

← FLASHBACK³

← FLASHBACK^{HD}

In-Car Digital Video Recorder



User's Guide

version 3.2.6

Table of Contents

Introduction	1
Flashback In-Car Components	1
DVR Operating Modes	2
Front Panel of DVR.....	2
Rear Panel of DVR.....	4
Peripherals	5
DVR Monitor.....	6
Monitor Buttons.....	6
Using DVR Buttons vs. Monitor Buttons	8
Monitor Display	8
Idle Mode	9
Record Mode.....	10
Play Mode	10
Forward Facing Zoom Cameras	11
Nite-Watch Camera	11
10x HD Optical Zoom Camera.....	12
Camera Functions	13
Backseat Camera	14
Bullet Camera.....	14
Antennas	14
VLP2 Wireless Microphone	15
Requirements for Successful Recording Using the VLP2.....	15
Starting a Recording Using the VLP2	16
Using the “Short Mute” Feature	17
Using the Emergency Button.....	17
VLP2 Battery Considerations	17
VLP2 Light Indicators	18
Docking Station Light Indicators.....	18
Docking Station Ports	19
VLX Wireless Microphone	20
Requirements for Successful Recording Using the VLX	20

Peripherals (cont'd)

VLX Wireless Microphone (cont'd)

Starting a Recording From the VLX..... 21

Muting an Audio Recording 22

VLX Battery Considerations 22

VLX Light Indicators 23

Docking Station Light Indicators..... 24

Docking Station Port..... 24

Remote Record Button 25

Radar Interface 25

Resettable Crash Sensor 25

DVR Operation..... 26

Powering Up..... 26

Logging into a DVR Using Your USB Login Key..... 26

Starting a Recording..... 27

Stopping a Recording & Assigning a Video Category 28

Playing Back a Video 28

Transferring Videos from DVR to Server 31

 Automatic Transmission 31

 Manual Transmission..... 31

Logging Out..... 32

Powering Down 32

DVR Settings..... 32

Changing the Date & Time Settings..... 33

 Selecting a Time Zone 33

 Turning Daylight Savings Time On/Off 35

 Changing the Date Display Format 37

 Selecting the Current Date 39

 Selecting the Current Time 42

Changing the Record Settings 44

 Adjusting Video Quality and File Size 44

 Changing the Video Quality Setting 45

 Changing the Video Frames-Per-Second Setting for
Regular Record 47

Adjusting Video Quality and File Size (cont'd)

- Changing the Video Frames-Per-Second Setting for Background Record 49
- Changing the Video Resolution Setting..... 52
- Turning Background Record On/Off..... 54
- Turning Stealth Mode On/Off..... 58
- Changing the Pre/Post Record Settings 60
- Selecting the Camera(s) for Channel 2 64
- Changing the Audio Settings..... 66
 - Turning the VLP1 Audio On/Off..... 67
 - Turning the VLP2 Audio On/Off..... 69
 - Turning the In-Car Audio On/Off..... 71
 - Turning the Record ‘Beep’ On/Off..... 74
 - Turning the Keystroke ‘Beep’ On/Off..... 76
 - Turning the Pre/Post Audio On/Off..... 79
 - Changing the Gain Setting for the VLP1 Audio..... 81
 - Changing the Gain Setting for the VLP2 Audio..... 84
 - Changing the Gain Setting for the In-Car Audio..... 87
- Selecting & Configuring Record Triggers..... 90
 - Turning the Lights Trigger On/Off..... 91
 - Turning the Siren Trigger On/Off..... 93
 - Turning the AUX1 Trigger On/Off 96
 - Turning the Aux 2 Trigger On..... 98
 - Turning the Aux 2 Trigger Off..... 104
 - Turning the Speed Trigger On/Off 107
 - Turning the ‘Stop Override’ Feature On/Off..... 111
 - Turning the VLP Microphone Trigger On/Off..... 113
- Changing Display Options..... 116
 - Turning the Radar Display On..... 116
 - Turning the Radar Display Off..... 120
 - Turning the Lights Display On/Off 122
 - Turning the Siren Display On/Off 124
 - Turning the Brakes Display On/Off..... 126
 - Turning the Aux 1 Display On/Off..... 129

DVR Settings (cont'd)

Changing Display Options (cont'd)

- Turning the Aux 2 Display On/Off..... 131
- Turning the Speed Display On/Off..... 133
- Turning the Metric Units Display On/Off 136
- Turning the ‘GPS’ Display On/Off..... 138
- Turning the Temp/Voltage Display On/Off..... 141
- Turning the ‘WLAN’ Display On/Off..... 143

Entering/Changing the Wireless Options 146

- Entering/Changing the Wireless IP..... 147
- Entering/Changing the Wireless NetMask 149
- Entering/Changing the Wireless Gateway IP 152
- Turning the Wireless DHCP Option On/Off 155

Entering/Changing the Ethernet Options..... 158

- Entering/Changing the Ethernet IP 159
- Entering/Changing the Ethernet NetMask..... 161
- Entering/Changing the Ethernet Gateway IP 164
- Changing the Gateway Type 166
- Turning the Ethernet DHCP Option On/Off..... 169
- Configuring the Flashback to Act as a DHCP Server..... 171

Entering/Changing the Wireless Security Settings..... 177

- Changing the Wireless Security Mode 177
- Changing the Wireless Authentication Type 179
- Changing the Wireless Encryption Type 182
- Entering the Wireless Encryption Key 185
- Entering Your Wireless SSID..... 188
- Entering a Wireless Password..... 191
- Turning the Wireless SSL Indicator On/Off..... 194

Entering/Changing System Settings 197

- Programming the Ignition Timer 197
- Changing the DES Admin ID and Password 199
- Enabling/Disabling the USB Login Feature 203
- Entering the Server Address 205
- Entering the Officer Name 208

Entering the DVR Unit Name 210

Viewing/Updating Firmware 213

 Viewing the Current Firmware Version 213

 Transferring a Firmware File from a USB Drive to a DVR 215

Copying the DVR Configuration File to/from DVR 218

 Copying the config.xml File from Your DVR to a USB Drive 219

 Copying the config.xml File from a USB Drive to Your DVR 221

Resetting the DVR to its Factory Settings 224

Copying the DVR Log Files to a USB Drive 226

Formatting an SD card..... 229

Viewing Your Flashback ID..... 231

Viewing Media Access Control Addresses 233

Changing the Flashback Monitor Settings..... 235

 Adjusting the Monitor Contrast Setting..... 235

 Adjusting the Monitor Brightness Setting 236

 Adjusting the Monitor Saturation Setting..... 237

 Adjusting the Monitor Hue Setting 238

 Adjusting the Monitor Sharpness Setting 238

 Adjusting the Text Transparency of the Monitor Controls 239

Viewing the Monitor Version Number & Product ID..... 241

Upgrading from Flashback2 to Flashback3 or FlashbackHD..... 241

DVR Specifications..... 250

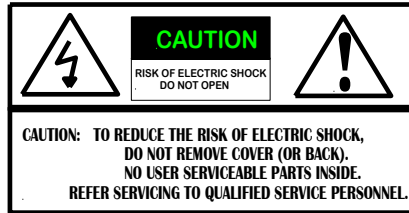
Glossary 252


Contact Information..... 253


Appendix: NJSP Playlist Screen 254

Index 255

Important Safeguards



 This symbol indicates important operating and maintenance instructions.

 This symbol indicates un-insulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to a person.

Caution: This system is designed to operate in 12 volt DC negative ground vehicles only. All system components must be operated only when properly connected to the DVR.

Attention: To reduce the risk of electric shock, do not perform any servicing other than that contained in this User’s Guide unless you are qualified to do so. Refer all servicing to qualified personnel.

DO NOT block ventilation openings.

DO NOT allow liquids to enter the DVR or any other component of the Flashback. This could cause electrical shorts, fire, or other damage.

The Flashback should be installed by a qualified technician and must conform to SAE Requirements. Ground wires (black) must be connected to the vehicle’s chassis. Never connect ground wires to the vehicle’s battery. If your vehicle also has a mobile data computer, make sure that both devices are grounded at the exact same point.

Warning: Airbag Deployment—Do not install equipment or route wiring in the deployment path of an airbag. Failure to observe this warning will reduce the effectiveness of the airbag or potentially dislodge the equipment, causing serious injury.

Warning: Seat Removal Precaution—If a vehicle seat is temporarily removed, verify with the vehicle manufacturer if the seat needs to be recalibrated for proper airbag deployment. Failure to heed this warning could result in death or serious injury.

Notice: Drilling Precautions—When drilling holes, check the area in which you are drilling to be sure you do not damage vehicle components. All drilled holes should be deburred and all sharp edges should be smoothed. All wire routings going through drilled holes should be protected by a grommet or convolute/split loom tubing.

Introduction

The Flashback is an in-car digital video recorder that can be installed inside a patrol car and/or interview room. This recorder collects video evidence and stores it temporarily on an SD card until the video can be transmitted to a storage server back at your agency or precinct. The Flashback is part of L3 Mobile-Vision’s *digital evidence collection system*. This system is comprised of multiple *in-car* and *back-office* components, as described below.

In-car components

Flashback’s in-car components include the DVR, DVR monitor, forward-facing “zoom” camera, Backseat camera (optional), Bullet cameras (optional), VoiceLink Plus wireless microphone, and Crash Sensor (optional).

Back-office components

Flashback’s “back office” components are housed in or around the agency or precinct building and typically include a storage server—either Linux or PC based—robotic disc burner, PC workstation (used to control the disc burner), Digital Evidence Series software, and one or more *access points* (for more on access points, see Glossary).

The manner in which videos upload to your storage server depends on the type of Digital Evidence software that you purchased. Our Linux based server applications, such as Digital Evidence Pro (DEP), are designed to transmit video to the storage server *wirelessly*. Other systems, such as Digital Evidence Viewer (DEV), require that you upload your videos *manually* from an SD storage card.

Flashback3 vs. FlashbackHD

L3 Mobile-Vision currently sells two models of the Flashback: *Flashback3* and *FlashbackHD*. Both models share similar features and functionality, with two key differences. First, the FlashbackHD can capture video at a higher resolution than the Flashback3—1280 x 720 pixels vs. 720 x 480 pixels for the Flashback3. Secondly, the Flashback3 comes with the Nite-Watch camera, whereas the FlashbackHD comes with either the HD Digital Zoom camera *or* the newer 10x HD Optical Zoom camera.

Flashback In-Car Components



DVR Operating Modes

Some of the buttons on the Flashback DVR and monitor are used for different functions depending on what mode the DVR is in.





Mode	Description
Idle Mode	The DVR is not recording or playing back a video.
Record Mode	The DVR is recording a video.
Play Mode	The DVR is playing back a recently recorded video.
Menu Mode	The DVR's menu functions are displayed.

Front Panel of DVR

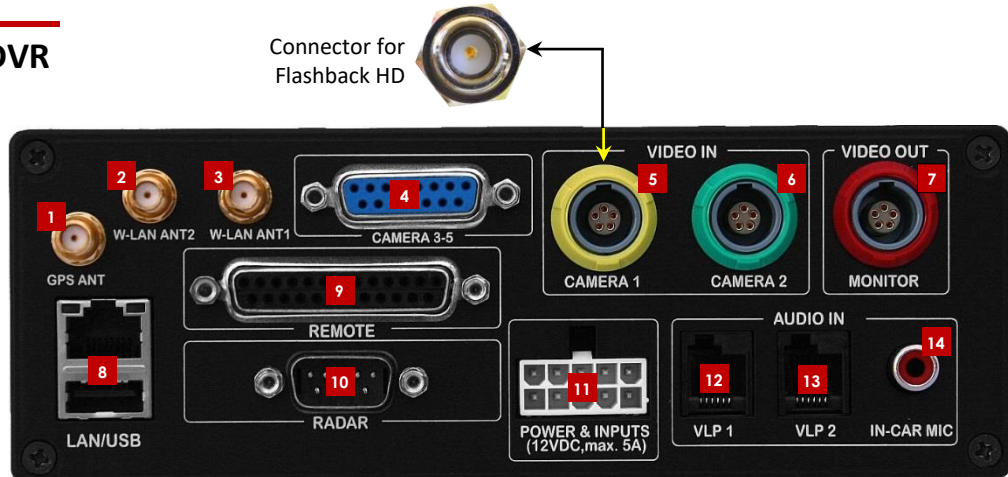


- 1** **IN USE** display. An LED light that denotes DVR activity. When this light is on, **do not** remove the SD card or your files may be lost!
- 2** **AUTO/OFF**. The manual power switch. Because the Flashback is designed to automatically power on and off, this switch is normally left in the **AUTO** position. **Do not** turn this switch off unless instructed into do so by an L3 Mobile-Vision procedure or Service Technician.
- 3** **MENU**. The *Menu* button, used to access the DVR programming options. You can also access this menu by pressing the **M** button on your Flashback monitor when the DVR door is open.
- 4** **REC**. The *Record* button. If you are in *Idle* mode, this button is used to initiate a recording session. If you are in *Record* mode, this button is used to toggle the in-car microphone off/on. If you are in *Menu* mode, this button is used to select the high-lighted menu item or field. You can also perform these tasks by pressing the **R** button on your Flashback monitor.
- 5** **STOP**. The *Stop* button. If you are in *Record* mode, this button is used to stop a recording. If you are in *Play* mode, this button is used to stop a video playback

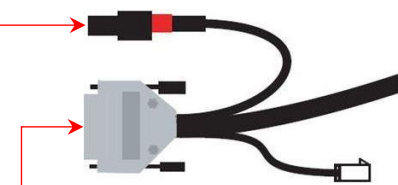
session. If you are in *Menu* mode, this button is used to move the cursor *up*. You can also perform these tasks by pressing the  button on your Flashback monitor.

- 6** **TRACE.** The *Trace Point* button. If you are in *Idle* mode, this button is used to display the Login/Logout menu. If you are in *Record* mode, this button is used to mark a position, or point, in a recording. If you are in *Play* mode, this feature is used to quickly advance to a previously marked Trace Point. You can also set or advance to a Trace Point by pressing the  button on your Flashback monitor.
- 7** **REW.** The *Fast Rewind* button. If you are in *Idle* mode, this button is used to toggle the monitor display between Channel 1 (Forward-facing zoom camera) and Channel 2 (Backseat and Bullet cameras). If you are in *Play* mode, this button is used to rewind slowly (press *once*) or quickly (press *twice*). If you are in *Pause* mode, this button is used to rewind one frame at a time. If you are in *Menu* mode on a field value, this button is used to display the previous field value. You can also perform these functions by pressing the  button on your Flashback monitor.
- 8** **PLAY/PAUSE.** The *Play/Pause* button. If you are in *Idle* mode, this button is used to display the *Playlist* directory. If you are in the *Playlist* directory, this button is used to select the highlighted video. If you are in *Play* mode, this button is used to either toggle the video *pause* function on/off (press and release button) *or* display the Select Source menu (press and **hold** button). If you are in *Menu* mode, this button is used to move the cursor *down*. You can also perform these functions by pressing the  button on your Flashback monitor.
- 9** **FF.** The *Fast Forward* button. If you are in *Play* mode, this button is used to advance slowly (press *once*) or quickly (press *twice*). If you are in *Pause* mode, this button is used to advance one frame at a time. If you are in *Menu* mode on a field value, this button is used to display the next field value. If you are in *Menu* mode on a menu screen, this button is used to select the highlighted menu option. You can also perform these functions by pressing the  button on your Flashback monitor.
- 10** **PWR, REC, and PLAY indicators.** LED lights used to indicate if there is currently power to the unit (PWR), a recording session in progress (REC), or a playback session in progress (PLAY).
- 11** **USB.** The input port for the *USB login key*—a memory stick that contains the user’s name. For instructions on logging into the DVR, see “Logging into a DVR Using Your USB Login Key” on page 26.
- 12** The Secure Digital (SD) card, used to temporarily store your Flashback videos until they can be transmitted to your agency’s application server or PC.
- 13** **SD CARD.** The input slot for the SD storage card.
- 14** **DVR DOOR.** The access door for the DVR’s manual power switch, SD card, and Flashback menu. This door can only be opened with a key. Depending on your agency’s policies, only a limited number of supervisors and/or IT personnel may have access to this key. To access the DVR menu options, this door must be *open*. To record or play back a video, this door must be *closed* and *locked*.

Rear Panel of DVR



- 1** GPS ANT. Input for GPS wire on antenna.
- 2** W-LAN ANT2. Input for W-LAN2 wire on Dual WiFi/GPS antenna.
- 3** W-LAN ANT1. If you've purchased the standard WiFi/GPS antenna, this is the input for the *W-LAN* wire. If you've purchased the Dual WiFi/GPS antenna, this is the input for the *W-LAN1* wire.
- 4** CAMERA 3-5. Input for 15-pin D connector used to connect up to three Bullet cameras using a special three-camera breakout cable.
- 5** CAMERA 1. Input for forward facing Forward-facing zoom camera
- 6** CAMERA 2. Input for optional Backseat camera
- 7** MONITOR. Connection for Flashback monitor (from REMOTE connector)
- 8** LAN/USB. Input for ethernet LAN cable (top) and USB drive (bottom).
- 9** REMOTE. Connection for Flashback monitor
- 10** RADAR. Input for radar unit
- 11** POWER & INPUTS (12VDC, max 5A). Connection for main harness, which houses the following wires: *power, ground, lights, siren interface, brakes input, ignition input, chassis ground, and auxiliary inputs*
- 12** VLP1. Input for VLP2 or VLX charging station.
- 13** VLP2. Input for second VLP2 or VLX charging station.
- 14** IN-CAR MIC. Input for wired rear seat microphone.



This document consists of general capabilities information that is not defined as controlled technical data under ITAR part 120.10 or EAR

Peripherals



Nite-Watch Camera

– OR –



10x HD Optical Zoom Camera



Back Seat Camera (optional)



Bullet camera (optional)



Voicelink Wireless Microphone



Resettable Crash Sensor (optional)



Monitor



WiFi/GPS Antenna

– OR –



Dual WiFi/GPS Antenna (upgrade)

DVR Monitor

Your Flashback camera comes with a 3.5" matrix monitor console, pictured below. This monitor is used to control the DVR, view recordings in progress, view untransmitted recordings, and set DVR preferences.



LCD Display – Full color
3.5" Active Matrix Display










Audio Speaker – System
speaker is located in back
of unit (not pictured)


Monitor Buttons

The monitor buttons are described in the following table.

Button	Used to...
	<p><u>While in <i>Idle</i> mode:</u> Display the Login/Logout menu.</p> <p><u>While in <i>Record</i> mode:</u> Mark a position in a recording, referred to as a <i>Trace Point</i>.</p> <p><u>While in <i>Play</i> mode:</u> Advance to a previously marked Trace Point while playing back a video, or toggle between the “image” and “text” views while on the Playlist screen.</p> <p>You can also perform these tasks by pressing on your DVR.</p>
	Access the DVR menu when the DVR door is open. You can also access this menu by pressing on your DVR.
	Increase brightness of monitor display
	Decrease brightness of monitor display
	Increase audio playback volume
	Decrease audio playback volume
	<p><u>While in <i>Idle</i> mode:</u> Begin recording</p> <p><u>While in <i>Record</i> mode:</u> Toggle the in-car microphone off/on</p> <p><u>While in <i>Menu</i> mode:</u> Select the highlighted menu item or field</p> <p>You can also perform these tasks by pressing on your DVR.</p>















These buttons only affect the monitor display, not the brightness or volume of the recorded file

Button	Used to...
	<p><u>While in <i>Record</i> mode:</u> Stop a recording</p> <p><u>While in <i>Play</i> mode:</u> Stop a video playback session</p> <p><u>While in <i>Menu</i> mode:</u> Move the cursor <i>up</i> the menu</p> <p>You can also perform these tasks by pressing  on your DVR.</p>
	<p><u>While in <i>Idle</i> mode:</u> Display the <i>Playlist</i> directory</p> <p><u>While in <i>Playlist</i> directory:</u> Select highlighted video</p> <p><u>While in <i>Play</i> mode:</u> Toggle video <i>pause</i> function on/off (press and release button), <i>or</i> display the Select Source menu (press and hold button).</p> <p><u>While in <i>Menu</i> mode:</u> Move the cursor <i>down</i> the menu</p> <p>You can also perform these tasks by pressing  on your DVR.</p>
	<p><u>While in <i>Idle</i> mode:</u> Toggle monitor display between Channel 1 (Forward-facing zoom camera) and Channel 2 (Backseat and Bullet cameras).</p> <p><u>While in <i>Play</i> mode:</u> Rewind slowly (press once) or quickly (press twice)</p> <p><u>While <i>playback</i> video is paused:</u> Rewind one frame at a time</p> <p><u>While in <i>Menu</i> mode on a field value:</u> Display previous field value <i>or</i> lower the numeric value of a field segment (while in a multi-part numeric field, such as a <i>date</i>).</p> <p>You can also perform these tasks by pressing  on your DVR.</p>
	<p><u>While in <i>Play</i> mode:</u> Advance slowly (press once) or quickly (press twice)</p> <p><u>While in <i>Menu</i> mode on a menu screen:</u> Select highlighted menu item</p> <p><u>While in <i>Menu</i> mode on a field value:</u> Display next field value <i>or</i> increase the numeric value of a field segment (while in a multi-part numeric field, such as a <i>date</i>).</p> <p>You can also perform these tasks by pressing  on your DVR.</p>
	<p><u>While in <i>Idle</i> mode:</u> Turn <i>Auto</i> mode off/on. For more information on this feature, see “What is Auto Mode?” below.</p> <p><u>While in <i>Play</i> mode:</u> Toggle the monitor display on/off.</p>

What is Auto Mode? Auto Mode is similar to the “Sleep” function on a computer. It turns the monitor display *off* when the unit is idle, thus saving power. By default, Auto mode is *on* whenever you login to your Flashback. If you prefer to keep your monitor display on *continuously* even when the unit is in *Idle* mode, press the  button until the Auto button light turns *off*.

Using DVR Buttons vs. Monitor Buttons

Because some of our customers mount their DVRs in the trunk of their vehicles, all of the buttons on the Flashback DVR are repeated on the Flashback monitor.

DVR	Monitor
	
	
	
	
	
	
	




NOTE: If you purchased the optional Vehicle Viewer or Vehicle Viewer Live application, you can also access these buttons from the Vehicle Viewer (Live) main menu.

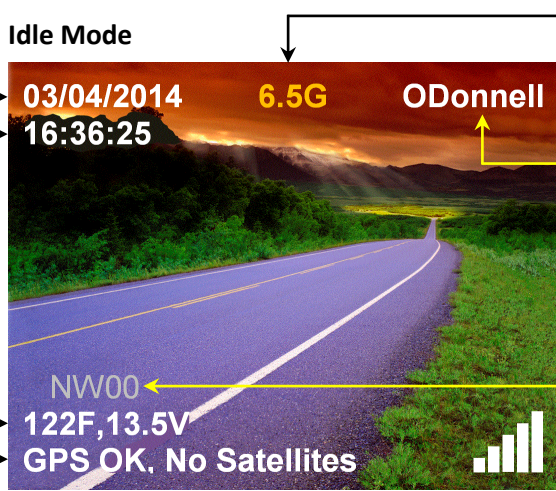
There is no difference between pressing a button on the Flashback DVR and pressing the equivalent button on the Flashback monitor. However, for brevity, all button references in this manual will picture the *monitor* buttons.

Monitor Display

This section describes the meaning of the various symbols and indicators that display on your Flashback monitor. Displays will vary based on what mode you're in and what display options you've selected. For example, the Wireless LAN connection indicator in the lower right corner of the screen will not display unless the value of the *WLAN display* field is set to **ON**.

Main Menu > System > Display 	
Light trigger	ON
Siren trigger	ON
Brakes trigger	ON
Aux1 trigger	ON
Aux2 trigger	OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	OFF

For more information on this and other display options, see “Changing Display Options” on page 116.



Idle Mode

Free space remaining on SD card

Current date → **03/04/2014**

Current time → **16:36:25**

6.5G

ODonnell → Officer logged into DVR

Internal DVR temperature and voltage → **NW00**
122F, 13.5V

Current setting for Nite Watch camera (if selected):

- NW00: Night Vision is **OFF**;
- NW04 – NW32: Night Vision is **ON**

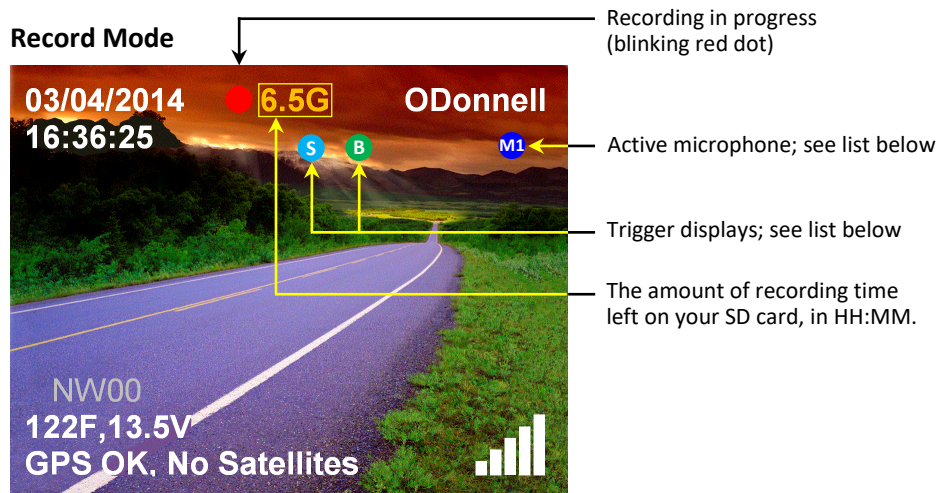
GPS information; see table below → **GPS OK, No Satellites**

Wireless LAN connection indicator:

- No connection = white
- Connection = green

GPS Status Messages	
Status	Description
GPS Error	DVR GPS circuitry hardware has failed
GPS OK, No Satellites	DVR GPS circuitry is operational but has not been able to determine vehicle location coordinates due to poor satellite signal strength or defective GPS antenna
GPS OK, antenna shorted	DVR GPS circuitry is operational but has detected an electrical short in the GPS antenna
40.8941,-74.4187,0MPH	GPS coordinates (i.e., vehicle's current location). This display indicates that GPS circuitry is fully operational and satellite signal strength is good.

Error messages {



How do I know when the SD card is full?

Thirty minutes before your SD card runs out of space, an audible “beep” will sound and the recording time indicator will turn red. Once the card is completely full, the word **FULL** will display at the top of the screen.

Trigger Displays	
Display	Description
L	Emergency lights are on
B	Brakes are engaged
S	Siren is on
A1	Aux 1 device is engaged
A2	Aux 2 device is engaged
Active Microphones	
M1	The wireless microphone connected to input port VLP 1 is <i>on</i>
M2	The wireless microphone connected to input port VLP 2 is <i>on</i>
M3	The in-car microphone is <i>on</i>



Forward Facing Zoom Cameras

There are three models of forward-facing zoom cameras sold by L3 Mobile-Vision:

- Nite-Watch Camera, below.
- 10x HD Optical Zoom Camera, next page.

All three of these cameras are typically mounted on your vehicle's windshield.

Nite-Watch Camera

The Nite-Watch camera works with the Flashback2 and Flashback3 only. It includes the following features:

- SD resolution
- 10x optical zoom
- Up to 144x total zoom
- Night vision.

For a description of this camera's control buttons, see "Camera Settings" on page 13.



Nite-Watch camera:
Front view

Nite-Watch camera:
Rear view



10x HD Optical Zoom Camera

The 10x HD Optical Zoom Camera works with FlashbackHD only. It includes the following features:

- 10x optical zoom
- Up to 120x total zoom
- Night vision.

For a description of this camera's control buttons, see the next section, "Camera Settings."

HD Optical Zoom camera:
Front view










HD Optical Zoom camera:
Rear view




Camera Functions

To operate your front-facing zoom camera, use the buttons on the rear of the camera, as described below.

-  **Auto Zoom.** Zoom in to 8x (*Nite-Watch* and *10x HD Optical Zoom*) or 3x (*HD Digital Zoom*), pause for several seconds, then return to a wide-angle view. This function is designed to zoom in on a license plate.
-  **Auto Focus** (*Nite-Watch* and *10x HD Optical Zoom*). Manually initiate a focus operation. When the camera is first powered on or a *Zoom* function is used, the camera will *automatically* focus on the current scene. However, if at any time the focus does not appear to be perfectly clear, you can try using this button to improve the focus.
-  **Minimum/Maximum Zoom** (*HD Digital Zoom* only). Toggle between *minimum* and *maximum* zoom.
-  **Zoom In.** Zoom in up to 144x (*Nite-Watch*), 120x (*10x HD Optical Zoom*), or 4x (*HD Digital Zoom*). To use this feature, press and hold the *Zoom In* button, then release once you achieve the desired view.
-  **Zoom Out.** To use this feature, press and hold the *Zoom Out* button, then release once you achieve the desired view.
-  **Backlight.** This function can help reveal scene details when the camera is facing into the sun.
-  **Nite-Watch.** When enabled, this feature will allow you to see more details in the dark than you could while in the normal operating mode. The following settings are available for the three camera models:
 - Nite-Watch*. NW4, NW8, NW16, and NW32.
 - HD Digital Zoom*. Same as above.
 - 10x HD Optical Zoom*. Settings are fully automatic when *Nite-Watch* is activated.



NOTE: The *Nite-Watch* feature is designed to be used for surveillance purposes while the vehicle is *stationary*. If you use *Nite-Watch* while the vehicle is *moving*, objects may appear blurred.

-  **Light.** Toggles the camera buttons' backlight on/off. By default, camera buttons will be illuminated each time the system is powered on. However, you may wish to turn these lights off occasionally, such as in a "lights out" situation.

Backseat Camera

The optional backseat camera is typically used to record suspects seated in the backseat of the vehicle. However, you may also point this camera towards the *front* of the vehicle. If the camera is installed *rear-facing*, make sure the camera's mirror switch is in the *On* position, as pictured below. If the camera is installed *forward-facing*, make sure the mirror switch is in the *Off* position.



Backseat Camera

Bullet Camera

The optional Bullet camera is a small, cylindrical camera that enables you to capture video from several different angles. The Flashback supports up to three Bullet cameras, all of which use Camera Channel 2. You connect these cameras to your Flashback using a special 3-cable connector.



Bullet camera

Antennas

NOTE: 'N' download speeds can only be achieved with the Dual WiFi/ GPS antenna.

During installation, your Flashback installer will drill a hole through the roof of your vehicle and mount one of two antennas: our standard *WiFi/GPS* antenna, or the faster *Dual WiFi/GPS* antenna, which is an optional upgrade. These antennas are used to:

- Wirelessly connect to your agency's internal network
- Capture GPS satellite data.



Standard WiFi/GPS Antenna



Dual WiFi/GPS Antenna (optional)

VLP2 Wireless Microphone

The VoiceLink Plus wireless microphone or “VLP2” is used to initiate a recording while you are outside your vehicle. If there are two officers sharing one vehicle, you may purchase a second VLP2.

The VLP2 comes with a docking station that has an antenna attached to it. The antenna is used to communicate with the DVR. In order for the VLP2 to operate, it must be synchronized with the docking station.

To remove the VLP2 mic from the docking station, simply tilt it *forward*, then lift *up*.



Requirements for Successful Recording Using the VLP2



When using your VLP2, please keep the following requirements in mind:

- ❑ **Remain within transmission range of the docking station.** If your VLP2 battery is fully charged, the transmission range is a maximum 1000 feet. If your VLP2 battery is *not* fully charged (common scenario), the transmission range is proportionally shorter. Whenever you move outside of range, the unit will vibrate *three times*.

- ❑ **Keep the Power switch in the ‘On’ position when using.** It’s recommended that you leave the VLP2 power switch *on* for the duration of your shift, as pictured right. This switch is located at the base of the mic.



- ❑ **Avoid metal barriers between the wireless mic and the docking station.** The wireless mic uses a “line of sight” signal. Physical barriers, particularly *metal* barriers, can interrupt this signal. Since your vehicle is made of metal, it’s important to mount the VLP2 above the dashboard line so that the signal does not have to pass through metal. Also, do not try to record while your vehicle is above or below you, as this forces the signal to pass through the vehicle’s undercarriage or roof, respectively. For example, if you are standing on an overpass and your vehicle is parked *under* the overpass, this creates a metal barrier, as the signal has to pass through the roof of your vehicle.

- ❑ **Avoid multiple non-metal barriers between the wireless mic and the docking station.** If you walk indoors while a recording is in progress, multiple walls can interrupt the signal between the wireless mic and the docking station.


- ❑ **Always maintain a strong battery charge.** For more information, see “VLP2 Battery Considerations” on the next page.
- ❑ **Configure your VLP2 as a record trigger on the Flashback.** If you are using the Fleet Management feature, see “Changing the Triggers for a Flashback DVR that is Not Assigned to a DVR Group” or “Changing the Triggers for a Flashback DVR Group” in the DVRs chapter of your DES Administrator’s Guide. If you are *not* using the Fleet Management feature, see “Selecting & Configuring Record Triggers” on page 90.
- ❑ **Use the VLP2 with the lapel mic.** Although the VLP2 comes with an internal mic, it is designed only as a *backup* mic in the event that the lapel mic fails. Whenever possible, use the lapel mic as your primary microphone. If you use the internal mic as your primary microphone, you may encounter audio interference due to wind and road noises that are more easily picked up when a mic is connected to your waist vs. your chest.




Starting a Recording Using the VLP2



To initiate a recording session, slide this switch **down**.

To *start* a recording, slide the VLX switch *down*. The unit will vibrate *once*, indicating that you have successfully initiated a recording. To *stop* a VLX initiated recording, press  from the Flashback monitor or DVR. The unit will vibrate *twice*, indicating that you have successfully ended the recording.



HINT: If you receive any audio feedback after activating the microphone, use the  button on your Flashback monitor to decrease the volume slightly.



WARNING: If you feel two short vibrations approximately 10 seconds after you initiate a recording, it indicates that the recording has stopped. This typically occurs because you left the DVR door open.

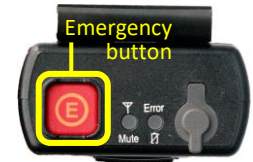
Using the “Short Mute” Feature

If you hold the **Record** switch *down* while a recording is in progress (see illustration on the previous page), it will mute the audio until you release the switch.

Using the Emergency Button

Optional feature; must be configured with your agency's radio

If your agency has chosen to use the Emergency button feature, pressing this button will automatically transmit an emergency signal to the docking station's emergency port (see also “Docking Station Ports” on page 18). This port connects the DVR to your agency radio, thus enabling you to secretly transmit an emergency signal to your agency or precinct.



VLP2 Battery Considerations

Your VLP2 comes with a rechargeable battery. To recharge the battery, first turn off the Power switch at the base of the wireless mic, then place it in the docking station or indoor charger. If you are using the docking station, your vehicle must be *on*.

It can take several hours to fully charge a battery. Once a battery is fully charged, the charge will last approximately 50 hours in *Stand-By* mode or 10 hours in *Record* mode. For this reason, it is typically not necessary to use the in-car charger unless you need to resync the VLP2.

Tips for battery maintenance and care:

- When you're on duty, only use the in-car charger to 1) resync the unit or 2) charge the battery when the battery is low.** In order to use the in-car charger, the DVR must be *on*.
- When you're *not* on duty, remove the VLP2 from the vehicle and place it in the indoor charger.** Don't leave the VLP2 in your vehicle or the battery will run down. Also, prolonged exposure to extreme heat or cold may damage the battery and/or decrease its lifetime. The ambient temperature required for charging is between -4° and 113°F.



WARNING: Do not charge the battery outside the required range of -4° to 113° F. Doing so could be hazardous and/or cause damage to the unit. Also, do not leave the VLP2 charging in the vehicle unattended.

- Replace the battery every 18 – 24 months.** All rechargeable batteries wear out with time, usage, exposure to heat and cold, etc. We recommend that you replace your battery *before* it wears out. There are two options for replacing the battery: 1) Have us do it—call *Service* at 1-800-336-8475 for a return authorization number, or 2) Do it yourself—call *Sales* and submit an order for part number MVD-VLP2-BAT. When the battery arrives, use a 1.5mm (metric) Allen wrench to open the VLP2 case and replace the old battery.
- Handle with care.** Take care not to drop or mishandle your VLP2, as this may damage the battery and/or the unit itself.





For information on L3 Mobile-Vision’s warranty and replacement options regarding VLP2s, refer to the Flashback Digital Evidence Collection System warranty.



VLP2 Light Indicators

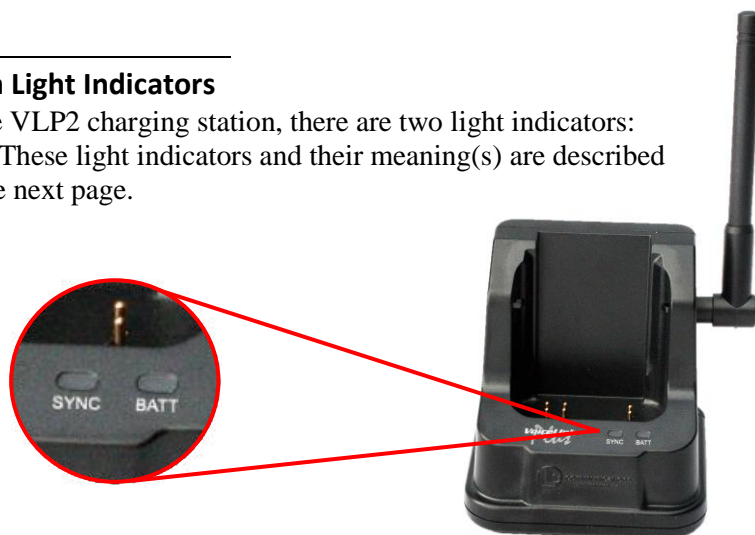
On the top of the VLP2, there are two light indicators: the *Mute/Sync* indicator, and the *Error/Battery* indicator, pictured left.




These light indicators and their meaning(s) are described in the following table.

Indicator	Color	Meaning
	Solid green	Signal between the wireless mic and docking station is good. The two devices are in sync.
	Blinking orange	Audio is temporarily muted. This occurs when you hold the Record switch <i>down</i> while a recording is in progress.
	Blinking red	Signal between the wireless mic and docking station is marginal and audio is likely interrupted. This occurs because you are nearly out of range or there is a barrier of some sort (metal, for example) interrupting the signal from the mic to the docking station. To regain a reliable audio connection, move back within range of the docking station.
	Blinking red	Lapel mic has failed <i>or</i> battery is low. If the Lapel mic fails, the audio source will automatically switch to the unit’s internal mic.

Docking Station Light Indicators

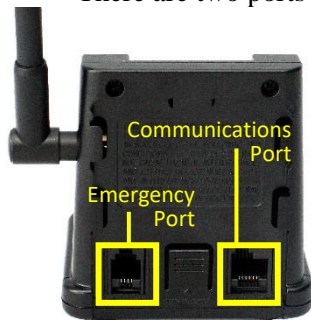
In the front of the VLP2 charging station, there are two light indicators: SYNC and BATT. These light indicators and their meaning(s) are described in the table on the next page.



Indicator	Color	Meaning
	Green	<ul style="list-style-type: none"> ▪ If the light blinks four times and then stops, the docking station has just synchronized with the wireless mic. ▪ If the light blinks continuously, the docking station is unable to synchronize with the wireless mic. ▪ If the light is continuous, the audio is active (i.e., a recording is in progress).
	Red	Wireless mic is docked and charging.
	Green	<p><u>If VLP2 is undocked:</u> Docking station is powered on.</p> <p><u>If VLP2 is docked:</u> Wireless mic is fully charged.</p>

Docking Station Ports

There are two ports on the back of the docking station, as pictured below.



If your agency has chosen to use the Emergency button feature, use the *Emergency* port to connect the docking station to your agency radio via a phone jack cable.

Use the *Communications* port to connect the docking station to the DVR via the cable provided by L3 Mobile-Vision.

VLX Wireless Microphone

The VoiceLink eXtended wireless microphone or “VLX” is used to initiate a recording while you are outside your vehicle. If there are two officers sharing one vehicle, you may wish to purchase a second VLX. The DVR supports up to two units.

The VLX comes with a docking station that has an antenna attached to it. The antenna is used to communicate with the DVR. In order for the device to operate, the VLX must be synchronized with the docking station.

To remove the wireless mic from the docking station, simply tilt it *forward*, then lift *up*.



Requirements for Successful Recording Using the VLX

When using your VLX, please keep the following requirements in mind:

- Remain within transmission range of the docking station.** If your VLX battery is fully charged, the transmission range is a maximum 1,200 feet. If your VLX battery is *not* fully charged (common scenario), the range may be reduced. Whenever you move outside of range, the unit will vibrate *once* every five seconds for six consecutive times. The Signal LED will also flash red until the VLX is back in range.

VoiceLink eXtended wireless microphone with docking station

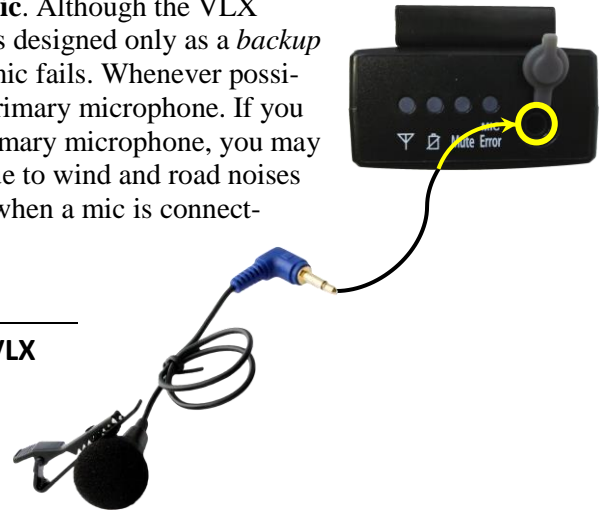


- Keep the Power switch in the ‘On’ position when using.** It’s recommended that you leave the VLX power switch *on* for the duration of your shift, as pictured right. This switch is located at the base of the mic.
- Avoid metal barriers between the wireless mic and the docking station.** The wireless mic uses a “line of sight” signal. Physical barriers, particularly *metal* barriers, can interrupt this signal. Since your vehicle is made of metal, it’s important to mount the

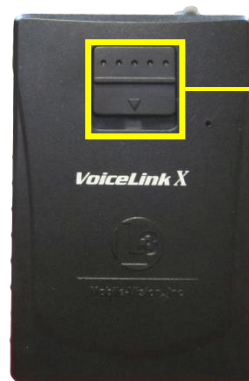
VLX above the dashboard line so that the signal does not have to pass through metal. Also, do not try to record while your vehicle is above or below you, as this forces the signal to pass through the vehicle’s undercarriage or roof, respectively. For example, if you are standing on an overpass and your vehicle is parked *under* the overpass, this creates a metal barrier, as the signal has to pass through the roof of your vehicle.

- Avoid multiple non-metal barriers between the wireless mic and the docking station.** If you walk indoors while a recording is in progress, multiple walls can interrupt the signal between the wireless mic and the docking station.


- ❑ **Configure your VLX as a record trigger on the Flashback.** If you are using the Fleet Management feature, see “Changing the Triggers for a Flashback DVR that is Not Assigned to a DVR Group” or “Changing the Triggers for a Flashback DVR Group” in the DVRs chapter of your DES Administrator’s Guide. If you are *not* using the Fleet Management feature, see “Selecting & Configuring Record Triggers” in your *Flashback User’s Guide*.
- ❑ **Always maintain a strong battery charge.** For more information, see “VLX Battery Considerations” on the next page.
- ❑ **Use the VLX with the lapel mic.** Although the VLX comes with an internal mic, it is designed only as a *backup* mic in the event that the lapel mic fails. Whenever possible, use the lapel mic as your primary microphone. If you use the *internal* mic as your primary microphone, you may encounter audio interference due to wind and road noises that are more easily picked up when a mic is connected to your waist vs. your chest.




Starting a Recording From the VLX



To initiate a recording session, slide this switch **down**

To *start* a recording, slide the VLX switch *down*. The unit will vibrate *once*, indicating that you have successfully initiated a recording. To *stop* a VLX initiated recording, press  from the Flashback monitor or DVR. The unit will vibrate *twice*, indicating that you have successfully ended the recording.



HINT: If you receive any audio feedback after activating the microphone, use the  button on your Flashback monitor to decrease the volume slightly.



WARNING: If you feel two short vibrations after you initiate a recording, it indicates that the recording has stopped. This typically occurs when the DVR door is open or there is no memory card in the card slot.

NOTE: Some agencies choose to disable Audio Mute. If your agency has done so, this feature will not be available to you

Muting an Audio Recording

If desired, you can mute the audio for a recording that is already in progress. To do so, hold the **Record** switch *down* for at least one second. The unit will vibrate *once** and the mute LED will flash red, indicating that mute is enabled. When you're ready to resume audio, repeat the procedure. The unit will vibrate *twice*** and the Mute LED will stop flashing, indicating that the audio has resumed.

VLX Battery Considerations

Your VLX comes with a rechargeable battery. To recharge the battery, first turn off the Power switch at the base of the wireless mic, then place it in the docking station *or* indoor charger. If you are using the docking station, the vehicle must be *on* and the temperature in the car must be between 32° F and 112° F.

It takes up to 2.5 hours to fully charge a battery. Once a battery is fully charged, the charge will last approximately five days in *Stand-By* mode or 24 hours in *Record* mode. For this reason, it is typically not necessary to use the in-car charger unless you need to resync the VLX.

Tips for battery maintenance and care:

- When you're on duty, only use the in-car charger to 1) resync the unit or 2) charge the battery when the battery LED is solid red (battery low).** In order to use the in-car charger, the DVR must be *on*.
- When you're *not* on duty, remove the VLX from the vehicle and place it in the indoor charger.** Don't leave the VLX in your vehicle or the battery will run down. Also, prolonged exposure to extreme heat or cold may damage the battery and/or decrease its lifetime. The ambient temperature required for charging is between 32° F to 112° F.



WARNING: Do not charge the battery outside the required range of 32° F to 112° F. Doing so could be hazardous and/or cause damage to the unit. Also, do not leave the VLX charging in the vehicle unattended.

- Replace the battery every 18 months.** All rechargeable batteries wear out with time, usage, exposure to heat and cold, etc. We recommend that you replace your battery *before* it wears out. There are two options for replacing the battery: 1) Have us do it—call *Service* at 1-800-336-8475 for a return authorization number, or 2) Do it yourself—call *Sales* and submit an order for part number MVD-VLX-BAT. Once the new battery arrives, remove the clip on the back of the unit and slide the battery door *down*.
- Handle with care.** Take care not to drop or mishandle your VLX, as this may damage the battery and/or the unit itself.

For information on L3 Mobile-Vision's warranty and replacement options regarding VLXs, refer to the Flashback Digital Evidence Collection System warranty.

* Short vibration—approximately .2 seconds






** Long vibration—approximately .4 seconds

VLX Light Indicators

On the top of the VLX, there are four light indicators: the *Signal*, *Battery*, *Mute*, and *MIC Error*.







These light indicators and their meaning(s) are described in the following table.

Indicator	Color	Meaning
 <i>Signal</i>	Solid green	Recording is in progress; signal between the wireless mic and docking station is good. The two devices are in sync.
 <i>Signal</i>	Blinking green	Signal between the wireless mic and docking station is marginal and audio is likely interrupted. This occurs because you are nearly out of range <i>or</i> there is a barrier of some sort (metal, for example) interrupting the signal from the wireless mic to the docking station. To regain a reliable audio connection, move back within range of the docking station.
 <i>Signal</i>	Blinking red	Recording is in progress but the wireless mic is out of range; the DVR is not receiving audio from the wireless mic.
 <i>Signal</i>	Solid orange	There is an active connection with audio to the DVR, but the DVR is not recording, typically because the DVR door is open or there is no memory card in the DVR's card slot.
 <i>Mute</i>	Blinking red	Audio is temporarily muted. This occurs when you hold the Record switch <i>down</i> for at least two seconds while a recording is in progress.
 <i>Mic Error</i>	Solid red	External lapel microphone is not functioning properly and may need to be replaced. In this circumstance, the audio source will automatically switch to the unit's internal microphone.
 <i>Battery</i>	Solid red	Battery level is low—less than 2.5 hours.

Docking Station Light Indicators

In the front of the VLX charging station, there are two light indicators: **SYNC** and **PWR/CHG**. These light indicators and their meaning(s) are described in the table below.



Indicator	Color	Meaning
 SYNC	Blinking green	The docking station is attempting to synchronize with the wireless mic. The light will continue blinking until the synchronization is complete.*
 SYNC	Solid green	The audio is active (i.e., a recording is in progress).
 PWR/CHG	Solid green	<u>If VLX is undocked:</u> Docking station is powered on. <u>If VLX is docked:</u> Wireless mic is fully charged.
 PWR/CHG	Solid red	Wireless mic is docked and charging.



Docking Station Port

There is a communications port on the back of the docking station, as pictured here. Use this port to connect the docking station to the DVR via the cable provided by L3 Mobile-Vision.

* The first time a wireless mic is synced, this process may take up to 30 “blinks”

Remote Record Button

L3 Mobile-Vision sells an optional device that enables you to press a large, lighted red push button to initiate a recording. One advantage of this device is that the Record button is large enough to press while wearing gloves. Another advantage is that the button is illuminated, making it easy for you to locate it in a low light environment. If you are interested in purchasing this device, contact your L3 Mobile-Vision Sales Representative at 1-800-336-8475.



Radar Interface

The optional radar interface enables you to link your Flashback to your in-car radar detector. This enables you to display radar readings on the Flashback screen and save them as part of your videos. The format for the on-screen radar readings is **T:# L:# P:#**, where # = *miles-per-hour* or *kilometers-per-hour*. **T** stands for *Target Speed*, **L** stands for *Locked Target Speed*, and **P** stands for *Patrol Speed*, as described below.

- Target Speed.** The MPH or KPH reading that an officer obtained after the radar device was aimed at a speeding vehicle.
- Locked Target Speed.** The minimum MPH or KPH reading that the officer was looking for when the radar device was aimed at a speeding vehicle.
- Patrol Speed.** The MPH or KPH reading of the officer's patrol car at the time a radar reading was obtained.

Resettable Crash Sensor

The optional Resettable Crash Sensor is a device that's used to detect a vehicle crash and automatically initiate a recording. To do so, it draws energy from an internal backup battery rather than from your vehicle battery. The Crash Sensor kit includes a G-force sensor, backup battery, and cable.




DVR Operation

Powering Up

The Flashback is designed to power on automatically whenever you turn your vehicle's ignition *on*. This is the recommended method for turning your Flashback on. You do not have to press any buttons.



Logging into a DVR Using Your USB Login Key

When more than one officer uses the same patrol car, you need a way to identify yourself to the DVR at the beginning of each shift so that your videos will be linked to you. That is what the DVR Login Key is used for. It is simply a file that contains your user information. You copy this file from the DES application to a USB memory stick, then insert the memory stick in your Flashback's USB port at the beginning of each shift.

- 1 If you have not done so already, copy your login information from the DES server to a USB memory stick. For specific instructions, see "Generating a DVR Login Key" in chapter 1 of the *DEP User's Guide* or "Generating a DVR Login Key for an Officer" in chapter 5 of the *DEP Administrator's Guide*.
- 2 Insert the USB memory stick in the Flashback's USB port.
- 3 Press . The Login screen displays.



NOTE: If this screen says **Logout** instead of **Login**, it means that the last officer to use this DVR forgot to logout. To fix this problem, continue with steps 4 and 5 to log the last officer out, then repeat steps 3 – 5 to log yourself in.

- 4 Press .
- 5 Press .
- 6 Remove the USB memory stick.

Starting a Recording

Regular recordings can be initiated in one of two ways: *manually* or *automatically*. **Manual** recordings are initiated by the officer in different ways (see descriptions below). **Automatic** recordings are initiated by the DVR in response to pre-programmed “trigger” actions, such as turning your emergency lights *on*. For more information on record triggers, see “Selecting & Configuring Record Triggers” on page 90.

To manually start a recording, first check to make sure the *Verifying Storage* message no longer displays.* Next, perform **one** of the following actions:

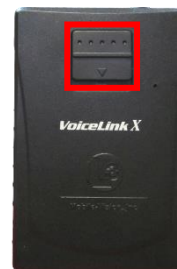
- 1** Press **R** on the DVR



- 2** Press **R** on the monitor



- 3** Slide the button on the front of your VLP2 or VLX mic **down** (see **NOTE**, right)



NOTE: In order to initiate a recording from the VLP2 or VLX, the device must be turned on, its battery must be charged, and it must be configured as a record trigger. For more information, see “Turning the VLP Microphone Trigger On/Off” on page 113.

* Never start a recording while the *Verifying Storage* message is displayed on your Flashback monitor. Wait until the message disappears before attempting to start a recording!



Background Record. In addition to Regular recordings, there is a Background Record function that you can engage if you are interested in recording continuously whenever your vehicle is turned on. For more information on this feature, see “Turning Background Record On/Off” on page 54.

- Whenever a regular recording is in progress, a red dot will blink on your monitor.


Stopping a Recording & Assigning a Video Category

To stop a recording, press . A list of video categories displays.



To assign the highlighted category to your video, do nothing. To assign a *different* category to your video, continue pressing  until the desired category displays. Once five seconds have elapsed without pressing , the system will link the displayed category to your video.







NOTE: Do not hesitate too long after pressing  for the first time. If you want to scroll through the category list, you only have five seconds to begin doing so, otherwise the first category will automatically be assigned to your video. If this occurs, however, you can still change the video’s category from within the Flashback application. For more information, see “Changing a Video’s Category” in chapter 2 of your DES User’s Guide or Administrator’s Guide.

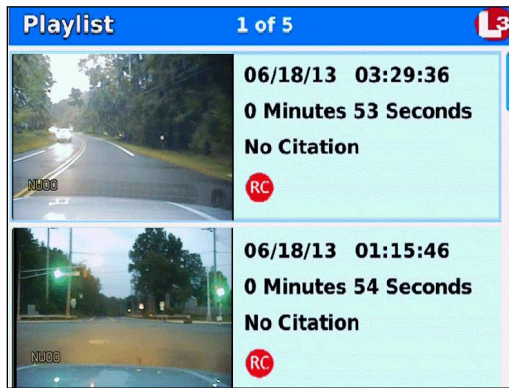
Playing Back a Video

This section describes how to view a video on your Flashback monitor *after* it is recorded but *before* it is transferred to your agency’s storage server. If the video you wish to view has already been transferred, see “Playing a Video” in chapter 2 of the *DEP User’s Guide* or *DEP Administrator’s Guide* instead.



You can now play back a video while a recording is in progress.

- 1 Make sure the door to your DVR is locked and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . A list of video files will display in either *image* view or *list* view, as pictured on the next page. These are all the files that have been recorded since your last transmission.
- 3 To toggle back and forth between *image* view and *list* view, press .


















Video Playlist in "image" view

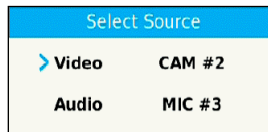



Video Playlist in "list" view

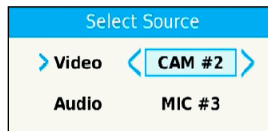
The columns on the Playlist screen (*list* view) are described in the following table.




Playlist Screen	
Column	Description
Date	Recording start date in YY/MM/DD format.
Time	Recording start time in HH:MM:SS format.
Dur	Duration of recording in seconds (s) or minutes (m).
Category	If this is a <i>Background Record</i> video, Background(R) will display here. If this is a <i>Regular Record</i> video, the video's category will display here. The default categories are: <i>No Citation</i> , <i>Citation</i> , <i>Search</i> , <i>Arrest</i> , and <i>Other</i> . If a category name is followed by (C), it indicates that the video is a continuation of the previous video. The system automatically subdivides videos that are larger than 1G.
Trg	The event that triggered the recording: Record Button Wireless microphone connected to input port VLP 1 Wireless microphone connected to input port VLP 2 Emergency lights Siren Speed Auxiliary 1 device, such as the Crash Sensor Auxiliary 2 device, such as a motion detector Display-only events (i.e., events that do not trigger a recording) Brakes In-car microphone
Trc	If a  displays here, it indicates that there is one or more Trace Points embedded in this video. For more on Trace Points, see the table on page 6.

