



CycleVision

Digital Video Recorder



User's Guide

version 3.2.x



Mobile-Vision, Inc.

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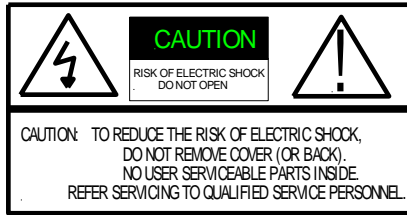
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Important Safeguards



 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 CycleVision Digital Motorcycle Recording System. This could cause electrical shorts, fire, or other damage.

CycleVision should be installed by a qualified technician and must conform to SAE Requirements.

If, for any reason, you need to jump start the vehicle, make sure the system power switch, located behind the media access door, is in the Off position

Warning: Ground Wires (Black) must be connected to the motorcycle’s chassis. Never connect ground wires directly to the motorcycle’s battery.

Notice: Drilling Precautions—When drilling holes, check the area in which you are drilling to be sure you do not damage motorcycle 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 CycleVision Flashback3 is a digital video recorder that is installed on a motorcycle. The Flashback 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 precinct. The CycleVision Flashback3 is part of L-3 Mobile-Vision's *Digital Evidence Collection System*. This system is comprised of multiple vehicle and back-office components, as described below.

Flashback's **vehicle components** include the DVR, DVR monitor, Bullet camera(s), and VoiceLink Plus wireless microphone (VLP2).

Flashback's **back office** components are housed in or around the precinct building and typically include a storage server, robotic disc burner, PC workstation (used to control the disc burner), Digital Evidence Series software, and one or more access points.*

The manner in which you manage your CycleVision Flashback3 videos depends on the type of Digital Evidence software that you purchased. Some systems, such as Digital Evidence Pro (DEP), communicate wirelessly with a Linux storage server at your precinct. Other systems, such as Digital Evidence Viewer (DEV), require that you manually upload your videos to a Windows PC using an SD storage card.

This user manual covers the Flashback **vehicle** components only. For more information on the **back office** components, refer to the software documentation that came with your digital evidence collection system. For example, if you are using Digital Evidence PRO, see the *DEP User's Guide* and/or *DEP Administrator's Guide*.

Basic Components



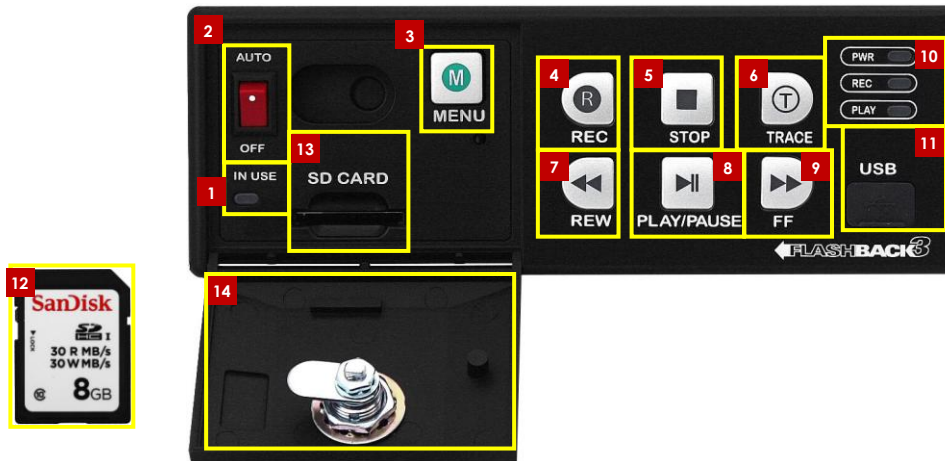
* A hardware component that facilitates data transmission from vehicle to storage server.

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 Flashback3 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 to do so by an L-3 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 *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.

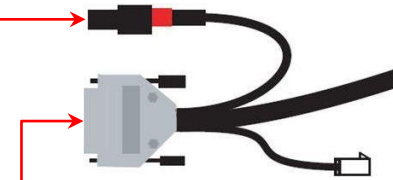
- 6** **TRACE.** The *Trace Point* button. If you are in *Idle* mode, this button is used to display the Login/Logout menu. If you are in *Record* mode, this button is used to mark a position, or point, in a recording. If you are in *Play* mode, this feature is used to quickly advance to a previously 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 *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 17.
- 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



Figure 1: Rear Panel of DVR

- 1** GPS ANT. Input for GPS wire on antenna.
- 2** W-LAN ANT1. Input for the *W-LAN* wire on the WiFi/GPS antenna
- 3** CAMERA 1. Input for Bullet camera
- 4** CAMERA 2. Input for second Bullet camera (optional)
- 5** MONITOR. Connection for Flashback monitor (from REMOTE connector)
- 6** (LAN)/USB. Input for USB drive. *LAN port not used in this application.*
- 7** REMOTE. Connection for Flashback monitor
- 8** RADAR. Input for optional radar unit
- 9** 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*
- 10** VLP1. Input for VLP2 charging station
- 11** VLP2. Input for second VLP2 charging station



Peripherals



Monitor



Bullet camera



VoiceLink Plus Wireless Microphone



WiFi/GPS Antenna

DVR Monitor

Your Flashback3 camera comes with a 3.5" matrix monitor console, pictured on the next page. This monitor is used to control the DVR, view recordings in progress, view untransmitted recordings, and set DVR preferences.

(Continued)



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>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>
	<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>














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

Button	Used to...
	<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>Play</i> mode:</u> Rewind slowly (press once) or quickly (press twice)</p> <p><u>While <i>playback</i> video is <i>paused</i>:</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 Flashback3. 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 their motorcycle's storage compartment, all of the buttons on the Flashback DVR are repeated on the Flashback monitor.

DVR	Monitor
	
	
	
	
	
	
	

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 100.

Idle Mode

Free space remaining on SD card

Current date → 03/04/2014

Current time → 16:36:25

Officer logged into DVR

Internal DVR temperature and voltage → 122F, 13.5V

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

Wireless LAN connection indicator:
 ■ No connection= white
 ■ Connection = green

GPS Status Messages	
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 {

Record Mode

Recording in progress (blinking red dot)

Active microphone; see list on page 10

Trigger displays; see list on page 10

The amount of recording time left on your SD card, in HH:MM. See “How do I know when the SD card is full?” on the next page.

Internal DVR temperature and voltage → 122F, 13.5V

GPS OK, No Satellites

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>

Play Mode

Video start date → **03/04/2014**

Time at which video was recorded, in HH:MM:SS format. This display changes constantly during playback to indicate the exact time of day that each video frame was recorded → **11:27:15**

ODonnell

Play button (shown) or Pause button (II)

122F, 13.5V

40.8736,-7474.4303,28MPH

Bullet Camera

The optional Bullet camera is a small, cylindrical camera that you can mount to either the Strobe Head or the Engine Guard.



Antenna

The WiFi/GPS antenna is used to:

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

VLP2 Wireless Microphone

The VoiceLink Plus wireless microphone or “VLP2” is used to initiate a recording while you are away from your vehicle.

The VLP2 comes with a docking station that has an antenna attached to it. The antenna is used to communicate with the DVR. To record video, the VLP2 must be “in sync” (i.e., 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 VLP2 and the docking station. The VLP2 uses a “line of sight” signal. Physical barriers, particularly *metal* barriers, can interrupt this signal.

- Avoid multiple non-metal barriers between the VLP2 and the docking station.** If you walk indoors while a recording is in progress, multiple walls can interrupt the signal between the VLP2 and the docking station.
- Always maintain a strong battery charge.** For more information, see “VLP2 Battery Considerations” on page 13.
- Configure your VLP2 as a record trigger on the Flashback3.** For instructions, see “Selecting & Configuring Record Triggers” on page 74.


- ❑ **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**.

After you slide the VLP2 switch *down*, the unit will vibrate *once*, indicating that you have successfully initiated a recording. After you press , the unit will vibrate *twice*, indicating that you have successfully ended a recording.