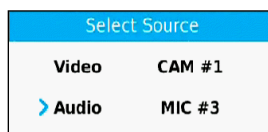
- 4 Press the  or  button until the correct file is highlighted.
- 5 Press . The default video/audio track begins playing. The default *video* track is Camera channel 1 (forward-facing zoom camera), and the default *audio* track is VLP 1 port (VLP2 or VLX mic connected to VLP 1 port).
- 6 To select a *different* video and/or audio track, proceed to the next step. Otherwise skip to step 18.
- 7 Hold the  button *down* until the Select Source menu displays.



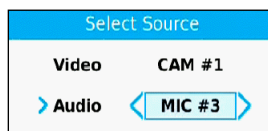
- 8 To select a different *camera* view, proceed to the next step. Otherwise skip to step 12.
- 9 Press  to select the *Video* field.







- 10 Press  to toggle between the two camera channels, as described below.
 - **CAM #1.** Display the view from the forward-facing zoom camera.
 - **CAM #2.** Display the view from all other cameras in a “split-screen” format. This includes the Backseat camera and any Bullet camera(s).
- 11 Press  to save your camera selection.
- 12 To select a different *audio* track, proceed to the next step. Otherwise skip to step 17.
- 13 Press  to advance to the *Audio* field.



- 14 Press  to select the *Audio* field.



- 15 Press  until the desired audio track displays, as described below.
 - **MIC #1.** Play the audio track for the wireless mic that's connected to port VLP 1.
 - **MIC #2.** Play the audio track for the wireless mic that's connected to port VLP 2.
 - **MIC #3.** Play the audio track for the in-car mic.
- 16 Press  to save your audio selection.
- 17 Press  again to exit the Select Source menu and begin playing the selected video/audio track. Depending on your selections and camera configuration, this may be a single or “split-screen” view. For example, if you selected **Cam #2** and you have four cameras recording on Channel 2—a Backseat camera and three Bullet cameras—then all four views will play simultaneously on one screen that's divided into four quadrants.
- 18 When you're done viewing the video(s), press  to exit the Playlist screen.

Transferring Videos from DVR to Server

Transmission refers to the process of transferring video files from your in-car DVR to the storage server back at your agency or precinct. This transmission can occur either *automatically* (typical) or *manually*, as described below.

Automatic Transmission

Whenever your vehicle comes within approximately 300 feet of an access point, it triggers an automatic transmission*. During this transmission, all videos that are currently stored on your DVR will transfer wirelessly to the storage server via an access point (for more on access points, see Glossary). Automatic transmission does not require any action on your part.

Manual Transmission



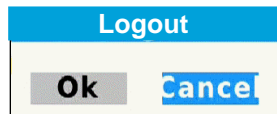
Each Flashback DVR holds a storage device called an *SD card*. This card is used to temporarily store an officer's videos until they can be transferred to your agency's storage server. Typically, the SD card remains in the Flashback unit, as most video files will transmit automatically. However, if you can't wait for the automatic file transfer to occur, or a problem has occurred that interfered with the wireless file transfer, you can manually upload the videos yourself by removing the SD card and inserting it in an SD card reader connected to your PC workstation on the server. (For specific instructions, see “Manually Uploading New Videos” in chapter 2 of the *DEP User's Guide* or *DEP Administrator's Guide*.) When you are finished uploading the videos, re-insert the SD card in your Flashback unit.

* Unless the DVR is in RECORD mode, in which case the transfer will occur AFTER the recording is complete.

Logging Out

Before you power down your vehicle, you must log out of the DVR. This is the exact same procedure used to login.

- 1 Press **T**. The Logout screen displays.



- 2 Press **▶▶**.
- 3 Press **R**.

Powering Down

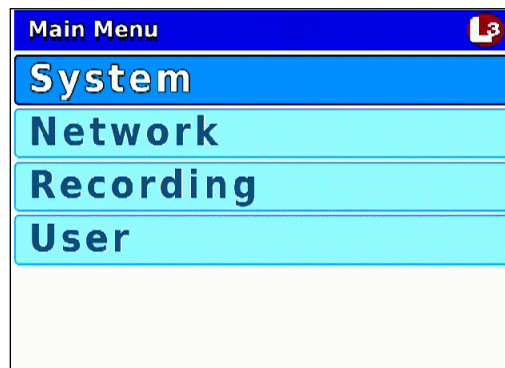
Your DVR powers up/down automatically

The Flashback is designed to power off automatically after a programmed ignition timer delay of **X** number of minutes, where **X** = **1, 15, 30, 45, or 60**. Do not use the red On/Off button to power down the device unless instructed to do so by an L3 Mobile-Vision Support Specialist.

Please note that the system will *not* power down automatically if the DVR is recording *or* transmission is in progress. As long as neither of these processes is in effect, however, the ignition shutdown timer will begin immediately after the vehicle's ignition is turned *off*. The default setting for the shutdown timer is 15 minutes. To change this setting, see "Programming the Ignition Timer" on page 197.

DVR Settings

This section describes how to change the various DVR settings via the Flashback Main Menu. To access this menu, first open the door on your DVR door using the key provided by L3 Mobile-Vision. Next, press the **M** button on the DVR or the **M** button on the Flashback monitor. Remember—the DVR door must be *open* in order for you to access the Main Menu!



For more information, see:

- Changing the Date & Time Settings, below
- Changing the Record Settings, page 44
- Changing the Audio Settings, page 66
- Selecting & Configuring Record Triggers, page 90
- Changing Display Options, page 116
- Entering/Changing the Wireless Options, page 146
- Entering/Changing the Ethernet Options, page 158
- Entering/Changing the Wireless Security Settings, page 177
- Entering/Changing System Settings, page 197
- Entering the Officer Name, page 208
- Entering the DVR Unit Name, page 210
- Viewing/Updating Firmware, page 213
- Copying the DVR Configuration File to/from DVR, page 218
- Resetting the DVR to its Factory Settings, page 224
- Copying the DVR Log Files to a USB Drive, page 226
- Formatting an SD card, page 229
- Viewing Your Flashback ID, page 231
- Viewing Media Access Control Addresses, page 233




Changing the Date & Time Settings

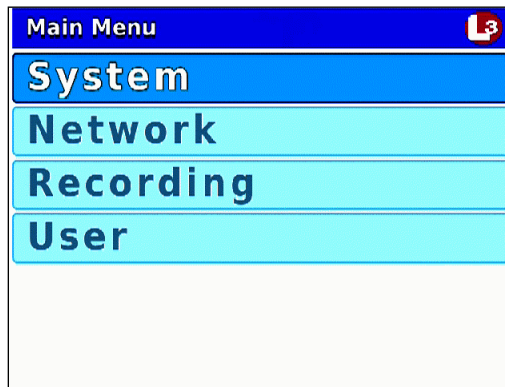
To change the date and/or time settings, proceed to the appropriate section:




- Selecting a Time Zone, below
- Turning Daylight Savings Time On/Off, page 35
- Changing the Date Display Format, page 37
- Selecting the Current Date, page 39
- Selecting the Current Time, page 42.

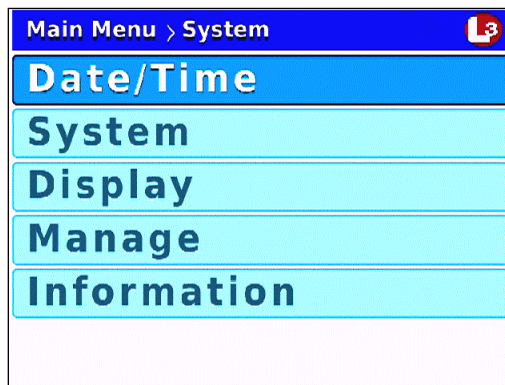
Selecting a Time Zone


This section describes how to select the time zone in which you will be recording. The system defaults to *Eastern Standard Time*.

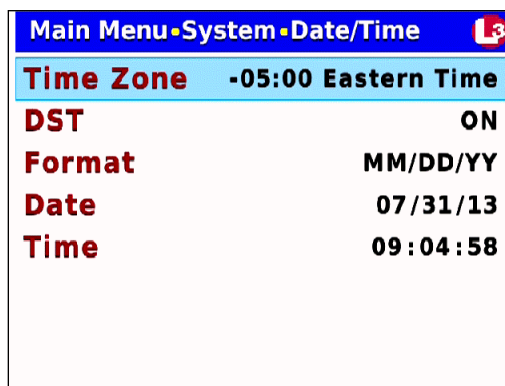
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



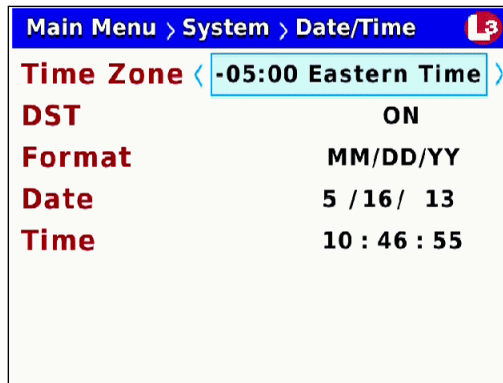
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.
- 4 Press  to select the **System** option. The System menu displays.



- 5 Press  to select the **Date/Time** option. The Date/Time screen displays.



- Press **R** again to select the *Time Zone* field.



- Using the **◀** or **▶** buttons, display the time zone you wish to select. For example:

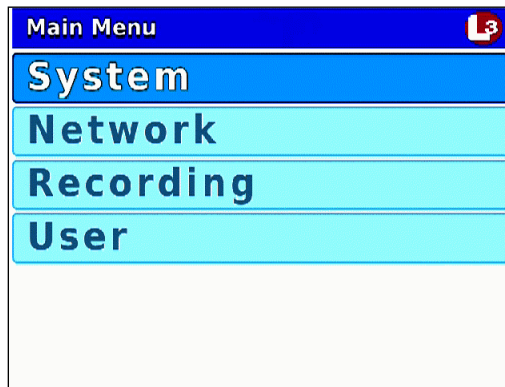
To change from...	To...	Action
Eastern Time	Atlantic Time	Press ▶ twice
Eastern Time	Indiana Time	Press ▶ once
Eastern Time	Mountain Time	Press ◀ twice
Eastern Time	Arizona Time	Press ◀ three times
Eastern Time	Pacific Time	Press ◀ four times



- Once the correct time zone displays, press **M** *four times* to save your changes and exit this option.

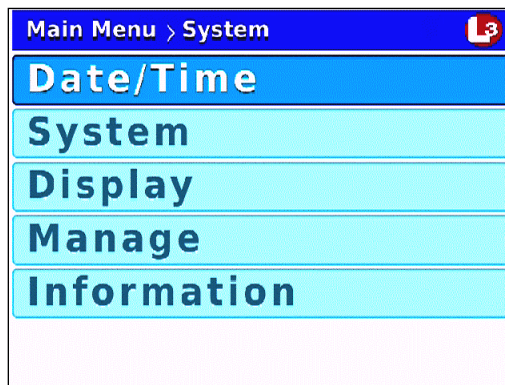
Turning Daylight Savings Time On/Off

This section describes how to turn the daylight savings time option *on* or *off*. If you are recording in a location that observes daylight savings time, this option should be *on*, which is the system default. If you are recording in a location that does *not* observe daylight savings time, this option should be *off*.

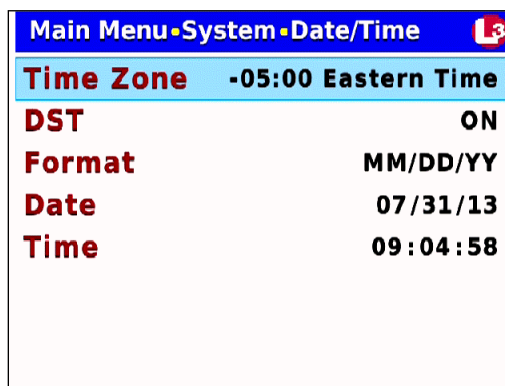
- Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- Press **M**. The Main Menu displays.




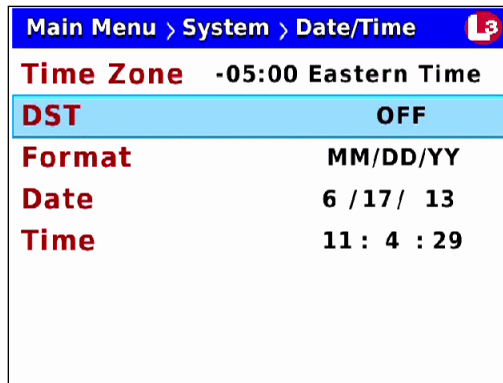
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.
- 4 Press **R** to select the **System** option. The System menu displays.




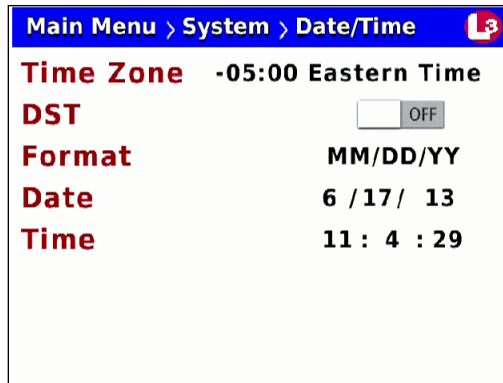
- 5 Press **R** to select the **Date/Time** option. The Date/Time screen displays.





- 6 Press  to advance to the *DST* field.






- 7 Press  to select the *DST* field.

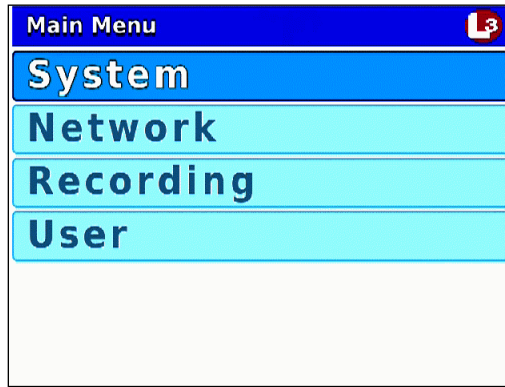




- 8 Press  to toggle the field value to **ON** or **OFF**.
- 9 Press  *four times* to save your changes and exit this option.

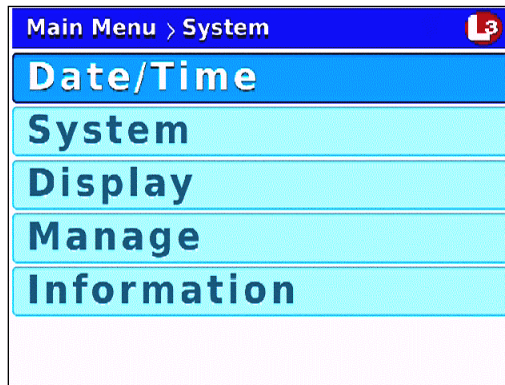
Changing the Date Display Format

This section describes how to change the format in which your dates display. Options include MM/DD/YY (default), DD/MM/YY, or MM/DD/YYYY.

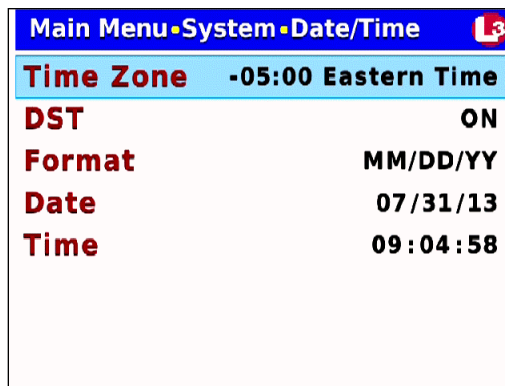
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



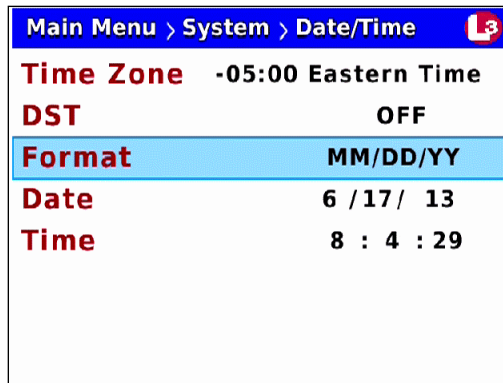
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.
- 4 Press **R** to select the **System** option. The System menu displays.



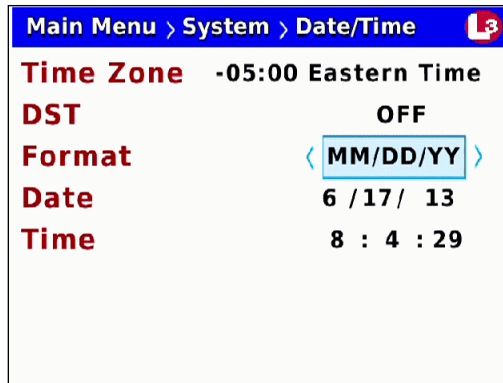
- 5 Press **R** to select the **Date/Time** option. The Date/Time screen displays.



- 6 Press **▶** twice to advance to the *Format* field.



- 7 Press **R** to select the *Format* field.

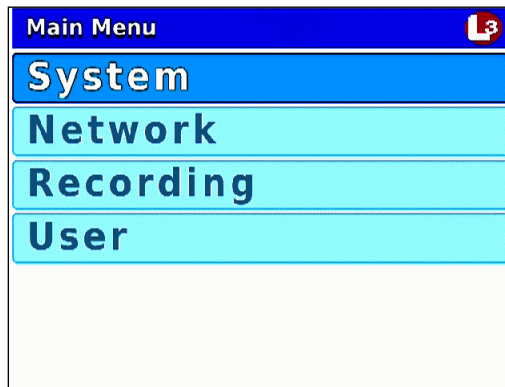




- 8 Use the **▶** button to select the desired date format.
- 9 Press **M** four times to save your changes and exit this option.

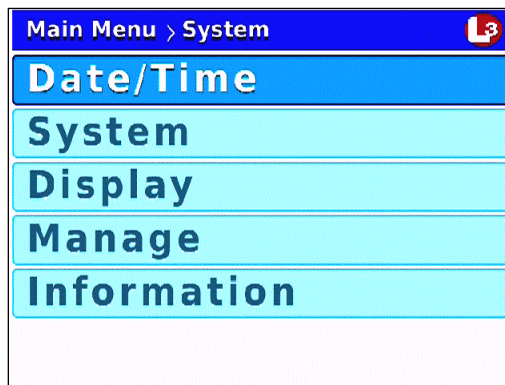
Selecting the Current Date

The Flashback's date display is set automatically by the Flashback unit's GPS. However, in the event of a GPS malfunction (such as a broken antennae), you can set the Flashback date display manually, as described below.

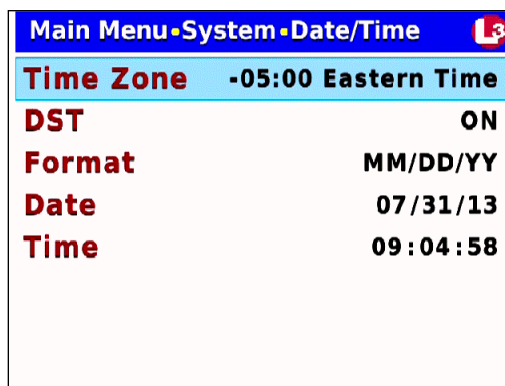
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.




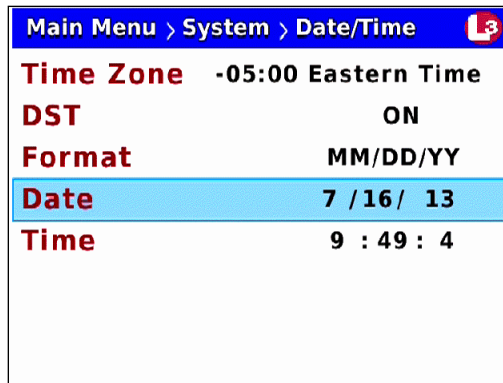
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.
- 4 Press **R** to select the **System** option. The System menu displays.



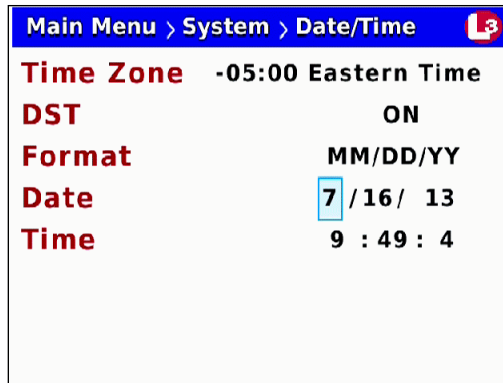
- 5 Press **R** to select the **Date/Time** option. The Date/Time screen displays.












- 6 Press  twice to advance to the *Date* field.






- 7 Press  to select the *Date* field.

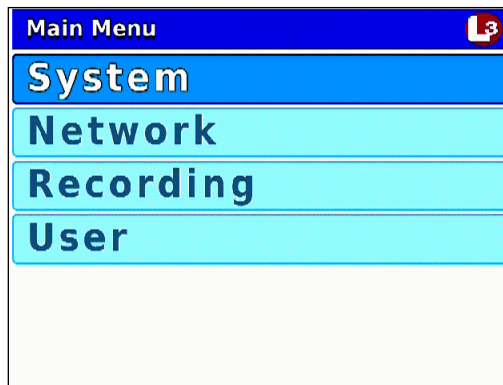





- 8 To change the *first* segment of the *Date* field, proceed to the next step. Otherwise skip to step 10.
- 9 Use the  or  buttons to move the numeric display higher or lower, respectively. Once the desired number displays, proceed to the next step.
- 10 To change the *second* segment of the *Date* field, press , then proceed to the next step. Otherwise skip to step 12.
- 11 Use the  or  buttons to move the numeric display higher or lower, respectively. Once the desired number displays, proceed to the next step.
- 12 To change the *third* segment of the *Date* field, press , then proceed to the next step. Otherwise skip to step 14.
- 13 Use the  or  buttons to move the numeric display higher or lower, respectively. Once the correct year displays, proceed to the next step.
- 14 Press  four times to save your changes and exit this option.

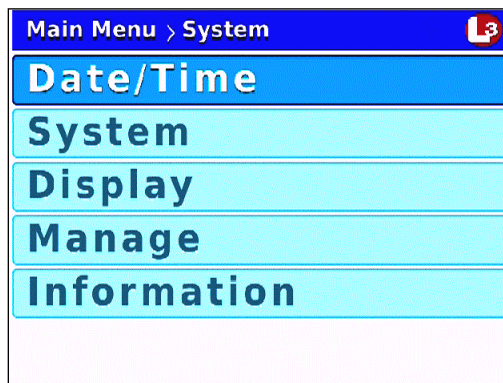
Selecting the Current Time


The Flashback's time display is set automatically by the Flashback unit's GPS. However, in the event of a GPS malfunction (such as a broken antennae), you can set the Flashback time display manually, as described below.

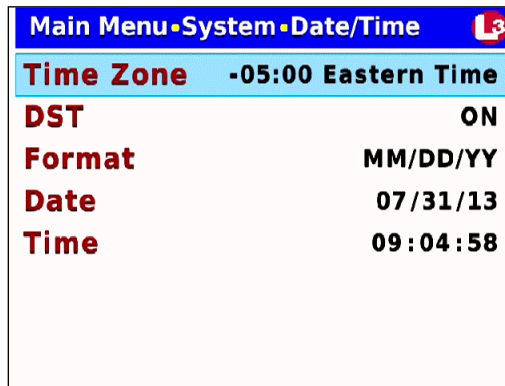
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.




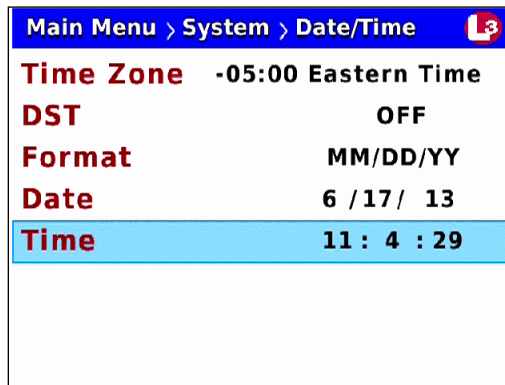
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.
- 4 Press  to select the **System** option. The System menu displays.




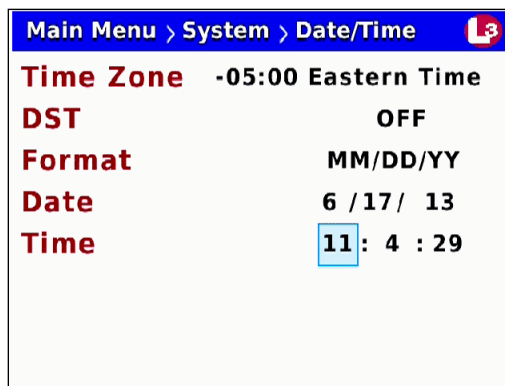
- 5 Press  to select the **Date/Time** option. The Date/Time screen displays.











- 6 Press  to advance to the *Time* field.



- 7 Press  to select the *Time* field.




- 8 To change the *hours* segment of the *Time* field, proceed to the next step. Otherwise skip to step 10.
- 9 Use the  or  buttons to move the hours display higher or lower, respectively. Once the desired number displays, proceed to the next step.

- 10 To change the *minutes* segment of the *Time* field, press , then proceed to the next step. Otherwise skip to step 12.
- 11 Use the  or  buttons to move the minutes display higher or lower, respectively. Once the desired number displays, proceed to the next step.
- 12 To change the *seconds* segment of the *Time* field, press , then proceed to the next step. Otherwise skip to step 14.
- 13 Use the  or  buttons to move the numeric display higher or lower, respectively.



HINT: You may want to set the seconds setting *ahead* by several seconds to give yourself time to save the record.

- 14 Press  *four times* to save your changes and exit this option.

Changing the Record Settings

The Flashback offers a number of different recording options, such as video resolution, frames-per-second, Background Record, etc. Please review the options discussed in this chapter to determine if the default settings are meeting your agency's needs.

For more information, see:

- Adjusting Video Quality and File Size, below
- Turning Background Record On/Off, page 54
- Turning Stealth Mode On/Off, page 58
- Changing the Pre/Post Record Settings, page 60
- Selecting the Camera(s) for Channel 2, page 64.

Adjusting Video Quality and File Size

There is always a tradeoff between file size and quality. The sharper and clearer a video is, the bigger its file size. If you are experiencing problems with bandwidth speed and/or storage space, you may want to experiment with the video *quality*, *frames-per-second*, and *resolution* settings to see if you can reduce your file sizes somewhat without sacrificing too much quality.

For specific instructions, see:

- Changing the Video Quality Setting, next page
- Changing the Video Frames-Per-Second Setting for Regular Record, page 47
- Changing the Video Frames-Per-Second Setting for Background Record, page 49
- Changing the Video Resolution Setting, page 52.

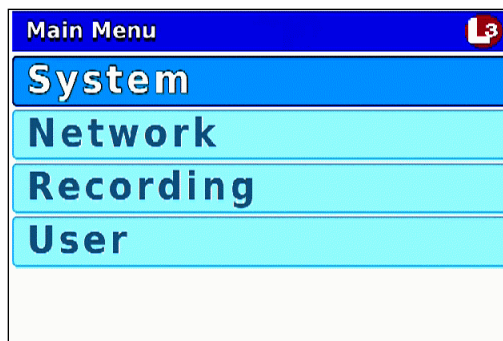
Changing the Video Quality Setting

This section describes how to change the quality setting for videos recorded from Channel 1 (Forward-facing zoom camera) or Channel 2 (all other cameras). This setting denotes the video's bitrates in either megabits-per-second (mbps) or kilobits-per-second (kbps).

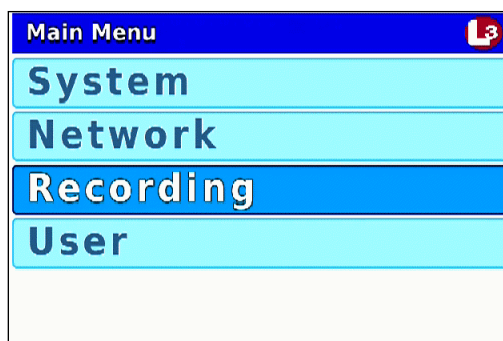
Camera Channel 1		Camera Channel 2	
Quality Setting	Bitrates	Quality Setting	Bitrates
1 (FB3)	1.5 mbps	1	250 kbps
2 (FB3)	2.0 mbps	2	500 kbps
3 (FB3)	2.5 mbps	3	750 kbps
4 (FBHD)	3.0 mbps	4	1.0 mbps
6 (FBHD)	4.0 mbps	5	1.25 mbps
8 (FBHD)	5.0 mbps		

The higher the quality setting, the better the video quality *and* the larger the video's file size.

- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



- 3 Press the **Left Arrow** or **Right Arrow** button until **Recording** is highlighted.



- 4 Press **R** to select the **Recording** option. The Recording menu displays.



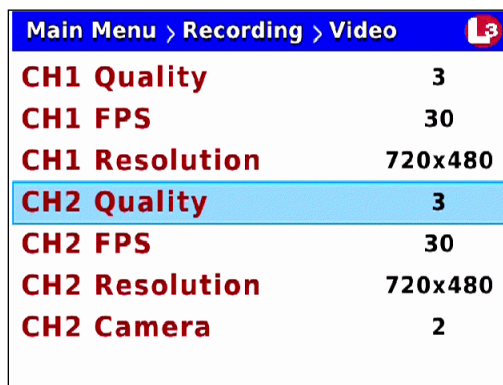
- 5 Press **R** to select the **Video** option. The Video screen displays.



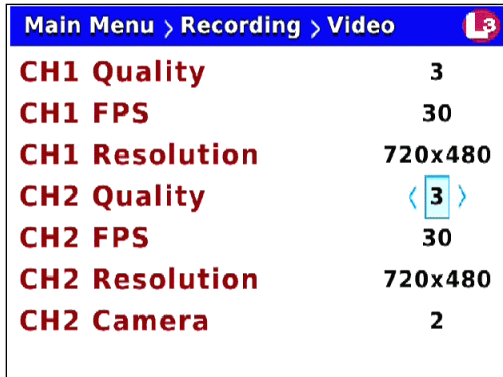
- 6 To change the video quality for Channel 1 (Forward-facing zoom camera), proceed to the next step.


– OR –

To change the video quality for Channel 2 (Backseat and Bullet cameras), press **⏮** *three times* to advance to the *CH2 Quality* field.



- 7 Press **R** to select the current field.



Main Menu > Recording > Video 	
CH1 Quality	3
CH1 FPS	30
CH1 Resolution	720x480
CH2 Quality	< 3 >
CH2 FPS	30
CH2 Resolution	720x480
CH2 Camera	2

The higher the number, the better the video quality & the larger the video size

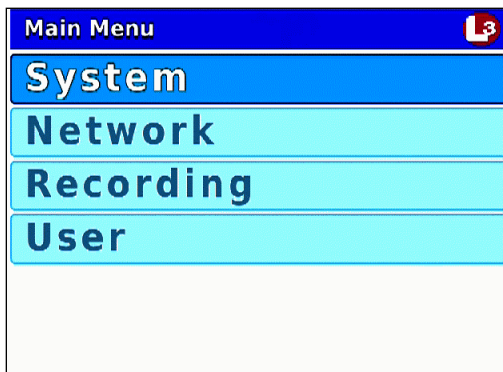
- 8 Use the **▶** button to select an appropriate number between 1 – 8:
 - If you're changing Channel 1 for a Flashback3, select a number from 1 – 3
 - If you're changing Channel 1 for a FlashbackHD, select a number from 4 – 8
 - If you're changing Channel 2 for either DVR, select a number from 1 – 5.
- 9 Press **M** *twice* to save your changes and exit the Video screen. The system will automatically reboot.


Changing the Video Frames-Per-Second Setting for Regular Record



This section describes how to change the number of frames-per-second captured for videos recorded from Channel 1 (Forward-facing zoom camera) or Channel 2 (all other cameras) during regular record mode. To change the frames-per-second for videos captured during Background Record, see “Changing the Video Frames-Per-Second Setting for Background Record” on page 49.

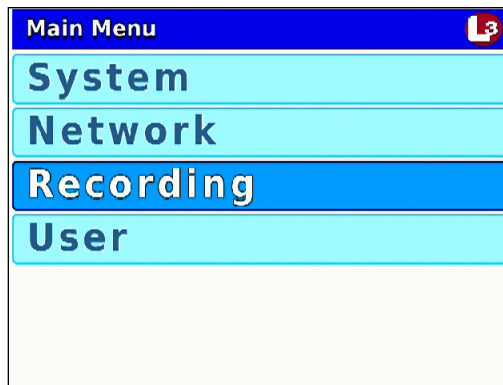
The higher the number, the smoother the video's picture *and* the larger the video's file size.


- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.




Main Menu 
System
Network
Recording
User


- 3 Press the  or  button until **Recording** is highlighted.



- 4 Press  to select the **Recording** option. The Recording menu displays.




- 5 Press  to select the **Video** option. The Video screen displays.



 A screenshot of the 'Main Menu > Recording > Video' settings screen. The title bar is blue with 'Main Menu > Recording > Video' and the L3 logo. Below it is a list of settings for two channels:

Main Menu > Recording > Video	
CH1 Quality	3
CH1 FPS	30
CH1 Resolution	720x480
CH2 Quality	3
CH2 FPS	30
CH2 Resolution	720x480
CH2 Camera	2


- 6 To change the frames-per-second for Channel 1 (Forward-facing zoom camera), press  to advance to the *CH1 FPS* field.

– OR –




To change the frames-per-second for Channel 2 (Backseat and Bullet cameras), press  *three times* to advance to the *CH2 FPS* field.

Main Menu > Recording > Video 	
CH1 Quality	3
CH1 FPS	30
CH1 Resolution	720x480
CH2 Quality	3
CH2 FPS	30
CH2 Resolution	720x480
CH2 Camera	2

- 7 Press  to select the current field.

Main Menu > Recording > Video 	
CH1 Quality	3
CH1 FPS	30
CH1 Resolution	720x480
CH2 Quality	3
CH2 FPS	< 30 >
CH2 Resolution	720x480
CH2 Camera	2




The higher the number, the better the video quality & the larger the video size

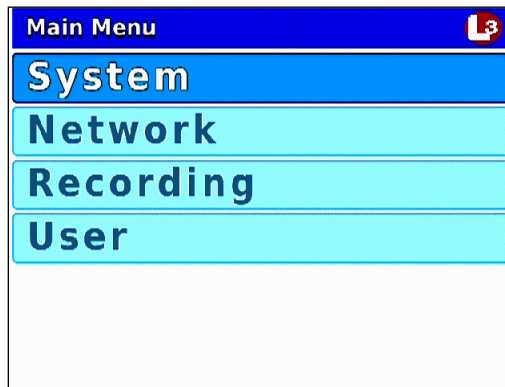
- 8 Use the  or  button to select the desired frames-per-second (2 – 30).
- 9 Press  twice to save your changes and exit the Video screen. The system will automatically reboot.



Changing the Video Frames-Per-Second Setting for Background Record

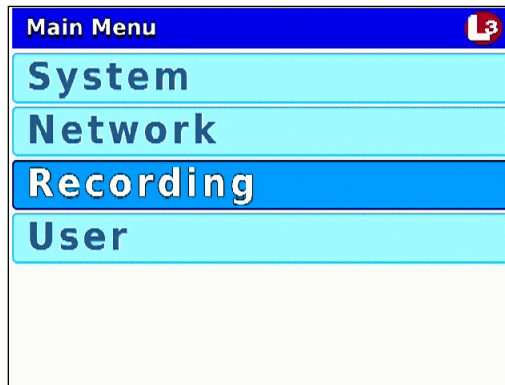
This section describes how to change the number of frames-per-second captured for videos recorded from Channel 1 (Forward-facing zoom camera) during Background Record. For more information on Background Record, see “Turning Background Record On/Off” on page 54. To change the frames-per-second for videos captured during *Regular Record* mode, see the previous section.


The higher the number, the smoother the video’s picture *and* the larger the video’s file size.

- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.




- 3 Press the  or  button until **Recording** is highlighted.



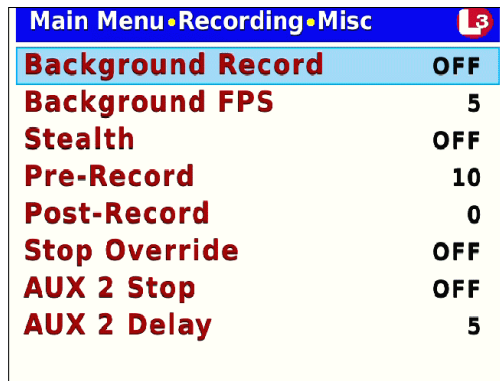
- 4 Press  to select the **Recording** option. The Recording menu displays.



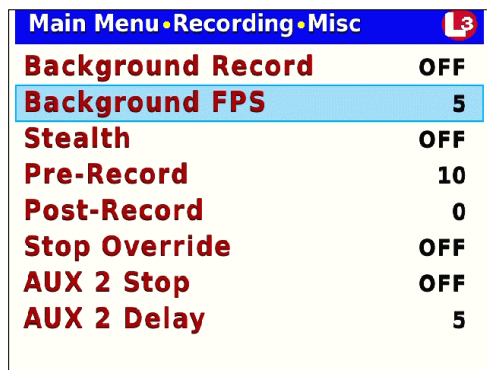
- 5 Press  to advance to the **Miscellaneous** option.



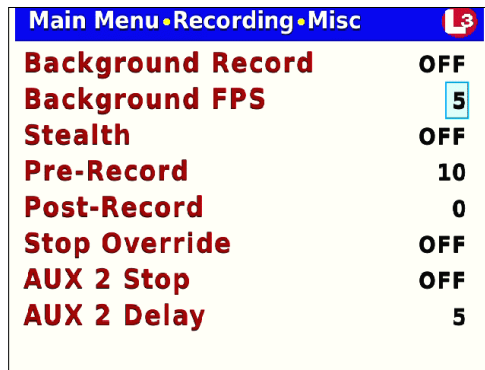
- 6 Press **R** to select the **Miscellaneous** option. The Misc screen displays.





- 7 Press **▶|◀** to advance to the *Background FPS* field.



- 8 Press **R** to select the *Background FPS* field.



The higher the number, the better the video quality & the larger the video size

- Use the  button to select the desired frames-per-second (2 or 5).
- Press  twice to save your changes and exit the Misc screen. The system will automatically reboot.




Changing the Video Resolution Setting

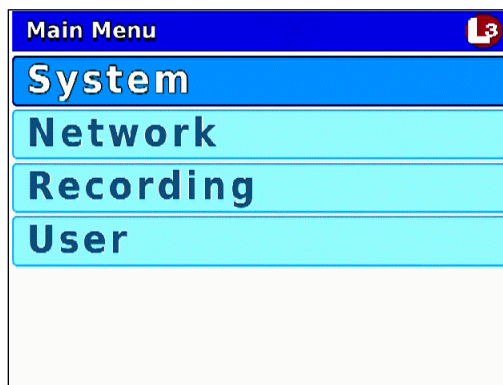
This section describes how to change the recording resolution for videos recorded from Channel 1 (Forward-facing zoom camera).



The higher the number, the clearer the video's picture *and* the larger the video's file size.

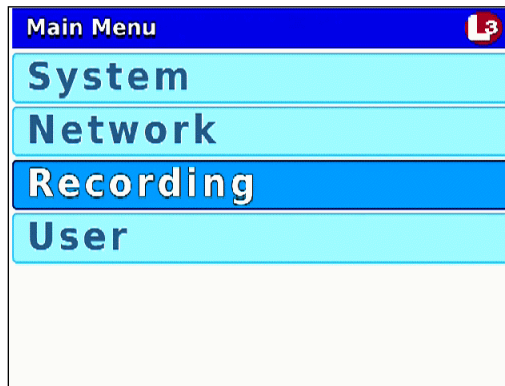


NOTE: The HD setting (1280 x 720) requires DES version 3.7 or higher.

- Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- Press . The Main Menu displays.



- Press the  or  button until **Recording** is highlighted.



- 4 Press **R** to select the **Recording** option. The Recording menu displays.




- 5 Press **R** again to select the **Video** option. The Video screen displays.



- 6 To change the video resolution for Channel 1 (Forward-facing zoom camera), press **▶** twice to advance to the *CH1 Resolution* field.

– OR –


To change the video resolution for Channel 2 (Backseat camera and Bullet cameras), press **◀** twice to advance to the *CH2 Resolution* field

Main Menu > Recording > Video 		
CH1 Quality	3	
CH1 FPS	30	
CH1 Resolution	720x480	1280x720 (HD)
CH2 Quality	3	
CH2 FPS	30	
CH2 Resolution	720x480	
CH2 Camera	2	

- 7 Press **R** to select the current field.


Main Menu > Recording > Video 		
CH1 Quality	3	
CH1 FPS	30	
CH1 Resolution	720x480	
CH2 Quality	3	
CH2 FPS	30	
CH2 Resolution	720x480	
CH2 Camera	2	

The higher the number, the better the video quality & the larger the video size

- 8 Press the  button until the desired screen resolution displays.
- 9 Press **M** twice to save your changes and exit the Video screen. The system will automatically reboot.

Turning Background Record On/Off

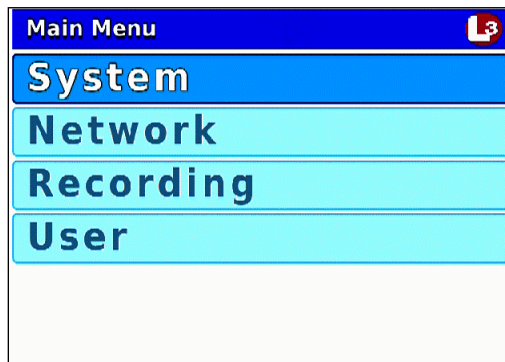
This section describes how to turn the Background Record feature *on* or *off*. This feature enables you to record continuously from the Forward-facing zoom camera at a reduced frame rate without audio whenever your vehicle's ignition is on. The downside of this feature is that it substantially increases your storage requirements. Before selecting this option, carefully review your video storage capacity.

When Background Record is on, you can still press the **R** button to start a regular recording, which is typically of a higher quality and resolution than Background Record videos. After you press **R**, the system will save the current *Background Record* file and begin generating a *Regular Record* file. When you press  to stop the video, the system will save the *Regular Record* file and return the DVR to Background Record mode. In this manner, you might generate multiple *Background Record* and *Regular Record* files during a given shift.

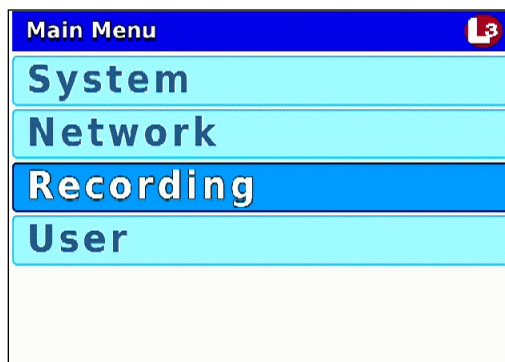
Because Background Recordings are captured at a much lower frames-per-second setting than Regular Recordings, they appear more like a series of “freeze frame” shots rather than a motion picture.

For more on the pre-record feature, see “Changing the Pre/Post Record Settings” on page 60.

- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



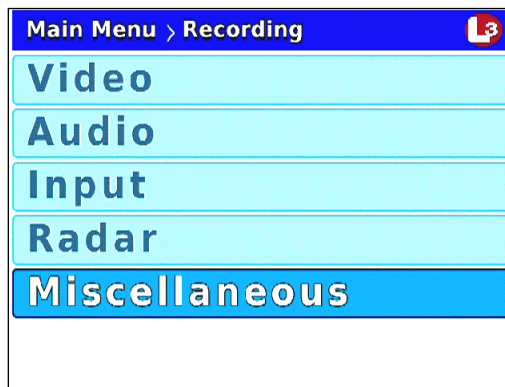
- 3 Press the **□** or **▶** button until **Recording** is highlighted.



- 4 Press **R** to select the **Recording** option. The Recording menu displays.



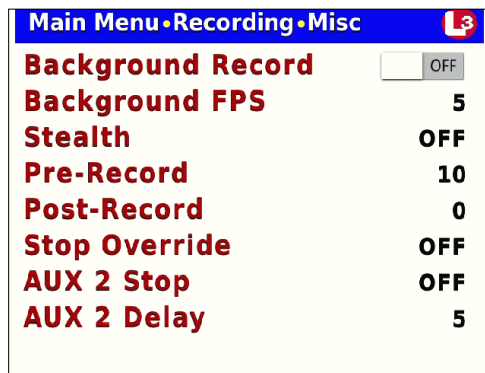
- 5 Press **⏏** to advance to the **Miscellaneous** option.



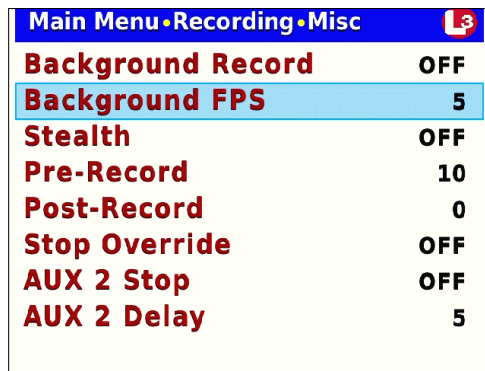
- 6 Press **R** to select the **Miscellaneous** option. The Misc screen displays.

Main Menu • Recording • Misc	
Background Record	OFF
Background FPS	5
Stealth	OFF
Pre-Record	10
Post-Record	0
Stop Override	OFF
AUX 2 Stop	OFF
AUX 2 Delay	5

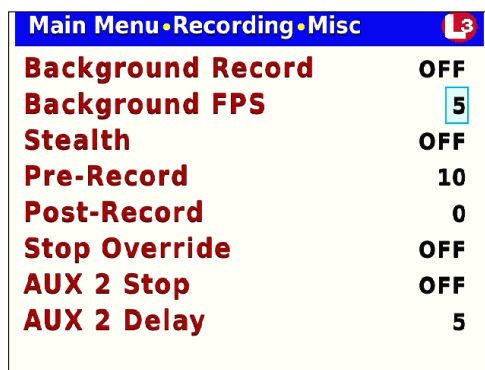
- 7 Press **R** to select the *Background Record* field.





- 8 Press **▶** to toggle the field value to **ON** or **OFF**.
- 9 To change the frames-per-second setting for videos captured in Background Record, proceed to the next step. Otherwise skip to step 14. (System default is 5 frames-per-second.)
- 10 Press **M**.
- 11 Press **▶** to advance to the *Background FPS* field.



- 12 Press **R** to select the *Background FPS* field.






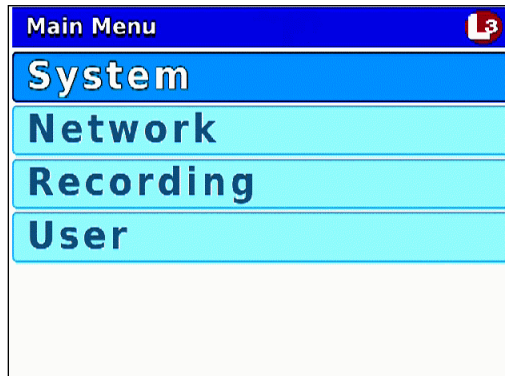
- 13 Use the  button to select the desired frames-per-second (2 or 5).
 - 14 Press  twice to save your changes and exit the Misc screen. The system will automatically reboot.
- B** **NOTE:** By default, a *Background Record* indicator (pictured left) will display on the Flashback screen whenever Background Record is *on*. If you want to hide this indicator from view, you must change the *Stealth* setting to **ON**. For instructions, see the next section.



Turning Stealth Mode On/Off

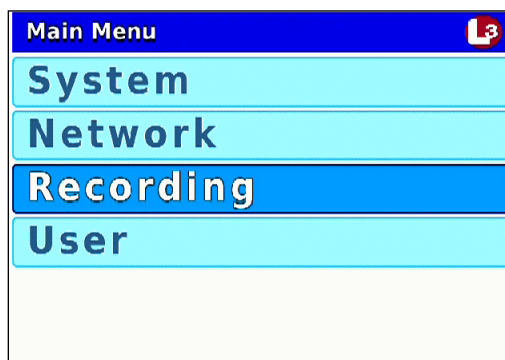
This section describes how to turn “Stealth” mode *on* or *off*, which determines whether or not the *Background Record indicator* **B** will display on the Flashback screen when Background Record is *on*.

If Stealth mode is *on*, the *Background Record* indicator will be hidden from view. If Stealth mode is *off* (system default), the *Background Record* indicator will be visible.

- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



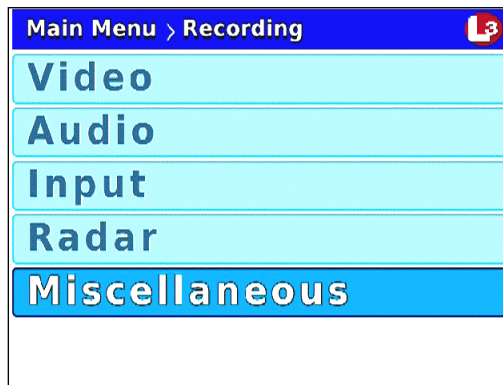
- 3 Press the  or  button until **Recording** is highlighted.



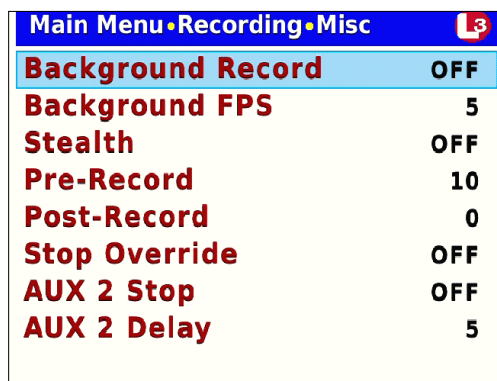
- 4 Press **R** to select the **Recording** option. The Recording menu displays.




- 5 Press **D** to advance to the **Miscellaneous** option.




- 6 Press **R** to select the **Miscellaneous** option. The Misc screen displays.





- 7 Press **▶** twice to advance to the *Stealth* field.

Main Menu • Recording • Misc 	
Background Record	OFF
Background FPS	5
Stealth	OFF
Pre-Record	10
Post-Record	0
Stop Override	OFF
AUX 2 Stop	OFF
AUX 2 Delay	5


- 8 Press  to select the *Stealth* field.



Main Menu • Recording • Misc 	
Background Record	OFF
Background FPS	5
Stealth	<input type="checkbox"/> OFF
Pre-Record	10
Post-Record	0
Stop Override	OFF
AUX 2 Stop	OFF
AUX 2 Delay	5

- 9 Press  to toggle the field value to **ON** or **OFF**.
- 10 Press  *four times* to save your changes and exit this option.

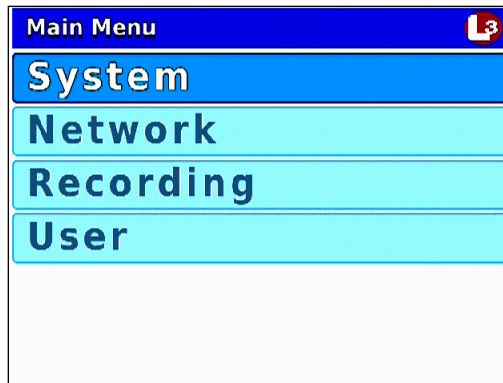
Changing the Pre/Post Record Settings

If desired, you may capture up to 60 seconds of video *before* a recording session begins and/or *after* a recording session ends. Many agencies are interested in seeing what happened x number of seconds *before* a recording was triggered by either a manual or automatic trigger. For example, if you are using the Crash Sensor as the *Aux 1* trigger, you may wish to view the events that preceded a motor vehicle accident.

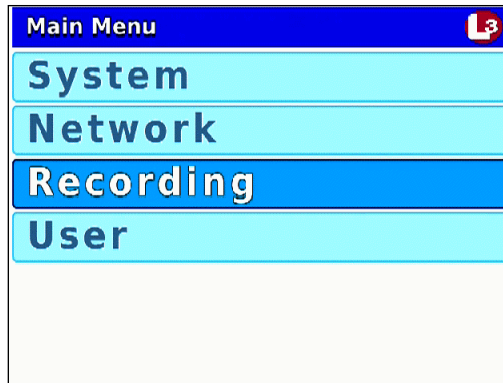
The reason that the Flashback is able to capture video *before* a recording session even begins is because the DVR is, in fact, recording all the time—it just doesn't save all that data to the SD card unless you choose to do so. You might compare pre-recordings to the short-term memory on a computer. Before you ever click **Save** (or in this case, the  button), there is still some data stored in the computer's short-term memory.

- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)

- 2 Press **M**. The Main Menu displays.



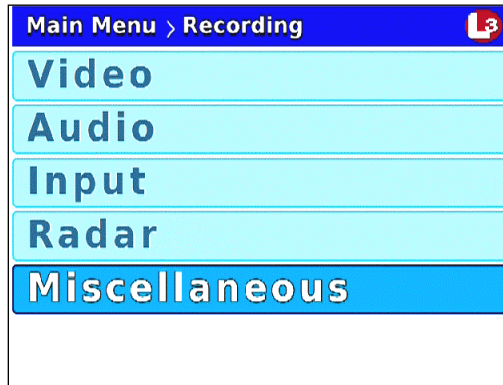
- 3 Press the **Left Arrow** or **Right Arrow** button until **Recording** is highlighted.



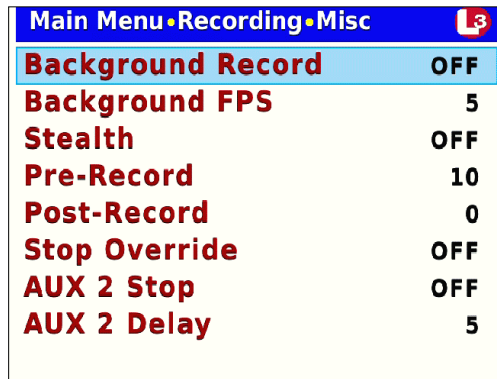
- 4 Press **R** to select the **Recording** option. The Recording menu displays.



- 5 Press **Left Arrow** to advance to the **Miscellaneous** option.



- 6 Press **R** to select the **Miscellaneous** option. The Misc screen displays.

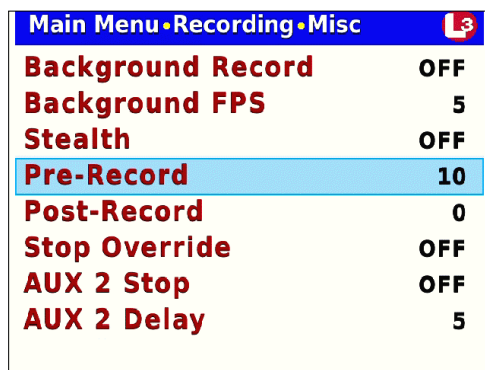


- 7 To change your *pre-record* setting, proceed to the next step.


– OR –



To change your *post-record* setting, skip to step 13.


- 8 Press **▶|** *three times* to advance to the *Pre-Record* field.



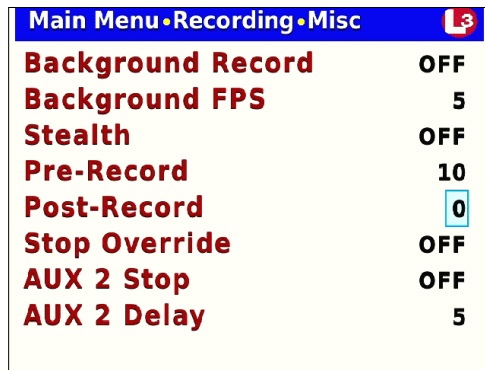
- 9 Press **R** to select the *Pre-Record* field.



Main Menu • Recording • Misc 	
Background Record	OFF
Background FPS	5
Stealth	OFF
Pre-Record	10
Post-Record	0
Stop Override	OFF
AUX 2 Stop	OFF
AUX 2 Delay	5

- 10 Use the  button to select the desired length for your pre-recordings (in seconds): **0, 10** (default), **20, 30, 40, 50, or 60**. Once the desired number displays, proceed to the next step.
- 11 If you wish to change your *post-record* setting as well, proceed to the next step.
– OR –
If you do *not* wish to change your *post-record* setting, skip to step 16.
- 12 Press **M**.
- 13 Use the  button to advance to the *Post-Record* field.