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

Using the “Short Mute” Feature

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

Using the Emergency Button

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 15). This port connects the DVR to your agency radio, thus enabling you to secretly transmit an emergency signal to your agency or precinct.



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

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 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.

Tips for battery maintenance and care:

- ❑ **When you're on duty, put your VLP2 back in the Docking Station if you're not using it.** As with an in-vehicle cell phone charger, the Docking Station allows you to recharge the VLP2's battery whenever your vehicle is *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, extreme heat and humidity can cause the battery to swell, thus reducing its lifespan. The recommended operating and storage temperature for the battery is between -4° and 113°F.
- ❑ **Replace the battery every 18 – 24 months.** The exact length of a battery's life will vary depending on its usage and exposure to heat, cold, etc. However, it's recommended that you replace your battery proactively *before* it dies. 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.






For information on L-3 Mobile-Vision's warranty and replacement options regarding VLP2s, refer to the Flashback Digital Evidence Collection System warranty.



VLP2 Light Indicators

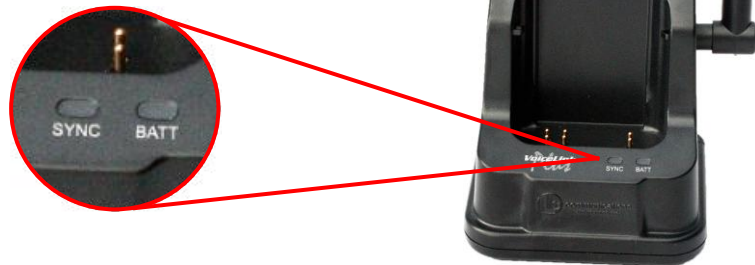
On the top of the VLP2, there are two light indicators: the *Mute/Sync* indicator, and the *Error/Battery* indicator, pictured left.




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

Indicator	Color	Blinks?	Meaning
	Green	No	Signal between VLP2 and Docking Station is good. The two devices are in sync.
	Orange	Yes	Audio is temporarily muted. This occurs when you hold the Record button <i>down</i> while a recording is in progress.
 	Red	Yes	Signal between VLP2 and docking station is poor or non-existent. This occurs because you are either out of range or there is a barrier of some sort (metal, for example) blocking the signal from the mic to the docking station. To regain a connection, move back within range of the docking station. If the SYNC light blinks green four times and then stops, you have successfully synchronized the mic with the docking station. If the SYNC light continues to blink, it usually indicates that either the Power switch on the VLP2 is <i>off</i> or the VLP2's battery is dead. If, upon investigation, you find that the battery is good and the Power switch is <i>on</i> as it should be, examine the pins at the base of the charging station, pictured left. If one or more of these pins is pushed down or corroded, it could be the source of your problem. Try cleaning the pins with a clean cloth dipped in isopropyl alcohol. If that doesn't work, contact L-3 Mobile-Vision Support for assistance.
	Red	Yes	Lapel mic has failed <i>or</i> battery is low. If the Lapel mic is shorted or the mic lead is shorted or open, the audio source will automatically switch to the VLP2's internal mic.

Docking Station Light Indicators

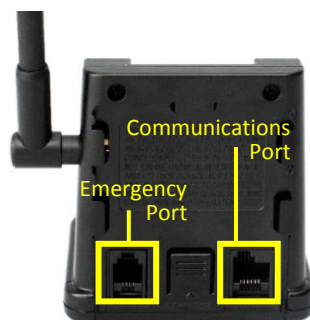
In the front of the VLP2 charging station, there are two light indicators: **SYNC** and **BATT**. These light indicators and their meaning(s) are described in the table below.



Indicator	Color	Description
 SYNC	Green	<ul style="list-style-type: none"> ▪ If the light blinks four times and then stops, the docking station has just synchronized with the VLP2 mic. ▪ If the light blinks continuously, the docking station is unable to synchronize with the VLP2 mic. ▪ If the light is continuous, the audio is active (i.e., a recording is currently in progress).
 BATT	Red	Battery is charging.
 BATT	Green	Battery is charged.

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 L-3 Mobile-Vision.

Remote Record Button

L-3 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 L-3 Mobile-Vision Sales Representative at 1-800-336-8475.



Radar Interface

The optional radar interface enables you to link your Flashback3 to your 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.


DVR Operation

Powering Up

The Flashback3 is designed to power on automatically whenever you turn your vehicle's ignition *on*. This is the recommended method for turning your Flashback3 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, as described on the next page. **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 74.

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  on the DVR



- 2** Press  on the monitor



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



NOTE: In order to initiate a recording from the VLP2, 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 VLP2 Microphone Trigger On/Off” on page 97.

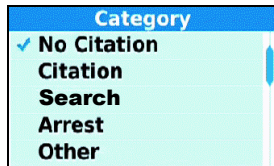
Background Record. In addition to Regular recordings, there is a Background Record function that you can engage if you are interested in recording continuously whenever your vehicle is turned on. For more information on this feature, see “Turning Background Record On/Off” on page 44.



* 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!

- 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 the *DEP User's Guide* or *DEP 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.

NEW in v3.1+ 

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 Auxiliary 2 device Display-only events (i.e., events that do not trigger a recording) Brakes
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 video/audio track begins playing.
- 6 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 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

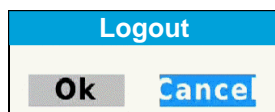


Each Flashback DVR holds a storage device called an SD card. This card is used to temporarily store an officer's videos until they can be transferred to your agency's storage server. Typically, the SD card remains in the Flashback unit, as most video files will transmit automatically. However, if you 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.

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 . The Logout screen displays.



- 2 Press .
- 3 Press .

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



Your DVR powers up/down automatically

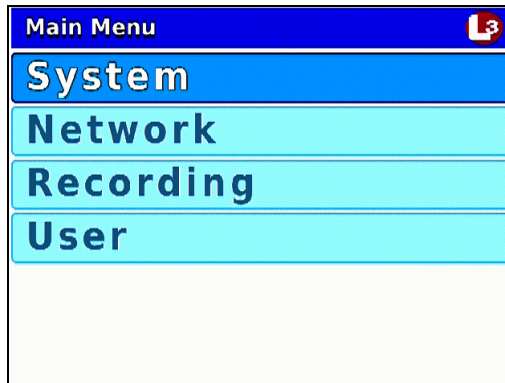
Powering Down

The Flashback3 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 L-3 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 163.

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 L-3 Mobile-Vision. Next, press the  button on the DVR or the  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, next page
- Changing the Record Settings, page 34
- Changing the Audio Settings, page 56
- Selecting & Configuring Record Triggers, page 74
- Changing Display Options, page 100
- Entering/Changing the Wireless Options, page 131
- Entering/Changing the Wireless Security Settings, page 143
- Entering/Changing System Settings, page 163
- Entering the Officer Name, page 174
- Entering the DVR Unit Name, page 176
- Viewing/Updating Firmware, page 178
- Copying the DVR Configuration File to/from DVR, page 184

- Resetting the DVR to its Factory Settings, page 189
- Copying the DVR Log Files to a USB Drive, page 192
- Formatting an SD card, page 194
- Viewing Your Flashback3 ID, page 197
- Viewing Media Access Control Addresses, page 199

Changing the Date & Time Settings

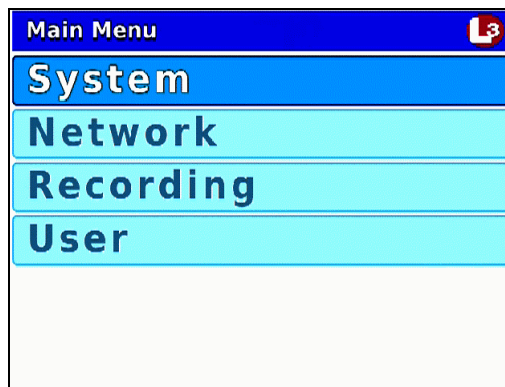
To change the date and/or time settings, proceed to the appropriate section:

- Selecting a Time Zone, below
- Turning Daylight Savings Time On/Off, page 25
- Changing the Date Display Format, page 27
- Selecting the Current Date, page 29
- Selecting the Current Time, page 31.