Main Menu • Recording • Misc 	
Background Record	OFF
Background FPS	5
Stealth	OFF
Pre-Record	10
Post-Record	0
Stop Override	OFF
AUX 2 Stop	OFF
AUX 2 Delay	5

- 14 Press **R** to select the *Post-Record* field.






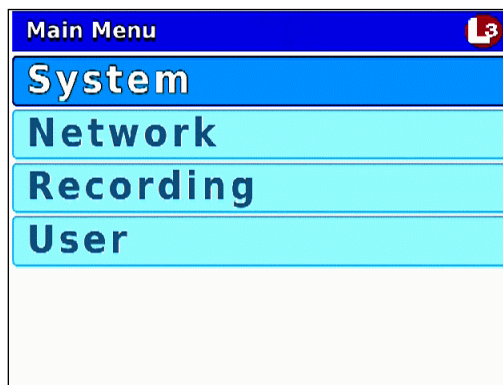
- Use the  button to select the desired length for your post-recordings (in seconds): **0** (default), **10**, **20**, **30**, **40**, **50**, or **60**. Once the desired number displays, proceed to the next step.
- Press  *twice* to save your changes and exit the Misc screen. The system will automatically reboot.



Selecting the Camera(s) for Channel 2

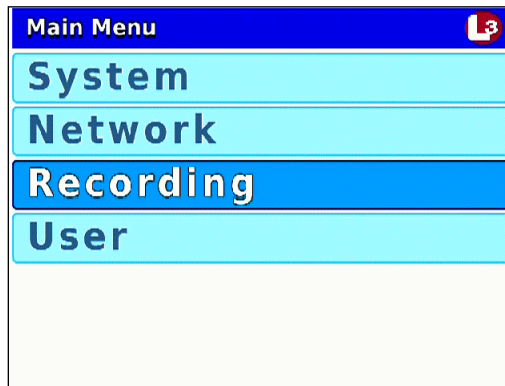
This section describes how to select the number of cameras that will be recording on Channel 2. If there will be *no* cameras recording on Channel 2, set the *CH2 Camera* field to **OFF**.

You can have up to four cameras recording on Channel 2: the *Backseat* camera and 1 – 3 *Bullet* cameras.

- Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- Press . The Main Menu displays.



- Press the  or  button until **Recording** is highlighted.




- 4 Press **R** to select the **Recording** option. The Recording menu displays.



- 5 Press **R** to select the **Video** option. The Video screen displays.



- 6 Press **⏏** to advance to the *CH2 Camera* field.

Main Menu > Recording > Video 	
CH1 Quality	3
CH1 FPS	30
CH1 Resolution	720x480
CH2 Quality	3
CH2 FPS	30
CH2 Resolution	720x480
CH2 Camera	2

- 7 Press **R** to select the *CH2 Camera* field.

Main Menu > Recording > Video 	
CH1 Quality	3
CH1 FPS	30
CH1 Resolution	720x480
CH2 Quality	3
CH2 FPS	30
CH2 Resolution	720x480
CH2 Camera	< 2 >

- 8 If you will be recording on Channel 2, press **▶** until the correct number of cameras displays (1-4).
– OR –
If you will *not* be recording on Channel 2, press **▶** until **OFF** displays.
- 9 Press **M** *twice* to save your changes and exit the Video screen. The system will automatically reboot.




Changing the Audio Settings

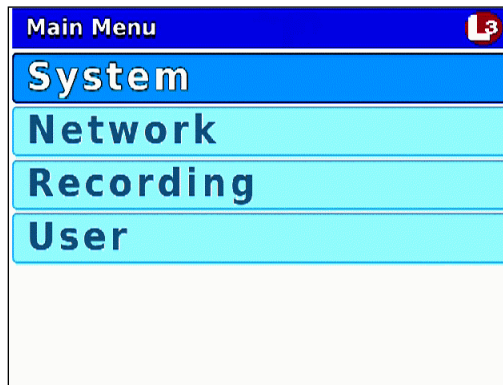
This section allows you to change the Flashback audio settings. For specific instructions, see:



- Turning the VLP1 Audio On/Off, next page
- Turning the VLP2 Audio On/Off, page 69
- Turning the In-Car Audio On/Off, page 71
- Turning the Record ‘Beep’ On/Off, page 74
- Turning the Keystroke ‘Beep’ On/Off, page 76
- Turning the Pre/Post Audio On/Off, page 79
- Changing the Gain Setting for the VLP1 Audio, page 81
- Changing the Gain Setting for the VLP2 Audio, page 84
- Changing the Gain Setting for the In-Car Audio, page 87.

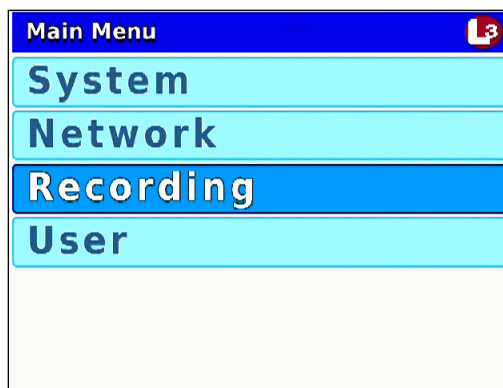
Turning the VLP1 Audio On/Off


This section describes how to turn your VLP1 port's audio setting *on* or *off*. If this setting is *on*, audio from the VLP2 or VLX wireless microphone connected to input port VLP 1 will be recorded. If this setting is *off*, audio from the VLP2 or VLX wireless microphone connected to input port VLP 1 will *not* be recorded.

- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



- 3 Press the  or  button until **Recording** is highlighted.



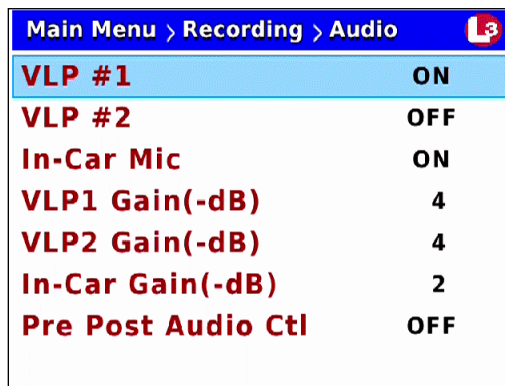
- 4 Press  to select the **Recording** option. The Recording menu displays.



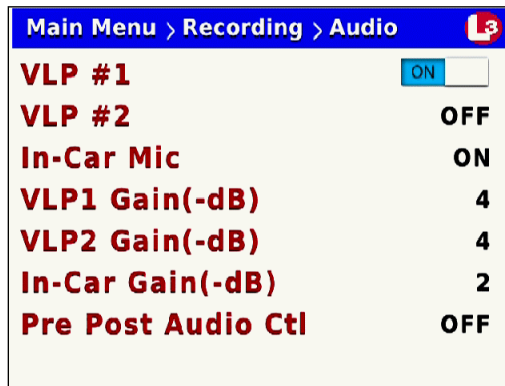
- 5 Press **▶** to advance to the **Audio** option.





- 6 Press **R** to select the **Audio** option. The Audio screen displays.






- 7 Press **R** to select the **VLP #1** field.

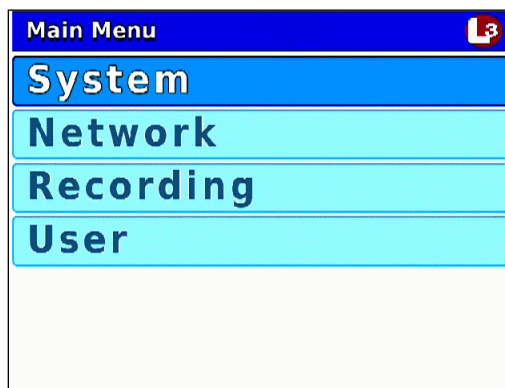




- 8 Press  to toggle the field value to **ON** or **OFF**.
- 9 Press  *four times* to save your changes and exit this option.

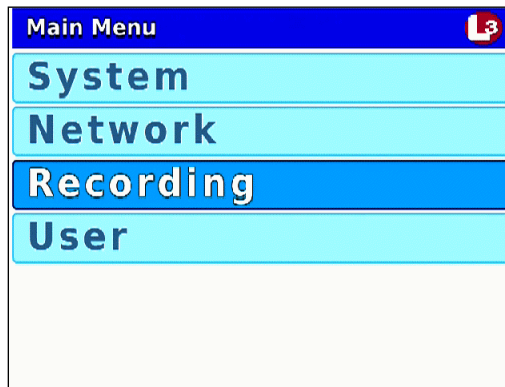
Turning the VLP2 Audio On/Off

This section describes how to turn your VLP2 port's audio setting *on* or *off*. If this setting is *on*, audio from the VLP2 or VLX wireless microphone connected to input port VLP 2 will be recorded. If this setting is *off*, audio from the VLP2 or VLX wireless microphone connected to input port VLP 2 will *not* be recorded.

- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



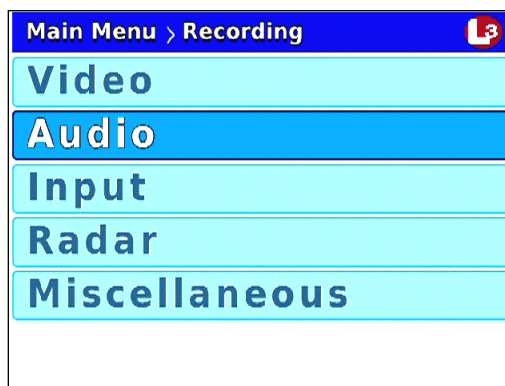
- 3 Press the  or  button until **Recording** is highlighted.




- 4 Press **R** to select the **Recording** option. The Recording menu displays.





- 5 Press **▶** to advance to the **Audio** option.





- 6 Press **R** to select the **Audio** option. The Audio screen displays.

Main Menu > Recording > Audio 	
VLP #1	ON
VLP #2	OFF
In-Car Mic	ON
VLP1 Gain(-dB)	4
VLP2 Gain(-dB)	4
In-Car Gain(-dB)	2
Pre Post Audio Ctl	OFF

- 7 Press  to advance to the *VLP #2* field.
- 8 Press  to select the *VLP #2* field.


Main Menu > Recording > Audio 	
VLP #1	ON
VLP #2	<input type="checkbox"/> OFF
In-Car Mic	ON
VLP1 Gain(-dB)	4
VLP2 Gain(-dB)	4
In-Car Gain(-dB)	2
Pre Post Audio Ctl	OFF




- 9 Press  to toggle the field value to **ON** or **OFF**.
- 10 Press  *four times* to save your changes and exit this option.

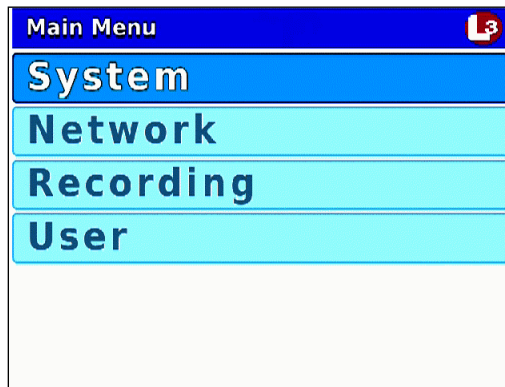
Turning the In-Car Audio On/Off



This section describes how to turn your in-car microphone's audio setting *on* or *off*. If this setting is *on*, audio from the in-car microphone will be recorded. If this setting is *off*, audio from the in-car microphone will *not* be recorded.

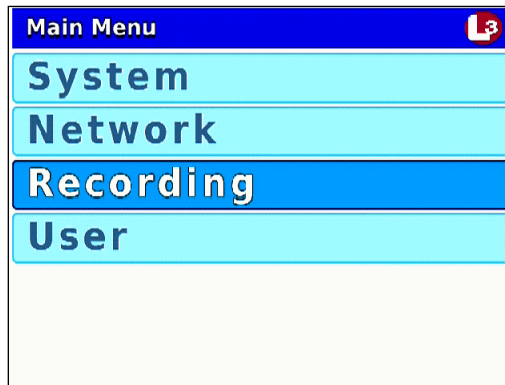



NOTE: If the in-car mic's audio setting is *on*, you will still have the option of temporarily muting that audio while a recording is in progress. To do so, press .

- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.




- 3 Press the  or  button until **Recording** is highlighted.



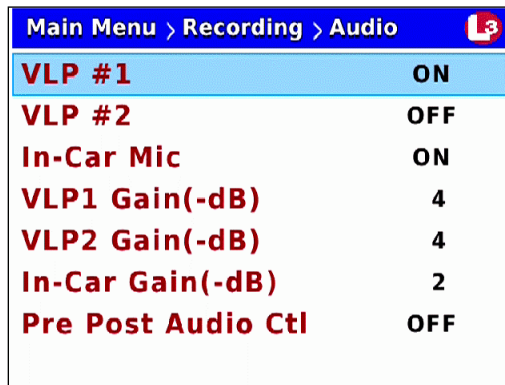
- 4 Press  to select the **Recording** option. The Recording menu displays.



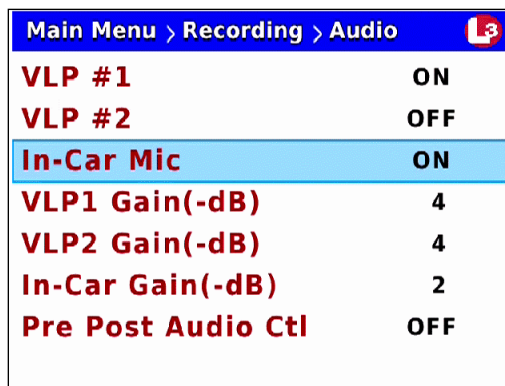
- 5 Press  to advance to the **Audio** option.



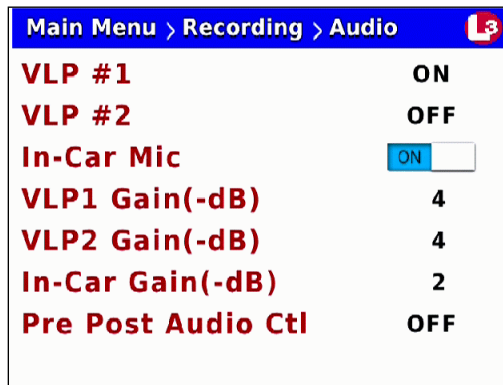
- 6 Press **R** to select the **Audio** option. The Audio screen displays.



- 7 Press **▶** twice to advance to the *In-Car Mic* field.



- 8 Press **R** to select the *In-Car Mic* field.

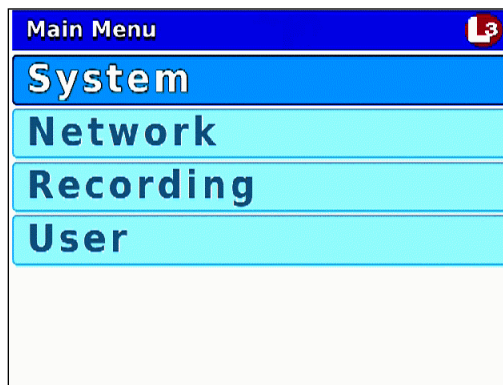


- 9 Press **▶** to toggle the field value to **ON** or **OFF**.
- 10 Press **M** *four times* to save your changes and exit this option.

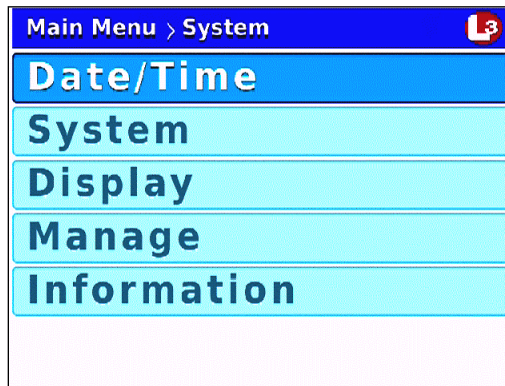
Turning the Record 'Beep' On/Off

This section describes how to turn the Record “beep” option *on* or *off*. If this setting is *on*, the DVR will beep every 30 seconds while a Regular recording is in session.

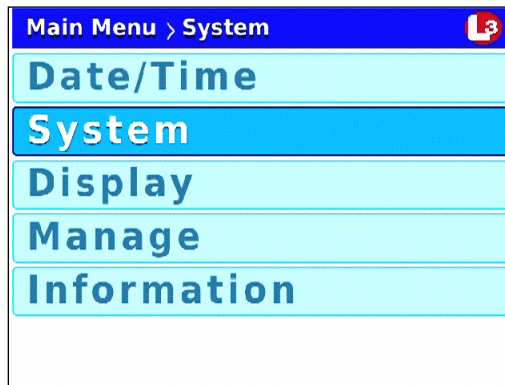
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



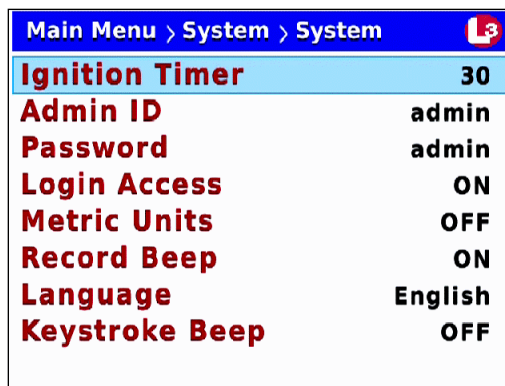
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **▶** or **◀** button to advance to that option.
- 4 Press **R** to select the **System** option. The System menu displays.




- 5 Press **▶** to advance to the **System** option.





- 6 Press **R** to select the **System** option. The System screen displays.





- 7 Press **□** *three times* to advance to the *Record Beep* field.

Main Menu > System > System 	
Ignition Timer	30
Admin ID	admin
Password	admin
Login Access	ON
Metric Units	OFF
Record Beep	ON
Language	English
Keystroke Beep	OFF




- 8 Press  to select the *Record Beep* field.

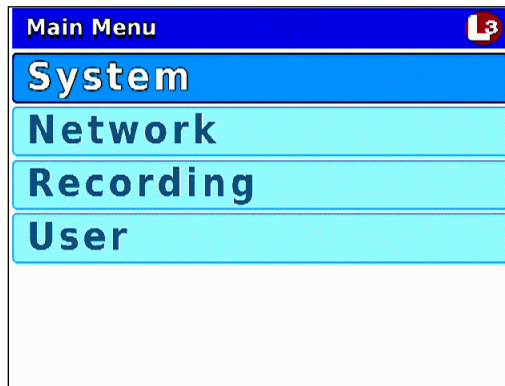
Main Menu > System > System 	
Ignition Timer	30
Admin ID	admin
Password	admin
Login Access	ON
Metric Units	OFF
Record Beep	<input checked="" type="checkbox"/>
Language	English
Keystroke Beep	OFF

- 9 Press  to toggle the field value to **ON** or **OFF**.
- 10 Press  *four times* to save your changes and exit this option.

Turning the Keystroke 'Beep' On/Off

This section describes how to turn the keystroke “beep” option *on* or *off*. If this setting is *on*, the DVR will beep each time you press one of the buttons on the DVR or DVR monitor.


- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.

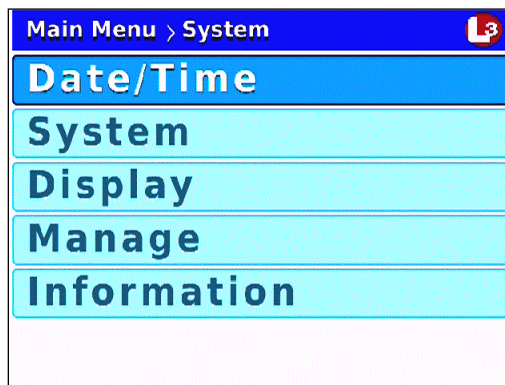



- 3 If **System** is highlighted, proceed to the next step.

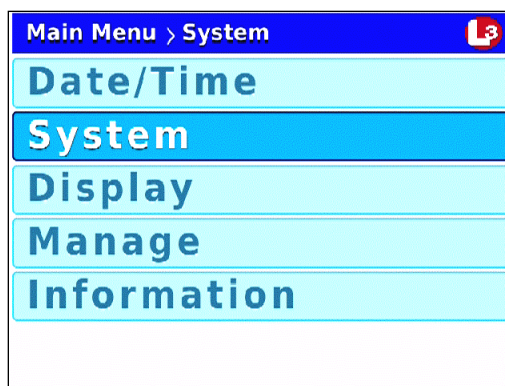
– OR –


If **System** is *not* highlighted, press the  or  button to advance to that option.


- 4 Press  to select the **System** option. The System menu displays.





- 5 Press  to advance to the **System** option.





- 6 Press  to select the **System** option. The System screen displays.



Main Menu > System > System 	
Ignition Timer	30
Admin ID	admin
Password	admin
Login Access	ON
Metric Units	OFF
Record Beep	ON
Language	English
Keystroke Beep	OFF

- 7 Press  to advance to the *Keystroke Beep* field.

Main Menu > System > System 	
Ignition Timer	30
Admin ID	admin
Password	admin
Login Access	ON
Metric Units	OFF
Record Beep	ON
Language	English
Keystroke Beep	OFF

- 8 Press  to select the *Keystroke Beep* field.




Main Menu > System > System 	
Ignition Timer	30
Admin ID	admin
Password	admin
Login Access	ON
Metric Units	OFF
Record Beep	ON
Language	English
Keystroke Beep	<input type="checkbox"/> OFF

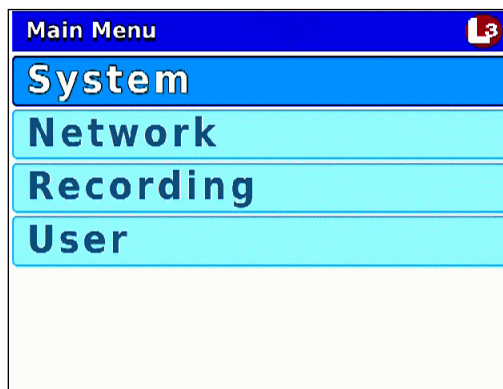
- 9 Press  to toggle the field value to **ON** or **OFF**.
- 10 Press  *four times* to save your changes and exit this option.



Turning the Pre/Post Audio On/Off

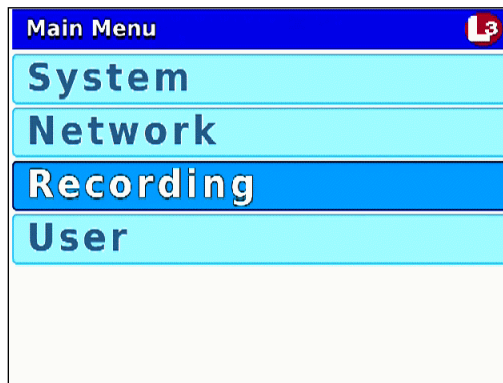
This section describes how to turn the audio *on* or *off* for your pre- and post-recordings. Including audio in these recordings will *increase* your file size; omitting audio from these recordings will *reduce* your file size.


For more information on pre- and post-recordings, see “Changing the Pre/Post Record Settings” on page 60.

- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



- 3 Press the  or  button until **Recording** is highlighted.



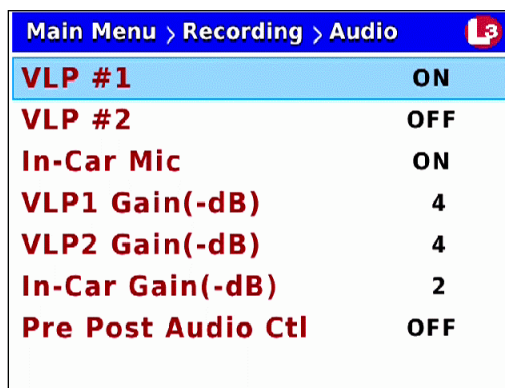
- 4 Press  to select the **Recording** option. The Recording menu displays.



- 5 Press **▶** to advance to the **Audio** option.



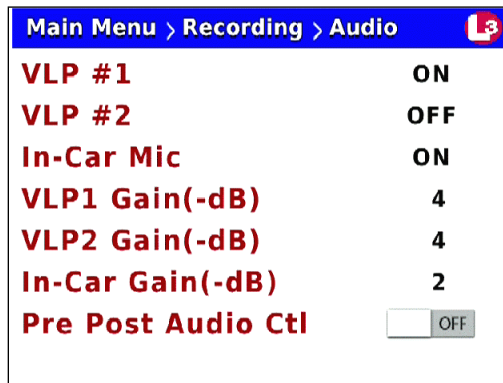
- 6 Press **R** to select the **Audio** option. The Audio screen displays.



- 7 Press **◀** to advance to the *Pre Post Audio Ctrl* field.



- 8 Press **R** to select the *Pre Post Audio Ctrl* field.



- 9 Press **▶** to toggle the field value to **ON** or **OFF**.
- 10 Press **M** *twice* to save your changes and exit the Audio screen. The system will automatically reboot.




Changing the Gain Setting for the VLP1 Audio

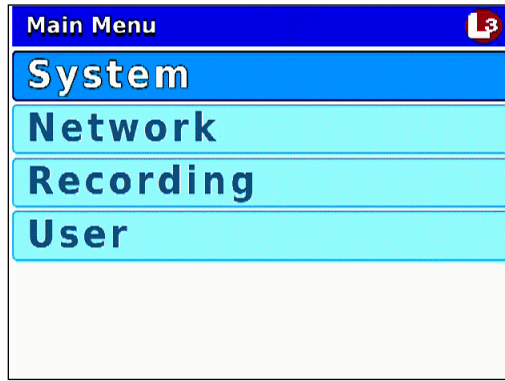
This section describes how to adjust the strength of the audio line level signal into the DVR for the VLP2 or VLX wireless microphone connected to input port VLP 1. This signal has an effect on volume:



- Increasing* the numeric value of the *VLP1 Gain(-dB)* field will result in decreased volume
- Decreasing* the numeric value of the *VLP1 Gain(-dB)* field will result in increased volume.

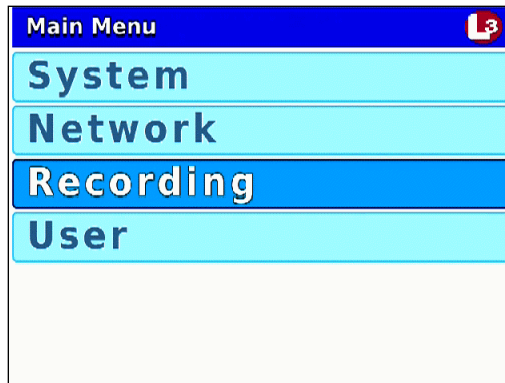
It's recommended that you adjust this setting up or down in *small increments* until you hear an improvement. If you notice increased distortion after changing this setting, go back to the Audio screen and increase the numeric value of the *VLP1 Gain(-dB)* field.


The system default is **-4** decibels.

- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.




- 3 Press the  or  button until **Recording** is highlighted.



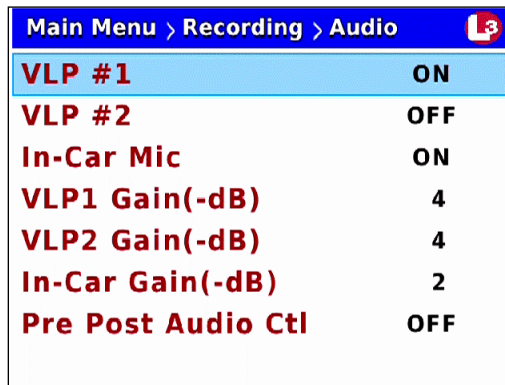
- 4 Press  to select the **Recording** option. The Recording menu displays.



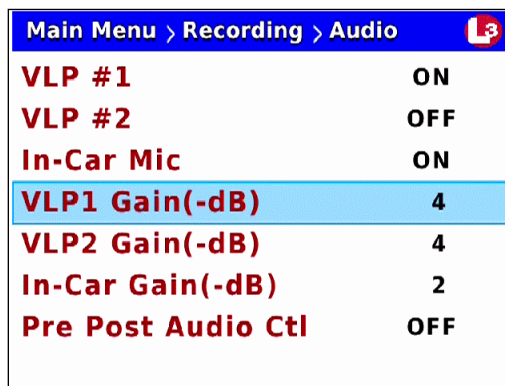
- 5 Press  to advance to the **Audio** option.




- 6 Press **R** to select the **Audio** option. The Audio screen displays.






- 7 Press **▶|** three times to advance to the *VLP1 Gain(-dB)* field.



- 8 Press **R** to select the *VLP1 Gain(-dB)* field.

Main Menu > Recording > Audio 	
VLP #1	ON
VLP #2	OFF
In-Car Mic	ON
VLP1 Gain(-dB)	< 4 >
VLP2 Gain(-dB)	4
In-Car Gain(-dB)	2
Pre Post Audio Ctl	OFF

- 9 Use the  or  button to select the desired gain in negative decibels (0 – 16). For example, if you notice some audio distortion in your videos and the value of the *VLP1 Gain(-dB)* field is currently **4**, you may want to try setting it to **5**.
- 10 Press  *four times* to save your changes and exit this option.




Changing the Gain Setting for the VLP2 Audio

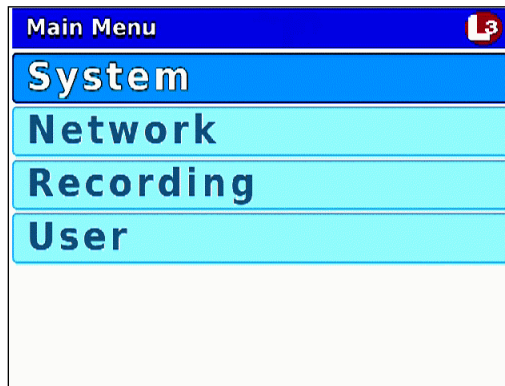
This section describes how to adjust the strength of the audio line level signal into the DVR for the VLP2 or VLX wireless microphone connected to input port VLP 2. This signal has an effect on volume:



- Increasing* the numeric value of the *VLP2 Gain(-dB)* field will result in decreased volume
- Decreasing* the numeric value of the *VLP2 Gain(-dB)* field will result in increased volume.

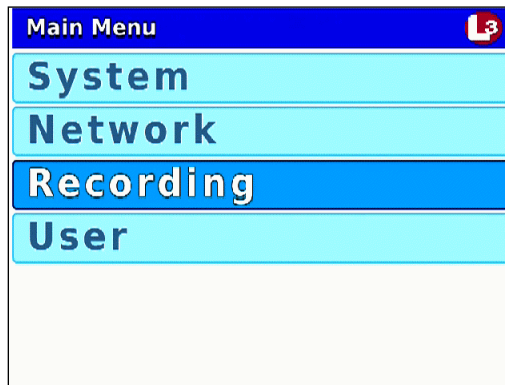
It's recommended that you adjust this setting up or down in small increments until you hear an improvement. If you notice increased distortion after changing this setting, go back to the Audio screen and increase the numeric value of the *VLP2 Gain(-dB)* field.


The system default is **-4** decibels.

- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.




- 3 Press the  or  button until **Recording** is highlighted.



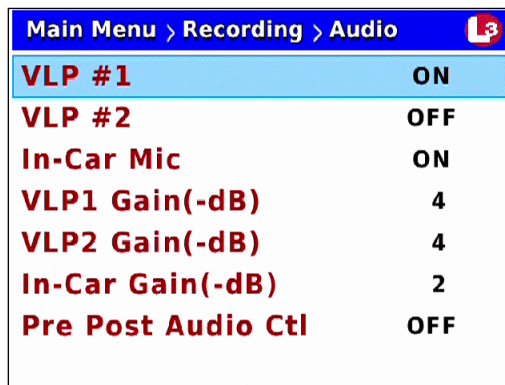
- 4 Press  to select the **Recording** option. The Recording menu displays.




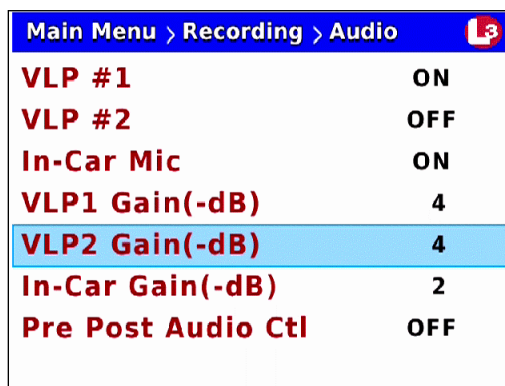
- 5 Press  to advance to the **Audio** option.



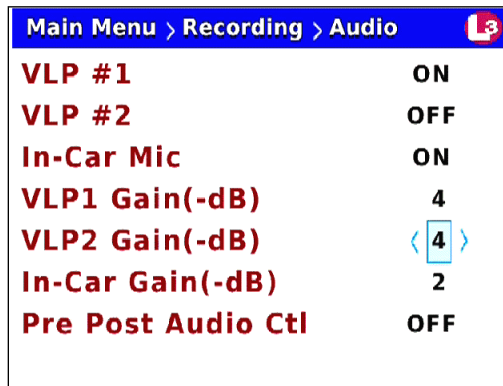
- 6 Press **R** to select the **Audio** option. The Audio screen displays.






- 7 Press  *three times* to advance to the *VLP2 Gain(-dB)* field.



- 8 Press **R** to select the *VLP2 Gain(-dB)* field.



- 9 Use the  or  button to select the desired gain in negative decibels (0 – 16). For example, if you notice some audio distortion in your videos and the value of the *VLP2 Gain(-dB)* field is currently **4**, you may want to try setting it to **5**.
- 10 Press  *four times* to save your changes and exit this option.




Changing the Gain Setting for the In-Car Audio

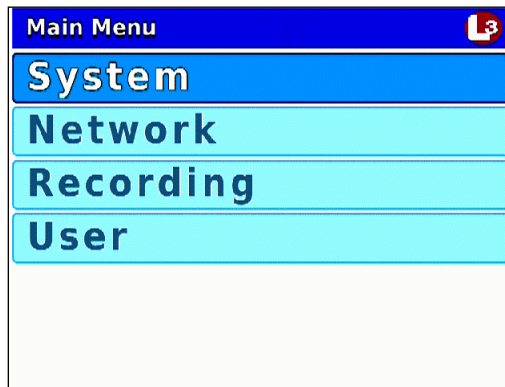
This section describes how to adjust the strength of the audio line level signal into the DVR for your in-car microphone. This signal has an effect on volume:



- Increasing* the numeric value of the *In-Car Gain(-dB)* field will result in decreased volume
- Decreasing* the numeric value of the *In-Car Gain(-dB)* field will result in increased volume.

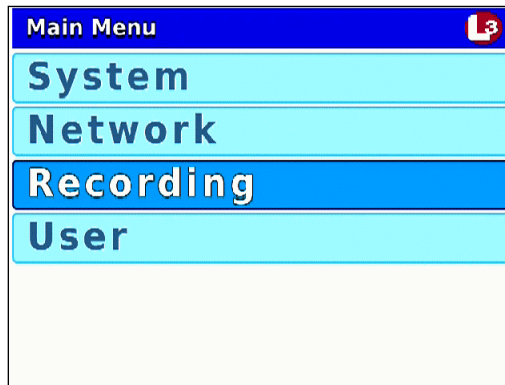
It's recommended that you adjust this setting up or down in small increments until you hear an improvement. If you notice increased distortion after changing this setting, go back to the *Audio* screen and increase the numeric value of the *In-Car Gain(-dB)* field.


The system default is -2 decibels.

- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.




- 3 Press the  or  button until **Recording** is highlighted.




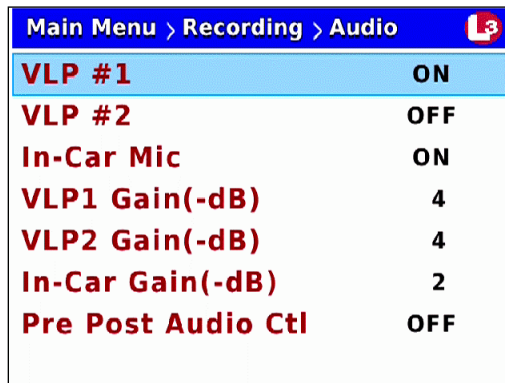
- 4 Press  to select the **Recording** option. The Recording menu displays.




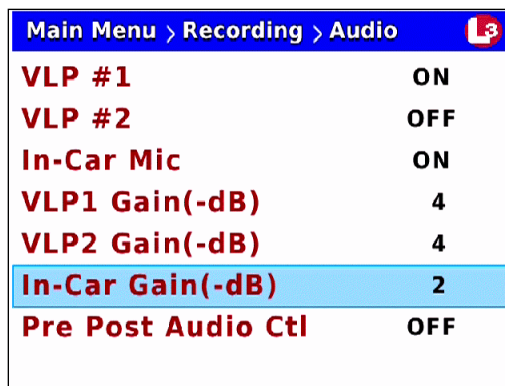
- 5 Press  to advance to the **Audio** option.





- 6 Press  to select the **Audio** option. The Audio screen displays.






- 7 Press  two times to advance to the *In-Car Gain(-dB)* field.



- 8 Press  to select the *In-Car Gain(-dB)* field.

Main Menu > Recording > Audio 	
VLP #1	ON
VLP #2	OFF
In-Car Mic	ON
VLP1 Gain(-dB)	4
VLP2 Gain(-dB)	4
In-Car Gain(-dB)	< 2 >
Pre Post Audio Ctl	OFF

- 9 Use the  or  button to select the desired gain in negative decibels (0 – 16). For example, if you notice some audio distortion in your videos and the value of the *In-Car Gain(-dB)* field is currently **4**, you may want to try setting it to **5**.
- 10 Press  *four times* to save your changes and exit this option.

Selecting & Configuring Record Triggers

Video recordings are initiated, or *triggered*, in one of two ways: *manually*, or *automatically*. To manually trigger a recording, you simply press the **Record** button on your Flashback monitor or DVR. To automatically trigger a recording, you program the Flashback to begin recording in response to selected actions. For example, you can program the Flashback to automatically begin recording when your siren or emergency lights go on, when your vehicle reaches a certain speed, or when a wireless microphone is activated. These actions are referred to as *record triggers*. Initially, your System Implementation Specialist (SIS) will assist you in selecting and configuring your record triggers. After that, you can use the following procedures to add new triggers and/or reconfigure existing triggers.




Please note that the Aux 1 and Aux 2 triggers work in tandem with optional add-on equipment, such as the Crash Sensor. Such equipment is typically installed at system-start up.

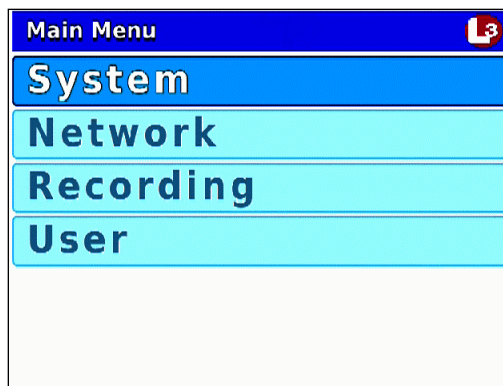
For more information, see:



- Turning the Lights Trigger On/Off, next page
- Turning the Siren Trigger On/Off, page 93
- Turning the AUX1 Trigger On/Off, page 96
- Turning the AUX2 Trigger On, page 98
- Turning the AUX2 Trigger Off, page 104
- Turning the Speed Trigger On/Off, page 107
- Turning the ‘Stop Override’ Feature On/Off, page 111
- Turning the VLP Microphone Trigger On/Off, page 113

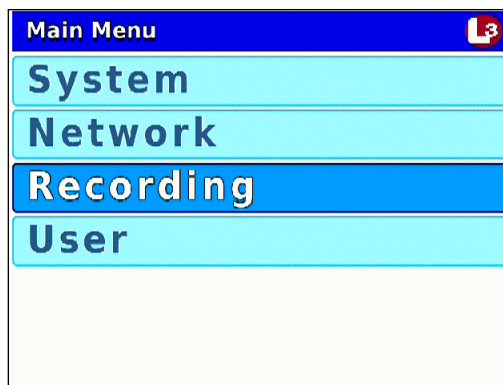
Turning the Lights Trigger On/Off


This section describes how to turn the lights record trigger *on* or *off*. When this feature is *on*, the DVR will automatically begin recording whenever you turn on your vehicle's emergency lights.

- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



- 3 Press the  or  button until **Recording** is highlighted.



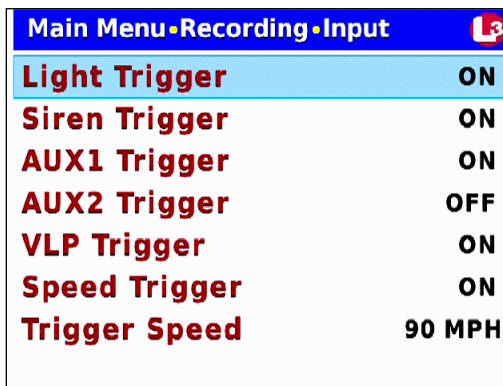
- 4 Press  to select the **Recording** option. The Recording menu displays.



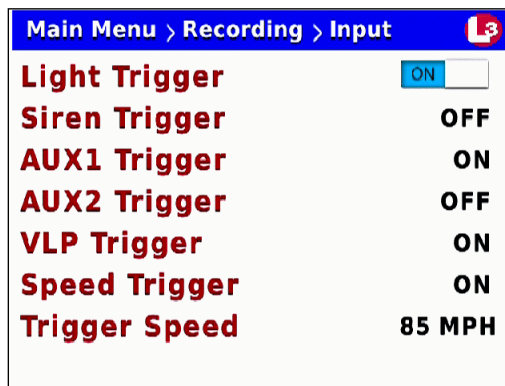
- 5 Press **▶|◀** twice to advance to the **Input** option.





- 6 Press **R** to select the **Input** option. The Input screen displays.






- 7 Press **R** to select the *Light Trigger* field.

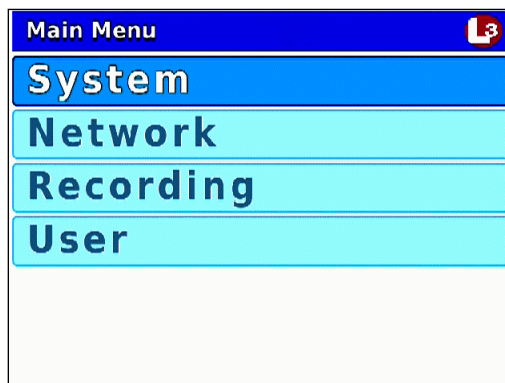




- 8 Press  to toggle the field value to **ON** or **OFF**.
- 9 Press  *four times* to save your changes and exit this option.

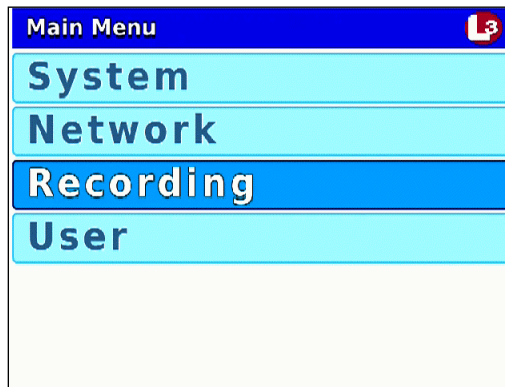
Turning the Siren Trigger On/Off

This section describes how to turn the siren record trigger *on* or *off*. When this feature is *on*, the DVR will automatically begin recording whenever your vehicle's siren is activated.

- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



- 3 Press the  or  button until **Recording** is highlighted.




- 4 Press **R** to select the **Recording** option. The Recording menu displays.





- 5 Press **▶|◀** twice to advance to the **Input** option.





- 6 Press **R** to select the **Input** option. The Input screen displays.


Main Menu • Recording • Input 	
Light Trigger	ON
Siren Trigger	ON
AUX1 Trigger	ON
AUX2 Trigger	OFF
VLP Trigger	ON
Speed Trigger	ON
Trigger Speed	90 MPH


7 Press  to advance to the *Siren Trigger* field.

Main Menu > Recording > Input 	
Light Trigger	ON
Siren Trigger	OFF
AUX1 Trigger	ON
AUX2 Trigger	OFF
VLP Trigger	ON
Speed Trigger	ON
Trigger Speed	85 MPH

8 Press  to select the *Siren Trigger* field.




Main Menu > Recording > Input 	
Light Trigger	ON
Siren Trigger	<input type="checkbox"/> OFF
AUX1 Trigger	ON
AUX2 Trigger	OFF
VLP Trigger	ON
Speed Trigger	ON
Trigger Speed	85 MPH

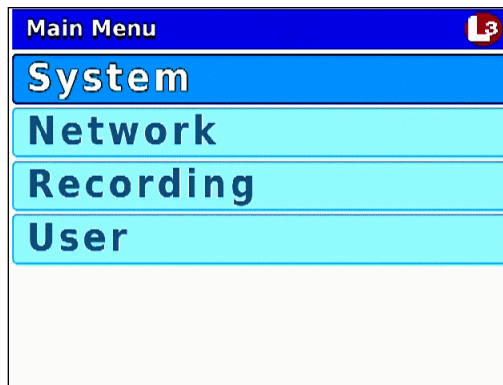
9 Press  to toggle the field value to ON or OFF.



10 Press  *four times* to save your changes and exit this option.

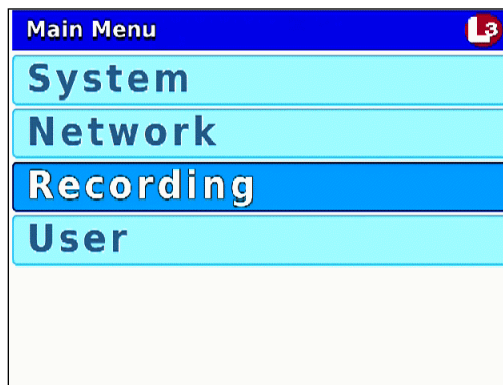
Turning the AUX1 Trigger On/Off


This section describes how to turn the Auxiliary 1 record trigger *on* or *off*. When this feature is *on*, the DVR will automatically begin recording whenever your Auxiliary 1 device (such as the Crash Sensor) is activated.

- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



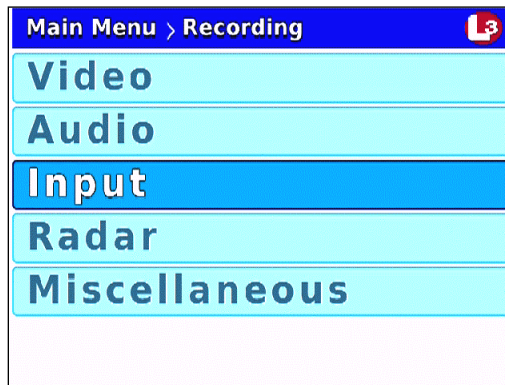
- 3 Press the  or  button until **Recording** is highlighted.



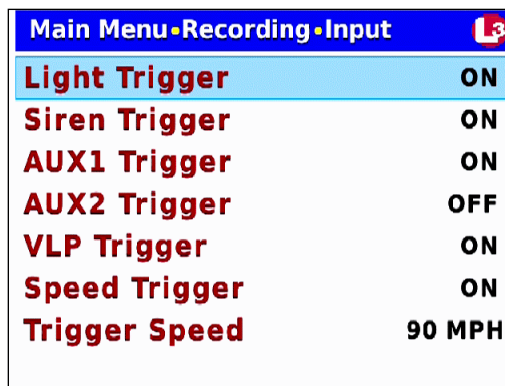
- 4 Press  to select the **Recording** option. The Recording menu displays.




- 5 Press **▶** *twice* to advance to the **Input** option.





- 6 Press **R** to select the **Input** option. The Input screen displays.





- 7 Press **▶** *twice* to advance to the *AUX1 Trigger* field.

Main Menu > Recording > Input 	
Light Trigger	ON
Siren Trigger	OFF
AUX1 Trigger	ON
AUX2 Trigger	OFF
VLP Trigger	ON
Speed Trigger	ON
Trigger Speed	85 MPH

- 8 Press  to select the *AUX1 Trigger* field.



Main Menu > Recording > Input 	
Light Trigger	ON
Siren Trigger	OFF
AUX1 Trigger	<input checked="" type="checkbox"/>
AUX2 Trigger	OFF
VLP Trigger	ON
Speed Trigger	ON
Trigger Speed	85 MPH

- 9 Press  to toggle the field value to **ON** or **OFF**.
- 10 Press  *four times* to save your changes and exit this option.

Turning the Aux 2 Trigger On

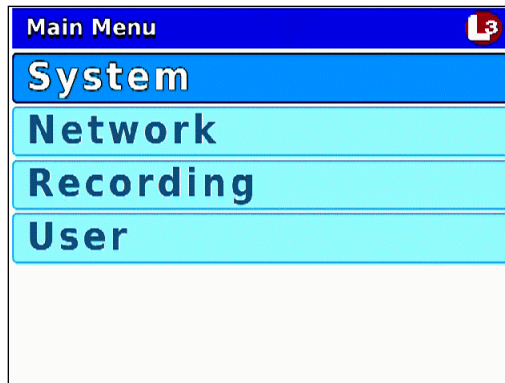
This section describes how to turn the Auxiliary 2 record trigger *on*. When this feature is *on*, the DVR will automatically begin recording whenever your Auxiliary 2 device (such as a motion detector) is activated.

If desired, you can program the DVR to automatically stop an Aux 2 triggered recording **X** number of minutes after the triggering activity ceases. For example, if your Aux 2 device is a motion detector, the “triggering activity” would be motion. If the *AUX 2 Delay* field is set to **5**, then after five motionless minutes, the DVR will automatically stop recording.*

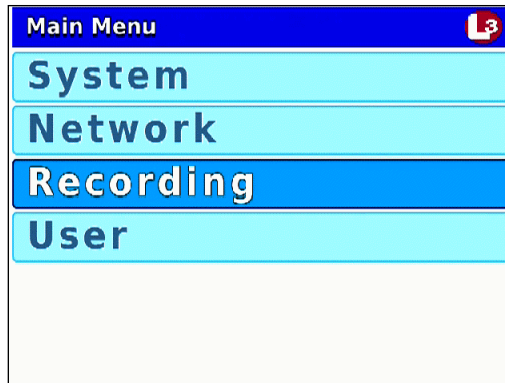
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)

* Assuming that the value of the *AUX 2 Trigger* and *AUX 2 Stop* fields is **ON**.

- 2 Press **M**. The Main Menu displays.



- 3 Press the **Left Arrow** or **Right Arrow** button until **Recording** is highlighted.



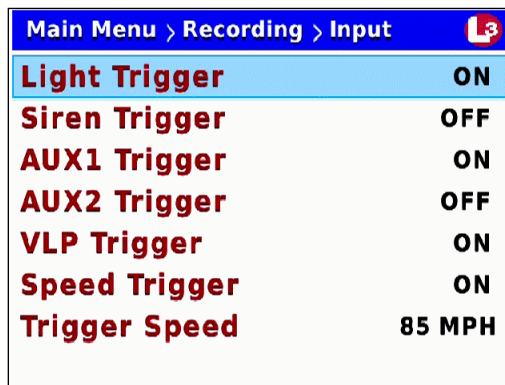
- 4 Press **R** to select the **Recording** option. The Recording menu displays.



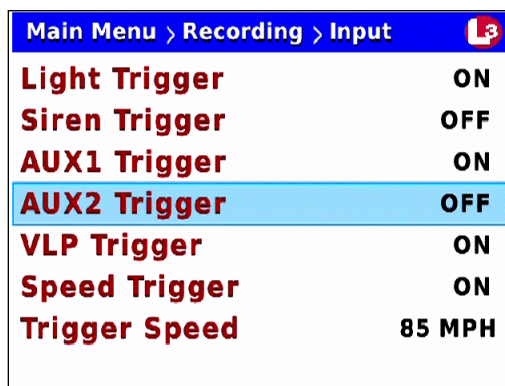
- 5 Press **Right Arrow** twice to advance to the **Input** option.



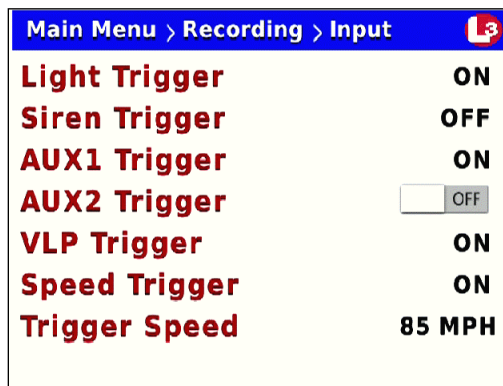
- 6 Press **R** to select the **Input** option. The Input screen displays.



- 7 Press **▶|◀** *three times* to advance to the *AUX2 Trigger* field.



- 8 Press **R** to select the *AUX2 Trigger* field.

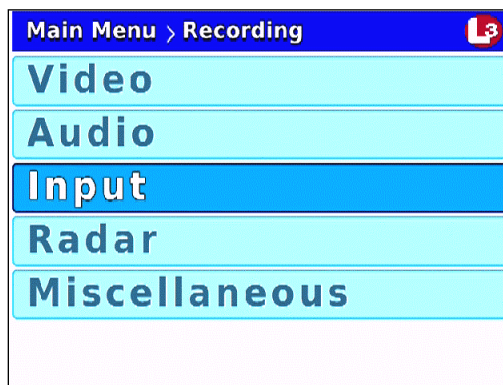


- 9 Press **↔** to toggle the field value from **OFF** to **ON**.

Terminating a recording manually vs. automatically

Next, you need to choose how you would like to turn off Aux 2 triggered recordings: *manually* or *automatically*. If you select the *manual* option, then you simply press the **⏏** button to stop a recording. Otherwise you can program the DVR to automatically turn off **X** number of minutes after the trigger activity ceases.


- 10 Press **M** *twice* to save your changes and return to the Recording menu.



- 11 Press **▶** *twice* to advance to the **Miscellaneous** option.




- 12 Press **R**. The Misc screen displays.

Main Menu • Recording • Misc 	
Background Record	OFF
Background FPS	5
Stealth	OFF
Pre-Record	10
Post-Record	0
Stop Override	OFF
AUX 2 Stop	OFF
AUX 2 Delay	5

- 13 If you wish to turn off Aux 2 triggered recordings *manually*, proceed to the next step.
 – OR –

If you wish to turn off Aux 2 triggered recordings *automatically*, skip to step 19.

- 14 Examine the value of the *AUX 2 Stop* field:
- If the *AUX 2 Stop* field is set to **OFF**, press **M** *three times* to save your changes and exit this option. **End of procedure.**
 - If the *AUX 2 Stop* field is set to **ON**, proceed to the next step.
- 15 Press **Q** *twice* to advance to the *AUX 2 Stop* field.

Main Menu • Recording • Misc 	
Background Record	OFF
Background FPS	5
Stealth	OFF
Pre-Record	10
Post-Record	0
Stop Override	OFF
AUX 2 Stop	OFF
AUX 2 Delay	5

- 16 Press **R** to select the *AUX 2 Stop* field.




Main Menu • Recording • Misc	
Background Record	OFF
Background FPS	5
Stealth	OFF
Pre-Record	10
Post-Record	0
Stop Override	OFF
AUX 2 Stop	<input type="checkbox"/> OFF
AUX 2 Delay	5

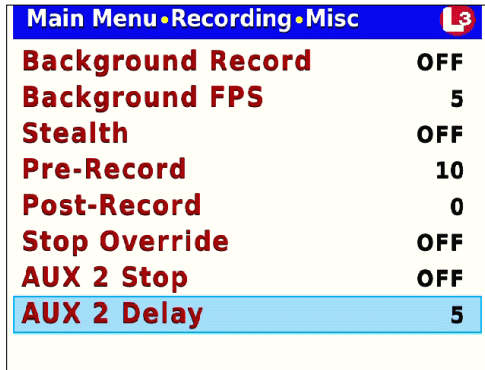
- 17 Press **▶** to change the value of the *AUX 2 Stop* field from **ON** to **OFF**.
- 18 Press **M** *four times* to save your changes and exit this option. **End of procedure.**
- 19 Examine the value of the *AUX 2 Stop* field:
 - If the value of the *AUX 2 Stop* field is **ON**, press **▶** to advance to the *AUX 2 Delay* field. Next, skip to step 24.
 - If the value of the *AUX 2 Stop* field is **OFF**, press **▶** *twice* to advance to the *AUX 2 Stop* field.


Main Menu • Recording • Misc	
Background Record	OFF
Background FPS	5
Stealth	OFF
Pre-Record	10
Post-Record	0
Stop Override	OFF
AUX 2 Stop	OFF
AUX 2 Delay	5

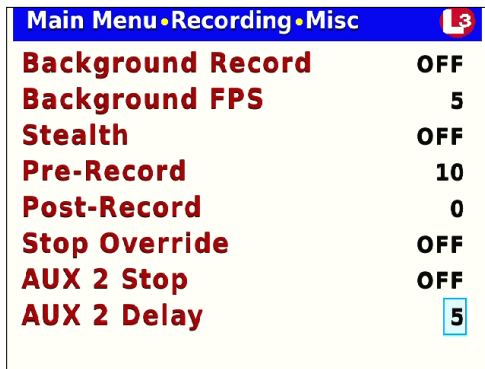
- 20 Press **R** to select the *AUX 2 Stop* field.



Main Menu • Recording • Misc	
Background Record	OFF
Background FPS	5
Stealth	OFF
Pre-Record	10
Post-Record	0
Stop Override	OFF
AUX 2 Stop	<input type="checkbox"/> OFF
AUX 2 Delay	5

- 21 Press  to change the value of the *AUX 2 Stop* field from **OFF** to **ON**.
- 22 Press .
- 23 Press  to advance to the *AUX 2 Delay* field.





- 24 Press  to select the *AUX 2 Delay* field.



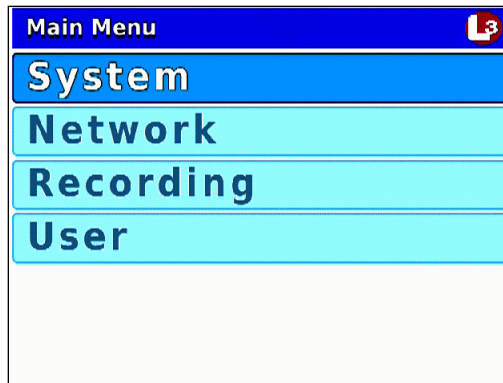
- 25 Use the  button to select the desired number of “delay” minutes that you want to elapse before a Aux 2 triggered recording is automatically stopped: **1, 5, 10, 15, 30, 45, or 60**. Once the desired number displays, proceed to the next step.
- 26 Press  *four times* to save your changes and exit this option.

Turning the Aux 2 Trigger Off

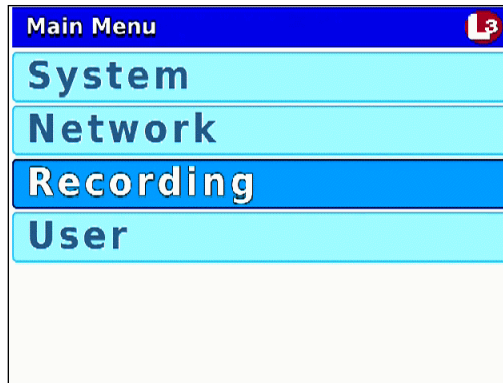
This section describes how to turn the Auxiliary 2 record trigger *off*. When this feature is *on*, the DVR will automatically begin recording whenever your Auxiliary 2 device (such as a motion detector) is activated.

- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)

- 2 Press **M**. The Main Menu displays.



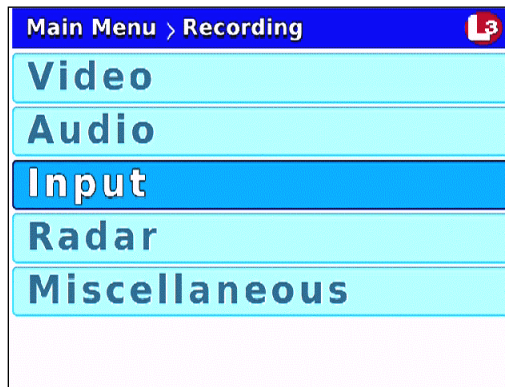
- 3 Press the **Left Arrow** or **Right Arrow** button until **Recording** is highlighted.



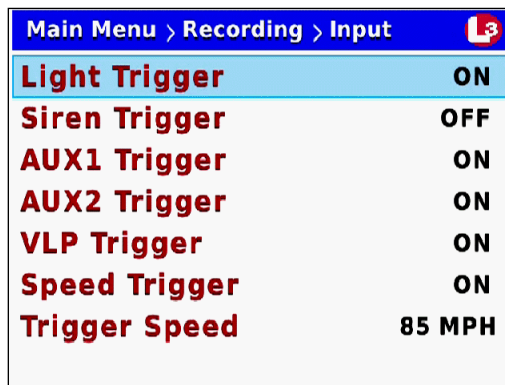
- 4 Press **R** to select the **Recording** option. The Recording menu displays.



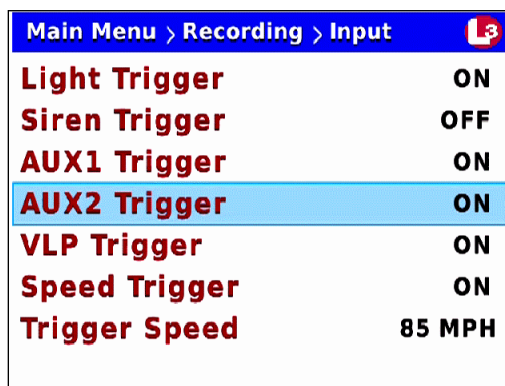
- 5 Press **Right Arrow** *twice* to advance to the **Input** option.



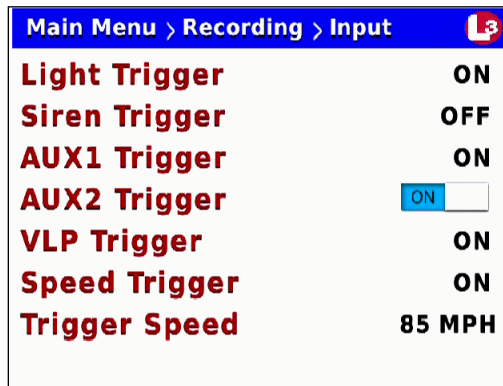
6 Press **R** to select the **Input** option. The Input screen displays.





7 Press **▶|◀** *three times* to advance to the *AUX2 Trigger* field.






8 Press **R** to select the *AUX2 Trigger* field.

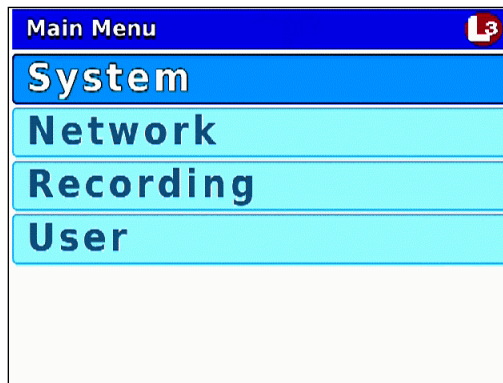




- 9 Press  to toggle the field value from **ON** to **OFF**.
- 10 Press  *four times* to save your changes and exit this option.

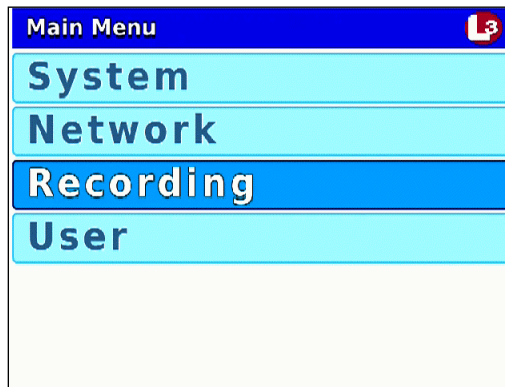
Turning the Speed Trigger On/Off

This section describes how to turn the *speed* trigger *on* or *off*. When this feature is *on*, the Flashback will automatically begin recording whenever your vehicle's speed reaches the number entered in the *Trigger Speed* field.

- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



- 3 Press the  or  button until **Recording** is highlighted.




- 4 Press **R** to select the **Recording** option. The Recording menu displays.





- 5 Press **▶|◀** *twice* to advance to the **Input** option.





- 6 Press **R** to select the **Input** option. The Input screen displays.


Main Menu • Recording • Input 	
Light Trigger	ON
Siren Trigger	ON
AUX1 Trigger	ON
AUX2 Trigger	OFF
VLP Trigger	ON
Speed Trigger	ON
Trigger Speed	90 MPH


7 Press  twice to advance to the *Speed Trigger* field.

Main Menu > Recording > Input 	
Light Trigger	ON
Siren Trigger	OFF
AUX1 Trigger	ON
AUX2 Trigger	OFF
VLP Trigger	ON
Speed Trigger	ON
Trigger Speed	85 MPH

8 Press  to select the *Speed Trigger* field.

Main Menu > Recording > Input 	
Light Trigger	ON
Siren Trigger	OFF
AUX1 Trigger	ON
AUX2 Trigger	OFF
VLP Trigger	ON
Speed Trigger	<input checked="" type="checkbox"/>
Trigger Speed	85 MPH

9 Press  to toggle the field value to ON or OFF.

- ⇒ If you turned the Speed Trigger *on*, proceed to the next step.
- ⇒ If you turned the Speed Trigger *off*, press  four times to save your changes and exit this option. **End of procedure.**

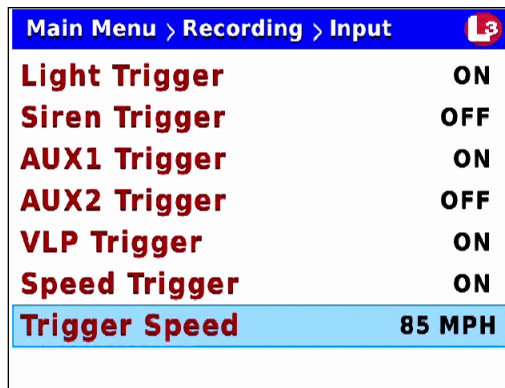
10 If you wish to change the trigger speed (see *Trigger Speed* field), proceed to the next step.

– OR –

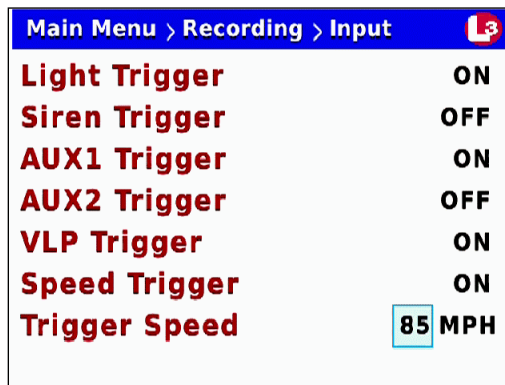
If you do *not* wish to change the trigger speed, press **M** *four times* to save your changes and exit this option. **End of procedure.**

11 Press **M**.

12 Press **▶** to advance to the *Trigger Speed* field.




13 Press **R** to select the *Trigger Speed* field.






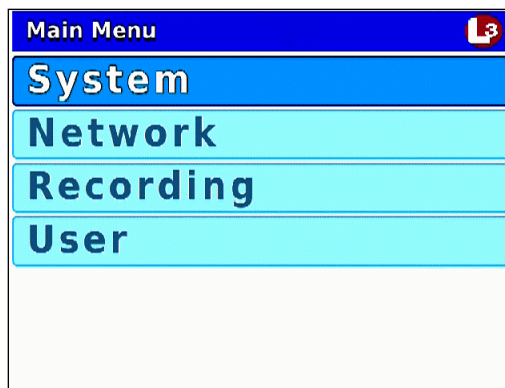
14 Use the **▶** or **◀** button to select the desired trigger speed (65 – 100). Once the desired trigger speed displays, proceed to the next step.



15 Press **M** *four times* to save your changes and exit this option.

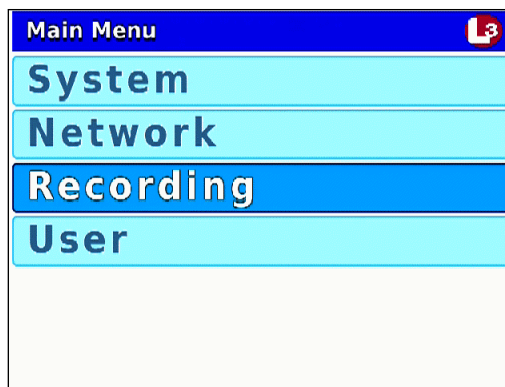
Turning the 'Stop Override' Feature On/Off


This section describes how to turn the *Stop Override* feature *on* or *off*. When this feature is *on*, it overrides the  button, preventing an officer from manually stopping a recording while the emergency lights are on.

- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



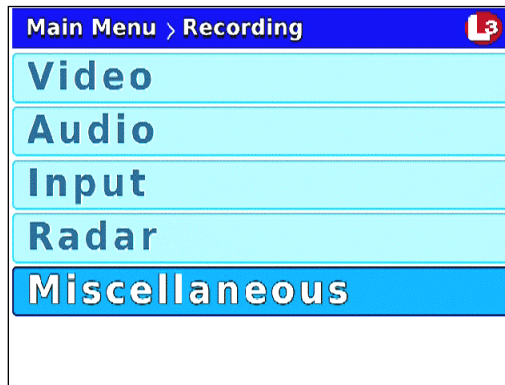
- 3 Press the  or  button until **Recording** is highlighted.



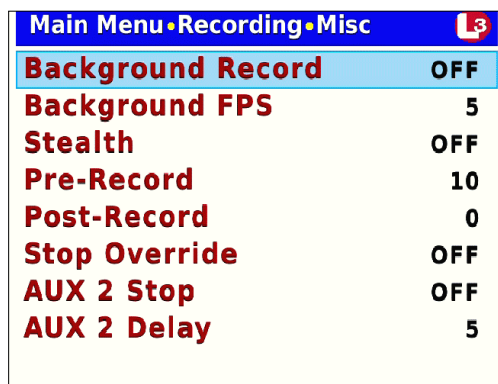
- 4 Press  to select the **Recording** option. The Recording menu displays.




- 5 Press **⏏** to advance to the **Miscellaneous** option.





- 6 Press **R** to select the **Miscellaneous** option. The Misc screen displays.





- 7 Press **⏏** *three times* to advance to the *Stop Override* field.

Main Menu • Recording • Misc 	
Background Record	OFF
Background FPS	5
Stealth	OFF
Pre-Record	10
Post-Record	0
Stop Override	OFF
AUX 2 Stop	OFF
AUX 2 Delay	5




- 8 Press  to select the *Stop Override* field.

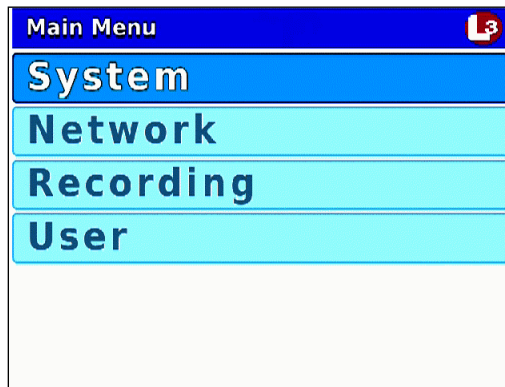
Main Menu • Recording • Misc 	
Background Record	OFF
Background FPS	5
Stealth	OFF
Pre-Record	10
Post-Record	0
Stop Override	<input type="checkbox"/> OFF
AUX 2 Stop	OFF
AUX 2 Delay	5



- 9 Press  to toggle the field value to **ON** or **OFF**.
- 10 Press  *four times* to save your changes and exit this option.

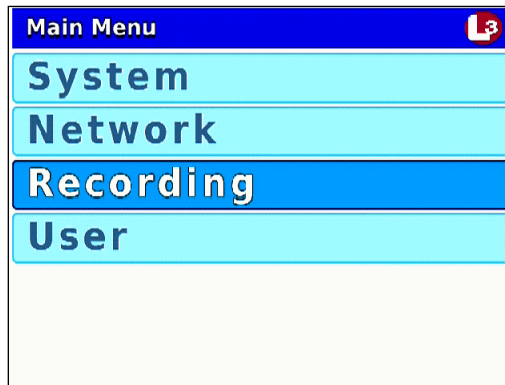
Turning the VLP Microphone Trigger On/Off


This section describes how to turn the wireless microphone's record trigger *on* or *off*. When this feature is *on*, the DVR will automatically begin recording whenever you activate a VLP2 or VLX wireless microphone.

- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.




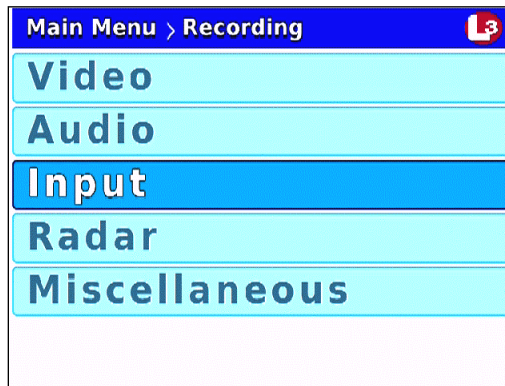
- 3 Press the  or  button until **Recording** is highlighted.



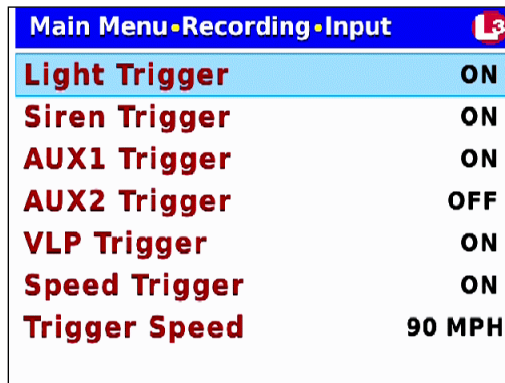
- 4 Press  to select the **Recording** option. The Recording menu displays.



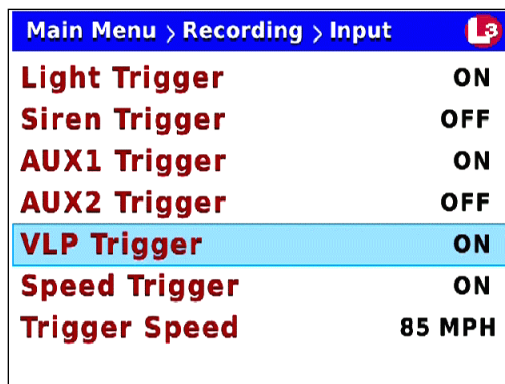
- 5 Press  twice to advance to the **Input** option.



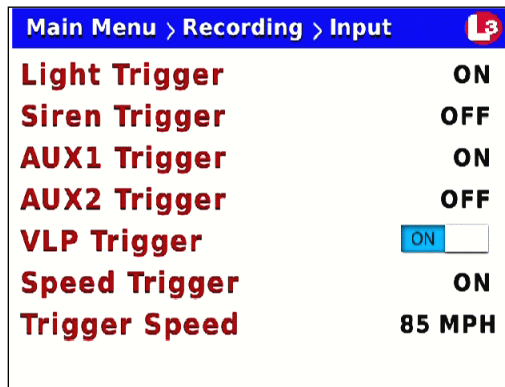
- 6 Press **R** to select the **Input** option. The Input screen displays.





- 7 Press **⏏** three times to advance to the *VLP Trigger* field.



- 8 Press **R** to select the *VLP Trigger* field.



- 9 Press  to toggle the field value to **ON** or **OFF**.
- 10 Press  *four times* to save your changes and exit this option.

Changing Display Options

This section describes how to change the status indicators that will display on:

- The Flashback monitor during a recording
- The Vehicle Viewer while the DVR is active.* Vehicle Viewer is an optional PC application that allows you to operate the DVR from your mobile data computer.
- The Flashback Player while viewing a video off the server or off a backup disc.*

For specific instructions, see:




- Turning the Radar Display On, below
 - Turning the Radar Display Off, page 120
 - Turning the Lights Display On/Off, page 122
 - Turning the Siren Display On/Off, page 124
 - Turning the Brakes Display On/Off, page 126
 - Turning the Aux 1 Display On/Off, page 129
 - Turning the Aux 2 Display On/Off, page 131
 - Turning the Speed Display On/Off, page 133
 - Turning the Metric Units Display On/Off, page 136
 - Turning the 'GPS' Display On/Off, page 138
 - Turning the 'Voltage' Display On/Off, page 141
 - Turning the 'WLAN' Display On/Off, page 143.
- Affects Flashback monitor only {

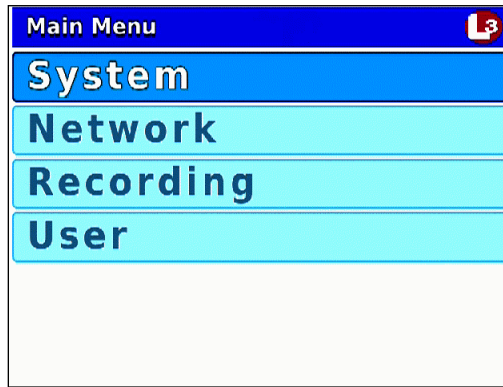
Turning the Radar Display On



This section describes how to turn the radar display *on*. When this display is *on*, selected radar indicators will display on your Flashback monitor.

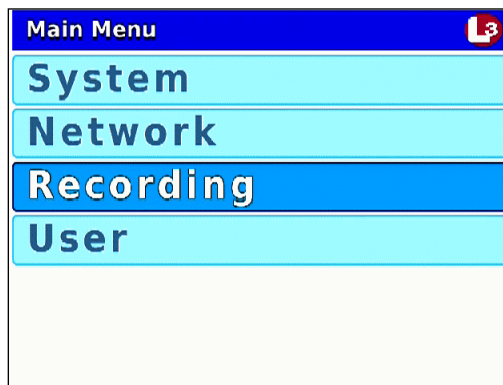
In order for this feature to work, your radar device must be wired to the radar trigger on the DVR.


* **Exceptions:** The GPS and WLAN displays appear on the Flashback monitor only.

- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



- 3 Press the  or  button until **Recording** is highlighted.



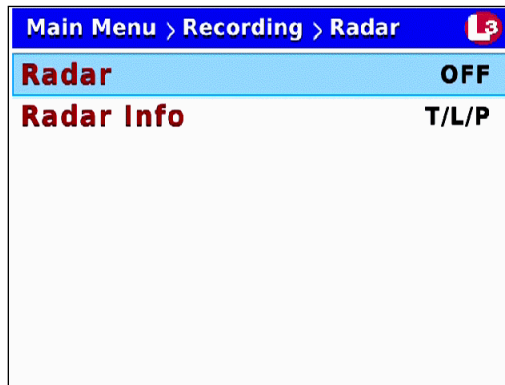
- 4 Press  to select the **Recording** option. The Recording menu displays.



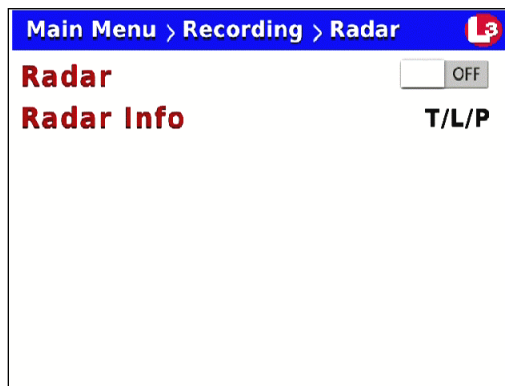
- 5 Press  *twice* to advance to the **Radat** option.



- 6 Press **R** to select the **Radar** option. The Radar screen displays.



- 7 Press **R** to select the *Radar* field.

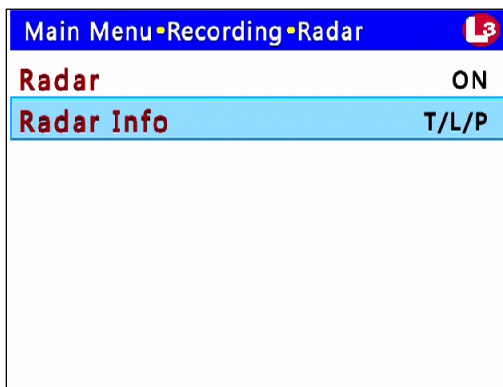


- 8 Press **▶** to toggle the field value from **OFF** to **ON**.
- 9 Examine the current radar settings in the *Radar Info* field, as described in the following table.

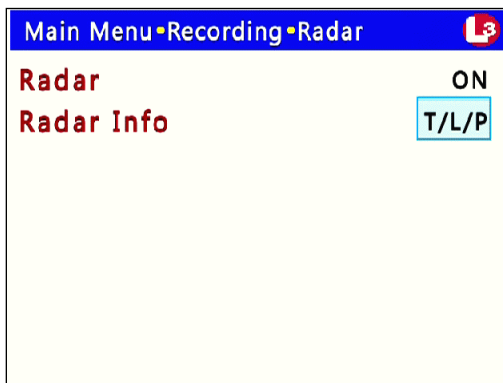
Available Radar Displays	
T	Target Speed. The MPH or KPH reading of a speeding vehicle.
L	Lock Speed. The minimum MPH or KPH reading that you're looking for when you aim your radar device at a speeding vehicle.
T/L	The target <i>and</i> lock speeds, as described above.
T/L/P <i>(system default)</i>	The target, lock, and patrol speeds. The patrol speed is the MPH or KPH reading of your patrol car at the time a radar reading is obtained.



- ⇒ To *keep* the current setting, skip to step 14.
- ⇒ To *change* the current setting, proceed to the next step.

- 10 Press **M**.
- 11 Press **▶|** to advance to the *Radar Info* field.






- 12 Press **R** to select the *Radar Info* field.

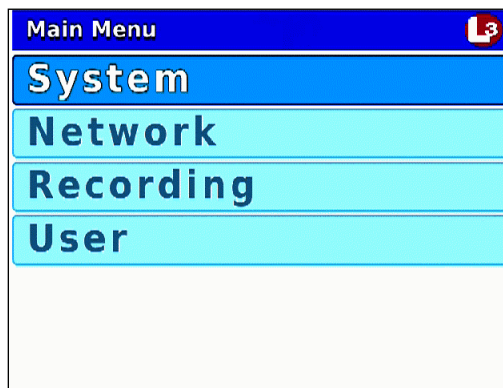




- 13 Use the  button to select the radar information you wish to display.
- 14 Press  *four times* to save your changes and exit this option.

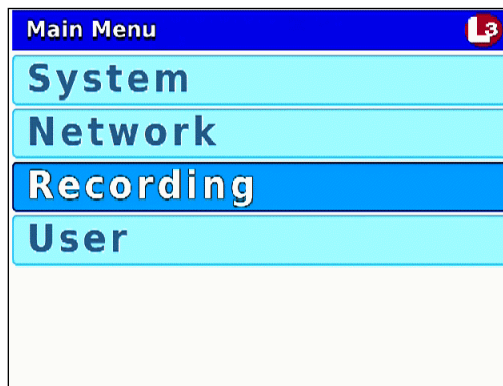
Turning the Radar Display Off


This section describes how to turn the radar display *off*. When this display is *on*, selected radar indicators will display on your Flashback monitor.

- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.




- 3 Press the  or  button until **Recording** is highlighted.




- 4 Press  to select the **Recording** option. The Recording menu displays.




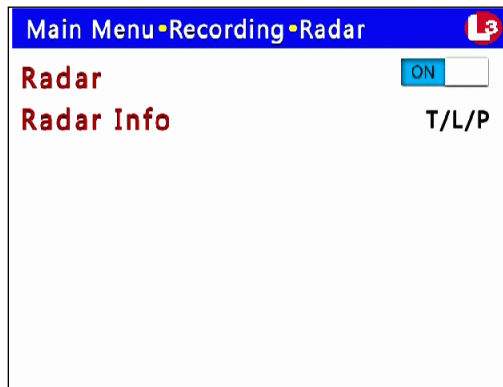
- 5 Press  twice to advance to the **Radar** option.





- 6 Press  to select the **Radar** option. The Radar screen displays.






- 7 Press  to select the *Radar* field.

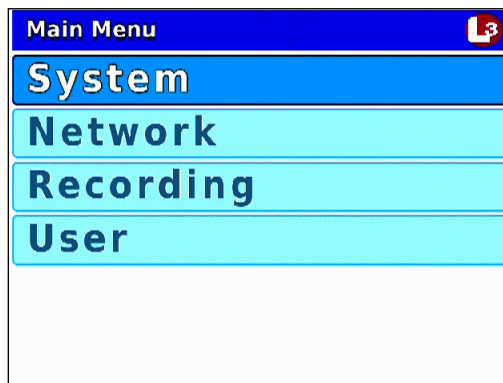





- 8 Press  to toggle the field value from **ON** to **OFF**.
- 9 Press  *four times* to save your changes and exit this option.

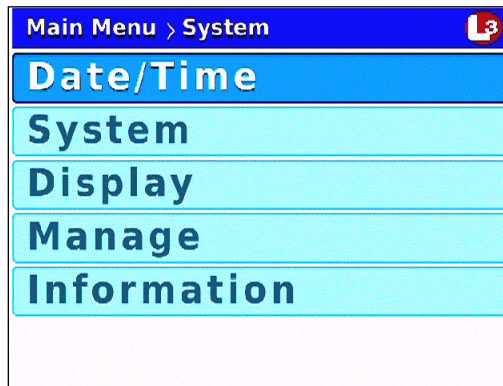
Turning the Lights Display On/Off

This section describes how to turn the Lights display on/off so that it either appears (Light trigger = ON) or does *not* appear (Light trigger = OFF) on the monitor during a recording. This display indicates when the vehicle's emergency lights are engaged.

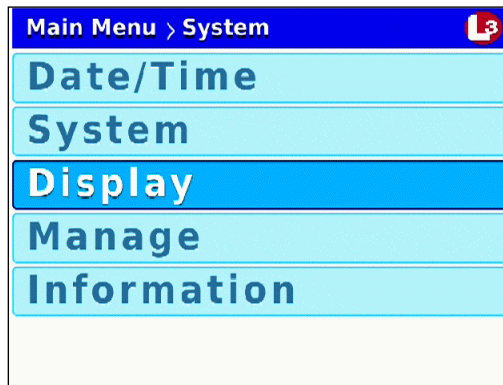
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



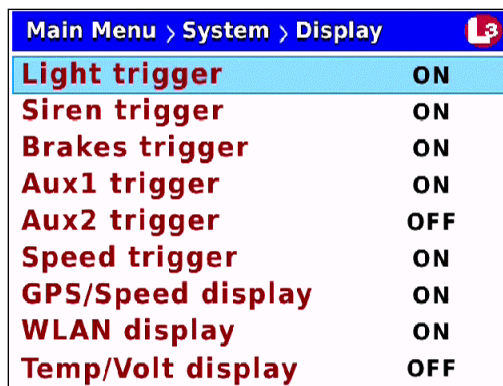
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.
- 4 Press  to select the **System** option. The System menu displays.



5 Press **▶|◀** *twice* to highlight the **Display** option.

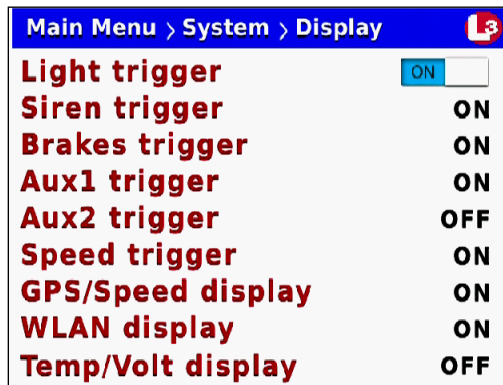


6 Press **R** to select the **Display** option. The Display screen displays.



Main Menu > System > Display	
Light trigger	ON
Siren trigger	ON
Brakes trigger	ON
Aux1 trigger	ON
Aux2 trigger	OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	OFF

7 Press **R** to select the *Light trigger* field.

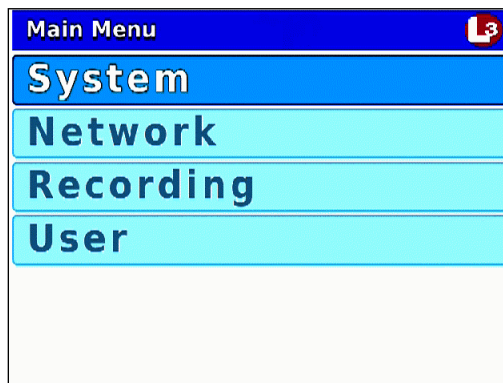


- 8 Press to toggle the field value to **ON** or **OFF**.
- 9 Press *four times* to save your changes and exit this option.

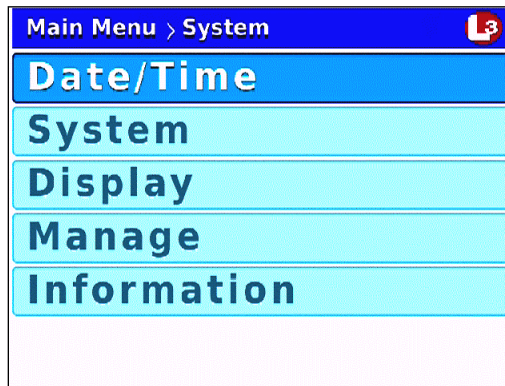
Turning the Siren Display On/Off

This section describes how to turn the Siren display on/off so that it either appears (Siren trigger = ON) or does *not* appear (Siren trigger = OFF) on the monitor during a recording. This display indicates when a vehicle's siren is engaged.

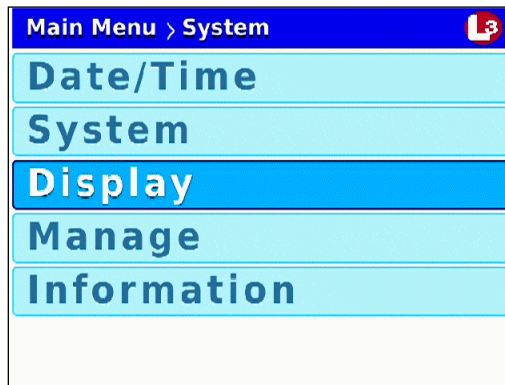
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the until the turns *off*.)
- 2 Press . The Main Menu displays.



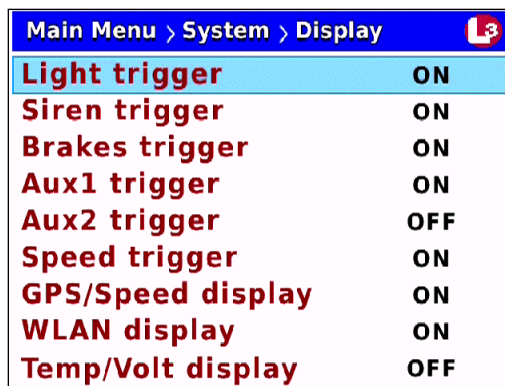
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the or button to advance to that option.
- 4 Press to select the **System** option. The System menu displays.




5 Press **▶|◀** twice to highlight the **Display** option.




6 Press **R** to select the **Display** option. The Display screen displays.



7 Press **▶|◀** to advance to the *Siren trigger* field.

Main Menu > System > Display 	
Light trigger	ON
Siren trigger	ON
Brakes trigger	ON
Aux1 trigger	ON
Aux2 trigger	OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	OFF

- 8 Press **R** to select the *Siren trigger* field.

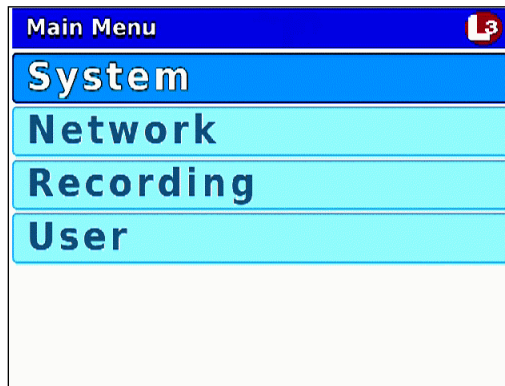
Main Menu > System > Display 	
Light trigger	ON
Siren trigger	<input checked="" type="checkbox"/>
Brakes trigger	ON
Aux1 trigger	ON
Aux2 trigger	OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	OFF




- 9 Press **▶** to toggle the field value to **ON** or **OFF**.
- 10 Press **M** *four times* to save your changes and exit this option.

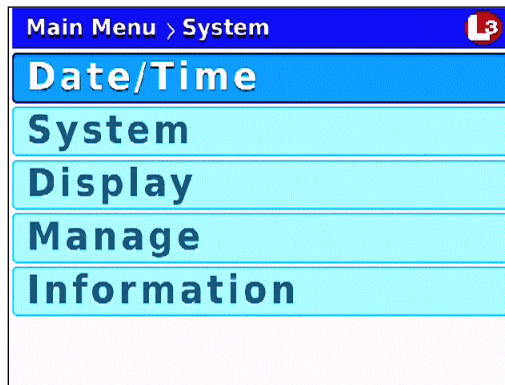
Turning the Brakes Display On/Off

This section describes how to turn the Brakes display on/off so that it either appears (Brakes trigger = ON) or does *not* appear (Brakes Trigger = OFF) on the monitor during a recording. This display indicates when a vehicle's brakes are engaged.

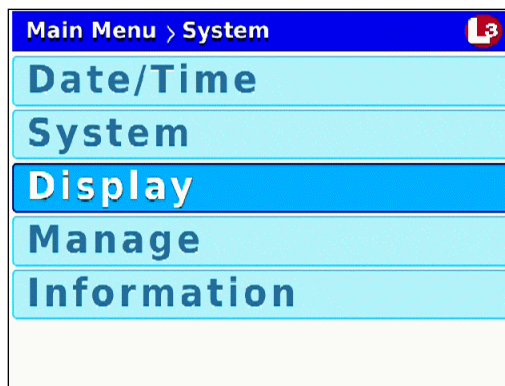
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.





- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.
- 4 Press  to select the **System** option. The System menu displays.





- 5 Press  twice to highlight the **Display** option.





- 6 Press  to select the **Display** option. The Display screen displays.



Main Menu > System > Display 	
Light trigger	ON
Siren trigger	ON
Brakes trigger	ON
Aux1 trigger	ON
Aux2 trigger	OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	OFF

- 7 Press  twice to advance to the *Brakes trigger* field.

Main Menu > System > Display 	
Light trigger	ON
Siren trigger	ON
Brakes trigger	ON
Aux1 trigger	ON
Aux2 trigger	OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	OFF

- 8 Press  to select the *Brakes trigger* field.

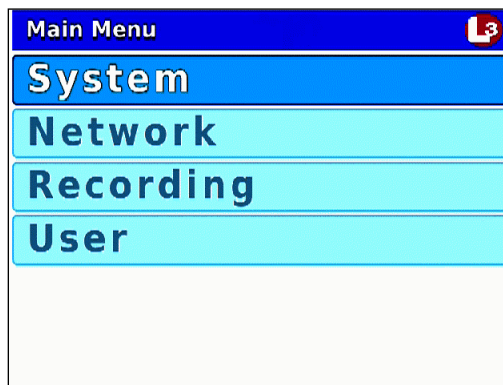
Main Menu > System > Display 	
Light trigger	ON
Siren trigger	ON
Brakes trigger	<input checked="" type="checkbox"/>
Aux1 trigger	ON
Aux2 trigger	OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	OFF

- 9 Press  to toggle the field value to ON or OFF.
- 10 Press  four times to save your changes and exit this option.

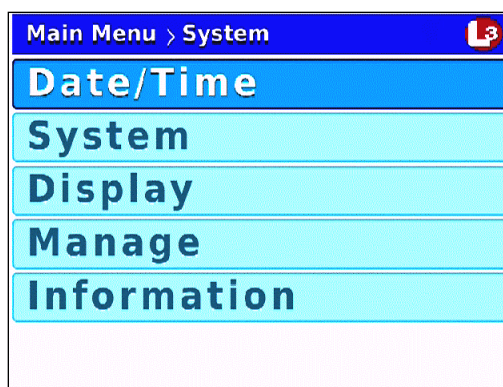
Turning the Aux 1 Display On/Off

This section describes how to turn the Aux 1 Display on/off so that it either appears (Aux1 trigger = ON) or does *not* appear (Aux1 trigger = OFF) on the monitor during a recording. This display indicates when the Auxiliary 1 trigger is engaged, such as the Crash Sensor.

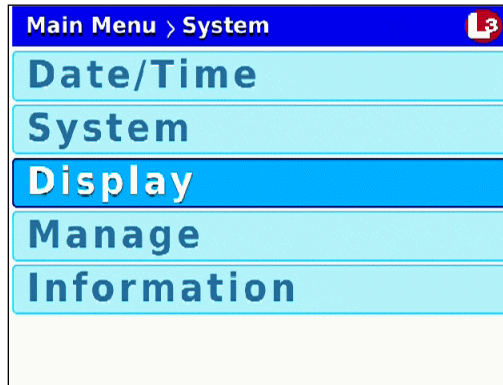
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



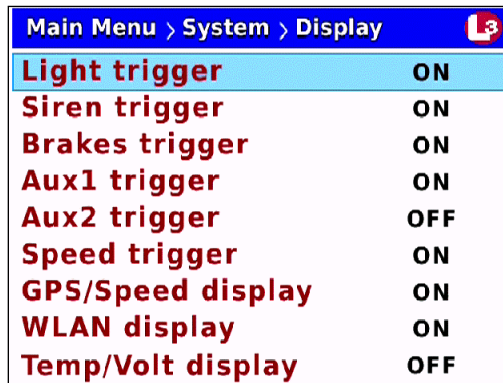
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **▶** or **◀** button to advance to that option.
- 4 Press **R** to select the **System** option. The System menu displays.



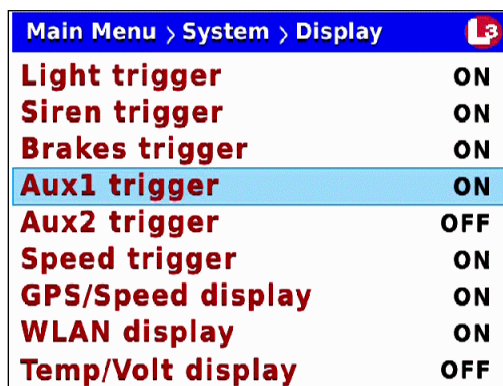
- 5 Press **▶** *twice* to highlight the **Display** option.



- 6 Press **R** to select the **Display** option. The Display screen displays.



- 7 Press **▶** *three times* to advance to the *Aux1 trigger* field.



- 8 Press **R** to select the *Aux1 trigger* field.

Main Menu > System > Display	
Light trigger	ON
Siren trigger	ON
Brakes trigger	ON
Aux1 trigger	<input checked="" type="checkbox"/>
Aux2 trigger	OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	OFF

- 9 Press **▶** to toggle the field value to **ON** or **OFF**.
- 10 Press **M** *four times* to save your changes and exit this option.

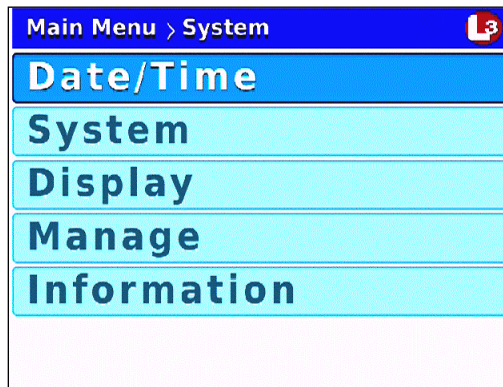
Turning the Aux 2 Display On/Off

This section describes how to turn the Aux 2 Display on/off so that it either appears (Aux2 trigger = ON) or does *not* appear (Aux2 trigger = OFF) on the monitor during a recording. This display indicates when the Auxiliary 2 trigger is engaged, such as a motion detector.

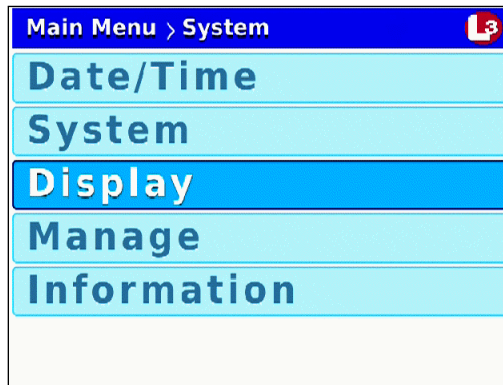
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.

Main Menu
System
Network
Recording
User

- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **▶** or **◀** button to advance to that option.
- 4 Press **R** to select the **System** option. The System menu displays.




- 5 Press **▶|◀** *twice* to highlight the **Display** option.





- 6 Press **R** to select the **Display** option. The Display screen displays.



Main Menu > System > Display	
Light trigger	ON
Siren trigger	ON
Brakes trigger	ON
Aux1 trigger	ON
Aux2 trigger	OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	OFF

- 7 Press **▶|◀** *four times* to advance to the *Aux2 trigger* field.

Main Menu > System > Display 	
Light trigger	ON
Siren trigger	ON
Brakes trigger	ON
Aux1 trigger	ON
Aux2 trigger	OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	OFF




- 8 Press  to select the *Aux2 trigger* field.

Main Menu > System > Display 	
Light trigger	ON
Siren trigger	ON
Brakes trigger	ON
Aux1 trigger	ON
Aux2 trigger	<input type="checkbox"/> OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	OFF

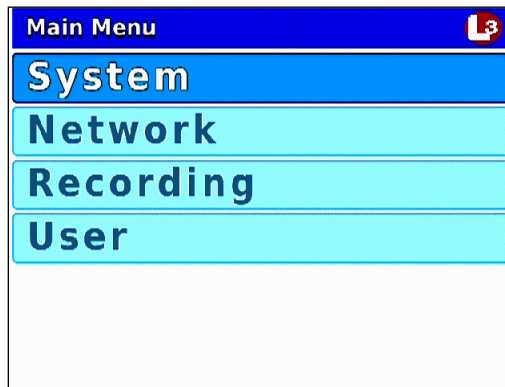
- 9 Press  to toggle the field value to **ON** or **OFF**.
- 10 Press  *four times* to save your changes and exit this option.




Turning the Speed Display On/Off

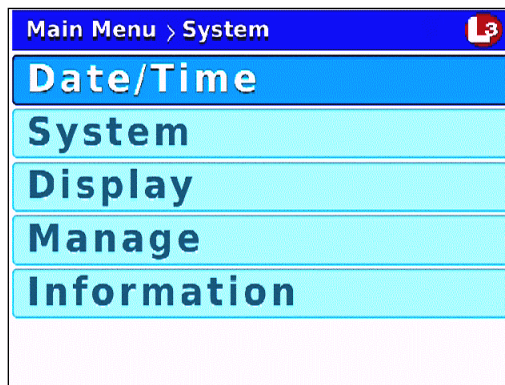
This section describes how to turn the Speed display on/off so that it either appears (Speed trigger = ON) or does *not* appear (Speed trigger = OFF) on the monitor during a recording. This display shows the vehicle's current speed during videos. The speed will display speeds in either miles-per-hour (default) or kilometers-per-hour (if Metric Units* = ON).

- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.

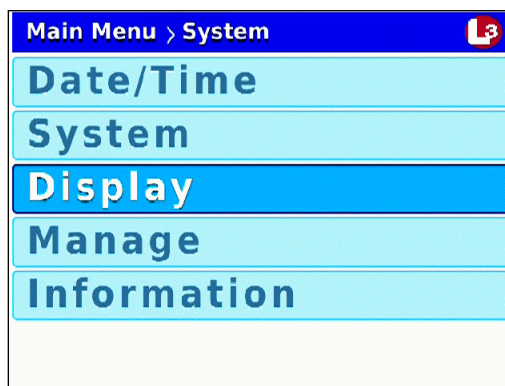
* This *Metric Units* field is located on the *System* screen (Main Menu → System → System)





- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.
- 4 Press  to select the **System** option. The System menu displays.





- 5 Press  twice to highlight the **Display** option.





- 6 Press  to select the **Display** option. The Display screen displays.



Main Menu > System > Display 	
Light trigger	ON
Siren trigger	ON
Brakes trigger	ON
Aux1 trigger	ON
Aux2 trigger	OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	OFF

- 7 Press  four times to advance to the *Speed trigger* field.

Main Menu > System > Display 	
Light trigger	ON
Siren trigger	ON
Brakes trigger	ON
Aux1 trigger	ON
Aux2 trigger	OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	OFF




- 8 Press  to select the *Speed trigger* field.

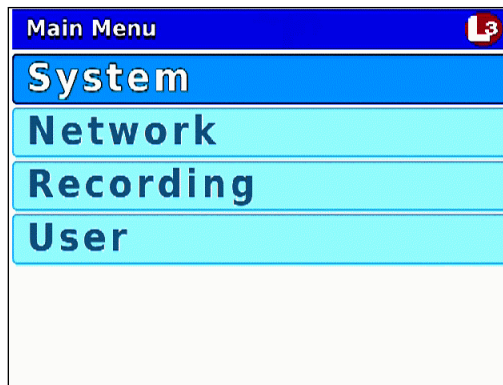
Main Menu > System > Display 	
Light trigger	ON
Siren trigger	ON
Brakes trigger	ON
Aux1 trigger	ON
Aux2 trigger	OFF
Speed trigger	<input checked="" type="checkbox"/>
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	OFF




- 9 Press  to toggle the field value to ON or OFF.
- 10 Press  four times to save your changes and exit this option.

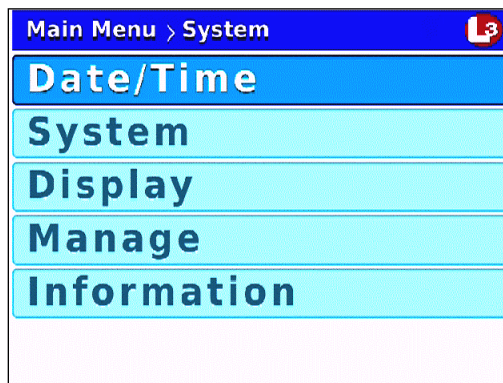
Turning the Metric Units Display On/Off


This section describes how to turn the metric units display on/off so that speeds display in either miles-per-hour (Metric Units = OFF) or kilometers-per-hour (Metric Units = ON) on the monitor during a recording.

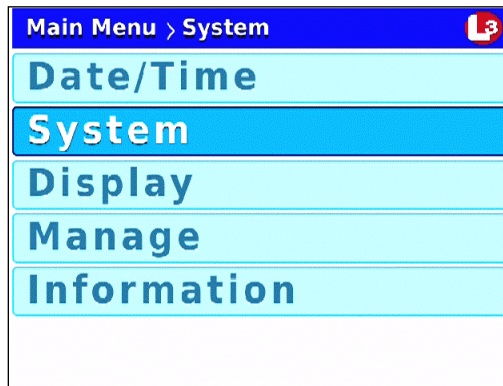
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



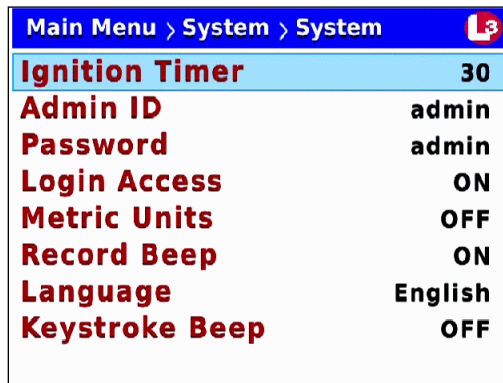
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.
- 4 Press  to select the **System** option. The System menu displays.



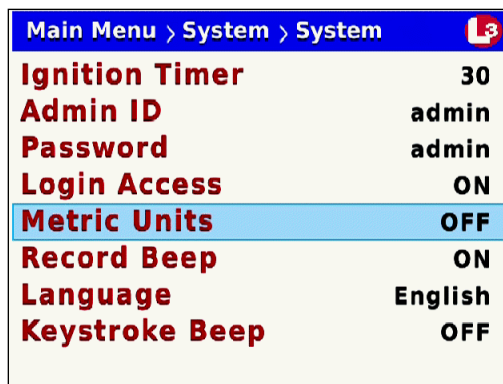
- 5 Press  to advance to the **System** option.



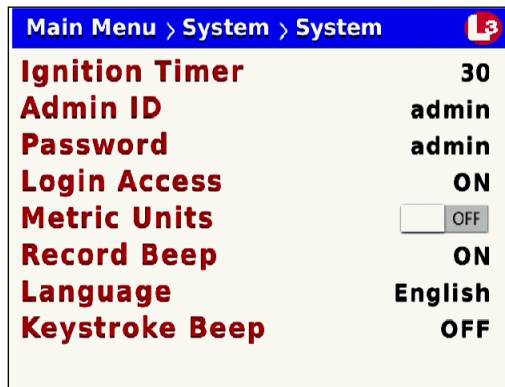
- 6 Press **R** to select the **System** option. The System screen displays.





- 7 Press **▶** *four times* to advance to the *Metric Units* field.



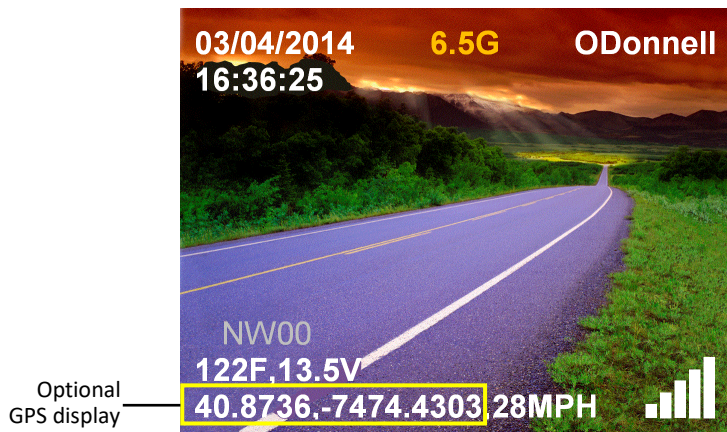
- 8 Press **R** to select the *Metric Units* field.






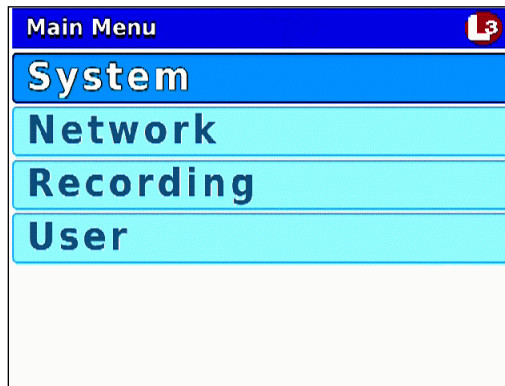
- 9 Press  to toggle the field value to **ON** or **OFF**:
ON..... Speeds will display in KPH (kilometers-per-hour)
OFF Speeds will display in MPH (miles-per-hour)
- 10 Press  *four times* to save your changes and exit this option.




Turning the 'GPS' Display On/Off

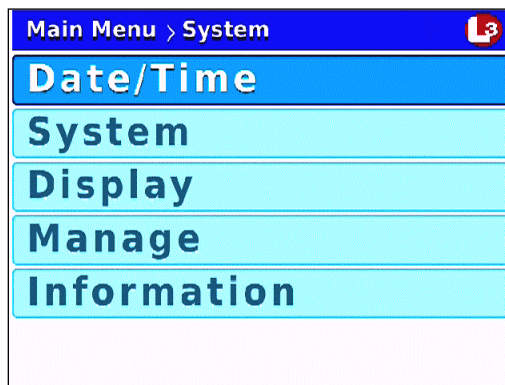
This section describes how to turn the on-screen GPS indicator On/Off, as shown below. By default, this indicator is *on*.