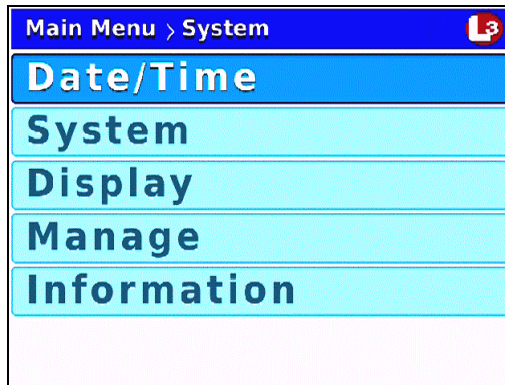
Selecting a Time Zone

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

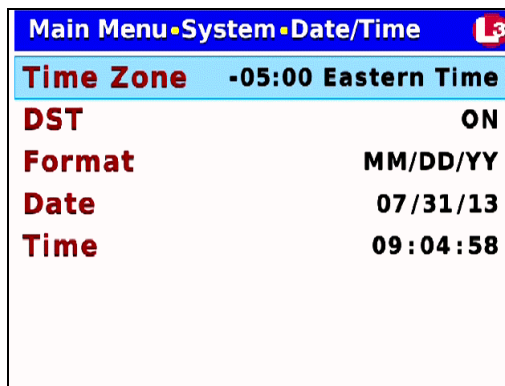
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



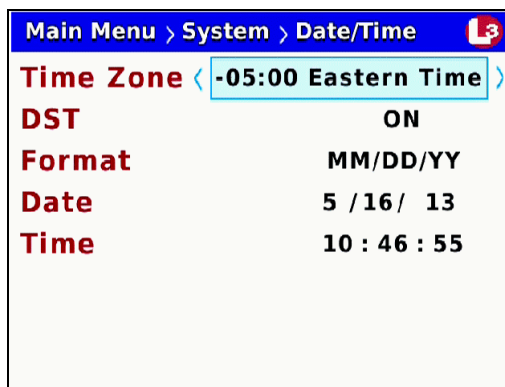
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **▶** or **◀** button to advance to that option.
- 4 Press **R** to select the **System** option. The System menu displays.





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



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



- 7 Using the  or  buttons, display the time zone you wish to select. See examples on the next page.

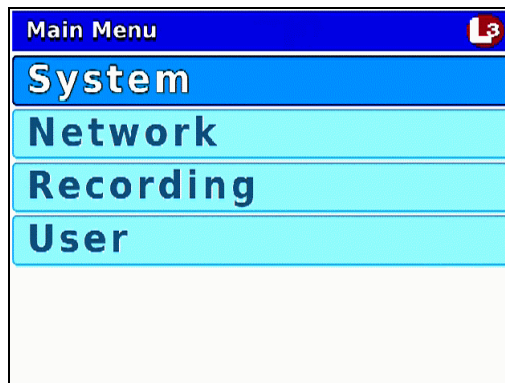
To change from...	To...	Action
Eastern Time	Atlantic Time	Press ►► twice
Eastern Time	Indiana Time	Press ►► once
Eastern Time	Mountain Time	Press ◀◀ twice
Eastern Time	Arizona Time	Press ◀◀ three times
Eastern Time	Pacific Time	Press ◀◀ four times

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

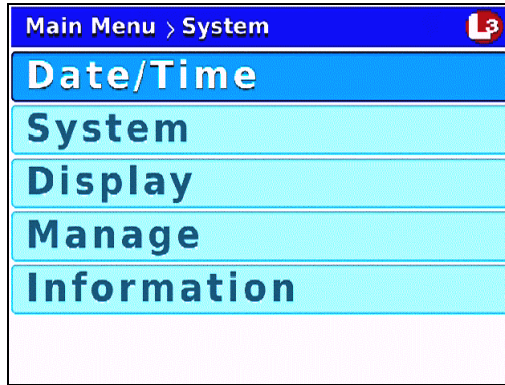
Turning Daylight Savings Time On/Off

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*.