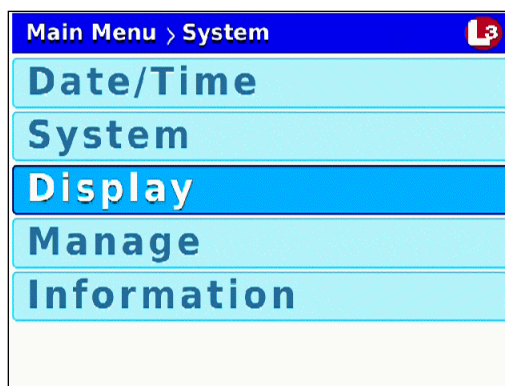
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.





- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.
- 4 Press  to select the **System** option. The System menu displays.





- 5 Press  twice to highlight the **Display** option.





- 6 Press  to select the **Display** option. The Display screen displays.



Main Menu > System > Display 	
Light trigger	ON
Siren trigger	ON
Brakes trigger	ON
Aux1 trigger	ON
Aux2 trigger	OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	OFF

- 7 Press  *three times* to advance to the *GPS/Speed display* field.

Main Menu > System > Display 	
Light trigger	ON
Siren trigger	ON
Brakes trigger	ON
Aux1 trigger	ON
Aux2 trigger	OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	OFF

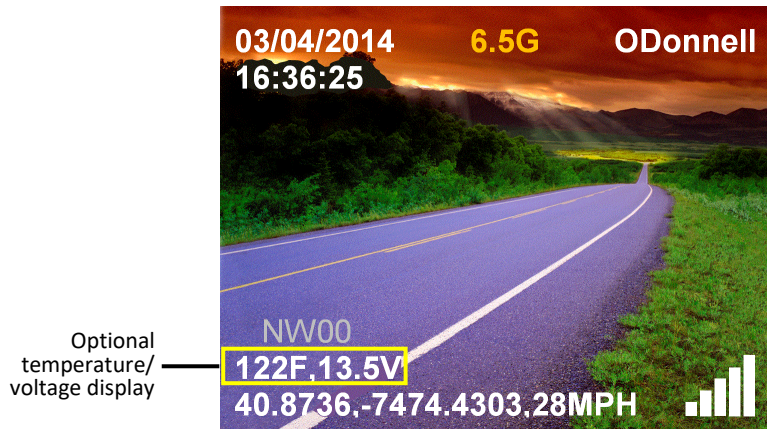
- 8 Press  to select the *GPS/Speed display* field.

Main Menu > System > Display 	
Light trigger	ON
Siren trigger	ON
Brakes trigger	ON
Aux1 trigger	ON
Aux2 trigger	OFF
Speed trigger	ON
GPS/Speed display	<input checked="" type="checkbox"/>
WLAN display	ON
Temp/Volt display	OFF

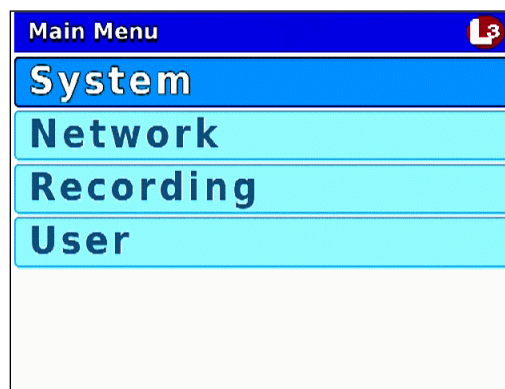
- 9 Press  to toggle the field value to **ON** or **OFF**.
- 10 Press  *four times* to save your changes and exit this option.

Turning the Temp/Voltage Display On/Off

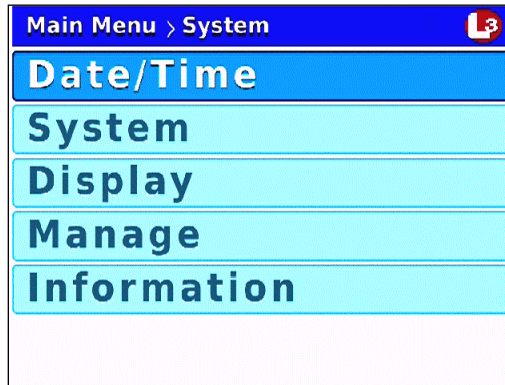
This section describes how to turn the on-screen temperature and voltage indicator *on* or *off*, as shown below. This indicator displays the DVR's internal voltage. By default, this indicator is *on*.



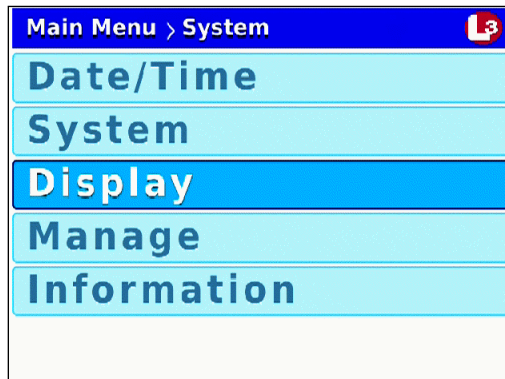
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **▶** or **◀** button to advance to that option.
- 4 Press **R** to select the **System** option. The System menu displays.




- 5 Press **▶|◀** *twice* to highlight the **Display** option.




- 6 Press **R** to select the **Display** option. The Display screen displays.



Main Menu > System > Display	
Light trigger	ON
Siren trigger	ON
Brakes trigger	ON
Aux1 trigger	ON
Aux2 trigger	OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	OFF

- 7 Press **◀** to advance to the *Temp/Volt display* field.

Main Menu > System > Display 	
Light trigger	ON
Siren trigger	ON
Brakes trigger	ON
Aux1 trigger	ON
Aux2 trigger	OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	OFF

- 8 Press  to select the *Temp/Volt display* field.

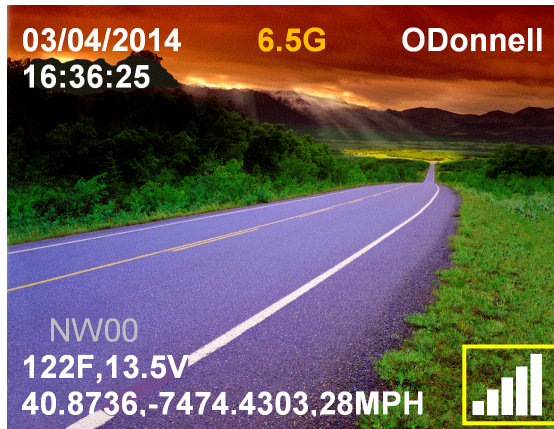
Main Menu > System > Display 	
Light trigger	ON
Siren trigger	ON
Brakes trigger	ON
Aux1 trigger	ON
Aux2 trigger	OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	<input type="checkbox"/> OFF

- 9 Press  to toggle the field value to **ON** or **OFF**.
- 10 Press  *four times* to save your changes and exit this option.

Turning the 'WLAN' Display On/Off

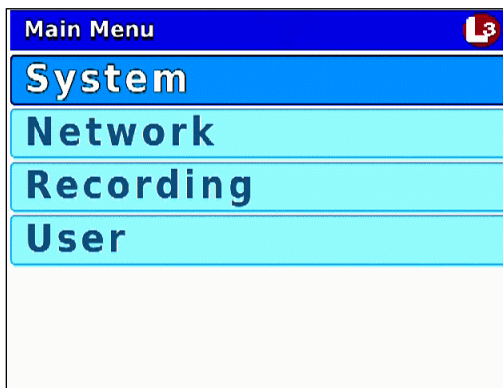
This section describes how to turn the wireless LAN connection indicator On/Off. When the bars are green, it indicates that the DVR is currently connected to your LAN. When the bars are white, it indicates that the DVR is *not* currently connected to your LAN.

By default, this indicator is *on*.

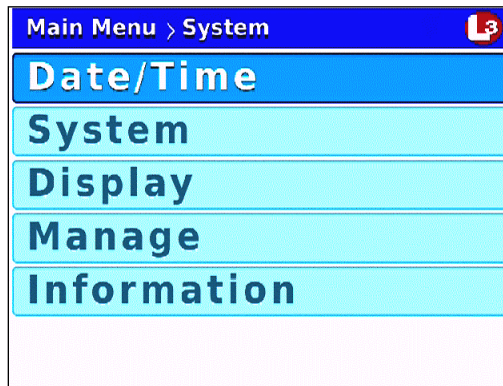


Optional WLAN display

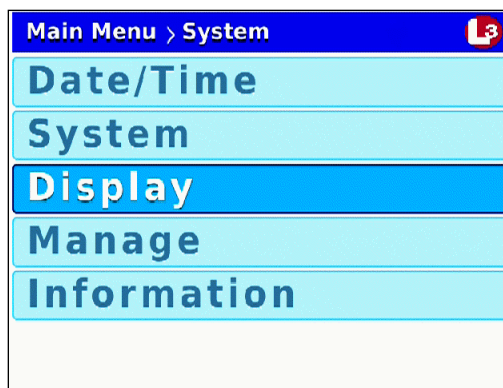
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



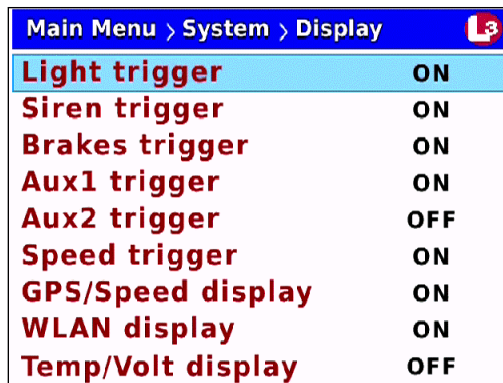
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **▶** or **◀** button to advance to that option.
- 4 Press **R** to select the **System** option. The System menu displays.




5 Press **⏪** twice to highlight the **Display** option.




6 Press **R** to select the **Display** option. The Display screen displays.



7 Press **⏩** twice to advance to the *WLAN display* field.

Main Menu > System > Display 	
Light trigger	ON
Siren trigger	ON
Brakes trigger	ON
Aux1 trigger	ON
Aux2 trigger	OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	OFF

- 8 Press **R** to select the *WLAN display* field.

Main Menu > System > Display 	
Light trigger	ON
Siren trigger	ON
Brakes trigger	ON
Aux1 trigger	ON
Aux2 trigger	OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	<input checked="" type="checkbox"/>
Temp/Volt display	OFF

- 9 Press **↔** to toggle the field value to **ON** or **OFF**.
- 10 Press **M** *four times* to save your changes and exit this option.

Entering/Changing the Wireless Options

This section describes how to enter or change the wireless options that enable your DVR to communicate with your agency’s *access points* (for a definition, see Glossary). Typically, you only need to enter these options if 1) your Flashback is installed in a vehicle, or 2) your Flashback is installed in an interview room *and* you are using the Vehicle Viewer or Vehicle Viewer Live application. If your DVR is installed in an interview room and you are *not* using Vehicle Viewer or Vehicle Viewer Live, see “Entering/Changing the Ethernet Options” on page 158 instead.

These procedures should be performed under the guidance of your agency’s IT staff or an L3 Mobile-Vision Support professional.

For specific instructions, see:




- Entering/Changing the Wireless IP, next page
- Entering/Changing the Wireless IP Mask, page 149
- Entering/Changing the Wireless Gateway IP, page 152
- Turning the Wireless DHCP Option On/Off, page 155.

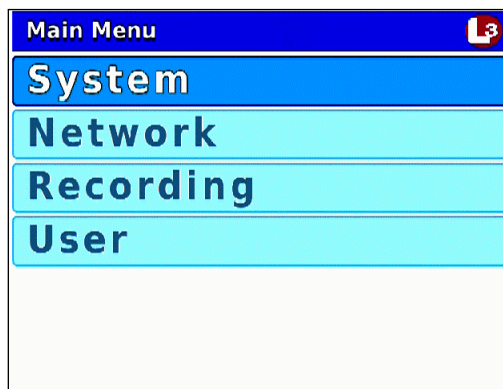
Entering/Changing the Wireless IP



This section describes how to enter or change the IP address of the DVR's wireless network interface controller (NIC).

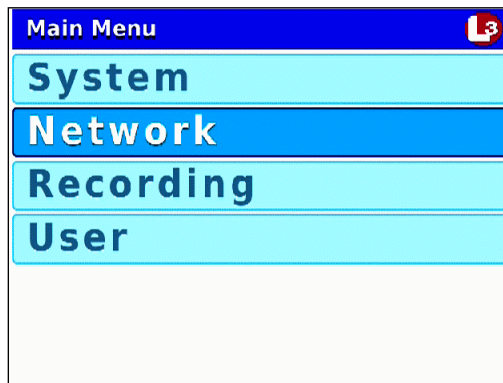


NOTE: If you want your DHCP server to automatically provide the wireless IP addresses to this DVR, do *not* enter this field. Instead, turn the Wireless DHCP option *on*, as described in “Turning the Wireless DHCP Option On/Off” on page 155.

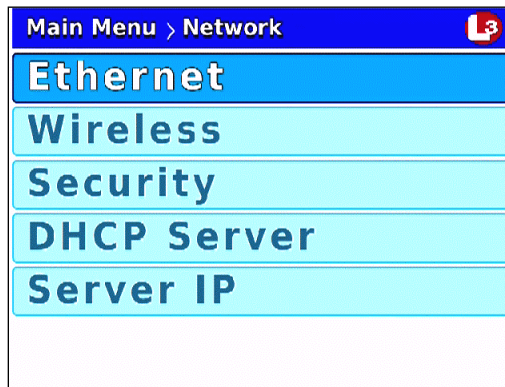
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



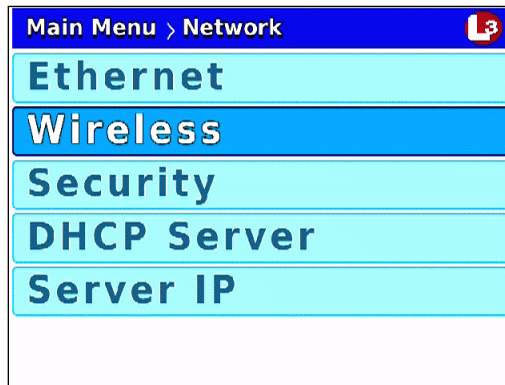
- 3 Press the  or  button until **Network** is highlighted.



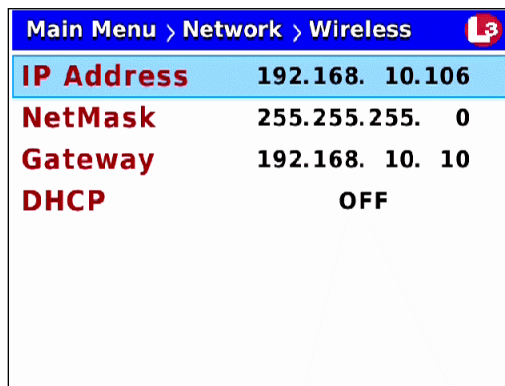
- 4 Press  to select the **Network** option. The Network menu displays.



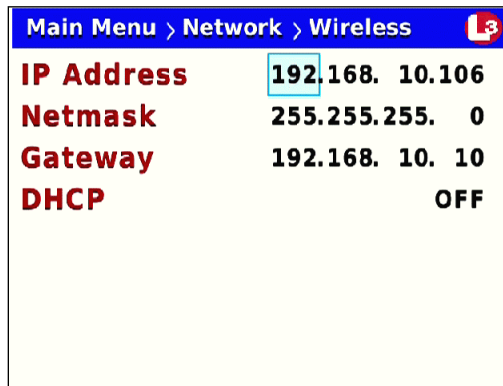
- 5 Press **▶|◀** to highlight the **Wireless** option.











- 6 Press **R** to select the **Wireless** option. The Wireless screen displays.



- 7 Press **R** to select the *IP Address* field.



- 8 To enter/change the first segment of the IP address, proceed to the next step. Otherwise use the  button to advance to the first segment you wish to change.
- 9 If the current value of this IP segment is **0**, proceed to the next step.
– OR –
If the current value of this IP segment is **1 – 255**, use the  or  buttons to move the numeric display higher or lower, respectively. Next, skip to step 11.
- 10 Press . The number **255** displays. Keep pressing the  button until the desired number displays. (If you overshoot the number, press  to back up.)
- 11 Use the  button to advance to the next segment you wish to enter/change.
- 12 Repeat steps 9 – 11 until all four segments of the IP address are entered/updated.
- 13 Press  *four times* to save your changes and exit this option.

Entering/Changing the Wireless NetMask




This section describes how to enter or change the IP address for the subnet mask of the DVR's wireless network interface controller (NIC). If you are using the default 192.168.10.X network, the value of this field will be **255.255.255.0**.

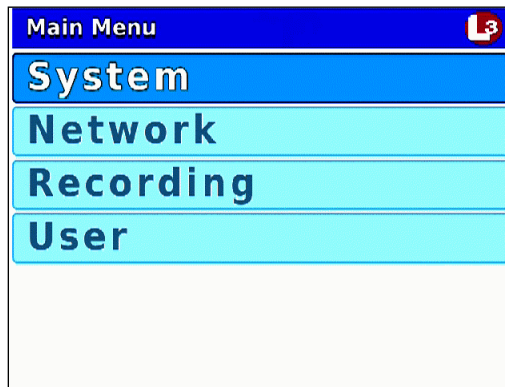




WARNING: If you are using both a *wireless* network and an *Ethernet* network, each Subnet must be **unique**. You cannot use the same Subnet for both networks!

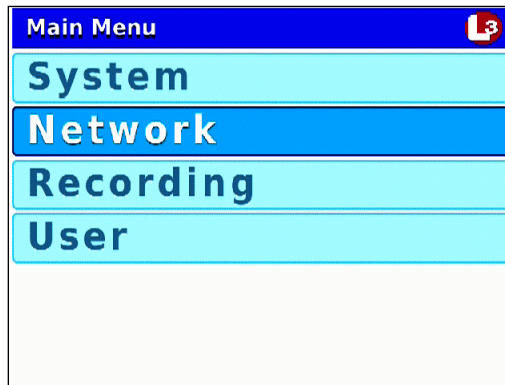



NOTE: If you want your DHCP server to automatically provide the wireless IP addresses to this DVR, do *not* enter this field. Instead, turn the Wireless DHCP option *on*, as described in “Turning the Wireless DHCP Option On/Off” on page 155.

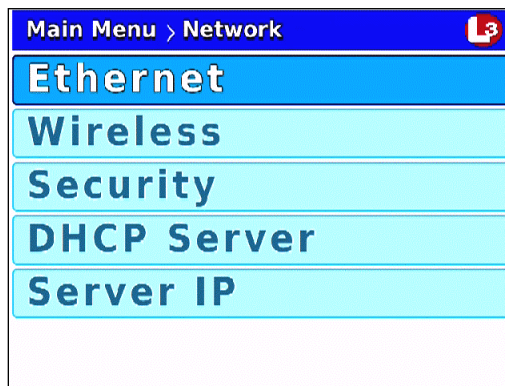
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



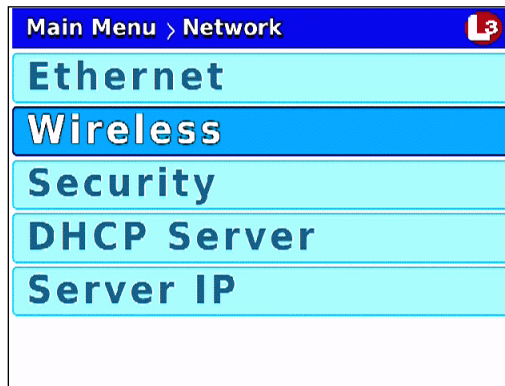
- 3 Press the  or  button until **Network** is highlighted.



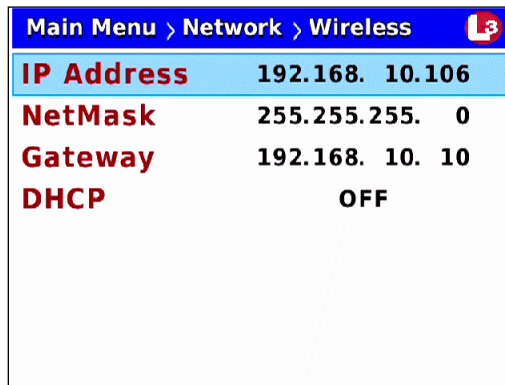
- 4 Press  to select the **Network** option. The Network menu displays.



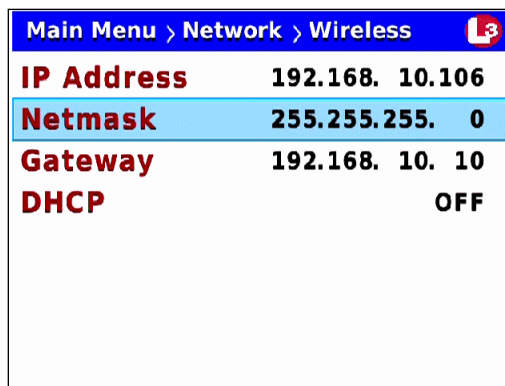
- 5 Press  to highlight the **Wireless** option.



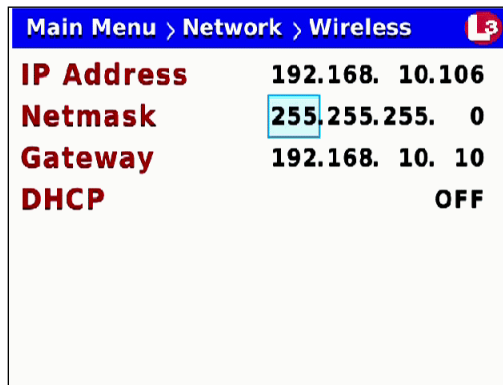
- 6 Press **R** to select the **Wireless** option. The Wireless screen displays.











- 7 Press **▶|** to advance to the *NetMask* field.



- 8 Press **R** to select the *NetMask* field.






- 9 To enter/change the first segment of the IP address, proceed to the next step. Otherwise use the  button to advance to the first segment you wish to change.
- 10 If the current value of this IP segment is **0**, proceed to the next step.
– OR –
If the current value of this IP segment is **1 – 255**, use the  or  buttons to move the numeric display higher or lower, respectively. Next, skip to step 12.
- 11 Press . The number **255** displays. Keep pressing the  button until the desired number displays. (If you overshoot the number, press  to back up.)
- 12 Use the  button to advance to the next segment you wish to enter/change.
- 13 Repeat steps 10 – 12 until all four segments of the IP address are entered/updated.
- 14 Press  *four times* to save your changes and exit this option.

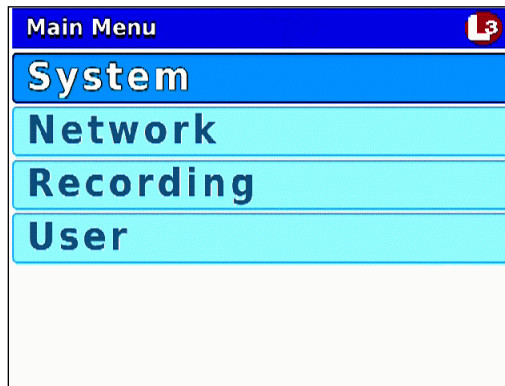
Entering/Changing the Wireless Gateway IP



This section describes how to enter or change the gateway address for the DVR's wireless network interface card (NIC). This value is usually set to the IP of the storage server.

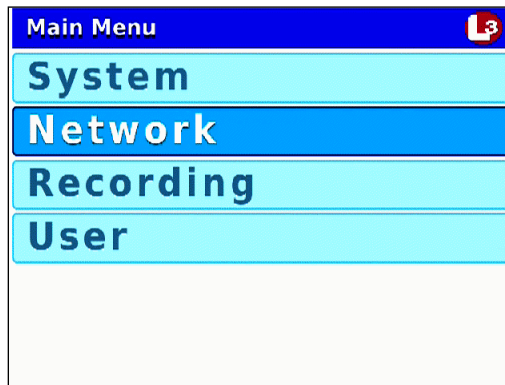



NOTE: If you want your DHCP server to automatically provide the wireless IP addresses to this DVR, do *not* enter this field. Instead, turn the Wireless DHCP option *on*, as described in “Turning the Wireless DHCP Option On/Off” on page 155.

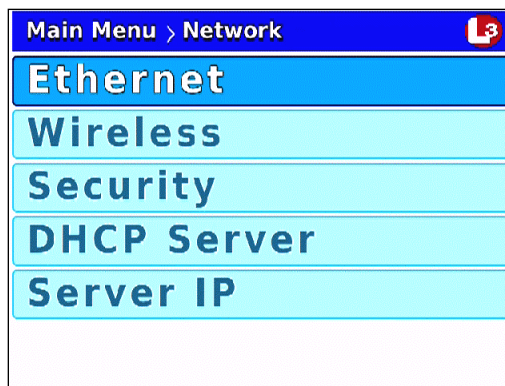
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



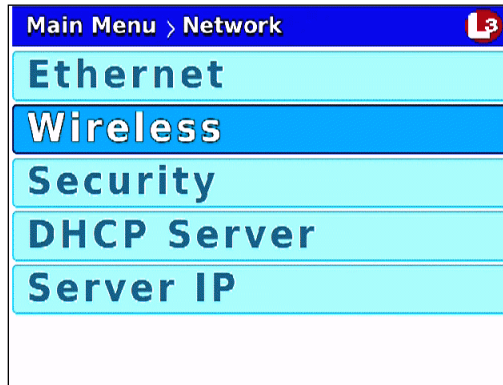
- 3 Press the  or  button until **Network** is highlighted.



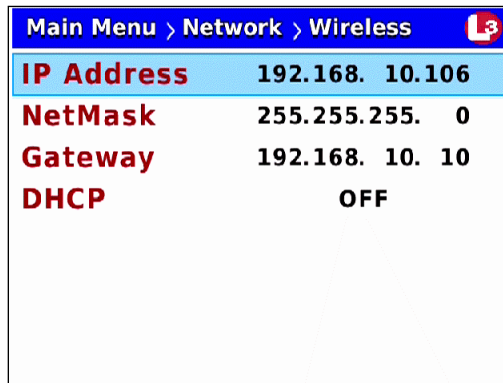
- 4 Press  to select the **Network** option. The Network menu displays.



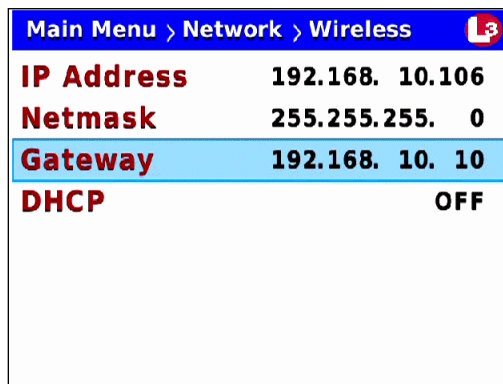
- 5 Press  to highlight the **Wireless** option.



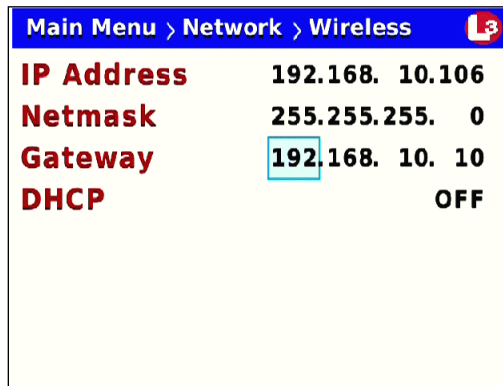
- 6 Press **R** to select the **Wireless** option. The Wireless screen displays.











- 7 Press **▶** twice to advance to the *Gateway* field.






- 8 Press **R** to select the *Gateway* field.

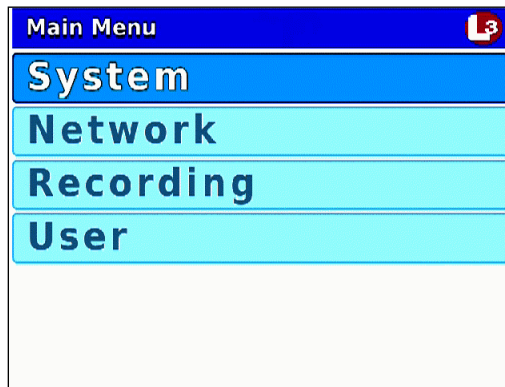




- 9 To enter/change the first segment of the IP address, proceed to the next step. Otherwise use the  button to advance to the first segment you wish to change.
- 10 If the current value of this IP segment is **0**, proceed to the next step.
– OR –
If the current value of this IP segment is **1 – 255**, use the  or  buttons to move the numeric display higher or lower, respectively. Next, skip to step 12.
- 11 Press . The number **255** displays. Keep pressing the  button until the desired number displays. (If you overshoot the number, press  to back up.)
- 12 Use the  button to advance to the next segment you wish to enter/change.
- 13 Repeat steps 10 – 12 until all four segments of the IP address are entered/updated.
- 14 Press  *four times* to save your changes and exit this option.

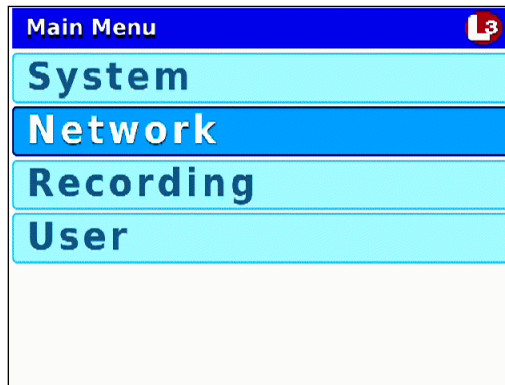
Turning the Wireless DHCP Option On/Off


This section describes how to turn the wireless DHCP wireless option on/off. If this option is *on*, your DHCP server will automatically provide the wireless IP addresses to this DVR, overriding the values in the *IP Address*, *NetMask*, and *Gateway* fields. If this option is *off*, you will have to manually assign IP addresses to this DVR by entering the *IP Address*, *NetMask*, and *Gateway* fields on the Wireless screen.

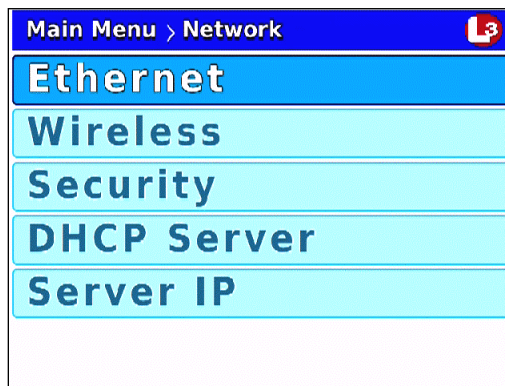
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



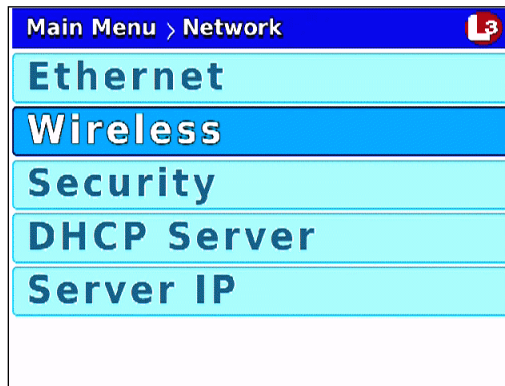
- 3 Press the  or  button until **Network** is highlighted.



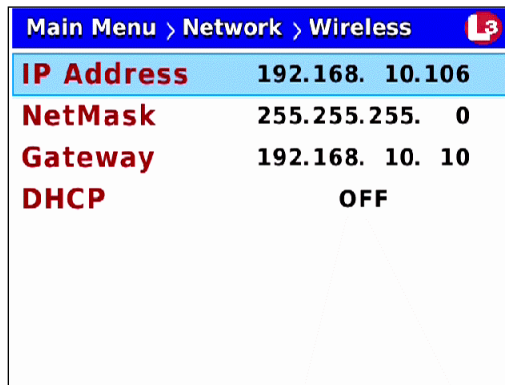
- 4 Press  to select the **Network** option. The Network menu displays.



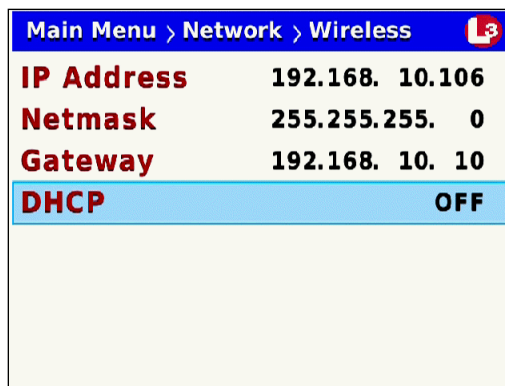
- 5 Press  to highlight the **Wireless** option.



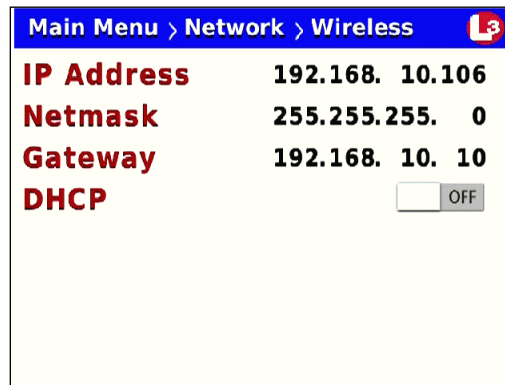
- 6 Press **R** to select the **Wireless** option. The Wireless screen displays.





- 7 Press **⏏** to advance to the *DHCP* field.



- 8 Press **R** to select the DHCP field.



- 9 Press  to toggle the field value to **ON** or **OFF**.
- 10 Press  *four times* to save your changes and exit this option.

If you changed the value of the *DHCP* field from **ON** to **OFF**, you will have to manually enter the *IP Address*, *NetMask*, and *Gateway* fields. For specific instructions, see:

- Entering/Changing the Wireless IP, page 147
- Entering/Changing the Wireless IP Mask, page 149
- Entering/Changing the Wireless Gateway IP, page 152.

Entering/Changing the Ethernet Options

This section describes how to enter or change the wireless options that enable your DVR to communicate with your LAN. Typically, you only need to enter these options if 1) your Flashback is installed in an interview room, or 2) your Flashback is installed in a vehicle *and* you are using the Vehicle Viewer, Vehicle Viewer Live, or UMD Editor application. If your Flashback is installed in a vehicle and you are *not* using one of these applications, see “Entering/Changing the Wireless Options” on page 146 instead.

These procedures should be performed under the guidance of your agency’s IT staff or an L3 Mobile-Vision support professional.

For specific instructions, see:




- Entering/Changing the Ethernet IP, next page
- Entering/Changing the Ethernet IP Mask, page 161
- Entering/Changing the Ethernet Gateway IP, page 164
- Changing the Gateway Type, page 166
- Turning the Ethernet DHCP Option On/Off, page 169
- Configuring the Flashback to Act as a DHCP Server, page 171.

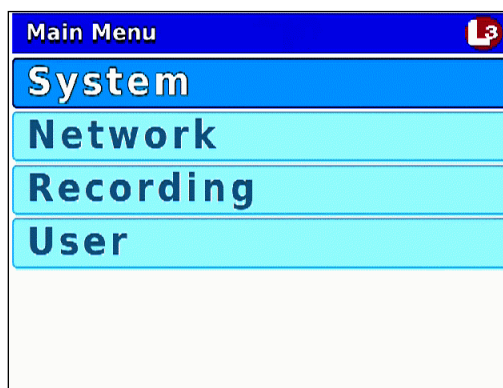
Entering/Changing the Ethernet IP



This section describes how to enter or change the IP address of the internal Ethernet LAN interface.

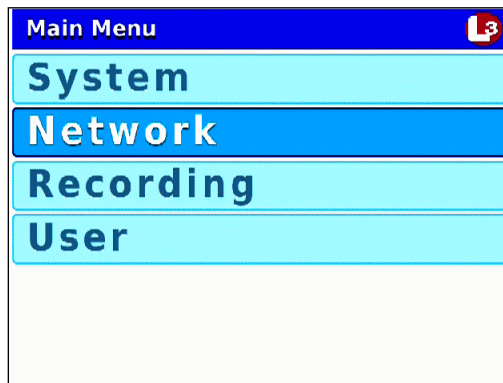



NOTE: If you want your DHCP server to automatically provide the Ethernet addresses to this DVR, do *not* enter this field. Instead, turn the Ethernet DHCP option *on*, as described in “Turning the Ethernet DHCP Option On/Off” on page 169.

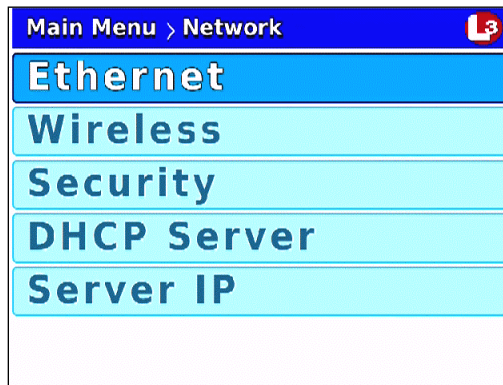
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



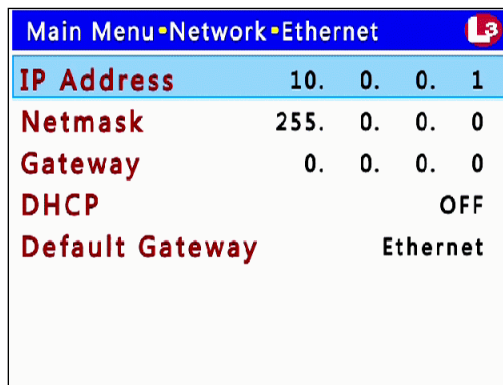
- 3 Press the  or  button until **Network** is highlighted.



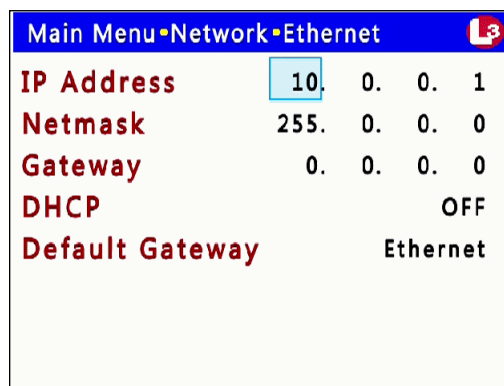
- 4 Press  to select the **Network** option. The Network menu displays.



- 5 Press **R** to select the **Ethernet** option. The Ethernet screen displays.



- 6 Press **R** to select the *IP Address* field.








- 7 To enter/change the first segment of the IP address, proceed to the next step. Otherwise use the **▶** button to advance to the first segment you wish to change.

- 8 If the current value of this IP segment is **0**, proceed to the next step.

– OR –

If the current value of this IP segment is **1 – 255**, use the **◀** or **▶** buttons to move the numeric display higher or lower, respectively. Next, skip to step 10.

- 9 Press . The number **255** displays. Keep pressing the  button until the desired number displays. (If you overshoot the number, press  to back up.)
- 10 Use the  button to advance to the next segment you wish to enter/change.
- 11 Repeat steps 8 – 10 until all four segments of the IP address are entered/updated.
- 12 Press  *four times* to save your changes and exit this option.

Entering/Changing the Ethernet NetMask




This section describes how to enter or change the netmask IP address for the internal Ethernet LAN interface. For more information on when/why you might need to update this field, see “Entering/Changing the Ethernet Options” on page 158.

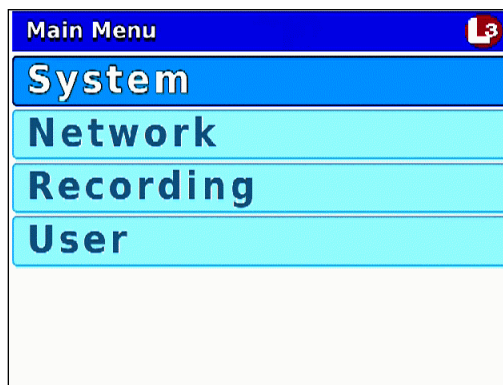




WARNING: If you are using both a *wireless* network and an *Ethernet* network, each NetMask must be **unique**. You cannot use the same NetMask for both networks!

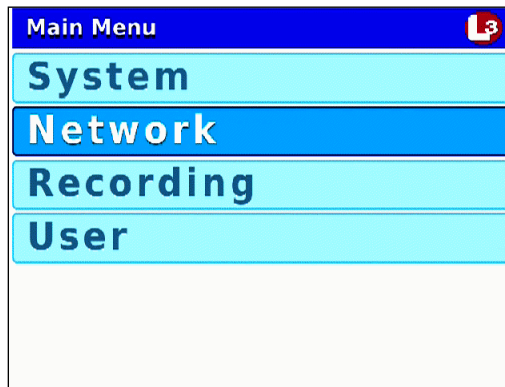


NOTE: If you want your DHCP server to automatically provide the Ethernet addresses to this DVR, do *not* enter this field. Instead, turn the Ethernet DHCP option *on*, as described in “Turning the Ethernet DHCP Option On/Off” on page 169.

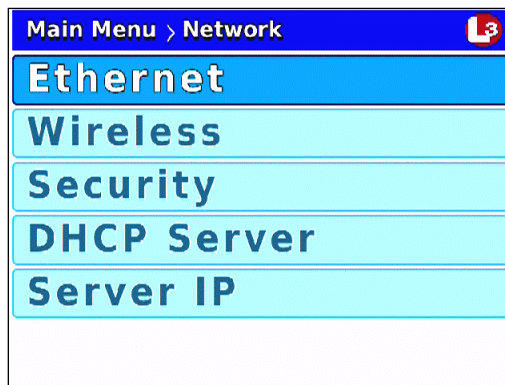
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



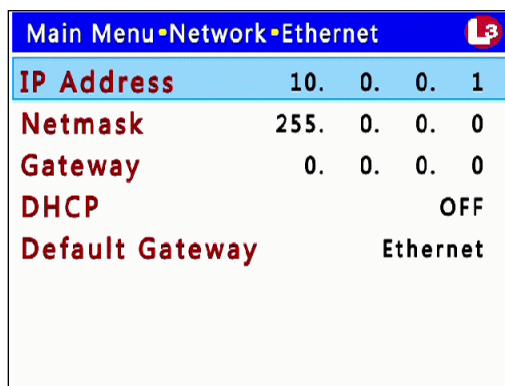
- 3 Press the  or  button until **Network** is highlighted.



- 4 Press **R** to select the **Network** option. The Network menu displays.



- 5 Press **R** to select the **Ethernet** option. The Ethernet screen displays.



- 6 Press **▶** to advance to the *Netmask* field.

Main Menu > Network > Ethernet	
IP Address	10. 0. 0. 1
Netmask	255. 0. 0. 0
Gateway	0. 0. 0. 0
DHCP	OFF
Default Gateway	Wireless

- 7 Press **R** to select the *Netmask* field.

Main Menu > Network > Ethernet	
IP Address	10. 0. 0. 1
Netmask	255. 0. 0. 0
Gateway	0. 0. 0. 0
DHCP	OFF
Default Gateway	Wireless

- 8 To enter/change the first segment of the IP address, proceed to the next step. Otherwise use the **▶** button to advance to the first segment you wish to change.
- 9 If the current value of this IP segment is **0**, proceed to the next step.
– OR –
If the current value of this IP segment is **1 – 255**, use the **◀** or **▶** buttons to move the numeric display higher or lower, respectively. Next, skip to step 11.
- 10 Press **▶**. The number **255** displays. Keep pressing the **▶** button until the desired number displays. (If you overshoot the number, press **◀** to back up.)
- 11 Use the **▶** button to advance to the next segment you wish to enter/change.
- 12 Repeat steps 9 – 11 until all four segments of the IP address are entered/updated.
- 13 Press **M** *four times* to save your changes and exit this option.

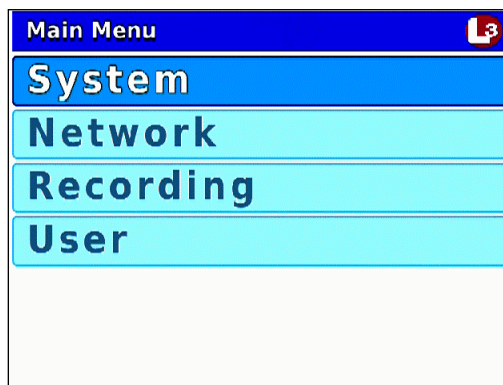
Entering/Changing the Ethernet Gateway IP

This section describes how to enter or change the gateway IP address for the internal Ethernet LAN interface. For more information on when/why you might need to update this field, see “Entering/Changing the Ethernet Options” on page 158.

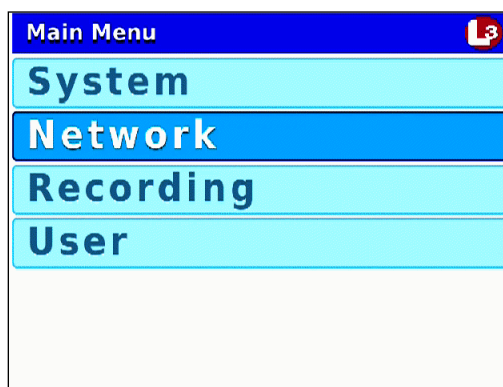


NOTE: If you want your DHCP server to automatically provide the ethernet addresses to this DVR, do *not* enter this field. Instead, turn the Ethernet DHCP option *on*, as described in “Turning the Ethernet DHCP Option On/Off” on page 169.

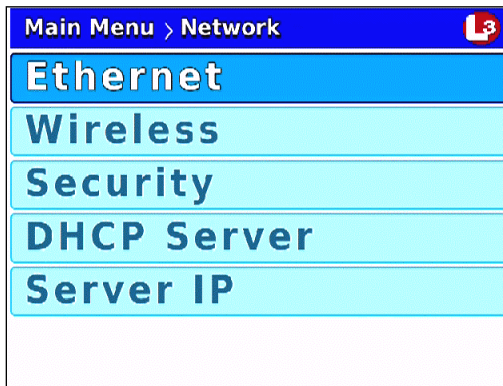
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



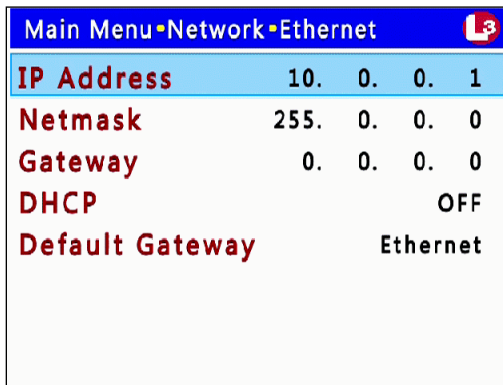
- 3 Press the **▶** or **◀** button until **Network** is highlighted.



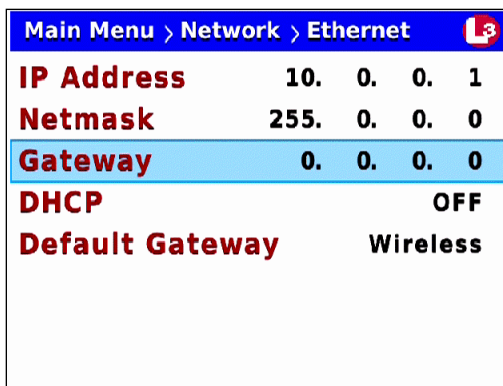
- 4 Press **R** to select the **Network** option. The Network menu displays.



- 5 Press **R** to select the **Ethernet** option. The Ethernet screen displays.











- 6 Press **▶** *twice* to advance to the *Gateway* field.






- 7 Press **R** to select the *Gateway* field.

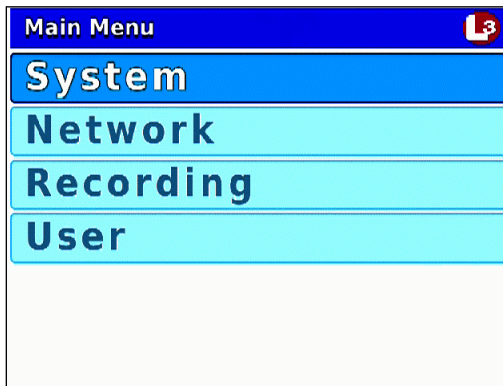
Main Menu > Network > Ethernet			
IP Address	10.	0.	0. 1
Netmask	255.	0.	0. 0
Gateway	0.	0.	0. 0
DHCP			OFF
Default Gateway			Wireless



- 8 To enter/change the first segment of the IP address, proceed to the next step. Otherwise use the  button to advance to the first segment you wish to change.
- 9 If the current value of this IP segment is **0**, proceed to the next step.
– OR –
If the current value of this IP segment is **1 – 255**, use the  or  buttons to move the numeric display higher or lower, respectively. Next, skip to step 11.
- 10 Press . The number **255** displays. Keep pressing the  button until the desired number displays. (If you overshoot the number, press  to back up.)
- 11 Use the  button to advance to the next segment you wish to enter/change.
- 12 Repeat steps 9 – 11 until all four segments of the IP address are entered/updated.
- 13 Press  *four times* to save your changes and exit this option.

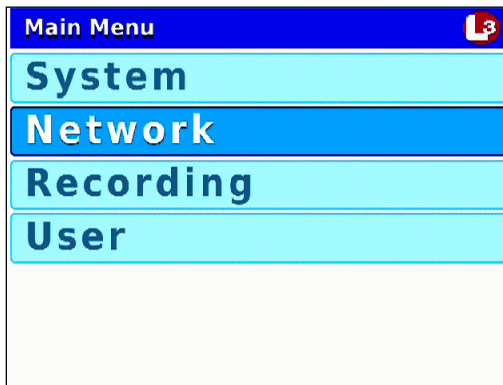
Changing the Gateway Type


This section describes how to change the gateway type. There are two gateway options: *Wireless* (default) or *Ethernet*.

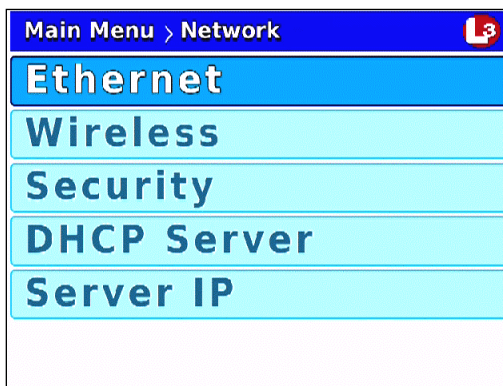
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.





- 3 Press the  or  button until **Network** is highlighted.





- 4 Press  to select the **Network** option. The Network menu displays.




- 5 Press  to select the **Ethernet** option. The Ethernet screen displays.



Main Menu • Network • Ethernet 				
IP Address	10.	0.	0.	1
Netmask	255.	0.	0.	0
Gateway	0.	0.	0.	0
DHCP				OFF
Default Gateway				Ethernet

- 6 Press  to advance to the *Default Gateway* field.

Main Menu > Network > Ethernet 				
IP Address	10.	0.	0.	1
Netmask	255.	0.	0.	0
Gateway	0.	0.	0.	0
DHCP				OFF
Default Gateway				Wireless




- 7 Press  to select the *Default Gateway* field.

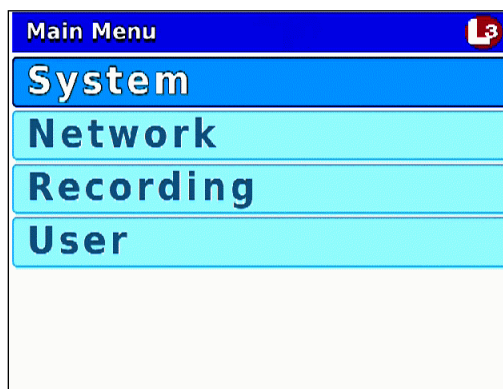
Main Menu > Network > Ethernet 				
IP Address	10.	0.	0.	1
Netmask	255.	0.	0.	0
Gateway	0.	0.	0.	0
DHCP				OFF
Default Gateway				Wireless



- 8 Press  to toggle the field value to **Ethernet** or **Wireless**.
- 9 Press  *four times* to save your changes and exit this option.

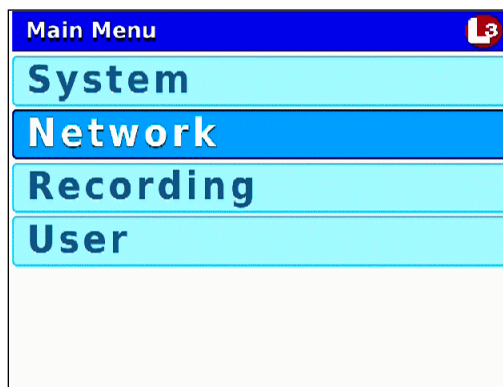
Turning the Ethernet DHCP Option On/Off

This section describes how to turn the Ethernet DHCP wireless option on/off. If this option is *on*, your DHCP server will automatically provide the Ethernet IP addresses to this DVR, overriding the values in the *IP Address*, *Netmask*, and *Gateway* fields. If this option is *off*, you will have to manually assign IP addresses to this DVR by entering the *IP Address*, *Netmask*, and *Gateway* fields.

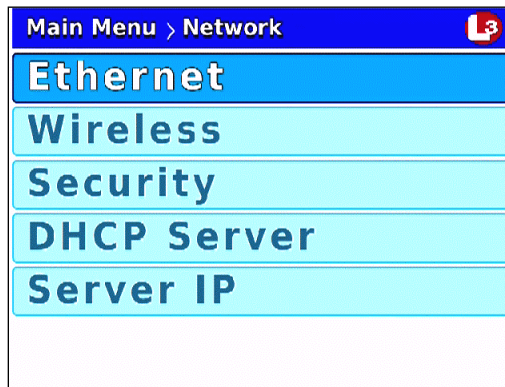
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



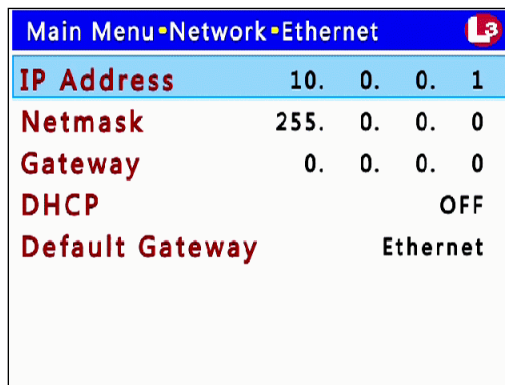
- 3 Press the  or  button until **Network** is highlighted.



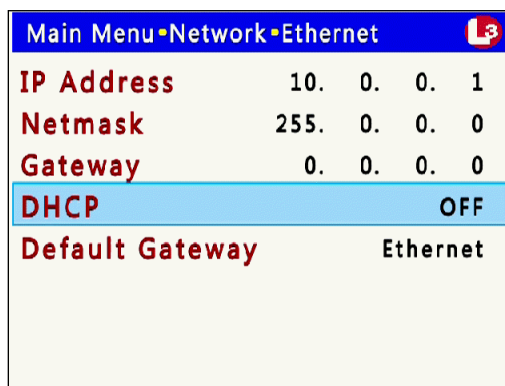
- 4 Press  to select the **Network** option. The Network menu displays.



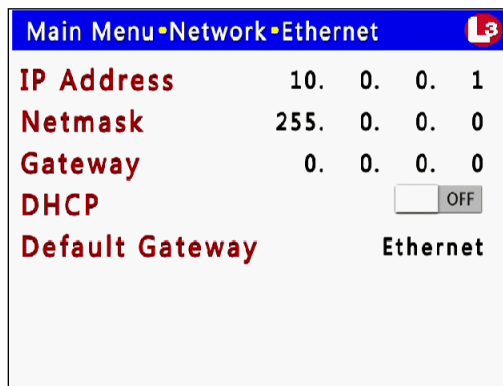
- 5 Press **R** to select the **Ethernet** option. The Ethernet screen displays.





- 6 Press **⏏** twice to advance to the *DHCP* field.



- 7 Press **R** to select the *DHCP* field.



- 8 Press  to toggle the field value to **ON** or **OFF**.
- 9 Press  *four times* to save your changes and exit this option.

If you changed the value of the *DHCP* field from **ON** to **OFF**, you will have to manually enter the *IP Address*, *Netmask*, and *Gateway* fields. For specific instructions, see:




- Entering/Changing the Ethernet IP, page 159
- Entering/Changing the Ethernet IP Mask, page 161
- Entering/Changing the Ethernet Gateway IP, page 164

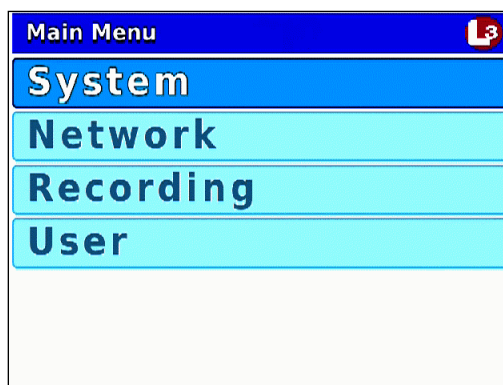
Configuring the Flashback to Act as a DHCP Server



This section describes how to configure the Flashback to act as a DHCP server.

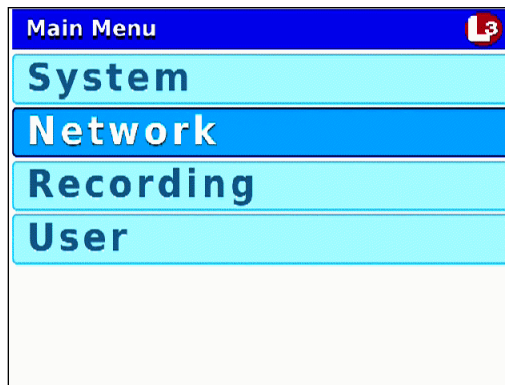



WARNING: Do not attempt the following procedure without the assistance of your agency's network specialist OR an L3 Mobile-Vision Technical Support Engineer. Entering incorrect data could cause wireless transmission to fail.

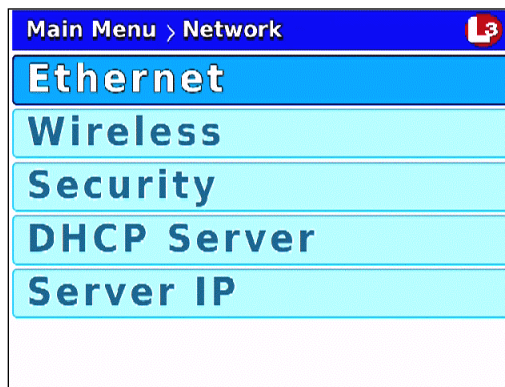
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



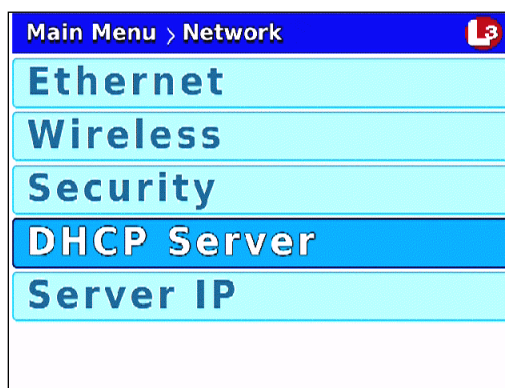
- 3 Press the  or  button until **Network** is highlighted.




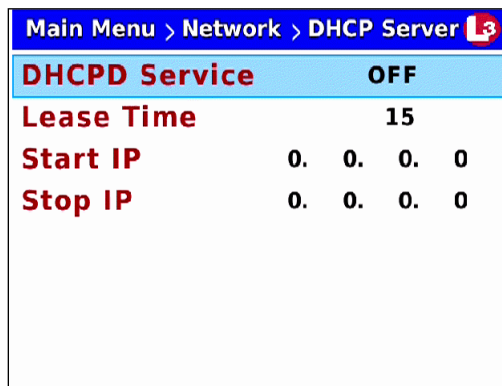
- 4 Press  to select the **Network** option. The Network menu displays.



- 5 Press  twice to highlight the **DHCP Server** option.



- 6 Press  to select the **DHCP Server** option. The DHCP Server screen displays.



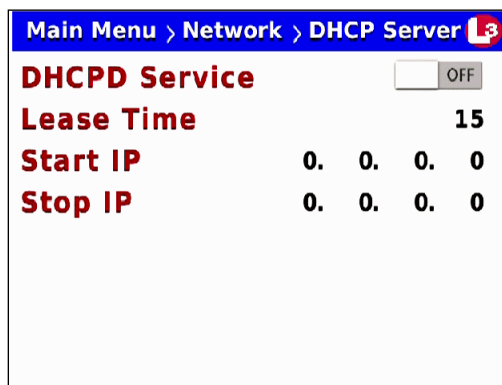
- 7 Check the value of the *DHCPD Service* field.

If the value of the *DHCPD Service* field is **ON** (default), skip to step 11.

– OR –

If the value of the *DHCPD Service* field is **OFF**, proceed to the next step.

- 8 Press **R** to select the *DHCPD Service* field.



- 9 Press **▶▶** to toggle the field value to **ON**.


- 10 Press **M**.

What is Lease Time? Note the value in the *Lease Time* field. This field is used to select the amount of time, in minutes, that you want the client to idle on the network before its IP address is eligible for reassignment. System default is 15 minutes.


- 11 To keep the current *Lease Time* value, press **▶▶** twice to advance to the *Start IP* field. Next, skip to step 16.

– OR –


To change the current *Lease Time* value, press **▶▶** to advance to the *Lease Time* field.

Main Menu • Network • DHCP Server 				
DHCPD Service				ON
Lease Time				15
Start IP	0.	0.	0.	0
Stop IP	0.	0.	0.	0

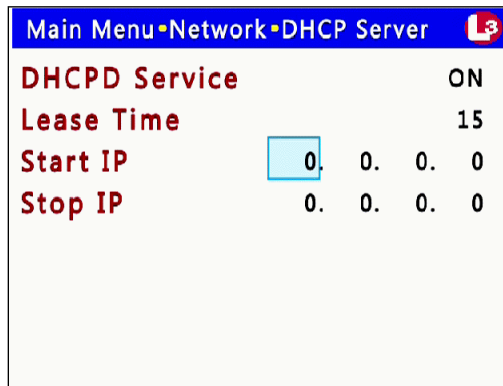
- 12 Press **R** to select the *Lease Time* field.

Main Menu • Network • DHCP Server 				
DHCPD Service				ON
Lease Time				15
Start IP	0.	0.	0.	0
Stop IP	0.	0.	0.	0










- 13 Press the **▶▶** button until the desired Lease Time minutes display—**15, 30, 45, or 60**.
- 14 Press **M**.
- 15 Press **▶|** to advance to the *Start IP* field.

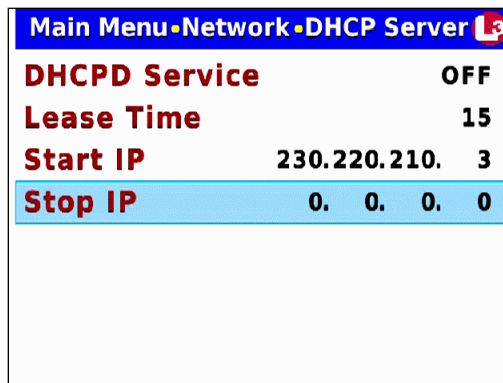
Main Menu • Network • DHCP Server 				
DHCPD Service				ON
Lease Time				15
Start IP	0.	0.	0.	0
Stop IP	0.	0.	0.	0

- 16 Press **R** to select the *Start IP* field.

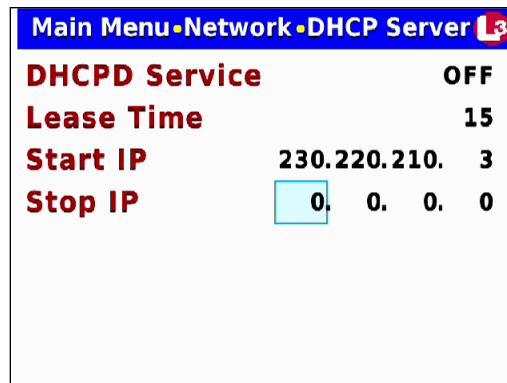


NOTE: The IP range that you specify in the *Start IP* and *Stop IP* fields must be outside the range of any existing DHCP servers.

- 17 To enter/change the first segment of the IP address, proceed to the next step. Otherwise use the  button to advance to the first segment you wish to change.
- 18 If the current value of this IP segment is **0**, proceed to the next step.
– OR –
If the current value of this IP segment is **1 – 255**, use the  or  buttons to move the numeric display higher or lower, respectively. Next, skip to step 20.
- 19 Press . The number **255** displays. Keep pressing the  button until the desired number displays. (If you overshoot the number, press  to back up.)
- 20 Use the  button to advance to the next segment you wish to enter/change.
- 21 Repeat steps 18 – 20 until all four segments of the IP address are entered/updated.
- 22 Once the correct IP address displays in the *Start IP* field, press .
- 23 Press  to advance to the *Stop IP* field.



- 24 Press **R** to select the *Stop IP* field.



- 25 To enter/change the first segment of the IP address, proceed to the next step. Otherwise use the **▶** button to advance to the first segment you wish to change.
- 26 If the current value of this IP segment is **0**, proceed to the next step.
– OR –
If the current value of this IP segment is **1 – 255**, use the **◀** or **▶** buttons to move the numeric display higher or lower, respectively. Next, skip to step 28.
- 27 Press **▶**. The number **255** displays. Keep pressing the **▶** button until the desired number displays. (If you overshoot the number, press **◀** to back up.)
- 28 Use the **▶** button to advance to the next segment you wish to enter/change.
- 29 Repeat steps 26 – 28 until all four segments of the IP address are entered/updated.
- 30 Once the correct address displays in the *Stop IP* field, press **M** *four times* to save your changes and exit this option.

Entering/Changing the Wireless Security Settings

This section describes how to enter and/or change the wireless security settings.






WARNING: In order for the automatic transmission process to work properly, these settings must match those on the Wireless Access Points. Do not change any of these settings unless instructed to do so by your agency's Network Administrator *or* an L3 Mobile-Vision Support technician.

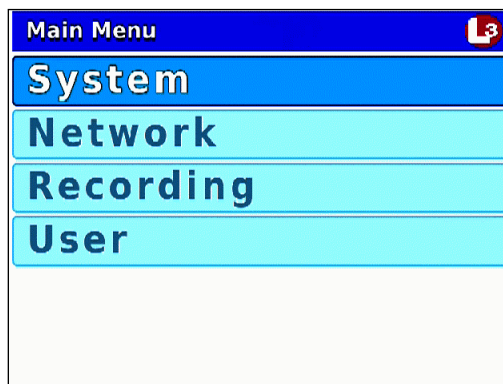
For specific instructions, see:



- Changing the Wireless Security Mode, below
- Changing the Wireless Authentication Type, page 179
- Changing the Wireless Encryption Type, page 182
- Entering the Wireless Encryption Key, page 185
- Entering Your Wireless SSID, page 188
- Entering a Wireless Password, page 191
- Turning the Wireless SSL Indicator On/Off, page 194.

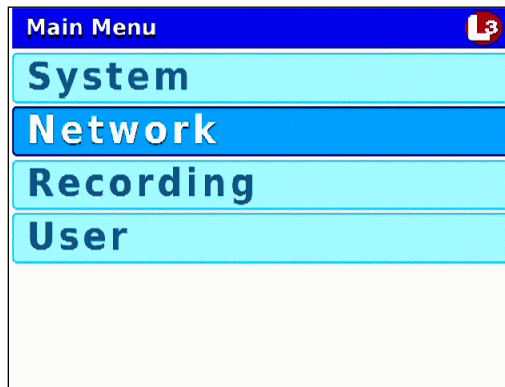
Changing the Wireless Security Mode

This section describes how to change the wireless security mode. By default, this option is set to **WEP-PSK**.

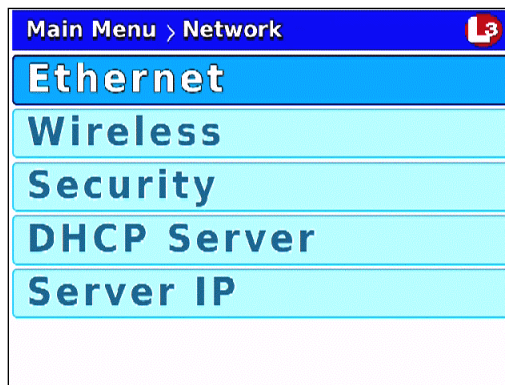
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



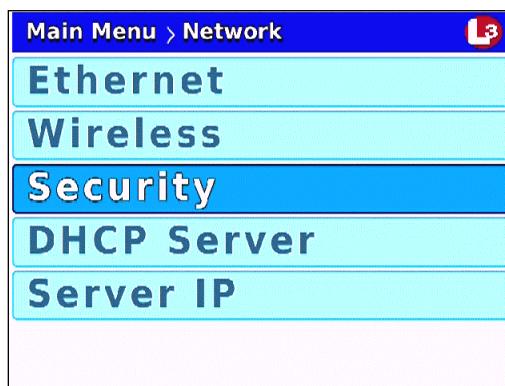
- 3 Press the  or  button until **Network** is highlighted.




- 4 Press **R** to select the **Network** option. The Network menu displays.





- 5 Press **▶** twice to advance to the **Security** option.






- 6 Press **R** to select the **Security** option. The Security screen displays.

Main Menu > Network > Security 	
Security Mode	WEP-PSK
Encryption	None
SSID	du9r2w
Authentication	Open
Security Key	
Password	
SSL Mode	OFF

- 7 Press  to select the *Security Mode* field.

Main Menu > Network > Security 	
Security Mode	WEP-PSK
Encryption	None
SSID	du9r2w
Authentication	Open
Security Key	
Password	
SSL Mode	OFF

- 8 Using the  or  buttons, display the security mode you wish to select.
- 9 Press  *four times* to save your changes and exit this option.

If you selected the **WPA-ENTERPRISE** or **WPA2-ENTERPRISE** mode, you will need to enter the associated wireless certificates through the DES application. For instructions, see “Changing the Wireless Certificates for a Flashback DVR that is Not Assigned to a DVR Group” in chapter 5 of the *DEP Administrator’s Guide*.

If you selected the **WEP-PSK** mode, you will need to enter a wireless encryption password. See “Entering the Wireless Encryption Key” on page 185 for instructions.

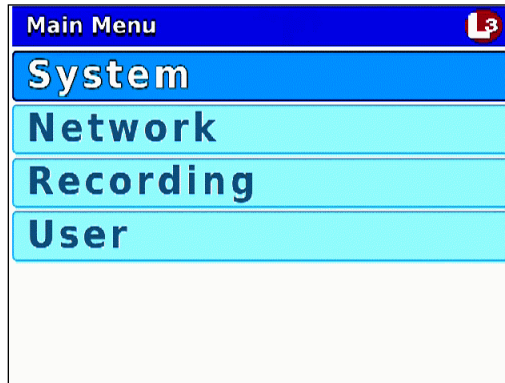
Changing the Wireless Authentication Type

This section describes how to change the authentication type used by the wireless mode displayed in the *Security Mode* field on the Security screen. By default, this option is set to **None**.

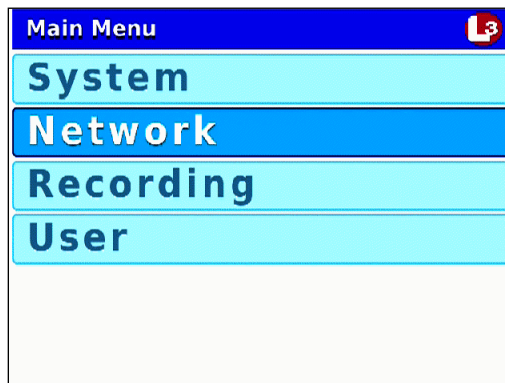


NOTE: If you selected wireless mode WPA-PSK or WPA2-PSK, this field is not required.

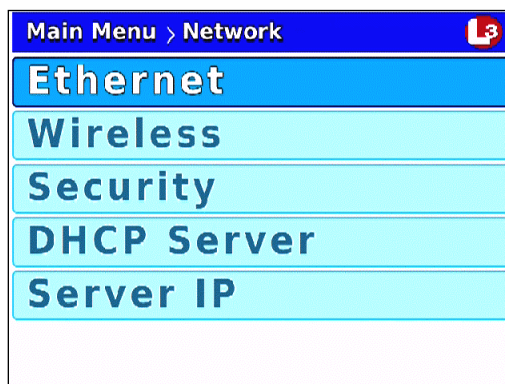
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



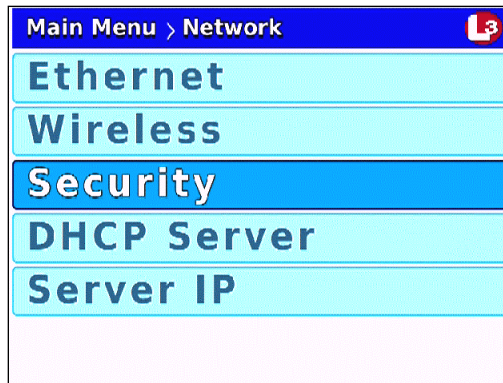
- 3 Press the **Left Arrow** or **Right Arrow** button until **Network** is highlighted.



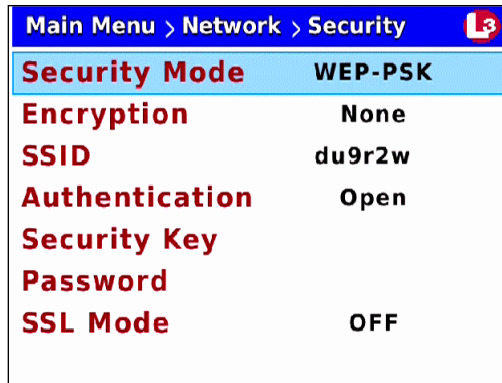
- 4 Press **R** to select the **Network** option. The Network menu displays.



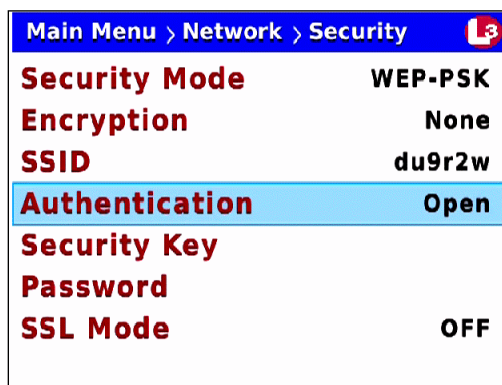
- 5 Press **▶|** *twice* to advance to the **Security** option.



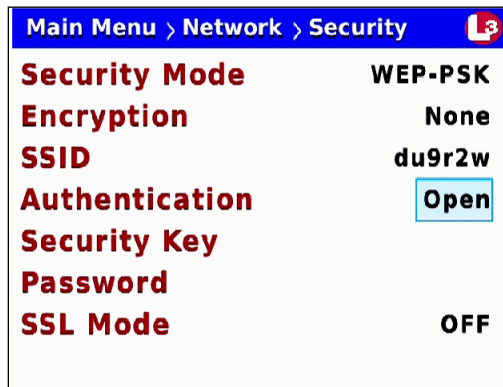
- 6 Press **R** to select the **Security** option. The Security screen displays.



- 7 Press **▶|** *three times* to advance to the *Authentication* field.



- 8 Press **R** to select the *Authentication* field.

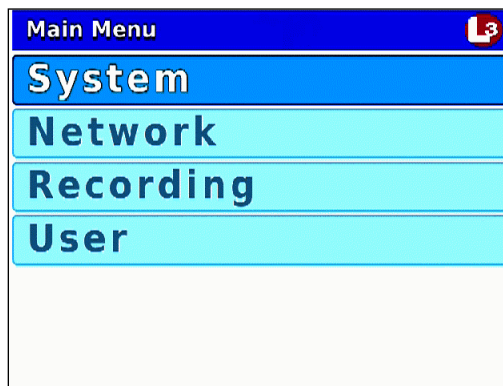


- 9 Using the ◀ or ▶ buttons, display the authentication type you wish to use.
- 10 Press **M** four times to save your changes and exit this option.

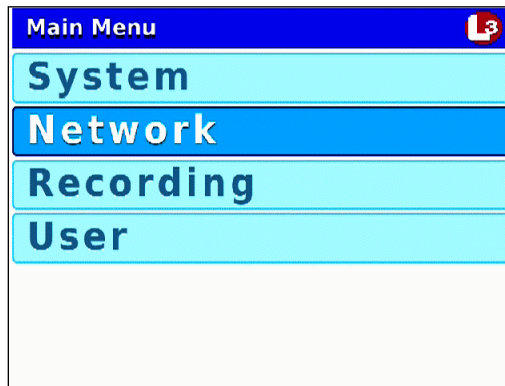
Changing the Wireless Encryption Type (WPA-PSK & WPA Enterprise only)

This section describes how to change the encryption or *security* type for wireless mode WPA-PSK or WPA Enterprise. By default, this option is set to **AES**.

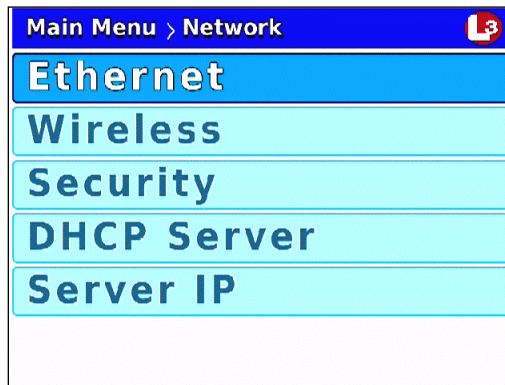
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



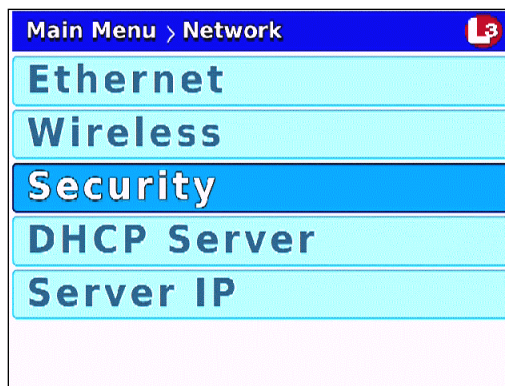
- 3 Press the ▶ or ◀ button until **Network** is highlighted.




- 4 Press **R** to select the **Network** option. The Network menu displays.





- 5 Press **▶** *twice* to advance to the **Security** option.





- 6 Press **R** to select the **Security** option. The Security screen displays.




Main Menu • Network • Security 	
Security Mode	WPA Enterprise
Encryption	AES
SSID	du9r2w
Authentication	Open
Security Key	
Password	
SSL Mode	OFF

- 7 Press  to advance to the *Encryption* field.

Main Menu • Network • Security 	
Security Mode	WPA Enterprise
Encryption	AES
SSID	du9r2w
Authentication	Open
Security Key	
Password	
SSL Mode	OFF

- 8 Press  to select the *Encryption* field.

Main Menu • Network • Security 	
Security Mode	WPA Enterprise
Encryption	AES
SSID	du9r2w
Authentication	Open
Security Key	
Password	
SSL Mode	OFF




- 9 Using the  or  buttons, display the security type you wish to select.
- 10 Press  *four times* to save your changes and exit this option.

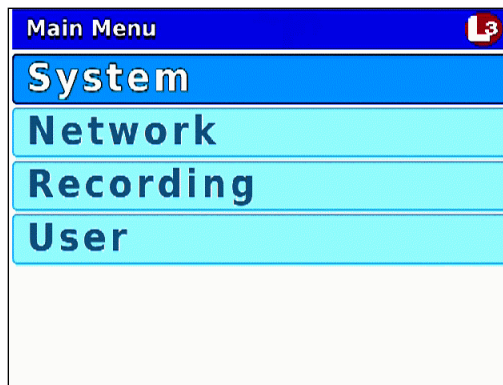
Entering the Wireless Encryption Key (WEP-PSK mode only)



This section describes how to enter your wireless encryption password for wireless mode WEP-PSK. If you selected any other security mode, this field is not required.

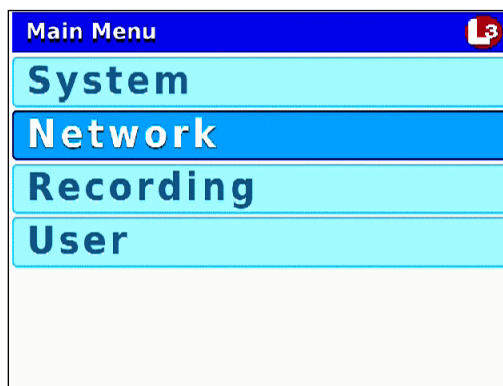
Your encryption key must be either 10 digits long (for 64 bits/ascii) or 26 digits long (for 128 bits/hex).


System default is **64**.

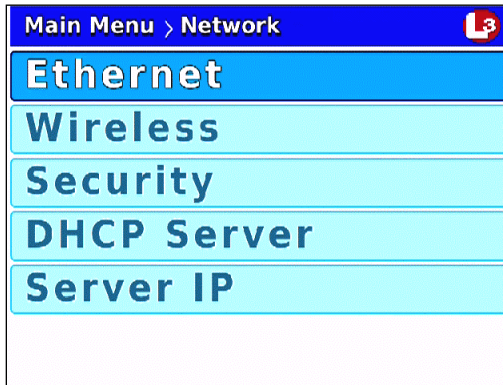
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



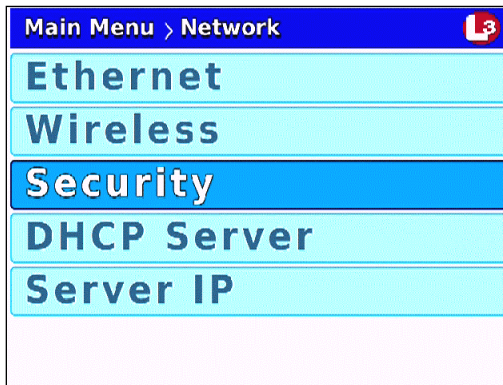
- 3 Press the  or  button until **Network** is highlighted.



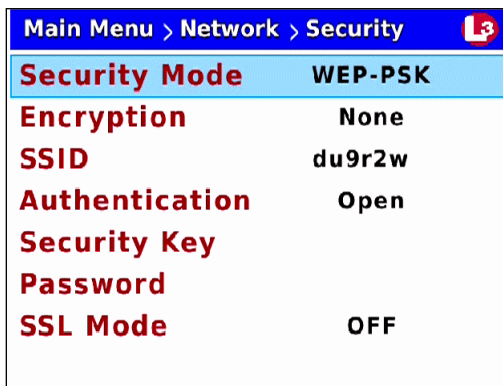
- 4 Press  to select the **Network** option. The Network menu displays.



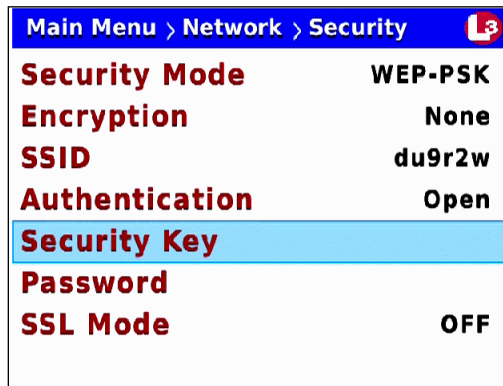
- 5 Press **▶** twice to advance to the **Security** option.



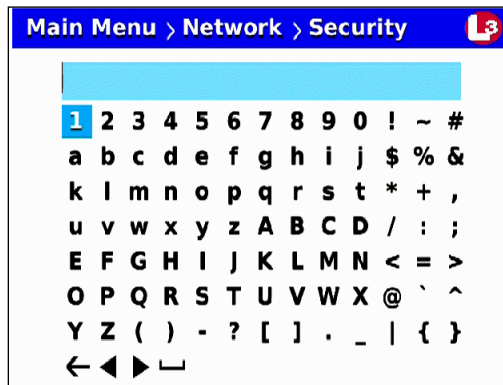
- 6 Press **R** to select the **Security** option. The Security screen displays.



- 7 Press **□** *three times* to advance to the *Security Key* field.



- 8 Press **R** to select the *Security Key* field. A data entry keyboard displays.



You will be using this keyboard to spell out your key, which must be either 10 digits long (for 64 bits/ascii) or 26 digits long (for 128 bits/hex). It may include any combination of the on-screen characters.

- 9 If there is an existing key displayed at the top of this screen, you have to delete that key first before you can enter a new one. Proceed to the next step for instructions.

– OR –

If there is *no text* displayed at the top of this screen, skip to step 12.

- 10 Press **O** to highlight the **←** icon.
- 11 Press **R** several times until the existing key is deleted.
- 12 Using the following navigation buttons, highlight the first letter of your key.
- O** Up
 - ⏮** Down
 - ⏭** Right
 - ⏪** Left.
- 13 Press **R**. The selected character displays at the top of the screen.


- 14 Repeat steps 12 and 13 until you have entered a password with the correct number of characters:
 - For 64 bits/ascii, enter **10** characters
 - For 128 bits/hex, enter **26** characters.




NOTE: The Wireless Key display area can only show 22 characters at a time. Since a 128-bit Encryption Key is 26 characters long, the key characters will shift (scroll) to the left as you enter the last 4 characters.

If you need to add or delete a character, use the following buttons:

- ▶Move forward one character
- ◀Move back one character
- ←Delete previous character




To insert a space, use the  icon.

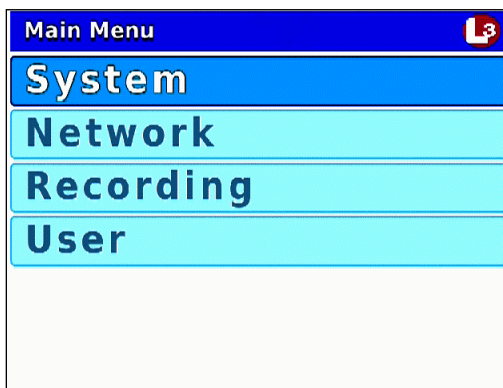
- 15 Once the correct key displays, press  *four times* to exit this option.



Entering Your Wireless SSID

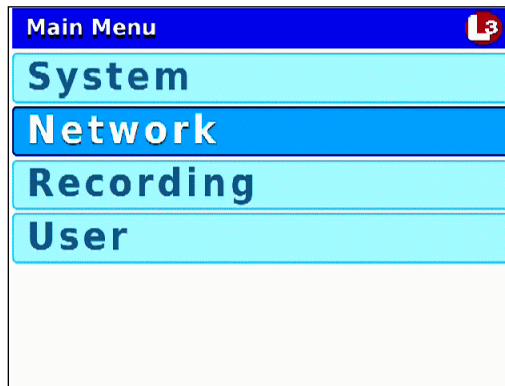
This section describes how to enter the name of your wireless network, also referred to as a *wireless service set identifier* (SSID).

This field is required for all wireless modes.

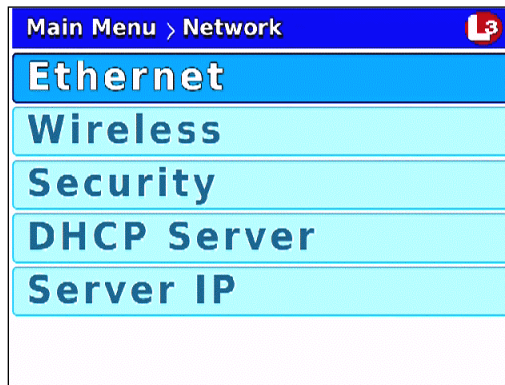
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



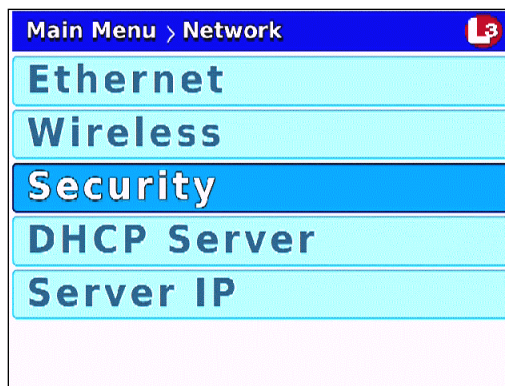
- 3 Press the  or  button until **Network** is highlighted.



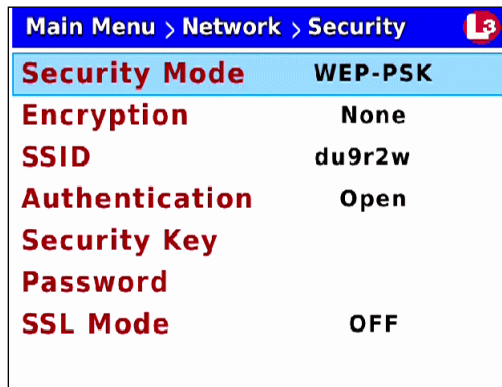
- 4 Press **R** to select the **Network** option. The Network menu displays.




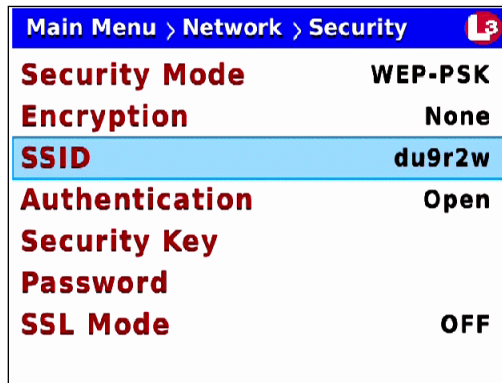
- 5 Press **▶** *twice* to advance to the **Security** option.



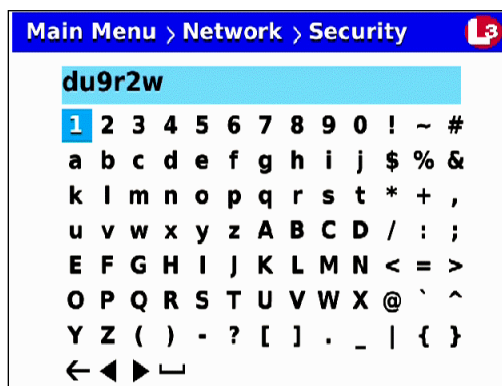
- 6 Press **R** to select the **Security** option. The Security screen displays.



- 7 Press  twice to advance to the SSID field.



- 8 Press  to select the SSID field. A data entry keyboard displays.
















You will be using this keyboard to spell out your wireless network name.

- 9 If there is an existing network name displayed at the top of this screen, you have to delete that name first before you can enter a new one. Proceed to the next step for instructions.

– OR –




If there is *no text* displayed at the top of this screen, skip to step 12.

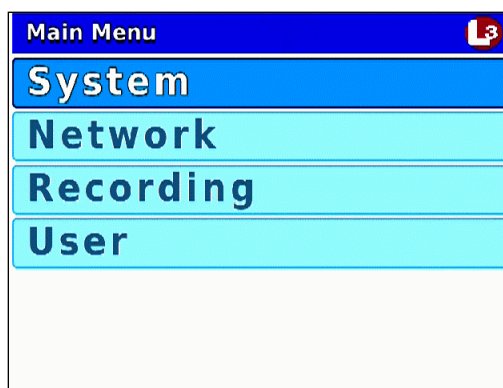
- 10 Press  to highlight the  icon.
- 11 Press  several times until the existing network name is deleted.
- 12 Using the following navigation buttons, highlight the first letter of your wireless network.
 -  Up
 -  Down
 -  Right
 -  Left
- 13 Press . The selected character displays at the top of the screen.
- 14 Repeat steps 12 and 13 until the wireless network name is spelled out at the top of your screen. If you need to add or delete a character, use the following buttons:
 - Move forward one character
 - Move back one character
 - Delete previous character



To insert a space, use the  icon.
- 15 Once the correct name displays, press  *four times* to save your changes and exit this option.

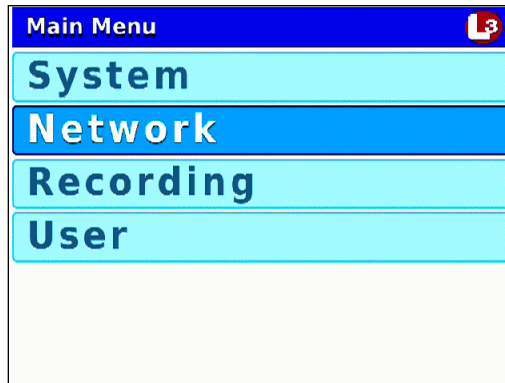
Entering a Wireless Password (WPA-PSK & WPA2-PSK mode only)


This section describes how to enter a wireless password for wireless modes WPA-PSK and WPA2-PSK. If you selected any other security mode, these fields are not required.

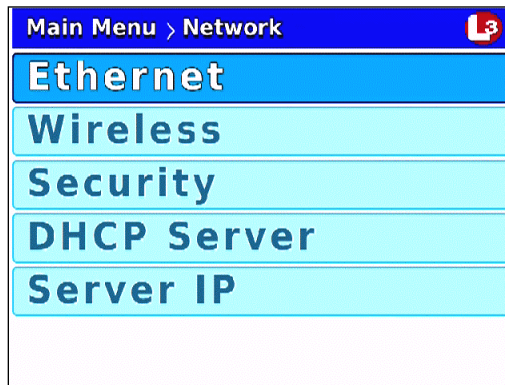
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.




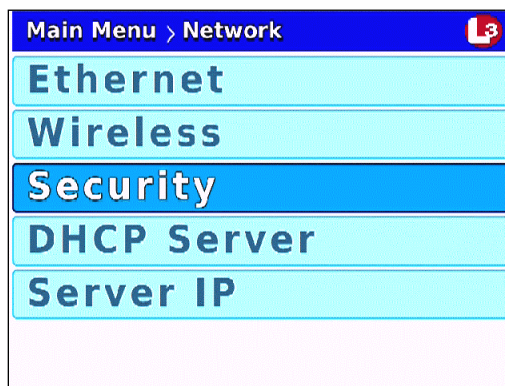
- 3 Press the  or  button until **Network** is highlighted.




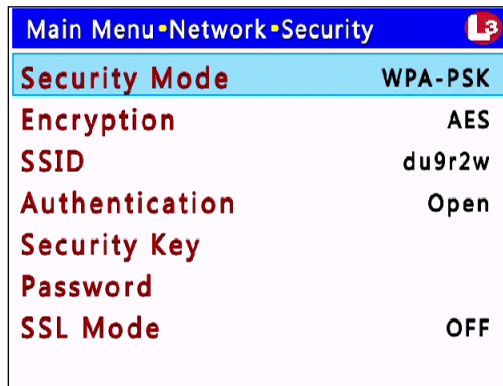
- 4 Press  to select the **Network** option. The Network menu displays.




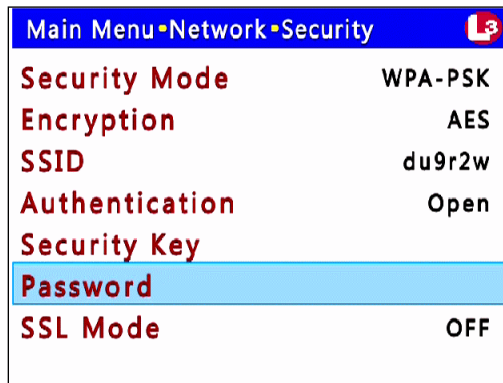
- 5 Press  twice to advance to the **Security** option.




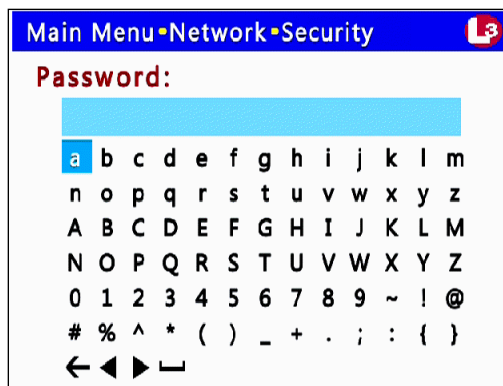
- 6 Press  to select the **Security** option. The Security screen displays.












- 7 Press  twice to advance to the *Password* field.



- 8 Select  to select the *Password* field. A data entry keyboard displays.






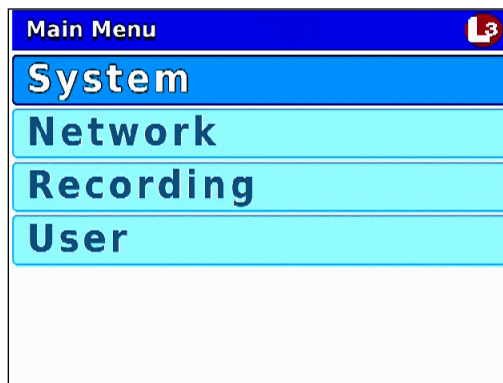
You will be using this keyboard to spell out your WPA-PSK/WPA2-PSK wireless password.



- 9 If there is an existing password displayed at the top of this screen, you have to delete that password first before you can enter a new one. Proceed to the next step for instructions.
– OR –
If there is *no text* displayed at the top of this screen, skip to step 12.
- 10 Press  to highlight the  icon.
- 11 Press  several times until the existing password is deleted.
- 12 Using the following navigation buttons, highlight the first letter of the wireless password.
 -  Up
 -  Down
 -  Right
 -  Left
- 13 Press . The selected character displays at the top of the screen.
- 14 Repeat steps 12 and 13 until the wireless password is spelled out at the top of your screen.
- 15 Once the correct password displays, press  *four times* to save your changes and exit this option.

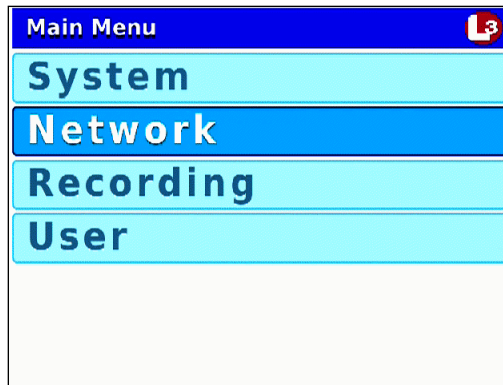
Turning the Wireless SSL Indicator On/Off


This section describes how to turn the wireless SSL indicator on or off. When this option is *on*, it indicates that you are using the SSL (Secure Socket Layer) type encryption to authenticate on your wireless network.

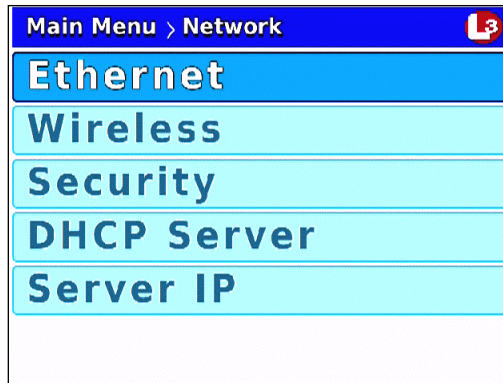
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.




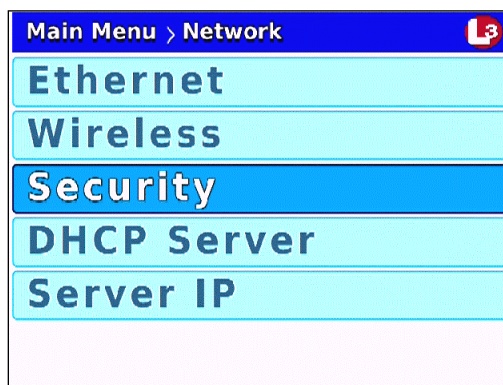
- 3 Press the  or  button until **Network** is highlighted.




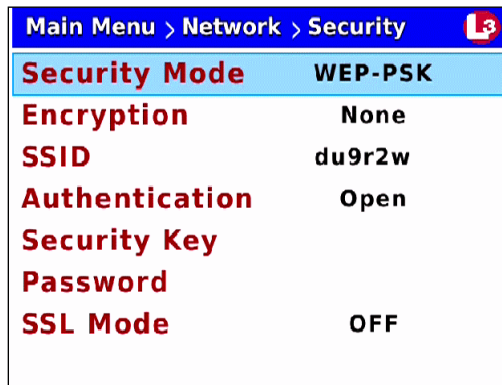
- 4 Press  to select the **Network** option. The Network menu displays.




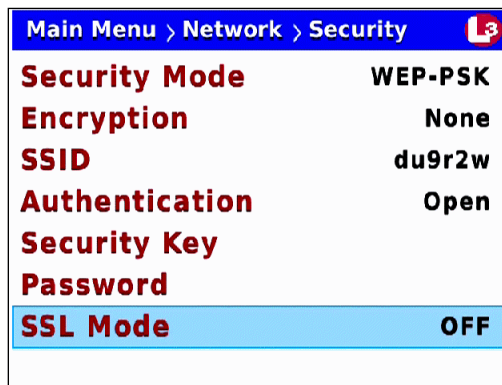
- 5 Press  twice to advance to the **Security** option.



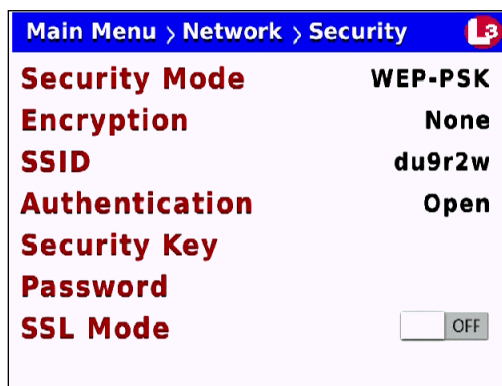
- 6 Press  to select the **Security** option. The Security screen displays.





- 7 Press  to advance to the *SSL Mode* field.



- 8 Press  to select the *SSL Mode* field.



- 9 Press  to toggle the field value to **ON** or **OFF**.
- 10 Press  *four times* to save your changes and exit this option.
- 11 Reboot your DVR. To do so, move the red **AUTO/OFF** switch on your DVR into the *down (OFF)* position. After approximately 30 seconds, move it back into the *up (AUTO)* position.

Entering/Changing System Settings

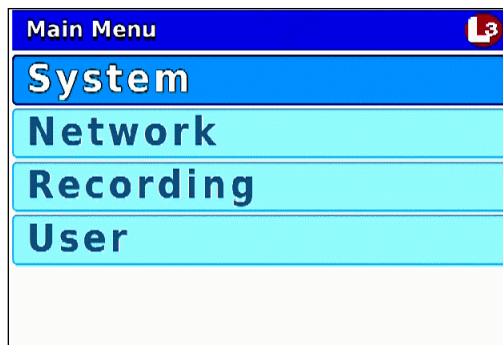
This section describes how to perform the following tasks:

- Program the ignition timer, below
- Enter the DES Admin ID and password, page 199
- Enable/disable the USB Login Feature, page 203.

Programming the Ignition Timer

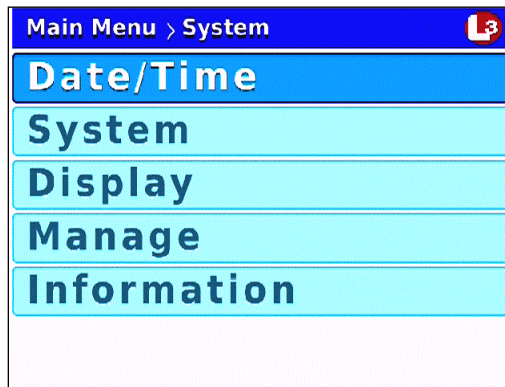
This section describes how to select the number of minutes that it will take for the DVR to power down after the ignition is turned off: **1**, **15** (default), **30**, **45**, or **60**. During the period in which the ignition is *off* but the DVR is still *on*, all automatic triggers will work and you will still be able to initiate a regular recording by pressing **R**. However, if you are using Background Record, it will turn off with the ignition.


- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.

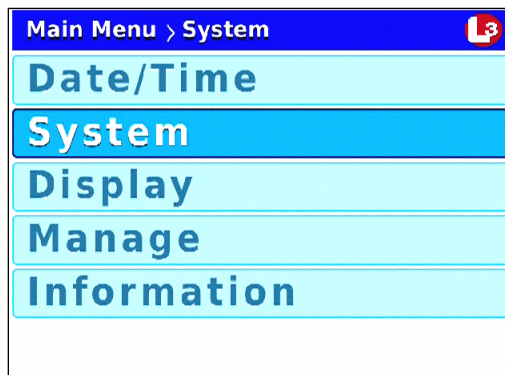



- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **▶** or **◀** button to advance to that option.
- 4 Press **R** to select the **System** option. The System menu displays.

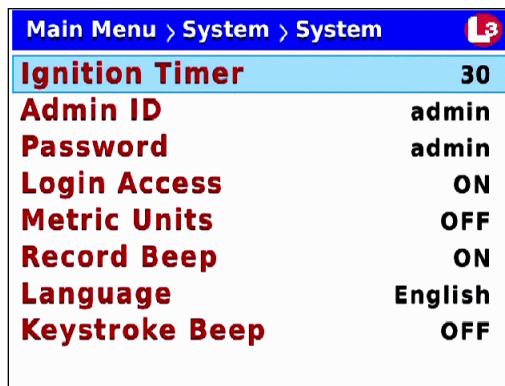
(Continued)




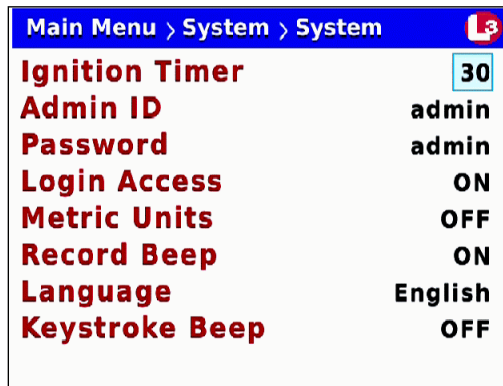
- 5 Press  to advance to the **System** option.



- 6 Press  to select the **System** option. The System screen displays.



- 7 Press  to select the *Ignition Timer* field.

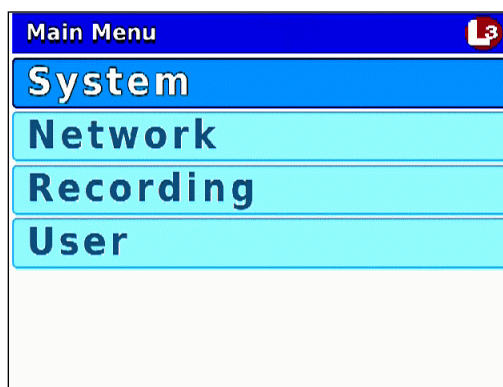


- Using the ◀ or ▶ buttons, display the number of minutes you wish to select.
- Press **M** four times to save your changes and exit this option.

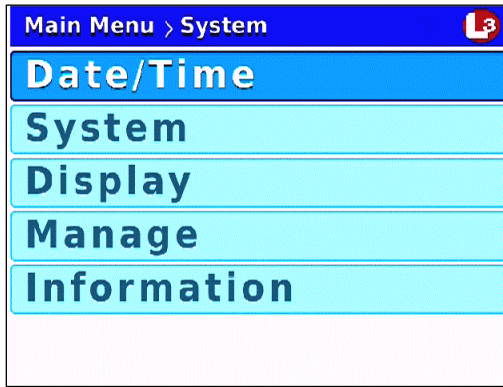
Changing the DES Admin ID and Password

During wireless transmission, your videos move from *DVR* to *access point* to *storage server*. In order for the system to login to the storage server, it requires a valid Administrator's User ID and Password. By default, both the *Admin ID* and *Password* fields are set to **admin**. To change these values, use the following procedure.

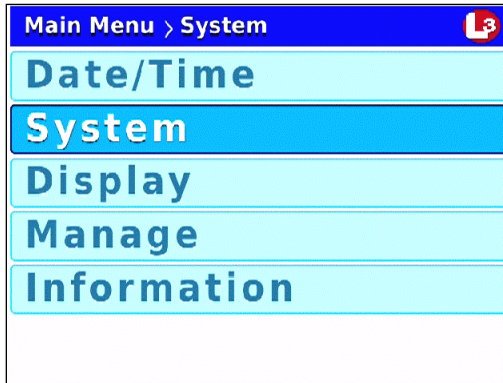
- Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- Press **M**. The Main Menu displays.



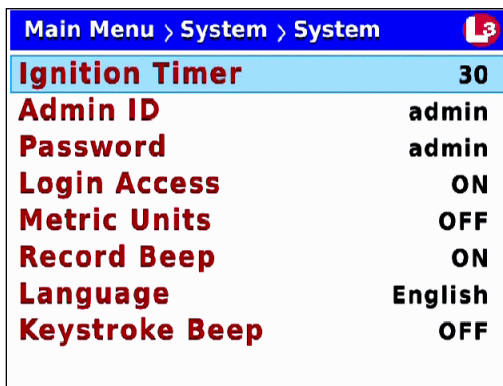
- If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the ▶ or ◻ button to advance to that option.
- Press **R** to select the **System** option. The System menu displays.



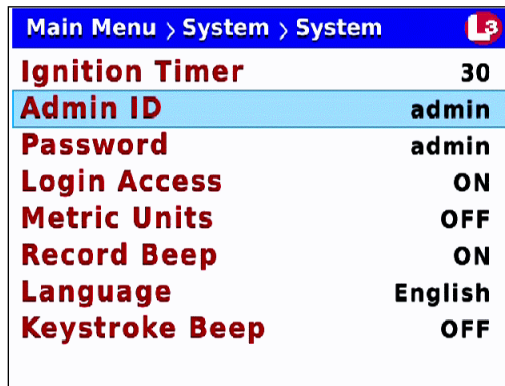
- 5 Press **▶|** to advance to the **System** option.



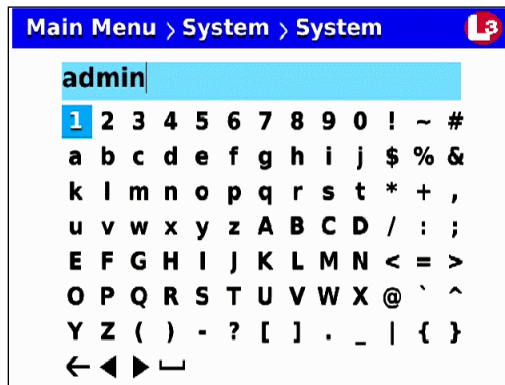
- 6 Press **R** to select the **System** option. The System screen displays.



- 7 Press **▶|** to advance to the *Admin ID* field.






- 8 Press **R** to select the *Admin ID* field. A data entry keyboard displays.

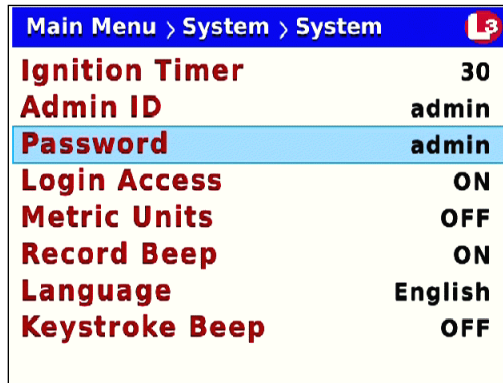



You will be using this keyboard to spell out your DES Administrator's User ID. Begin by deleting the old Admin ID, as described in steps 9 and 10.

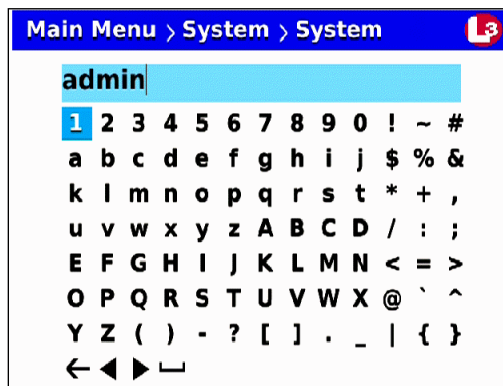
- 9 Press **←** to highlight the **←** icon.
- 10 Press **R** several times until the existing Admin User ID is deleted.
- 11 Using the following navigation buttons, highlight the first letter of the new Admin User ID you wish to enter.
- ↑** Up
 - ↓** Down
 - Right
 - ←** Left
- 12 Press **R**. The selected character displays at the top of the screen.
- 13 Repeat steps 11 and 12 until the Admin User ID is spelled out at the top of your screen. If you need to add or delete a character, use the following buttons:
- ▶** Move forward one character
 - ◀** Move back one character
 - ←** Delete previous character

To insert a space, use the  icon.





- 14 Once the correct Admin User ID displays, press  twice to save your changes and exit the data entry keyboard.
- 15 Press  to advance to the *Admin Password* field.



- 16 Press  to select the *Password* field. A data entry keyboard displays.





You will be using this keyboard to spell out your DES Administrator's password. Begin by deleting the old password, as described in steps 17 and 18.

- 17 Press  to highlight the  icon.
- 18 Press  several times until the password is deleted.
- 19 Using the navigation buttons, navigate to the first letter of the new password you wish to enter.
- 20 Press . The selected character displays at the top of the screen.

- 21 Repeat steps 19 and 20 until the administrator's password is spelled out at the top of your screen. If you need to add or delete a character, use the following buttons:

- ▶Move forward one character
- ◀Move back one character
- ←Delete previous character




To insert a space, use the  icon.

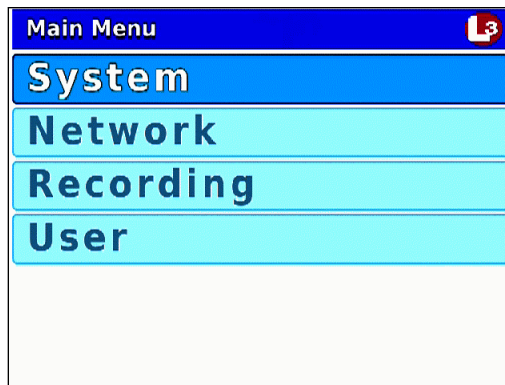
- 22 Once the correct password displays, press  four times to save your changes and exit this option.




Enabling/Disabling the USB Login Feature

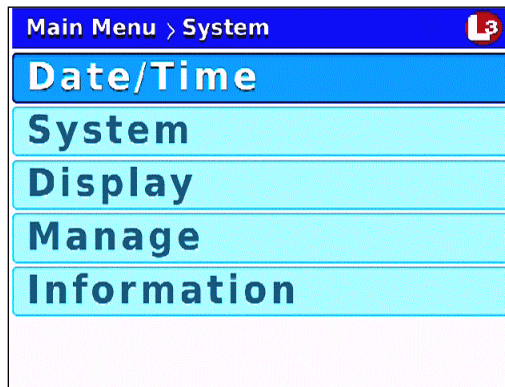
When the USB login feature is *enabled*, officers can use a USB login key to login to the DVR. When the USB login feature is *disabled*, officers *cannot* use a USB login key to login to the DVR. By default, the USB login feature is *enabled*.

For more information on the USB Login Key and how it's used, see "Logging into a DVR Using Your USB Login Key" on page 26.

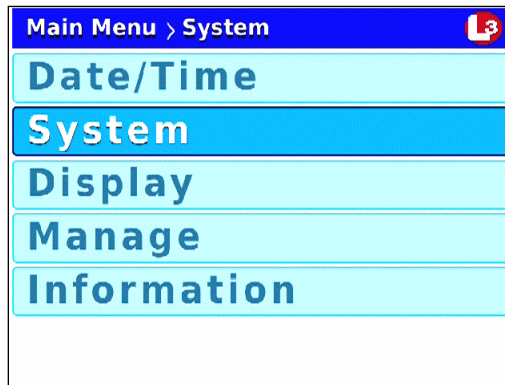
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



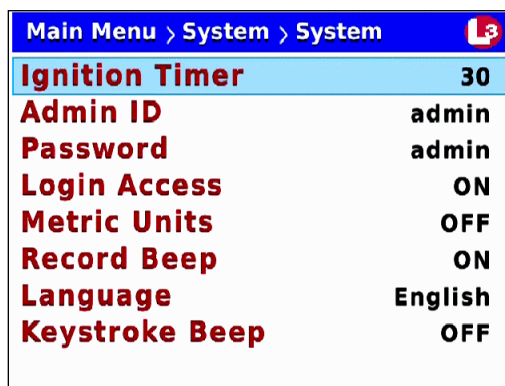
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.
- 4 Press  to select the **System** option. The System menu displays.




- 5 Press **▶|◀** to advance to the **System** option.





- 6 Press **R** to select the **System** option. The System screen displays.





- 7 Press **▶|◀** *three times* to advance to the *Login Access* field.

Main Menu > System > System 	
Ignition Timer	30
Admin ID	admin
Password	admin
Login Access	ON
Metric Units	OFF
Record Beep	ON
Language	English
Keystroke Beep	OFF




- 8 Press  to select the *Login Access* field.

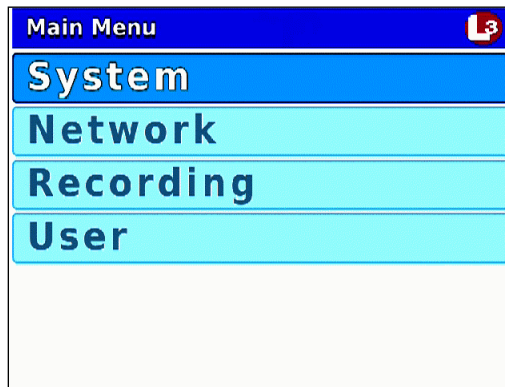
Main Menu > System > System 	
Ignition Timer	30
Admin ID	admin
Password	admin
Login Access	<input checked="" type="checkbox"/> ON <input type="checkbox"/>
Metric Units	OFF
Record Beep	ON
Language	English
Keystroke Beep	OFF



- 9 Press  to toggle the field value to **ON** (enabled) or **OFF** (disabled).
- 10 Press  *four times* to save your changes and exit this option.

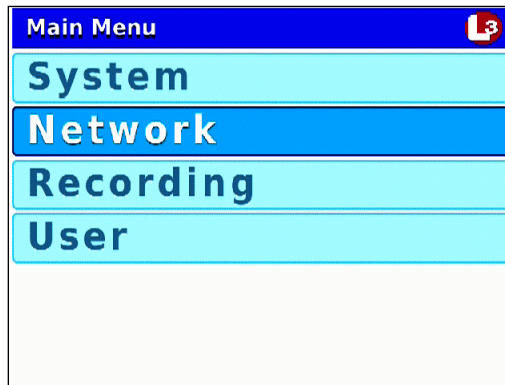
Entering the Server Address


This section describes how to enter the IP address that identifies your agency's DES storage server. This procedure is only necessary in special situations. Do not enter this information unless instructed to do so by your Network Specialist and/or L3 Mobile-Vision Technical Support Engineer.

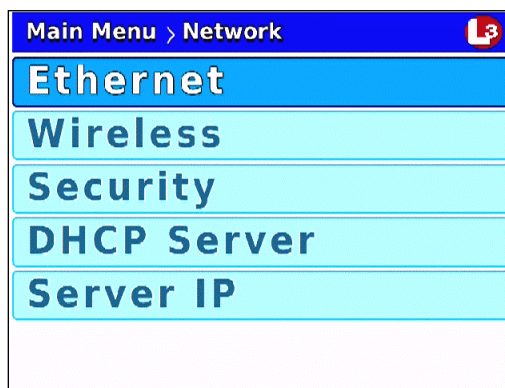
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.




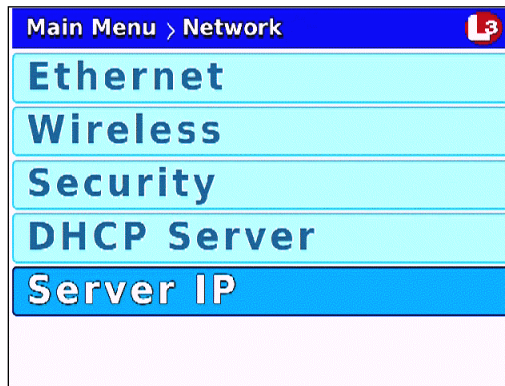
- 3 Press the  or  button until **Network** is highlighted.



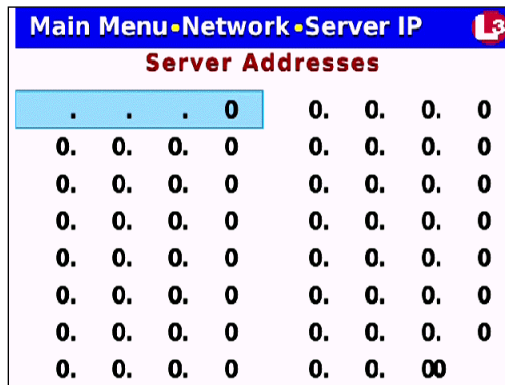
- 4 Press  to select the **Network** option. The Network menu displays.



- 5 Press  to advance to the **Server IP** option.





- 6 Press **R** to select the **Server IP** option. A data entry keyboard displays.



You will be using this keyboard to enter the Server IP address(es) for your DES server(s).

- 7 Press **R** to highlight the first segment of the first Server IP address.
- 8 Press **▶|**. The number **255** displays. Keep pressing the **▶|** button until the desired number displays. (If you overshoot the number, press **◀|** to back up.)
- 9 Press **▶▶** to advance to the next segment of the IP address.
- 10 Press **▶|**. The number **255** displays. Keep pressing the **▶|** button until the desired number displays. (If you overshoot the number, press **◀|** to back up.)
- 11 Repeat steps 9 and 10 until all four segments of the Server IP address are entered.
- 12 If your agency has *only one* DES server, skip to step 16.
– OR –
If your agency has *more than one* DES server, proceed to the next step.
- 13 Press **M**.




- 14 Press .
- 15 Enter the IP address for the second server, as described in steps 7 – 11.
- 16 Press  *four times* to save your changes and exit this option.

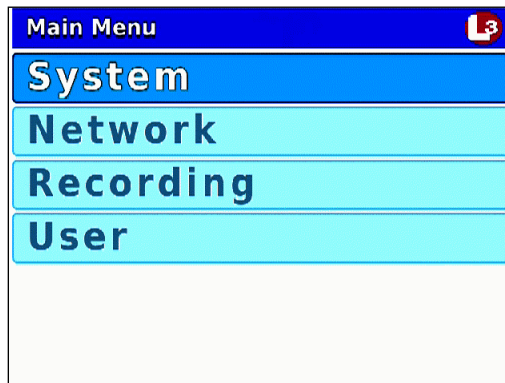
Entering the Officer Name

Normally, the officer name is automatically transferred to the DVR when an officer logs in using his DVR Login Key. However, there are a few circumstances when you might want or need to login manually:

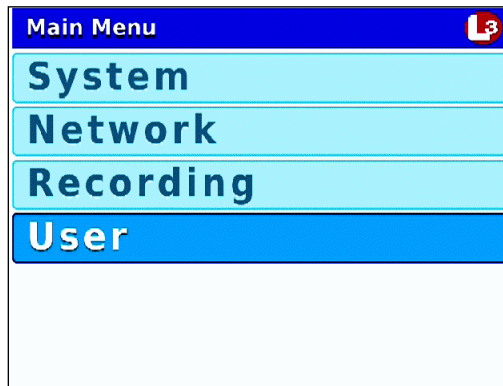
- Scenario 1.** You are the *only person* who drives the vehicle in which the DVR is installed. In this case, you can enter your name *once* to ensure that all future videos recorded on the DVR will be linked to you.
- Scenario 2.** You need to login to a DVR but you have either lost, misplaced, or forgotten your USB login key.

By default, the *Officer Name* field is set to **No Name**.

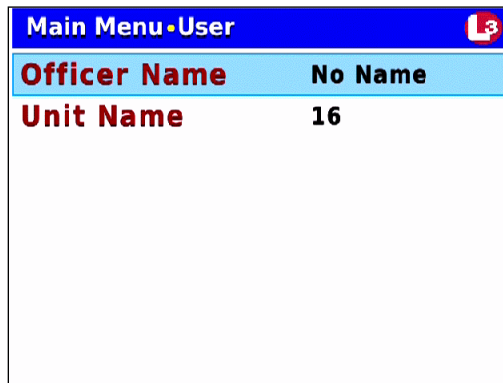
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



- 3 Press the  or  button until **User** is highlighted.



- 4 Press **R** to select the **User** option. The User screen displays.








- 5 Press **R** to select the *Officer Name* field. A data entry keyboard displays.







You will be using this keyboard to spell out the officer's name. Begin by deleting the old name, as described in steps 6 and 7.


- 6 Press **⏪** to highlight the **←** icon.
- 7 Press **R** several times until the existing officer name is deleted.

- 8 Using the following navigation buttons, highlight the first letter of the officer name you wish to enter.
 -  Up
 -  Down
 -  Right
 -  Left
- 9 Press . The selected character displays at the top of the screen.
- 10 Repeat steps 8 and 9 until the officer name is spelled out at the top of your screen.

If you need to add or delete a character, use the following buttons:




- Move forward one character
- Move back one character
- Delete previous character

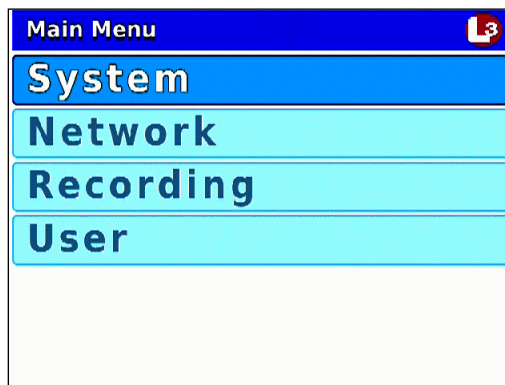
To insert a space, use the  icon.

- 11 Once the correct name displays, press  *three times* to save your changes and exit this option.

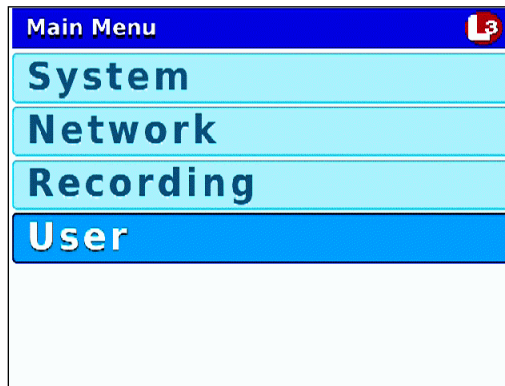
Entering the DVR Unit Name

This section describes how to assign a name and/or number to your DVR. Many agencies give their DVRs the same name as the vehicle in which they are installed, such as “Unit 146.”

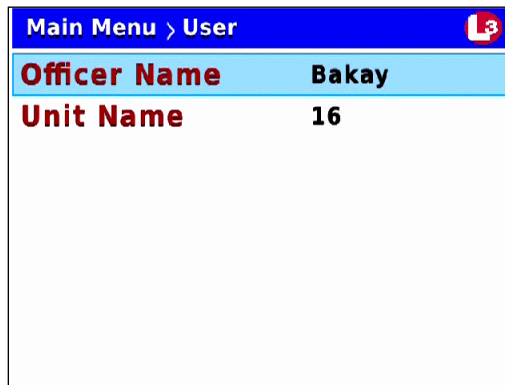
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



- 3 Press the  or  button until **User** is highlighted.



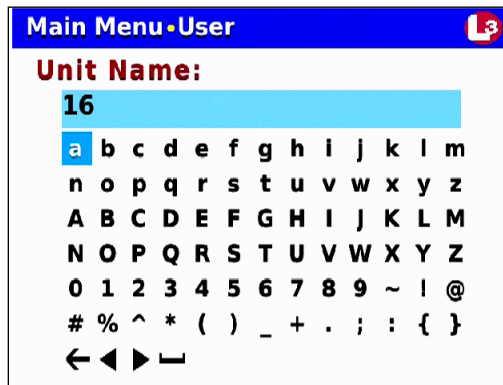
- 4 Press **R** to select the **User** option. The User screen displays.











- 5 Press **▶** to advance to the *Unit Name* field.






- 6 Press **R** to select the *Unit Name* field. A data entry keyboard displays.





You will be using this keyboard to spell out the unit's name and/or number. Begin by deleting the old unit name, as described in steps 7 and 8.

- 7 Press  to highlight the .
- 8 Press  several times until the existing unit name is deleted.
- 9 Using the following navigation buttons, highlight the first letter or number of the unit you wish to enter.
 -  Up
 -  Down
 -  Right
 -  Left
- 10 Press . The selected character displays at the top of the screen.
- 11 Repeat steps 9 and 10 until the unit name is spelled out at the top of your screen.

If you need to add or delete a character, use the following buttons:

- Move forward one character
- Move back one character
- Delete previous character

To insert a space, use the  icon.

- 12 Once the correct unit name displays, press  *three times* to save your changes and exit this option.

Viewing/Updating Firmware

Your DVR comes preloaded with the most current version of the Flashback firmware. If you have an Extended Maintenance Agreement (EMA) with L3 Mobile-Vision, you will periodically receive firmware updates via the Flashback application.

If you aren't sure which firmware version you currently have installed on your DVR, see the next section, "Viewing the Current Firmware Version."




To upgrade your DVR's firmware to the latest version, first copy the firmware file to a USB memory stick, as described in "Copying a Firmware File from DEP to a USB Drive" in chapter 5 of the *DEP Administrator's Guide*. Next, import that file to your DVR, as described in "Transferring a Firmware File from a USB Drive to a DVR" on page 215.

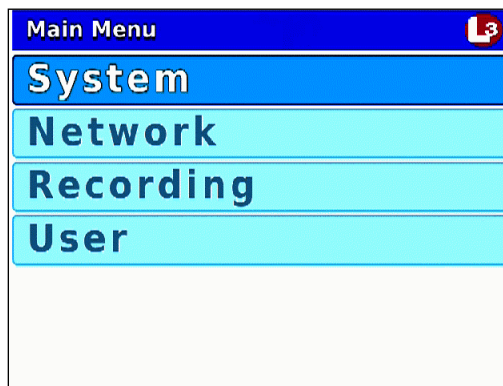
For more information, see:




- Viewing the Current Firmware Version, below
- Transferring a Firmware File from a USB Drive to a DVR, page 215.

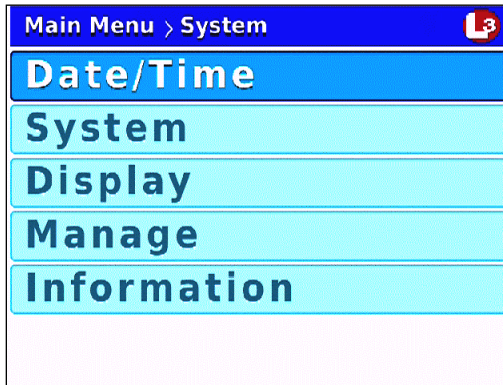
Viewing the Current Firmware Version

This section describes how to view the firmware version that is currently installed on your DVR.

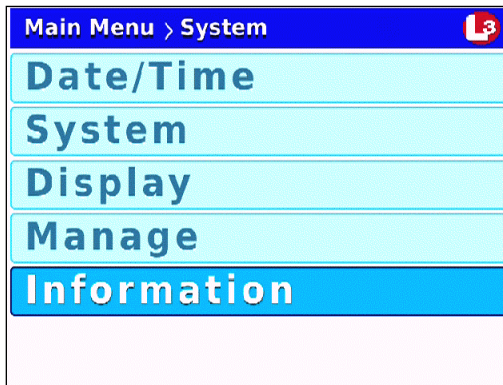
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



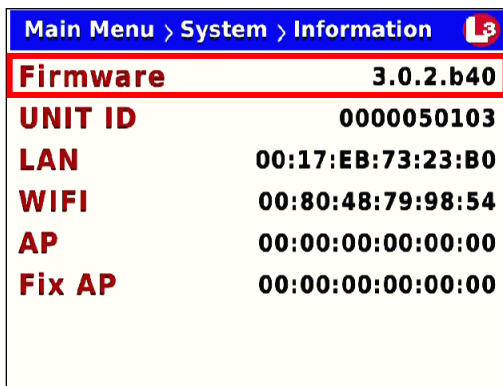
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.
- 4 Press  to select the **System** option. The System menu displays.



- 5 Press **[D]** to advance to the **Information** option.



- 6 Press **[R]** to select the **Information** option. The Information screen displays.



The firmware version that is currently installed on this DVR displays in the *Firmware* field.




- 7 Press **[M]** *three times* to exit this option.

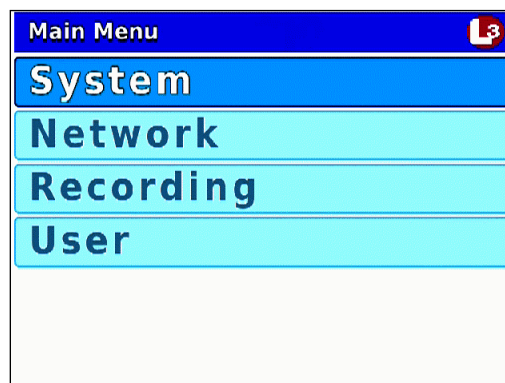
Transferring a Firmware File from a USB Drive to a DVR



This section describes how to manually copy the latest firmware version from a USB memory stick to your DVR. Before you perform this task, copy the latest firmware file from the Flashback application to a USB stick, as described in “Copying a Firmware File from DEP to a USB Drive” in chapter 5 of the *DEP Administrator’s Guide*.

- 1 Verify that all videos have been removed from the Flashback DVR unit. If there are any videos remaining on the DVR’s SD card, remove the card from the DVR and perform a manual upload. For more information on manual uploads, see “Manually Uploading Videos from an SD card Reader or ESU” in chapter 2 of the *DEP Administrator’s Guide*.
- 2 Take the USB drive that contains the firmware file and insert it into the USB port on the front of your Flashback DVR.

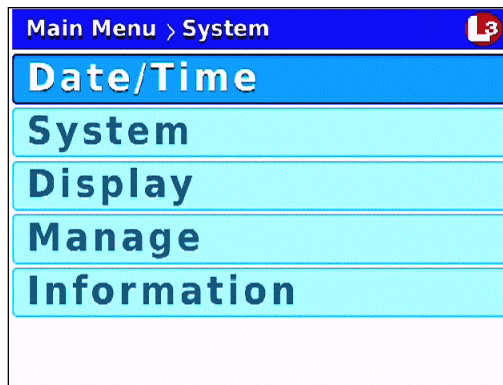


- 3 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 4 Press . The Main Menu displays.

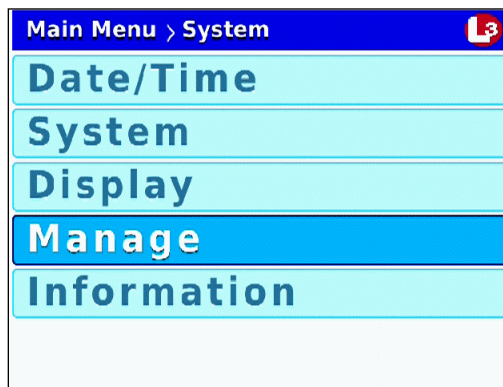


- 5 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.

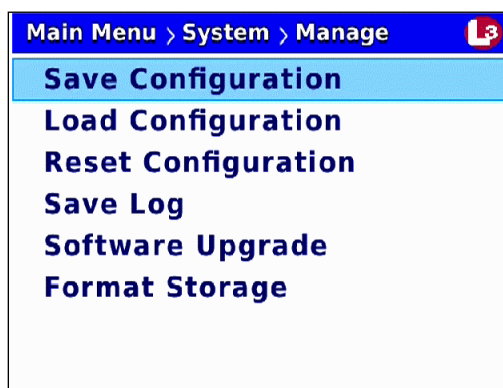
- 6 Press **R** to select the **System** option. The System menu displays.



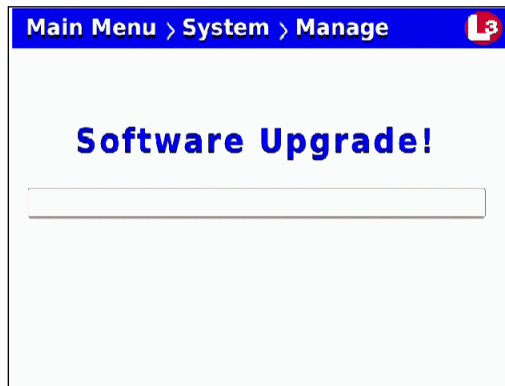
- 7 Press **⏏** twice to advance to the **Manage** option.





- 8 Press **R** to select the **Manage** option. The Manage screen displays.

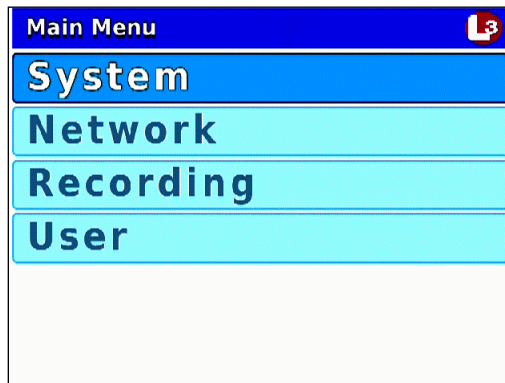



- 9 Press **⏏** twice to advance to the **Software Upgrade** option.
- 10 Press **R** to select the **Software Upgrade** option. The system begins updating your DVR. This process may take a minute or two. You will see the following status message on your screen during the upload.

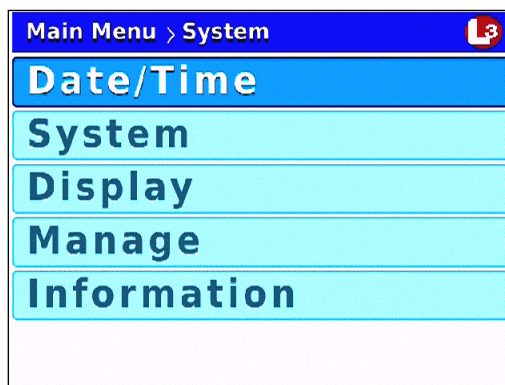


Once the process is complete, a confirmation message will display, then the DVR will automatically reboot.

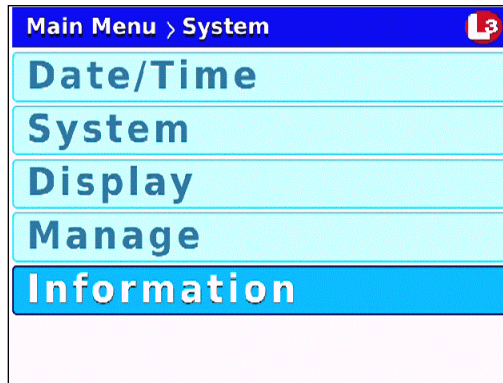
- 11 Once the reboot is complete and the USB drive has stopped blinking, you may remove the USB drive from the DVR.
- 12 Press the  button to turn Auto mode *off*.
- 13 Press . The Main Menu displays.



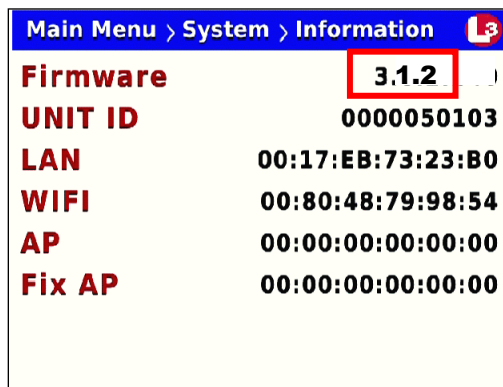
- 14 Press  to select the **System** option. The System menu displays.



- 15 Press **[D]** to advance to the **Information** option.



- 16 Press **[R]** to select the **Information** option. The Information screen displays.



- 17 Check to make sure the new firmware version displays in the *Firmware* field.
- 18 Press **[M]** *three times* to exit this option.
- 19 Record a short test video (1-2 minutes) and validate that your video transfers successfully across the network to the server.

Copying the DVR Configuration File to/from DVR

The DVR configuration file—config.xml—contains all of your DVR’s settings. If desired, you can manually copy this file from one DVR to another using a USB memory stick. You can also copy a config.xml file to the Flashback application in order to transfer one DVR’s settings to an entire fleet of DVRs. For information on the latter procedure, see “Creating a DVR Group from a DVR’s config.xml File” in chapter 5 of the *DEP Administrator’s Guide*.

For more information, see:




- Copying the config.xml File from Your DVR to a USB drive, next page
- Copying the config.xml File from a USB Drive to Your DVR, page 221.

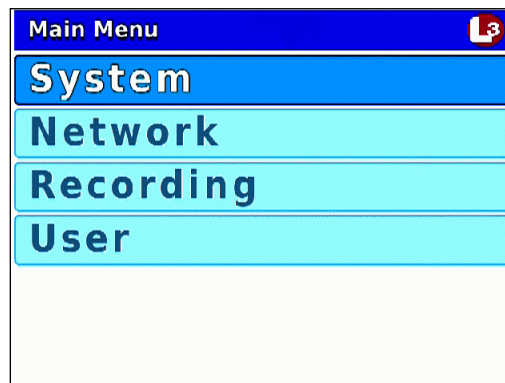
Copying the config.xml File from Your DVR to a USB Drive




This section describes how to copy a DVR's configuration file—config.xml—to a USB memory stick. This file contains all of a DVR's current settings. After you copy this file to USB stick, you can either upload the file to another DVR *or* upload it to the Flashback application. For more information on how you might use this file with the Flashback application, see "Fleet Management" in chapter 5 of the *DEP Administrator's Guide*.

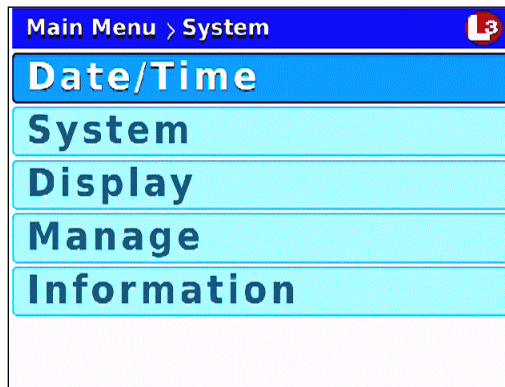
- 1 Insert a USB memory stick in the Flashback's USB port.



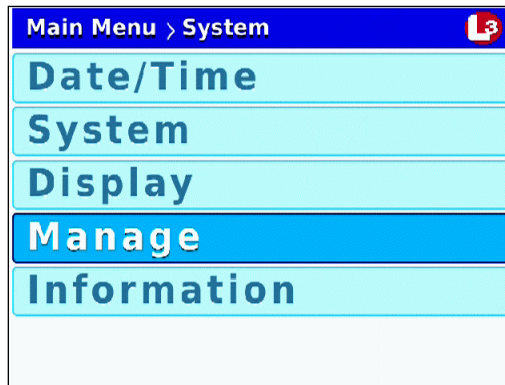
- 2 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 3 Press . The Main Menu displays.



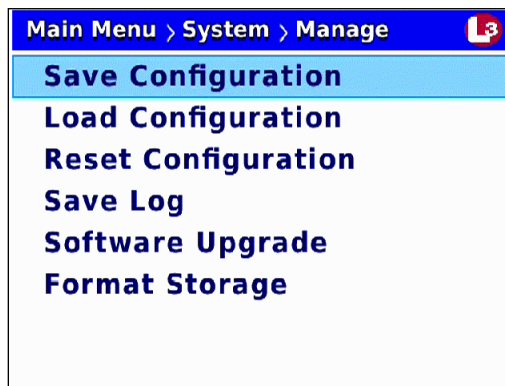
- 4 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.
- 5 Press  to select the **System** option. The System menu displays.



- 6 Press **□** *twice* to advance to the **Manage** option.



- 7 Press **R** to select the **Manage** option. The Manage screen displays.



- 8 Press **R** to select the **Save Configuration** option. The system copies the DVR's config.xml to the USB drive. While this process takes place, a status message will display on-screen.



Once the **Copying...** message disappears, the transfer is complete.

- 9 Press **M** *three times* to exit this option.

Copying the config.xml File from a USB Drive to Your DVR

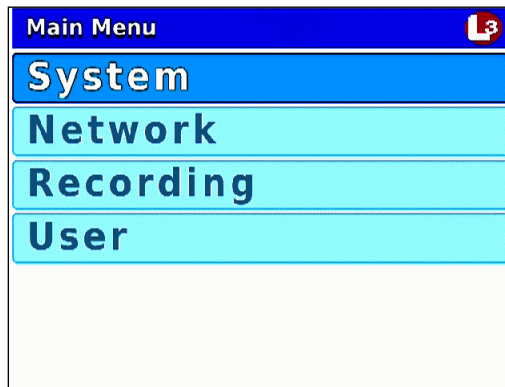
This section describes how to copy a DVR configuration file—config.xml—from a USB memory stick to your DVR. This file contains all of a DVR’s settings, allowing you to copy settings from one DVR to another.




For instructions on how to obtain a config.xml file from another DVR, see the previous section, “Copying the Configuration file from DVR to USB drive” and/or “Exporting a DVR’s config.xml File” in chapter 5 of the *DEP Administrator’s Guide*.

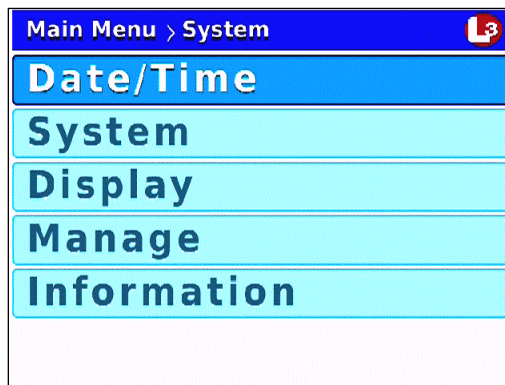
- 1 Take the USB drive that contains the config.xml file and insert it into the USB port on the front of your DVR.




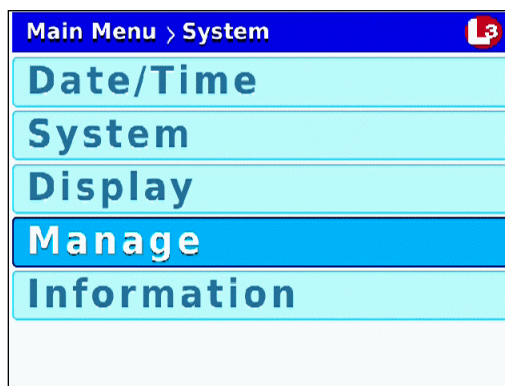
- 2 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 3 Press **M**. The Main Menu displays.




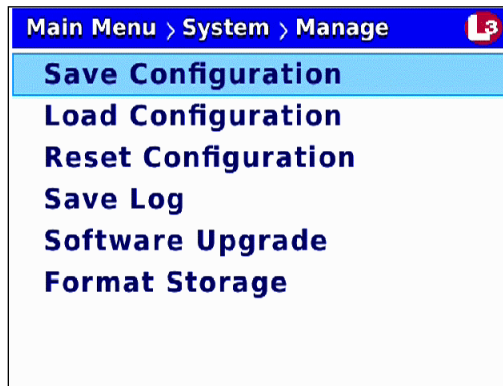
- 4 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.
- 5 Press  to select the **System** option. The System menu displays.



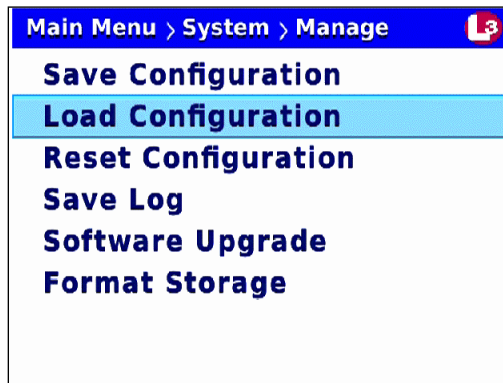
- 6 Press  *twice* to advance to the **Manage** option.



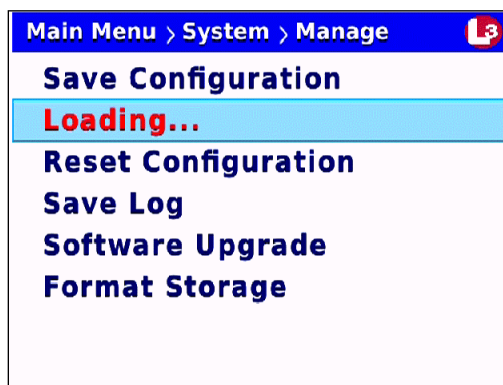
- 7 Press  to select the **Manage** option. The Manage screen displays.



- 8 Press **▶|** to advance to the **Load Configuration** option.



- 9 Press **R** to select the **Load Configuration** option. The system copies the config.xml file from the USB drive to your DVR. While this process takes place, a status message will display on-screen.






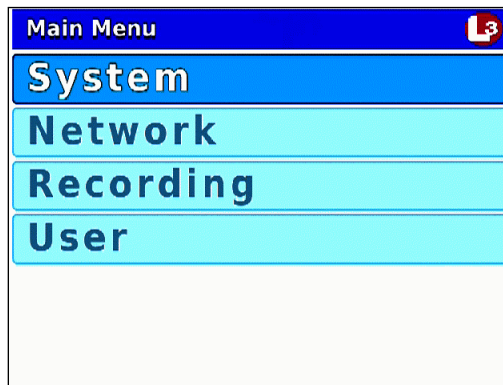
Once the **Loading...** message disappears, the transfer is complete.




- 10 Press **M** *three times* to exit this option. The system will automatically reboot.

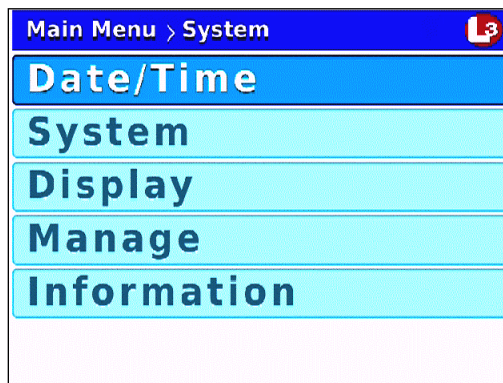
Resetting the DVR to its Factory Settings

This section describes how to return your DVR to its original factory settings. When performing this procedure, keep in mind that all previous changes made to the DVR menus will be wiped out.

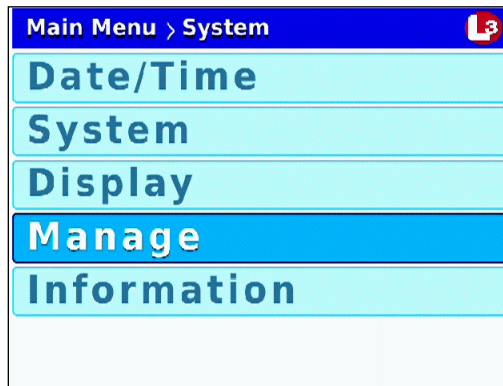
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



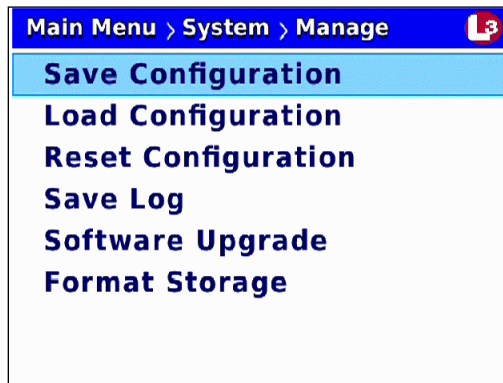
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.
- 4 Press  to select the **System** option. The System menu displays.



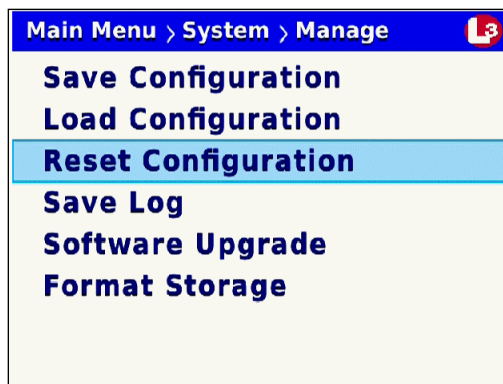
- 5 Press  *twice* to advance to the **Manage** option.



- 6 Press **R** to select the **Manage** option. The Manage screen displays.



- 7 Press **▶** *twice* to advance to the **Reset Configuration** option.



- 8 Press **R** to select the **Reset Configuration** option. The system resets the DVR to its original factory settings and then reboots the DVR. While this process takes place, a status message will display on-screen.



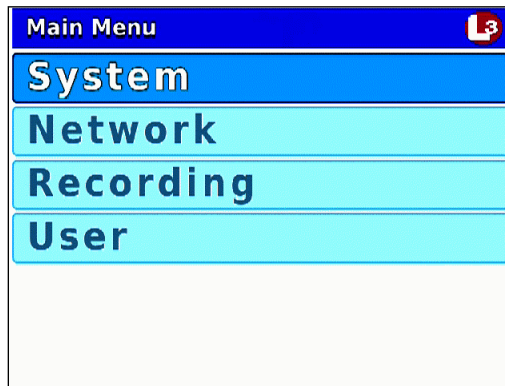
Copying the DVR Log Files to a USB Drive




This section describes how to copy the DVR log files to a USB memory stick. These files are used by L3 Mobile-Vision support staff to troubleshoot technical problems. Perform this task when instructed to do so by your L3 Mobile-Vision Technical Support Engineer.

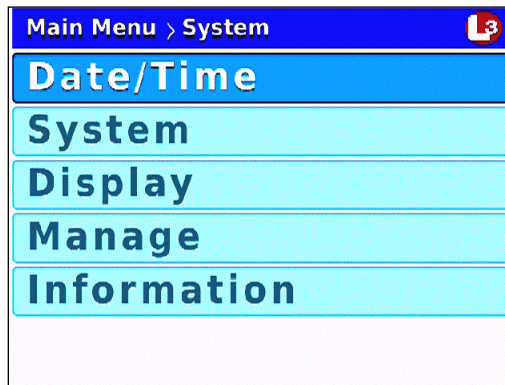
- 1 Insert a **blank** USB memory stick in the Flashback's USB port.




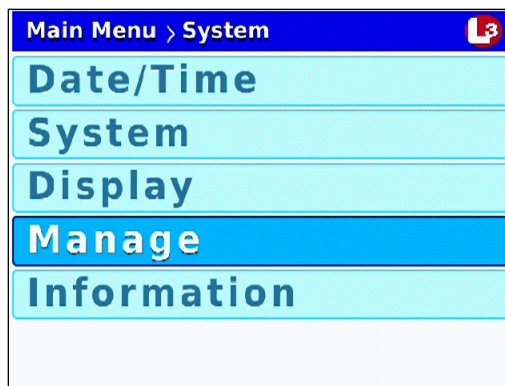
- 2 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 3 Press **M**. The Main Menu displays.




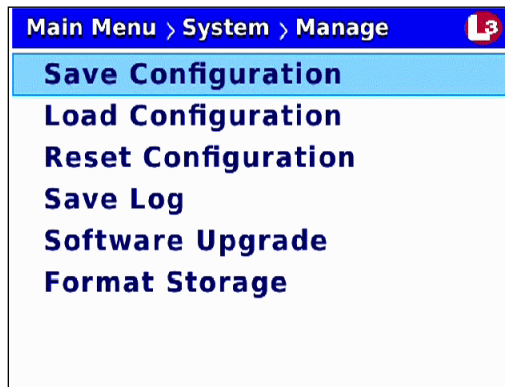
- 4 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.
- 5 Press  to select the **System** option. The System menu displays.



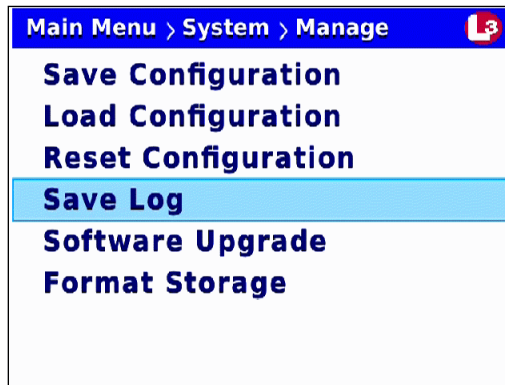
- 6 Press  *twice* to advance to the **Manage** option.



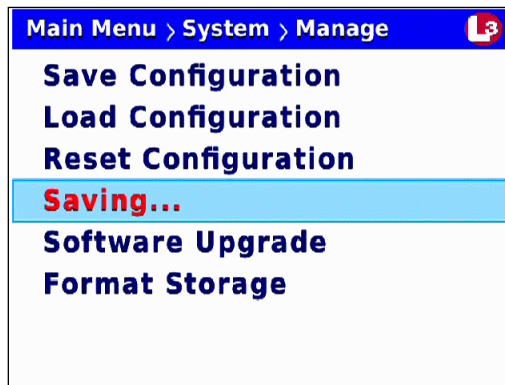
- 7 Press  to select the **Manage** option. The Manage screen displays.



- 8 Press **▶|◀** *three times* to advance to the **Save Log** option.



- 9 Press **R** to select the **Save Log** option. The system copies the DVR's log files to the USB drive. While this process takes place, a status message will display on-screen.



Once the **Saving...** message disappears, the transfer is complete. This may take several minutes or longer.

- 10 Press **M** *three times* to exit this option.
11 Remove the USB stick from the DVR.

- 12 Insert the USB stick in a USB port on your PC.
- 13 Send the **flash2.log.backup** file to your L3 Mobile-Vision Technical Support Engineer as an email attachment.

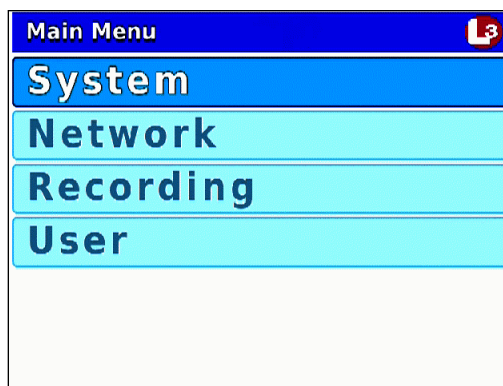
Formatting an SD card

This section describes how to reformat an SD card. The SD card is used to temporarily store videos until they can be automatically or manually transferred to the Flashback application. If the SD card you wish to reformat still contains video, either wait until automatic transmission occurs, *or* perform a manual upload. For more information on manual uploads, see “Manually Uploading New Videos” in chapter 2 of the *DEP Administrator’s Guide*.

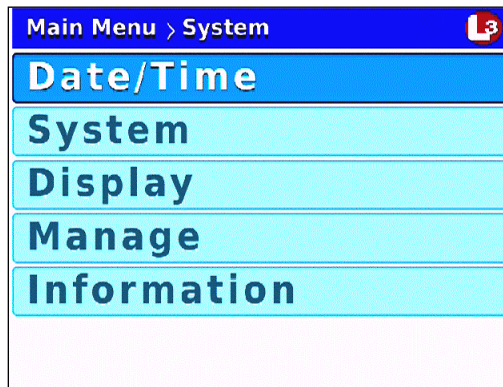
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Insert the SD card into your DVR’s **SD CARD** slot.




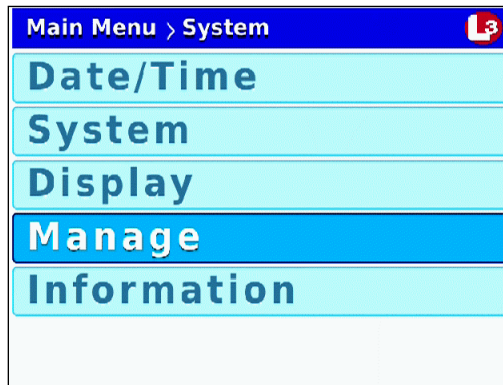
- 3 Press **M**. The Main Menu displays.




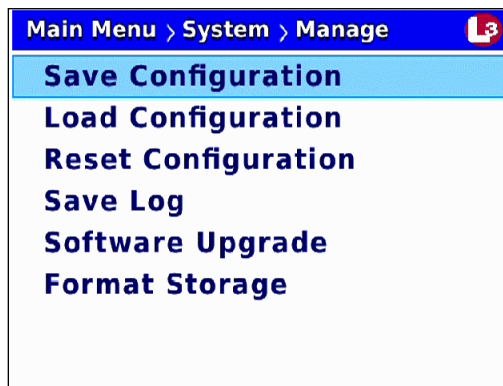
- 4 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **▶** or **◀** button to advance to that option.
- 5 Press **R** to select the **System** option. The System menu displays.




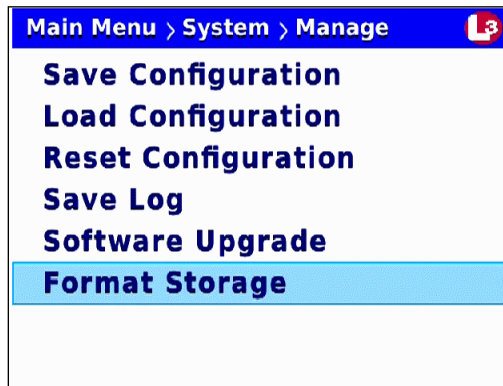
- 6 Press  twice to advance to the **Manage** option.




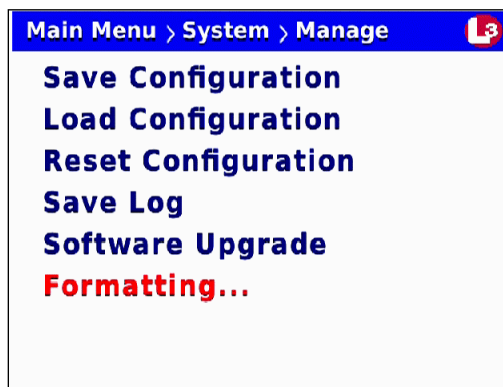
- 7 Press  to select the **Manage** option. The Manage screen displays.




- 8 Press  to advance to the **Format Storage** option.



- 9 Press  to select the **Format Storage** option. The system begins formatting the SD card. While this process takes place, a status message will display on-screen.






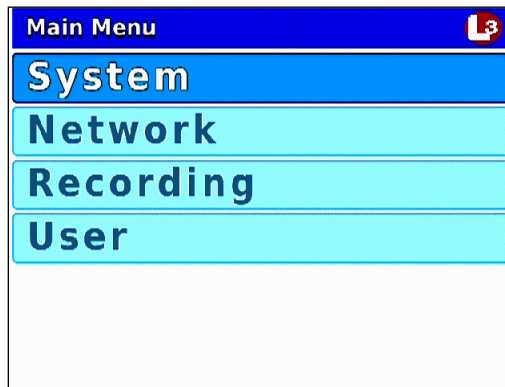
Once the red **Formatting...** message disappears, the format is complete.




- 10 Press  *three times* to exit this option.

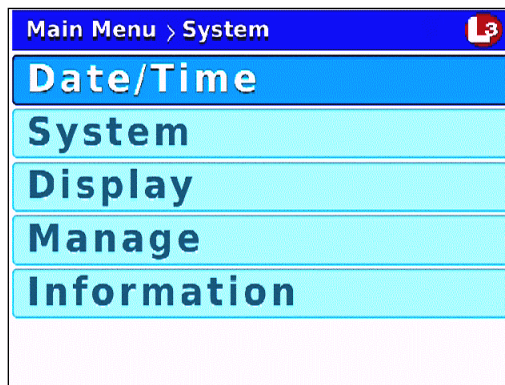
Viewing Your Flashback ID


This section describes how to view your Flashback ID. This is a unique identification code for your DVR, similar to a serial number.

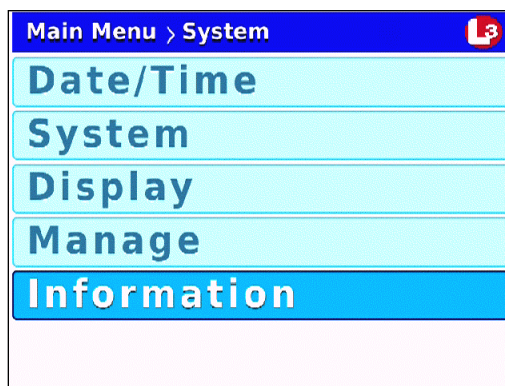
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.





- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.
- 4 Press  to select the **System** option. The System menu displays.




- 5 Press  to advance to the **Information** option.



- 6 Press  to select the **Information** option. The Information screen displays.




Main Menu > System > Information 	
Firmware	3.0.2.b40
UNIT ID	000050103
LAN	00:17:EB:73:23:B0
WIFI	00:80:48:79:98:54
AP	00:00:00:00:00:00
Fix AP	00:00:00:00:00:00


The Flashback ID displays in the *UNIT ID* field.




- 7 Press  *three times* to exit this option.

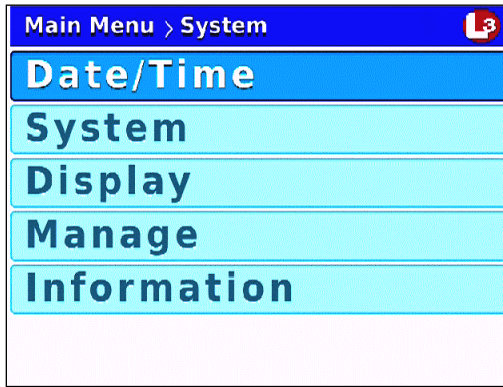
Viewing Media Access Control Addresses

This section describes how to view the DVR's Media Access Control (MAC) Addresses for your LAN, WiFi, and AP (Access Point) connections. These are view-only fields used for reporting purposes only.

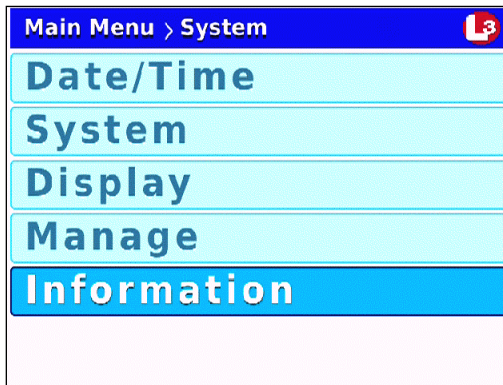
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.

Main Menu 
System
Network
Recording
User


- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.
- 4 Press  to select the **System** option. The System menu displays.



- 5 Press **⏏** to advance to the **Information** option.




- 6 Press **R** to select the **Information** option. The Information screen displays.

Main Menu > System > Information 	
Firmware	3.0.2.b40
UNIT ID	000050103
LAN	00:17:EB:73:23:B0
WIFI	00:80:48:79:98:54
AP	00:00:00:00:00:00
Fix AP	00:00:00:00:00:00

The Media Control Addresses (MACs) are described in the following table.

IP Address	Description
LAN	The media access control address (MAC) for the Ethernet adapter located at the rear of your DVR. <i>View-only field.</i>
WIFI	The media access control address (MAC) for your DVR's internal wireless card. <i>View-only field.</i>
AP	The media access control address (MAC) of the Access Point that the DVR is connected to. If the DVR is not connected to an Access Point, the value of this field will be all zeros. <i>View-only field.</i>
Fix AP	<i>This field is not currently used.</i>

- 7 Press  three times to exit this option.

Changing the Flashback Monitor Settings

This section describes how to change the various monitor settings that affect the quality of your Flashback monitor display. Please note that the monitor settings affect the monitor display only, *not* the quality of the actual video files.

For specific instructions, see:

- Adjusting the Monitor Contrast Setting, below
- Adjusting the Monitor Brightness Setting, page 236
- Adjusting the Monitor Saturation Setting, page 237
- Adjusting the Monitor Hue Setting, page 238
- Adjusting the Monitor Sharpness Setting, page 238
- Adjusting the Text Transparency of the Monitor Controls, page 239.

Adjusting the Monitor Contrast Setting





This section describes how to adjust the contrast setting for your Flashback monitor. Levels range from 0 – 100. You can adjust this setting up or down in increments of five (i.e., 5, 10, 15, etc.).


Once you change the contrast level, it will remain at that setting until you or another user changes it again.

Before you change this setting, it's recommended that you turn the GPS monitor display *off*, as it will make it difficult for you to see the Contrast bar. For instructions, see "Turning the 'GPS' Display On/Off" on page 138.


- 1 Press  +  simultaneously to enter Monitor Setup Mode. The yellow Contrast bar displays at the bottom of your monitor.



NOTE: If the red DIMMER display appears rather than the CONTRAST display pictured above, it means that you accidentally pressed the  button slightly ahead of the  button. Wait until the display disappears, then trying pressing  +  again.



- 2 Use the  button to *increase* this setting in increments of five.

– OR –

Use the  button to *decrease* this setting in increments of five.

After several seconds of inactivity, the system will automatically exit Monitor Setup Mode.

Adjusting the Monitor Brightness Setting

The easiest way to adjust brightness is to use the  or  buttons on your Flashback monitor. Alternatively, you can access the Brightness bar while in Monitor Setup Mode, as described below. This procedure is typically used when you are interested in knowing the numeric value of your brightness setting.





Once you change the brightness level, it will remain at that setting until you or another user changes it again.

Brightness levels range from 0 – 100. You can adjust this setting up or down in increments of five (i.e., 5, 10 ,15, etc.). System default is **50**.

Before you change this setting, it’s recommended that you turn the GPS monitor display *off*, as it will make it difficult for you to see the Brightness bar. For instructions, see “Turning the ‘GPS’ Display On/Off” on page 138.


- 1 Press  +  simultaneously to enter Monitor Setup Mode. The yellow Contrast bar displays at the bottom of your monitor.




NOTE: If the red DIMMER display appears rather than the CONTRAST display pictured above, it means that you accidentally pressed the  button slightly ahead of the  button. Wait until the display disappears, then trying pressing  +  again.

- 2 Press  to advance to the Brightness bar.



- 3 Use the  button to *increase* this setting in increments of five.

– OR –

Use the  button to *decrease* this setting in increments of five.

After several seconds of inactivity, the system will automatically exit Monitor Setup Mode.

Adjusting the Monitor Saturation Setting





This section describes how to adjust the saturation setting for your Flashback monitor. Levels range from 0 – 100. You can adjust this setting up or down in increments of five (i.e., 5, 10, 15, etc.).

Once you change the saturation level, it will remain at that setting until you or another user changes it again.

Before you change this setting, it's recommended that you turn the GPS monitor display *off*, as it will make it difficult for you to see the Saturation bar. For instructions, see “Turning the ‘GPS’ Display On/Off” on page 138.


- 1 Press  +  simultaneously to enter Monitor Setup Mode. The yellow Contrast bar displays at the bottom of your monitor.




NOTE: If the red DIMMER display appears rather than the CONTRAST display pictured above, it means that you accidentally pressed the  button slightly ahead of the  button. Wait until the display disappears, then trying pressing  +  again.

- 2 Press  *twice* to advance to the Saturation bar.



- 3 Use the  button to *increase* this setting in increments of five.

– OR –

Use the  button to *decrease* this setting in increments of five.

After several seconds of inactivity, the system will automatically exit Monitor Setup Mode.

Adjusting the Monitor Hue Setting





This section describes how to adjust the hue setting for your Flashback monitor. Levels range from 0 – 100. You can adjust this setting up or down in increments of five (i.e., 5, 10, 15, etc.).


Once you change the hue level, it will remain at that setting until you or another user changes it again.

Before you change this setting, it's recommended that you turn the GPS monitor display *off*, as it will make it difficult for you to see the Hue bar. For instructions, see “Turning the ‘GPS’ Display On/Off” on page 138.



- 1 Press  +  simultaneously to enter Monitor Setup Mode. The yellow Contrast bar displays at the bottom of your monitor.



NOTE: If the red DIMMER display appears rather than the CONTRAST display pictured above, it means that you accidentally pressed the  button slightly ahead of the  button. Wait until the display disappears, then try pressing  +  again.

- 2 Press  *three times* to advance to the Hue bar.



- 3 Use the  button to *increase* this setting in increments of five.
– OR –
Use the  button to *decrease* this setting in increments of five.

After several seconds of inactivity, the system will automatically exit Monitor Setup Mode.

Adjusting the Monitor Sharpness Setting





This section describes how to adjust the sharpness setting for your Flashback monitor. Levels range from 0 – 100. You can adjust this setting up or down in increments of five (i.e., 5, 10, 15, etc.).


Once you change the sharpness level, it will remain at that setting until you or another user changes it again.

Before you change this setting, it's recommended that you turn the GPS monitor display *off*, as it will make it difficult for you to see the Sharpness bar. For instructions, see “Turning the ‘GPS’ Display On/Off” on page 138.


- 1 Press  +  simultaneously to enter Monitor Setup Mode. The yellow Contrast bar displays at the bottom of your monitor.




NOTE: If the red DIMMER display appears rather than the CONTRAST display pictured above, it means that you accidentally pressed the  button slightly ahead of the  button. Wait until the display disappears, then trying pressing  +  again.

- 2 Press  *four times* to advance to the Sharpness bar.



- 3 Use the  button to *increase* this setting in increments of five.

– OR –

Use the  button to *decrease* this setting in increments of five.

After several seconds of inactivity, the system will automatically exit Monitor Setup Mode.





Adjusting the Text Transparency of the Monitor Controls


This section describes how to increase/decrease the transparency of the text that displays on-screen when the monitor controls are activated (i.e., volume display, brightness display, etc.) This setting does *not* affect any other on-screen text, such as the officer name or GPS coordinates. It only affects the on-screen controls, such as the “Contrast” display pictured below.

Before you change this setting, it’s recommended that you turn the GPS monitor display *off*, as it will make it difficult for you to see the Alpha Blanding bar. For instructions, see “Turning the ‘GPS’ Display On/Off” on page 138.



- 1 Press  +  simultaneously to enter Monitor Setup Mode. The yellow Contrast bar displays at the bottom of your monitor.



NOTE: If the red DIMMER display appears rather than the CONTRAST display pictured above, it means that you accidentally pressed the  button slightly ahead of the  button. Wait until the display disappears, then trying pressing  +  again.

- 2 Press  *five times* to advance to the Alpha Blending bar.



- 3 Use the  button to *increase* the text transparency.
– OR –
Use the  button to *decrease* the text transparency.

After several seconds of inactivity, the system will automatically exit Monitor Setup Mode.





Viewing the Monitor Version Number & Product ID


This section describes how to view the Flashback monitor's version number and product ID. Your L3 Mobile-Vision Technical Support Representative may request this number when troubleshooting monitor problems.

Before you change this setting, it's recommended that you turn the GPS monitor display *off*, as it will make it difficult for you to see the version and product numbers. For instructions, see "Turning the 'GPS' Display On/Off" on page 138.

- 1 Press  +  simultaneously to enter Monitor Setup Mode. The yellow Contrast bar displays at the bottom of your monitor.



NOTE: If the red DIMMER display appears rather than the CONTRAST display pictured above, it means that you accidentally pressed the  button slightly ahead of the  button. Wait until the display disappears, then trying pressing  +  again.

- 2 Press  *six times* to advance to the version and product numbers.

VERSION: v81114b

PRODUCT: BMG3540

Quickly jot the displayed numbers down. After several seconds of inactivity, the system will automatically exit Monitor Setup Mode. If the numbers disappear before you've had a chance to write them down, repeat steps 1 and 2.

Upgrading from Flashback2 to Flashback3 or FlashbackHD

The Flashback3 and FlashbackHD were designed to be fully backward compatible with the Flashback2. To switch out a Flashback2 for a Flashback3 or FlashbackHD, perform the following procedure.

If your agency's wireless LAN is *not* configured for DHCP, you will need the *Can Reset DVR* permission to perform this task. For instructions, see "Assigning Permissions to a User" in chapter 8 of the *DEP Administrator's Guide*.

- 1 If the Flashback2 is installed in an *Interview Room*, proceed to the next step.

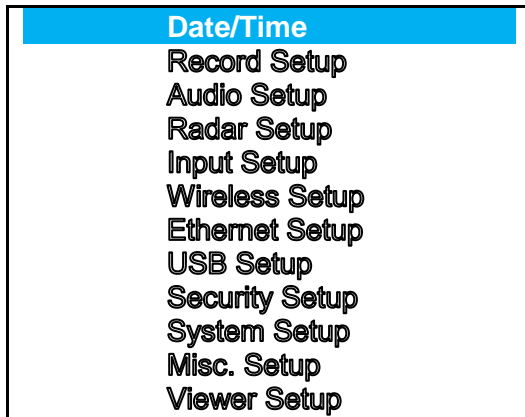
– OR –

If the Flashback2 is installed in a *vehicle*, power on that vehicle.

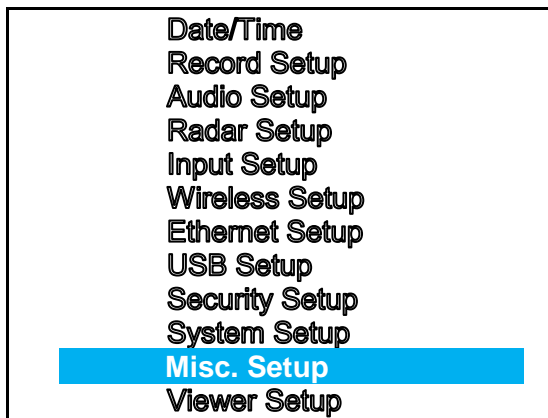
- 2 Insert a USB memory stick in the Flashback2's USB port.



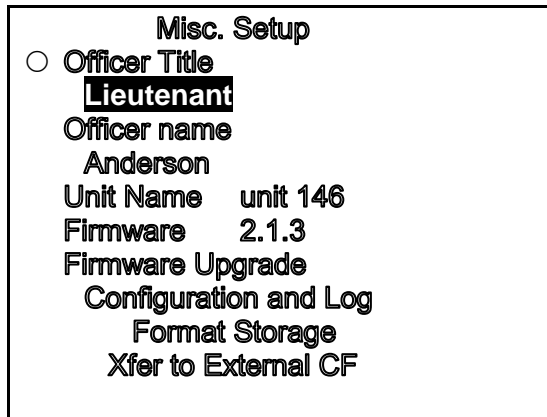
- 3 Make sure the door to the Flashback2 is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 4 Press **M**. The Main Menu displays.





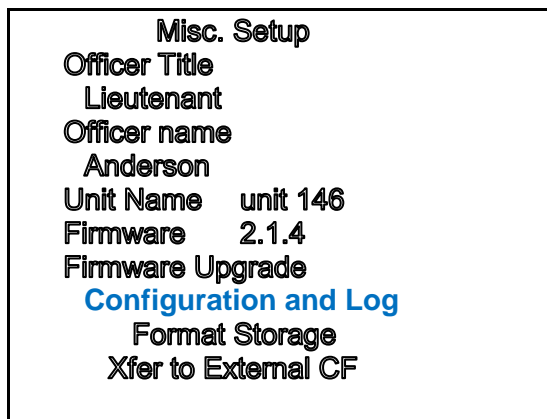
- 5 Press the **▶** or **◀** button until **Misc. Setup** is highlighted.




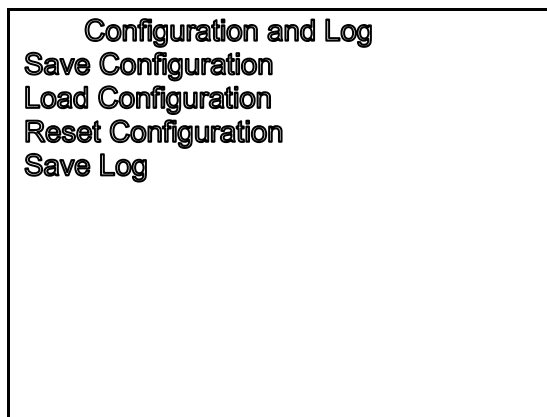
- 6 Press **R**. The Misc. Setup menu displays.



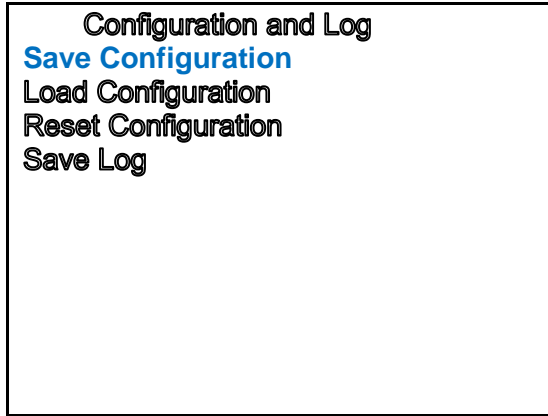
- 7 Use the  or  button to advance to the **Configuration and Log** option.



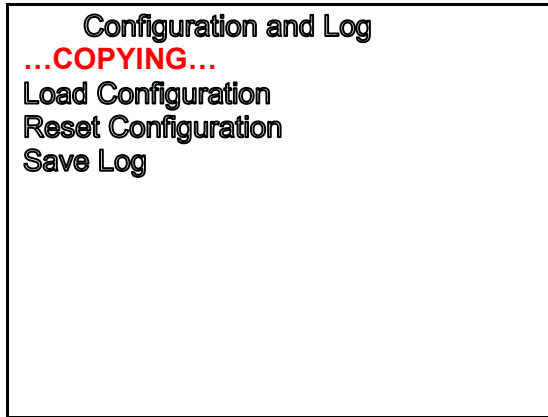
- 8 Press . The Configuration and Log screen displays.



- 9 Use the  or  button to highlight the **Save Configuration** option.



- 10 Press **R**. The system copies the Flashback2's configuration file to the USB drive. While this process takes place, a status message will display on-screen.



Once the **COPYING...** message disappears, the transfer is complete.

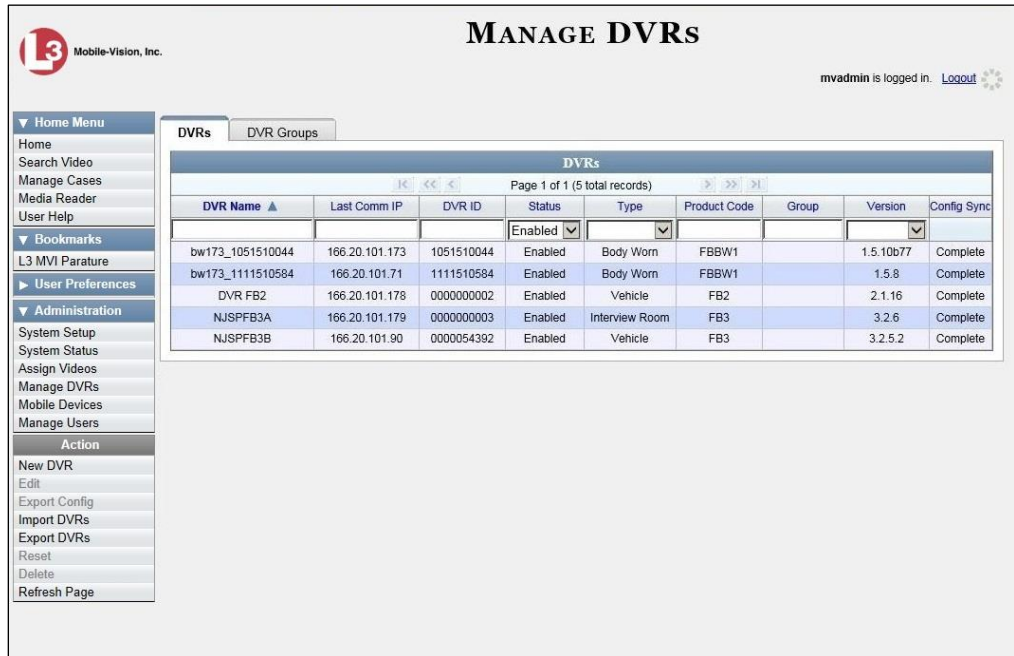


- 11 Remove the USB stick from the Flashback2.
- 12 Power down the Flashback2 by moving the red power switch into the *down* (**OFF**) position.
- 13 Fully disconnect all the wires and cables on the back of the Flashback2, then remove the unit.
- 14 If your agency's wireless LAN is configured for DHCP, skip to step 25.
– OR –
If your agency's wireless LAN is *not* configured for DHCP, proceed to the next step.

- 15 If you are installing the Flashback3 or FlashbackHD in an *Interview Room*, skip to step 17.
– OR –
If you are installing the Flashback3 or FlashbackHD in a *vehicle*, proceed to the next step.
- 16 If your vehicle is not within transmission distance, move it to within 300 feet of an access point.
- 17 Login to the Flashback server application as an *administrator* who has the *Can Reset DVR* permission. If you’re not sure if you have this permission, see “Assigning Permissions to a User” in chapter 8 of the *DEP Administrator’s Guide*.



- 18 Go to **Administration** and click **Manage DVRs**. The Manage DVRs page displays.



MANAGE DVRs

madmin is logged in. [Logout](#)

DVRs | DVR Groups

DVRs

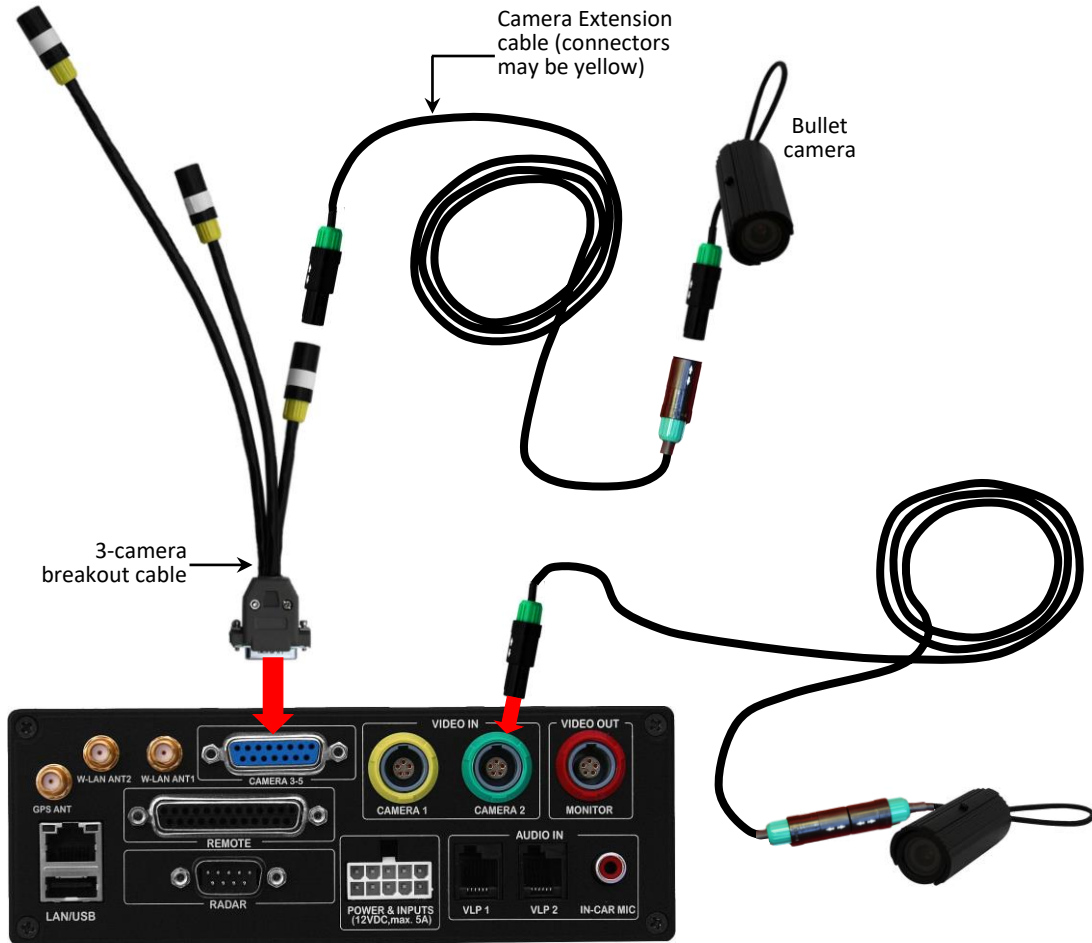
Page 1 of 1 (5 total records)

DVR Name ▲	Last Comm IP	DVR ID	Status	Type	Product Code	Group	Version	Config Sync
bw173_1051510044	166.20.101.173	1051510044	Enabled	Body Worn	FBBW1		1.5.10b77	Complete
bw173_1111510584	166.20.101.71	1111510584	Enabled	Body Worn	FBBW1		1.5.8	Complete
DVR FB2	166.20.101.178	0000000002	Enabled	Vehicle	FB2		2.1.16	Complete
NJSPFB3A	166.20.101.179	0000000003	Enabled	Interview Room	FB3		3.2.6	Complete
NJSPFB3B	166.20.101.90	0000054392	Enabled	Vehicle	FB3		3.2.5.2	Complete

Action

- New DVR
- Edit
- Export Config
- Import DVRs
- Export DVRs
- Reset
- Delete
- Refresh Page

- 19 Locate the DVR record for the Flashback2 unit you are replacing. If you have a large number of records to scan through, use the navigation icons *or* search fields at the top of the page to locate the record.
- 20 Click on the Flashback2 record to highlight it.
- 21 Go to the **Action** column and click **Reset**. A confirmation message displays.
- 22 Click **Yes**.
- 23 Wait 10 minutes, then proceed to the next step.
- 24 Return to the vehicle or Interview Room.
- 25 Insert the new Flashback3 or FlashbackHD unit and re-connect all wires and cables. If necessary, refer to the diagram on page 4. If you will be using one or more Bullet cameras, use the 3-Part Breakout Cable and Camera Extension Cable to connect them to the Flashback3's **CAMERA 3-5** port. Alternately, you can use the Camera Extension Cable to connect one of the Bullet cameras to the **CAMERA 2** port.



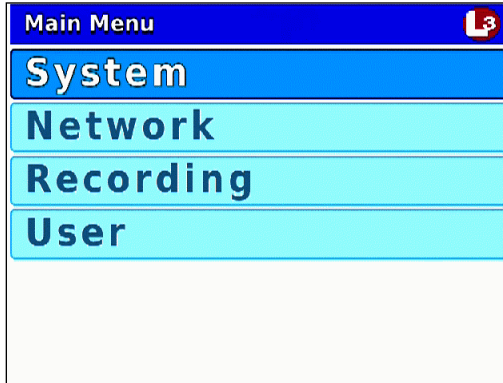
- 26** Make sure the door to the Flashback3 or FlashbackHD is open and the red power switch is in the **AUTO (ON)** position. If you are in a vehicle, turn the ignition on.

Next, copy the Flashback2 configuration file from the USB drive to your Flashback3 or FlashbackHD, as described in steps 27 – 34.

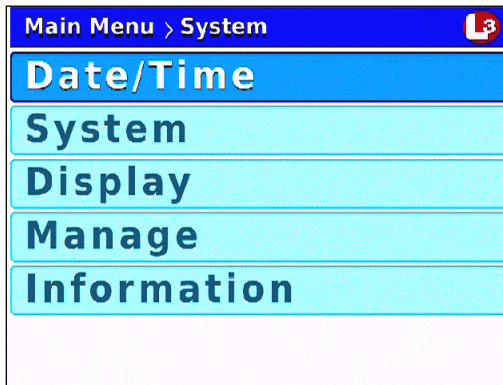
- 27** Take the USB drive that contains the Flashback2's *config.xml* file and insert it into the USB port on the front of the Flashback3 or FlashbackHD DVR.



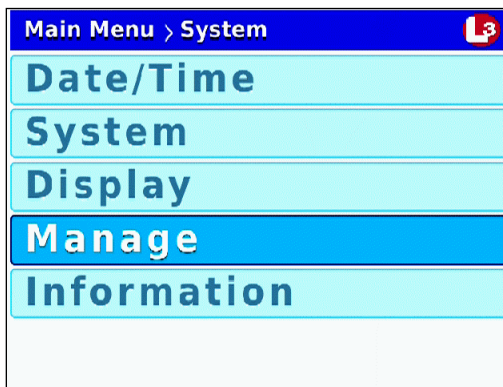
- 28 Press the **AUTO** button *twice* to turn Auto mode *off*.
- 29 Press **M**. The Main Menu displays.



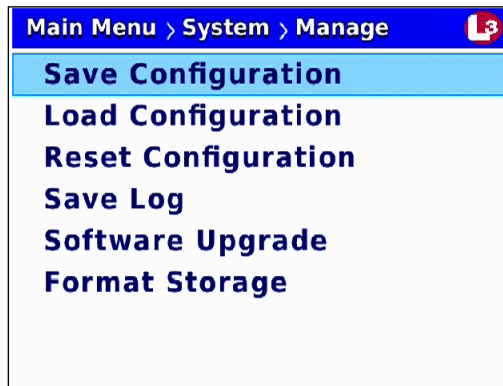
- 30 Press **R** to select the **System** option. The System menu displays.



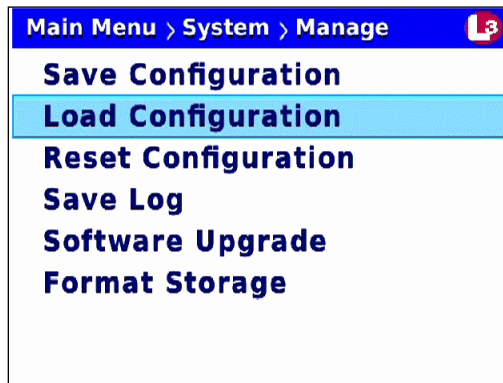
- 31 Press **O** *twice* to advance to the **Manage** option.



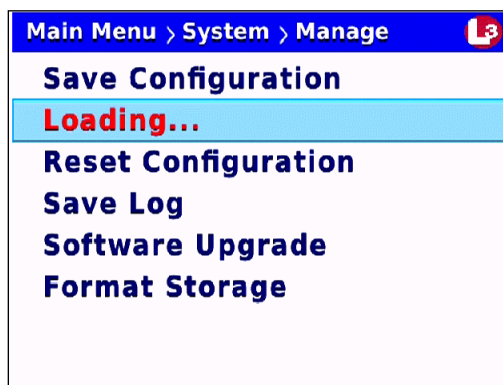
- 32 Press **R** to select the **Manage** option. The Manage screen displays.



- 33 Press **▶|** to advance to the **Load Configuration** option.



- 34 Press **R** to select the **Load Configuration** option. The system copies the config.xml file from the USB drive to your DVR. While this process takes place, a status message will display on-screen.



Once the **Loading...** message disappears, the transfer is complete.

- 35 Press **M** *three times* to exit this option.
- 36 Randomly check a few of your menu settings to verify that your Flashback2 settings have successfully transferred to the Flashback3 or FlashbackHD.

DVR Specifications

Flashback Technical Specifications	
Recorder Type	Digital, mobile application specific.
Recording Media	Secure Digital (SD) card with maximum 128 gigabyte storage capability.
Compression	System supports video compression using the MPEG 4 part 10 standard at up to 2.5 megabits per second for the first video stream and up to 1.5 megabits per second for the second stream.
Video Inputs	<ul style="list-style-type: none"> ▪ Camera 1: 2 – 30 frames-per-second ▪ Camera 2: 2 – 30 frames-per-second ▪ Camera(s) 3 – 5: Same frames-per-second as Camera 2
Audio Inputs	<ul style="list-style-type: none"> ▪ VLP1 ▪ VLP2 (optional) ▪ Wired Mic (Optional – backseat); mic level input
External Inputs	+5vdc – +15vdc: <ul style="list-style-type: none"> ▪ Emergency Lights ▪ Siren ▪ Brakes ▪ Ignition ▪ Auxiliary 1 ▪ Auxiliary 2
AV Outputs	<ul style="list-style-type: none"> ▪ NTSC Video ▪ Line Level Audio
Data Communication	<ul style="list-style-type: none"> ▪ Wireless 802.11(a) (b) (g) (a/n) (g/n) ▪ RS232C ▪ 10/100/1000 Ethernet ▪ USB 2.0 Interface
Record Trigger Types	<ul style="list-style-type: none"> ▪ Manual. Record triggered by the user via the <i>Record</i> buttons or VLP2/VLX mic ▪ Event. Record triggered automatically by activating the emergency lights, siren, or auxiliary inputs, or by exceeding the GPS speed threshold
Recording Modes	<ul style="list-style-type: none"> ▪ Regular Record. A recording initiated by one of the <i>Record Trigger Types</i> described above. ▪ Background Record. A continuous recording that occurs in the background at a low frame rate. Only occurs when Regular Record is <i>not</i> in process.
Resolution	320x240 to 720x480 (Flashback3) 320x240 to 1280x720 (FlashbackHD)

Flashback Technical Specifications (cont'd)	
Frame Rate set to 'Normal Record'	User selects up to 30 frames-per-second
Frame Rate set to 'Background Record'	User selects 2 or 5 frames/second
Recording Duration	8 – 60 hours. Recording capacity depends upon resolution, frame rate, and SD card size.
Power requirements	9 – 18 VDC @ 5 Amp Max; system includes under-power and over-power protection
Standby Current	19mA when unit is powered-down (ignition off)
Operating Temperature	-18° C to +75° C
DVR Connections	<ul style="list-style-type: none"> ▪ <i>+12VDC Power Input and ground.</i> Battery and vehicle ground, respectively ▪ <i>Ignition.</i> Vehicle ignition status ▪ <i>Camera Connections.</i> Camera 1, Camera 2, Cameras 3-5 ▪ <i>Video Output.</i> Flashback monitor ▪ <i>Wireless microphones.</i> VLP1 and VLP2 ▪ <i>Wired In-Car Microphone.</i> External mic DVR rear panel connector ▪ <i>Audio Output</i> ▪ <i>Radar/Aux.</i> Interface (RS232) ▪ <i>GPS/2x Wireless antenna</i> ▪ <i>V 2.0 USBs.</i> DVR Front Panel port and DVR rear panel port ▪ <i>Ethernet 10/100</i> ▪ <i>Inputs (i.e., Event Trigger Signals).</i> Light bar, siren, Aux1, and Aux2
DVR Dimensions	6.9"(w) x 6.1"(d) x 2.4"(h)

Glossary

Access Point

A device used to transmit videos from your in-car DVR to your *server*. The access point is connected to a wireless network antenna mounted on the outside of the building that houses your server.

Some precincts have more than one access point to accommodate multiple vehicles that park in different areas outside the building. See also *Transmission*.

Digital Evidence Collection System

An L3 Mobile-Vision product that is used by law enforcement personnel to collect digital evidence. It includes the following hardware and software components:

- Flashback DVRs
- Access point(s)
- Storage server(s)
- DES software
- Backup PC(s)
- Robotic DVD burner
- RAID storage device (optional).

DVR Login Key

A file on a USB drive that contains your user information. You insert this flash drive in your Flashback USB port at the beginning of each shift. This identifies you as the owner of that shift's videos.

Record Trigger

The event that causes an in-car DVR to automatically start recording without any action on the officer's part.

SD Card

The temporary storage device that stores Flashback3 and/or FlashbackHD videos until they can be transmitted to the agency *server*.

Server

The network computer that hosts the DES application and stores video evidence and other related data. Some larger agencies have more than one server.

System Implementation Specialist (SIS)

An L3 Mobile-Vision representative who assists with the installation of the Flashback Digital Evidence Collection system, including hardware (Flashback3 or FlashbackHD) and software (DES) components.

Transmission

The process of transferring video files from your in-car DVR to the *server* via an *access point*. This transmission can occur either *automatically* (typical) or *manually*.

- ❑ *Automatic transmission.* Whenever your vehicle comes within approximately 300 feet of an access point, it triggers an automatic transmission. During this transmission, all videos that are currently stored on your DVR will wirelessly transfer to the server via an access point.
- ❑ *Manual transmission.* Your DVR holds a temporary storage device called an SD card. This card is used to temporarily store your videos until they can be transferred to the server. If necessary, you can use this card to *manually* transfer videos to your PC, assuming you have the proper permissions. You would typically use this procedure if you can't wait for an automatic file transfer to occur, or a problem has occurred that interfered with the wireless file transfer. For more information, see "Manually Uploading New Videos" in chapter 2 of the *DEP User's Guide* or *DEP Administrator's Guide*.

Trace Point



A marker that you can add to a video while it's recording. This is accomplished by pressing the **T** button on the Flashback menu or DVR (pictured left). By marking a video with a Trace Point, it allows you to quickly advance to an important segment in a video during playback.



User Metadata (UMD)

Custom data fields that you can link to a video. Your System Administrator defines these fields. Their purpose is to allow you to annotate your videos with custom data, such as a citation number or subject description. If you have a mobile data computer with the UMD Editor installed on it, you have the option of attaching UMD to a video immediately after it is finished recording. Otherwise, you can attach UMD back at the precinct when you connect to the *server*.

Contact Information

Phone: 800-336-8475; Fax: 973-316-9509
Email: service.MVI@L3Com.com
Address: 400 Commons Way, Suite F, Rockaway, NJ 07866

Appendix: NJSP Playlist Screen

The following table describes how to determine the current status of an in-car video based on its display color on the Playlist screen (New Jersey State Police only).

Flashback Playlist Screen	
Video Status	Text Color
Playback available/has not downloaded	Black
Playback unavailable/has not downloaded	Red
Playback available/has downloaded	Green
Playback unavailable/has downloaded	Purple

Index

A

Address, IP. *See* IP address

Adjust

Monitor alpha blending setting, 239

Monitor contrast setting, 235

Monitor hue setting, 238

Monitor saturation setting, 237

Monitor sharpness setting, 238

Video quality settings, 44

Administrator's User ID and Password, 199

Advance

Frame-by-frame, 3, 7

to Trace Point, 3, 6

Alpha blending setting, monitor, 239

Amber light. *See* Orange light

Antenna

GPS, 9, 14

VLP2, 15

VLX, 20

WiFi, 14

AP MAC, 235

Atlantic Time, 33

Audio

Active, 19, 24

Captured with in-car mic. *See* In-car microphone

Captured with wireless mic. *See* VLP2 microphone *or* VLX microphone

Interruption, 23

Mute feature, 17, 18, 22, 23

Settings, gain for in-car mic, 87

Settings, gain for wireless mic, 81, 84

Settings, in-car mic, 71

Settings, keystroke 'beep', 76

Settings, pre/post record, 79

Settings, record 'beep', 74

Settings, wireless mic, 67, 69

Signal between wireless mic and docking station, 18, 23

Authentication type, wireless, 179

Auto

Button, 7

Focus function, for forward-facing zoom camera, 13

Focus function, for Nite-Watch camera, 13

Mode, 7

Switch, 2

Zoom function, for forward-facing zoom camera, 13

Automatically upload new video to server, 31

- Auxiliary 1
 - Display, 10, 129
 - Record trigger, 96
- Auxiliary 2
 - Display, 10, 131
 - Record trigger, 98, 104
 - Triggered recordings, using the Delay Stop Timer, 98, 104
- AV outputs, 250

B

- Background Record
 - Changing frames-per-second, 49
 - Indicator, 58
 - Setting, 49
 - Turning on/off, 54
- Backlight function, for forward-facing zoom camera, 13
- Back-office components, 1
- Backseat camera, 4, 14
- Barriers between wireless mic and Docking Station, 15, 20
- Battery
 - Wireless mic, charging in Docking Station, 19, 24
 - Wireless mic, charging with indoor charger, 17, 22
 - Wireless mic, fully charged, 19, 24
 - Wireless mic, indicators for, 18, 23
 - Wireless mic, life expectancy of, 17, 22
- Beep
 - Keystroke, 76
 - Record, 74
- Bitrates, 45
- Blinking
 - Green light on docking station, 19, 24
 - Green light on wireless mic, 23
 - Orange light on wireless mic, 18
 - Red light on wireless mic, 18, 23
- Brakes display, 10, 126
- Brightness button, 6
- Bullet camera
 - Description of, 14
 - Input port, 4

C

- Camera(s). *See* 'NiteWatch camera' or 'Backseat camera'
- Cameras
 - Backseat, 14
 - HD Optical Zoom, 12
 - In-car, 14
 - Nite-Watch, 11
 - Settings, 13

- Category, video, 28
- Central Time, 33
- Change
 - Background Record setting, 49
 - Current date, 39
 - Current time, 42
 - Date display format, 37
 - Daylight Savings Time, 35
 - Ethernet gateway IP, 164
 - Ethernet NetMask, 161
 - Firmware, 213
 - On-screen display options, 116
 - Pre/post record settings, 60
 - Time zone, 33
 - Video frames-per-second setting, 47, 49
 - Video quality setting, 44, 45
 - Video resolution setting, 52
 - Wireless authentication type, 179
 - Wireless encryption type for WEP-PSK, 185
 - Wireless encryption type for WPA, 182
 - Wireless gateway IP, 152
 - Wireless IP, 147
 - Wireless netmask, 149
 - Wireless security mode, 177
- Charging
 - Wireless mic in Docking Station, 19, 24
 - Wireless mic with indoor charger, 17, 22
- Cleaning the Docking Station pins, 18
- Close and lock DVR door, 3
- Compression, video, 250
- Config.xml file
 - Copying from DVR to USB drive, 219
 - Copying from USB drive to DVR, 221
- Configuration file, DVR. *See* Config.xml file
- Configuring the radar display, 116
- Contact information, 253
- Continuous Record function for Camera 2, 64
- Contrast setting, monitor, 235
- Control panel, 2
- Coordinates, GPS. *See* GPS
- Copy
 - config.xml file from DVR to USB drive, 219
 - config.xml file from USB drive to DVR, 221
 - DVR log files to USB drive, 226
- Crash sensor, 25
- CrashBat2
 - Display, 10, 129
 - Record trigger. *See* Auxiliary 1 record trigger

- Current
 - Date, selecting, 39
 - Firmware version, viewing, 213
 - Time, selecting, 42
- Customer service, 253

- D**
- Data communication, 250
- Date
 - Current, selecting, 39
 - Display format, changing, 37
 - Video was recorded, 29
- Daylight Savings Time, turning on/off, 35
- Decrease
 - Brightness on Flashback monitor, 6
 - Gain setting for wireless mic, 81, 84
 - Volume on Flashback monitor, 6
- Defective antenna, 9
- Delay Stop Timer, 98, 104
- DES User ID and password, 199
- DHCP, wireless, 155, 169
- Dimensions of DVR, 251
- Disabling the USB login feature, 203
- Display options
 - Auxiliary 1, 10, 129
 - Auxiliary 2, 10, 131
 - Brakes, 10, 126
 - Emergency lights, 10, 122
 - GPS, 9, 138
 - In-car mic, 10
 - Metric units, 136
 - Radar, 116, 120
 - Siren, 10, 124
 - Speed, 133
 - Temperature, 141
 - VLP2, 10
 - Voltage, 141
 - WLAN, 143
- Displaying the *Playlist*, 7
- Docking Station
 - Input ports, 19, 24
 - Light indicators, 18, 24
 - Pins, cleaning, 18
 - Removing wireless mic from, 15, 20
 - Signal strength, 18, 23
 - Synchronization with wireless mic, 19, 24
- Door, on DVR, 3, 23
- Download new video to server, 31
- Duration of video, 29, 251

E

- Eastern Standard Time, 33
- Edit. *See* Change
- Electrical short in GPS antenna, 9
- Emergency
 - Button on VLP2 mic, 17
 - Lights display, 10, 122
 - Lights record trigger, 91, 111
 - Port, 19, 24
- Enabling the USB login feature, 203
- Encryption
 - Key, wireless, 185
 - Type, WPA, 182
- Enterprise, WPA, 182
- Error light on VLP2, 18
- Ethernet
 - DHCP option, 169
 - Gateway IP, 164
 - NetMask, 161
 - Port, 4
- Event that triggers a recording. *See* Trigger(s)
- External inputs. *See* Input ports

F

- Factory settings, resetting DVR to, 224
- Failure of lapel mic, 18, 23
- Fast Forward, 3, 7
- Fast Rewind, 3, 7
- Firmware
 - File, transferring from USB drive to DVR, 215
 - File, updating, 213
 - Version, viewing current, 213
- Flashback menu, 32
- Flashback Player, display options, 116
- Flashback2 ID, 231
- Flashcard. *See* SD card
- Focus function, for forward-facing zoom camera, 13
- Formatting an SD card, 229
- Forward-facing zoom camera
 - Auto Focus button, 13
 - Auto Zoom button, 13
 - Backlight function, 13
 - Continuous Record function, 64
 - Input port, 4
 - Introduction to, 11
 - Night vision function, 13
 - Settings for, 13
 - Zoom In/Out buttons, 13

- Frame-by-frame
 - Advance, 3, 7
 - Rewind, 3, 7
- Frames-per-second setting, 47, 49
- Free space remaining on SD card, 10
- Frequency. *See* WiFi channel
- Front panel of DVR, 2
- Full SD card, 10

G

- Gain setting
 - for in-car mic, 87
 - for wireless mic, 81, 84
- Gateway
 - IP, ethernet, 164
 - IP, wireless, 152
 - Type, 166
- GPS
 - Antenna, 9, 14
 - Circuitry hardware failure, 9
 - Coordinates, 9
 - Display, 9, 138
- Green light
 - on docking station, 19, 24
 - on wireless mic, 18, 23

H

- HD Digital Zoom camera. *See Also* Forward-facing zoom camera
- HD Optical Zoom camera, 12, *See Also* Forward-facing zoom camera
- High definition (HD) setting, 52
- Highlight next menu item, 3, 7
- Highlight previous menu item, 2, 3, 7
- Hue setting, monitor, 238

I

- ID
 - DVR, 231
 - Monitor, 241
- Idle mode, 2, 9
- Ignition timer, programming, 197
- Import new video to server, 31
- IN USE display, 2
- In-Car camera. *See* Bullet camera
- In-car components, 1
- In-car microphone
 - Activity indicator, 10
 - Display, 10
 - Gain setting, 87

- In-car microphone (cont'd)
 - Input port, 4
 - Turning on/off, 2, 6, 71
- Increase
 - Brightness, 6
 - Gain setting for wireless mic, 81, 84
 - Volume, 6
- Indoor charger, 17, 22
- Input ports
 - Camera 1 (Nite-Watch camera), 4
 - Camera 2 (Backseat camera), 4
 - Cameras 3-5 (In-Car cameras), 4
 - Docking Station, 19, 24
 - Emergency, 19
 - Ethernet, 4
 - GPS, 4
 - In-car microphone, 4
 - Monitor, 4
 - WiFi, 4
 - Wireless mic, 4
- Input slot, for SD card, 3
- Inserting a Trace Point, 3, 6
- Internal mic, 16, 21
- IP address
 - DES server, 205
 - Ethernet, 158, 159
 - Ethernet gateway, 164
 - Ethernet mask, 161
 - Wireless, 147
 - Wireless gateway, 152
 - Wireless netmask, 149

- K**

- Key to DVR door, 3
- Keystroke 'beep', turning on/off, 76
- Kilobits-per-second (kbps), 45

- L**

- LAN. *See Also* 'Wireless' and 'IP address'
 - Ethernet options, 158
 - IP, changing, 147
 - MAC, 235
- Lapel microphone
 - Failure of, 18, 23
 - using with wireless mic, 16, 21
- Latitudinal and longitudinal coordinates. *See* GPS
- LCD display, turning on/off, 7
- LED light indicators. *See* Light indicators

- Life expectancy of wireless microphone battery, 17, 22
- Light indicators
 - On Docking Station, 18, 24
 - On DVR, 3
 - On wireless mic, 18, 23
- Lights
 - Display, 10, 122
 - Record trigger, 91, 111
- Line of Sight signal, 15, 20
- Location coordinates for vehicle. *See* GPS
- Lock DVR door, 3
- Locked Target speed, 25
- Log files for DVR, 226
- Logging into the DVR, 26
- Logging out of the DVR, 32
- Long videos. *See* File sequence
- Low battery on wireless mic, 18, 23

M

- M1 display indicator, 10
- M2 display indicator, 10
- MAC addresses, viewing, 233, 234
- Main Menu, 32
- Manual power switch for DVR, 2
- Manually uploading new video to server, 31
- Mask. *See* NetMask
- Media Access Control addresses (MACs), 234
 - AP, 235
 - LAN, 235
 - Viewing, 233
 - WIFI, 235
- Megabits-per-second (mbps), 45
- Memory card, missing, 23
- Menu button, 2, 6
- Menu item
 - Highlighting next, 3, 7
 - Highlighting previous, 2, 3, 7
 - Selecting, 2, 6
- Menu mode, 2
- Metal barriers between wireless mic and Docking Station, 15, 20
- Metric units display, turning on/off, 136
- Microphone. *See* 'VLP2 microphone,' 'VLX microphone,' 'In-car microphone'
- Mirror switch on Backseat camera, 14
- Missing memory card, 23
- Modes, operating
 - Idle, 2, 9
 - Menu, 2
 - Play, 2, 10
 - Record, 2, 10

Monitor

- Alpha blending setting, 239
- Auto mode, 7
- Buttons, 6, 8
- Contrast setting, 235
- Display, 8
- Display options, 116
- Hue setting, 238
- Input port, 4
- Introduction to, 6
- Modes, 2
- Saturation setting, 237
- Sharpness setting, 238
- Sleep function, 7
- Version number, 241

Mountain Time, 33

Muting audio on wireless mic, 17, 18, 22, 23

N

N2 spatial streams, 4, 14

NetMask

- Ethernet, 161
- Wireless, 149

Network interface controller (NIC), 147

New video, uploading to server, 31

Next menu item, highlighting, 3, 7

Night vision function, for forward-facing zoom camera, 13

Nite-Watch camera, 11, *See Also* Forward-facing zoom camera

O

Officer name, 208

ON/OFF switch

- for DVR, 2
- for wireless mic, 15, 20

On-screen display options. *See* Display options

Open DVR door, 3

Operating modes, 2

Operating temperature, 251

Optical Zoom camera, 12

Orange light on wireless mic, 18, 23

Override, stop, 111

P

Pacific Time, 33

Password

- for DES login, 199
- for WPA wireless mode, 191

Patrol speed, 25

- Pause function, toggling on/off, 7
- Physical barriers between wireless mic and Docking Station, 15, 20
- Pins on Docking Station, cleaning, 18
- Play indicator, 3
- Play mode, 2, 10
- Play/Pause button, 3, 7
- Playing back a video, 28
- Ports, input. *See* Input ports
- Post-record setting, 60
- Power
 - Indicator, 3
 - Requirements, 251
 - Switch, for DVR, 2
 - Switch, for wireless mic, 15, 20
- Power down DVR, 32
- Power up DVR, 26
- Pre/post audio, turning on/off, 79
- Pre-record setting, 60
- Previous menu item, highlighting, 2, 3, 7
- Product ID
 - DVR, 231
 - Monitor, 241

- Q**
- Quality setting, 45

- R**
- Radar
 - Display, configuring, 116
 - Display, turning off, 120
 - Display, turning on, 116
 - Interface, 25
- Radio, connecting to Emergency port, 19, 24
- Radom antenna, 4, 14
- Range, transmission. *See* Transmission range
- Rear panel of DVR, 4
- Record
 - Beep, turning on/off, 74
 - Button, 2, 6, 25
 - Delay Stop Timer for Aux 2 triggered recordings, 98, 104
 - Indicator, 3
 - Mode, 2, 10
 - Reasons. *See* Trigger(s)
 - Settings, Background Record, 54
 - Settings, pre/post record, 60
 - Settings, Stealth mode, 58
 - Settings, video frames per second, 47, 49
 - Settings, video quality, 45

- Record (cont'd)
 - Settings, video resolution, 52
 - Trigger, Aux 1 device, 96
 - Trigger, Aux 2 device, 98, 104
 - Trigger, emergency lights, 91, 111
 - Trigger, siren, 93
 - Trigger, speed, 107
 - Trigger, wireless mic, 113
- Recording. *See Also* Video
 - Buttons, 6
 - Date, 29
 - Display, 8
 - Duration, 251
 - Indicator light on wireless mic, 23
 - Media. *See* SD card
 - Start time, 29
 - Starting, 16, 21, 27
 - Stopping, 28
 - Time indicator, 10
 - Using Background Mode. *See* Background mode
- Red light
 - on docking station, 19, 24
 - on wireless mic, 18, 23
- Reformatting an SD card, 229
- Regular recording, starting, 27
- Remote Record button, 25
- Removing a wireless mic from the Docking Station, 15, 20
- Replace battery for wireless microphone, 17, 22
- Resettable crash sensor, 25
- Resetting the DVR to its factory settings, 224
- Resolution, video, 52
- Reviewing a video, 28
- Rewind button, 3, 7

S

- Satellite signal strength, 9
- Saturation setting, monitor, 237
- SD card, 3
 - Definition of, 31
 - Formatting, 229
 - Input slot, 3
 - Missing, 23
 - Space left on, 10
 - Specifications, 250
- Security settings, wireless
 - Authentication type, 179
 - Encryption key, WEP-PSK, 185
 - Encryption type, 182
 - Introduction to, 177

- Security settings, wireless (cont'd)
 - Mode, 177
 - Network name, 188
 - password for WPA modes, 191
 - SSID, 188
 - SSL indicator, 194
- Select
 - Current date, 39
 - Current time, 42
 - Date display format, 37
 - Daylight Savings Time, 35
 - Menu item, 2, 6
 - Time zone, 33
 - Video from the *Playlist*, 7
- Server
 - Automatically transmit videos to, 31
 - Log into, 199
 - Manually transmit videos to, 31
- Server IP address, 205
- Settings for DVR, changing, 32
- Settings for forward-facing zoom cameras, 13
- Sharpness setting, monitor, 238
- Signal
 - Interruption, between wireless mic and Docking Station, 15, 20
 - Line of sight, 15, 20
 - Strength, between wireless mic and Docking Station, 18, 23
 - Strength, of GPS satellite, 9
- Siren
 - Display, 10, 124
 - Record trigger, 93
- Slot, for SD card, 3
- Slow advance, 3, 7
- Slow rewind, 3, 7
- Space left on SD card, 10
- Spatial streams, N2, 4, 14
- Specifications, DVR, 250
- Speed
 - Display, 133
 - Locked target, 25
 - Patrol, 25
 - Record trigger, 107
 - Target, 25
- SSID, wireless, 188
- SSL indicator, turning on/off, 194
- Starting a recording, 27
- Stealth mode, 58
- Stop
 - Button, 2, 7
 - Delay timer, 98, 104

Stop (cont'd)
 Override feature, 111
 Recording, 2, 7, 28
 Video playback session, 2, 7
 Storage server. *See* Server
 Subdivided videos. *See* File sequence
 Subnet mask. *See* NetMask
 Switch to different camera, 3, 7
 Synchronization between wireless mic and Docking Station, 15, 18, 19, 20, 23, 24

T

Target speed, 25
 Technical specifications, 250
 Technical support, 253
 Temperature
 Effect on wireless microphone battery, 17, 22
 Required for operation, 251
 Temperature display, 141
 Text transparency setting for monitor controls, 239
 Time
 Current, selecting, 39, 42
 Date format, changing, 37
 Daylight Savings, turning on/off, 35
 Video started, 29
 Zone in which DVR will be filming, 33
 Timer
 Delay Stop, 98, 104
 Ignition, 197
 Toggle
 Aux 1 display on/off, 129
 Aux 1 trigger on/off, 96
 Aux 2 display on/off, 131
 Aux 2 trigger on/off, 98, 104
 Background record on/off, 54
 Between cameras, 3, 7
 Brakes display on/off, 126
 Continuous Record feature for camera2 on/off, 64
 Ethernet DHCP option on/off, 169
 GPS display on/off, 138
 In-car audio on/off, 71
 Keystroke 'beep' on/off, 76
 Lights display on/off, 122
 Lights trigger on/off, 91
 Metric units display on/off, 136
 Pre/post audio on/off, 79
 Radar display off, 120
 Radar display on, 116
 Record 'beep' on/off, 74
 Siren display on/off, 124

- Toggle (cont'd)
 - Siren trigger on/off, 93
 - Speed display on/off, 133
 - Speed trigger on/off, 107
 - Stealth mode on/off, 58
 - Stop Override feature on/off, 111
 - Temperature display on/off, 141
 - Voltage display on/off, 141
 - Wireless DHCP option on/off, 155
 - Wireless mic audio on/off, 67, 69
 - Wireless mic trigger on/off, 113
 - Wireless SSL indicator on/off, 194
 - WLAN display on/off, 143
- Trace Point
 - Advancing to, 3, 6
 - Inserting, 3, 6
- Transferring firmware file from USB drive to DVR, 215
- Transmission range
 - for DVR, 31
 - for wireless mic, 15, 20
- Transmit new video to server, 31
- Transparency setting for monitor controls, 239
- Trigger(s)
 - Auxiliary 1, 96
 - Auxiliary 2, 98, 104
 - CrashBat (Aux 1), 96
 - Emergency lights, 91, 111
 - for untransmitted videos, 29
 - Introduction to, 90
 - Siren, 93
 - Speed, 107
 - Wireless mic, 113
- Turn. *See Also* Toggle
- Turn DVR on, 26

U

- Unit name, 210
- Update. *See Also* Change
- Update firmware, 213
- Upload new video to server, 31
- USB
 - Input port, 3
 - Login key, enabling/disabling, 203
 - Login key, using, 26
- User ID, DES, 199

V

- Vehicle location coordinates. *See* GPS

- Verifying Storage* message, 27
- Video. *See Also* Recording
 - Automatically transmitting to server, 31
 - Background Record feature, 49, 54
 - Category, 28
 - Compression, 250
 - Continuous Record function for Camera 2, 64
 - Date, 29
 - Duration, 29
 - File size, adjusting, 44
 - Frames-per-second setting, 47, 49
 - Groups. *See* File sequence
 - Long. *See* File sequence
 - Manually transmitting to server, 31
 - New, transmitting to server, 31
 - Pause function, toggling on/off, 7
 - Play back, 28
 - Pre/Post record setting, 60
 - Quality setting, 45
 - Resolution setting, 52
 - Stealth mode, 58
 - Subdivided. *See* File sequence
 - Uploading to server, 31
- View
 - Firmware, 213
 - Media Access Control (MAC) addresses, 233, 234
 - Video, prior to transmission, 28
- VLP1 microphone
 - Audio, turning on/off, 67
 - Gain Setting, 81
 - Input port, 10
 - Record trigger, 113
- VLP2 microphone
 - Antenna, 15
 - Audio, turning on/off, 69
 - Battery indicator, 18
 - Battery, charging with indoor charger, 17
 - Battery, life expectancy, 17
 - Connected to VLP1 port, 10, 67
 - Connected to VLP2 port, 10, 69
 - Display, 10
 - Docking Station input ports, 19
 - Emergency button, 17
 - Gain setting, 84
 - Input port, 4
 - Internal mic, 16
 - Introduction to, 15
 - Lapel mic, 16
 - Line of Sight signal, 15
 - Mute feature, 17, 18

- VLP2 microphone (cont'd)
 - ON switch, 15
 - Record trigger, 113
 - Removing from Docking Station, 15
 - Signal strength, 18
 - Synchronization with Docking Station, 15, 19
 - Transmission range, 15
 - Turning on, 16
- VLX microphone
 - Antenna, 20
 - Audio, turning on/off, 67, 69
 - Battery indicator, 23
 - Battery, charging with indoor charger, 22
 - Battery, life expectancy, 22
 - Connected to VLP1 port, 67
 - Connected to VLP2 port, 69
 - Docking Station input ports, 24
 - Gain setting, 84
 - Gain Setting, 81
 - Internal mic, 21
 - Introduction to, 20
 - Lapel mic, 21
 - Line of Sight signal, 20
 - Mic error indicator, 23
 - Mute feature, 22, 23
 - Mute indicator, 23
 - ON switch, 20
 - Record trigger, 113
 - Removing from Docking Station, 20
 - Signal indicator, 23
 - Signal strength, 23
 - Synchronization with Docking Station, 20, 24
 - Transmission range, 20
 - Turning on, 21, 27
- Voice Link Plus microphone. *See* VLP2 microphone
- Voltage display, 141

W

- Warnings, vi
- Watching a video, 28
- WEP-PSK, 185
- WiFi
 - Antenna, 14
 - MAC, 235
- Wireless
 - Authentication type, 179
 - DHCP, 155, 169
 - Encryption key, WEP-PSK, 185
 - Encryption type, WPA, 182

Wireless (cont'd)
Gateway IP, 152
IP, 147
IPs, changing, 146
LAN display, 143
NetMask, 149
Network interface controller (NIC), 147
Network, name of, 188
Password, for WPA modes, 191
Security mode, 177
Security settings, 177
SSID, 188
SSL indicator, 194
WLAN. *See Also* 'Wireless' and 'IP address'
WLAN display, 143
WPA Enterprise, 182
WPA2-PSK, 191
WPA-PSK, 182, 191

Y

Yellow light. *See* Orange light

Z

Zone, time, 33
Zoom function, for forward-facing zoom camera, 13