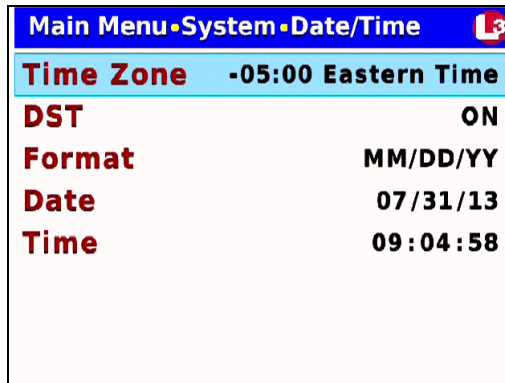
- Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **(AUTO)** button until the **(AUTO)** light turns *off*.)
- Press **(M)**. The Main Menu displays.



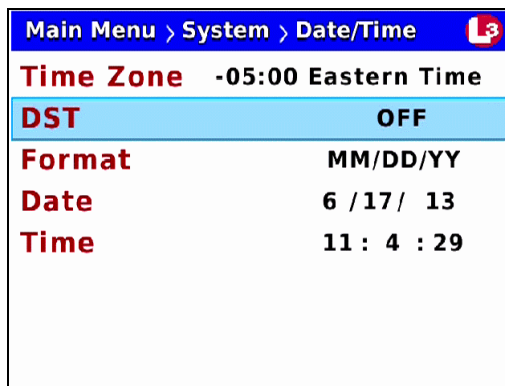
- If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **(►)** or **(◻)** button to advance to that option.
- Press **(R)** to select the **System** option. The System menu displays.



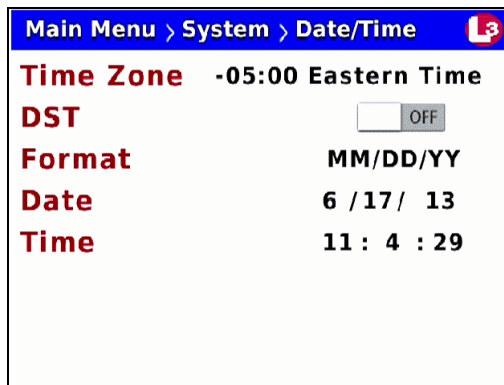
- 5 Press **R** to select the **Date/Time** option. The Date/Time screen displays.



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



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

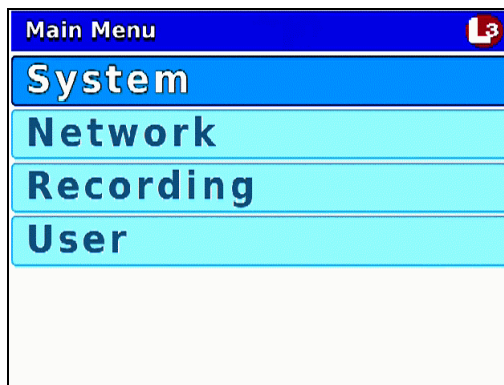


- 8 Press **▶** to toggle the field value to **ON** or **OFF**.
- 9 Press **M** *four times* to save your changes and exit this option.

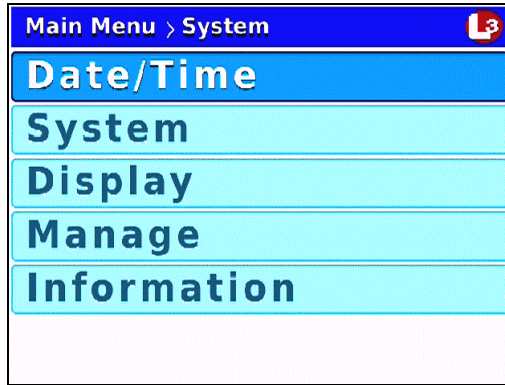
Changing the Date Display Format

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.

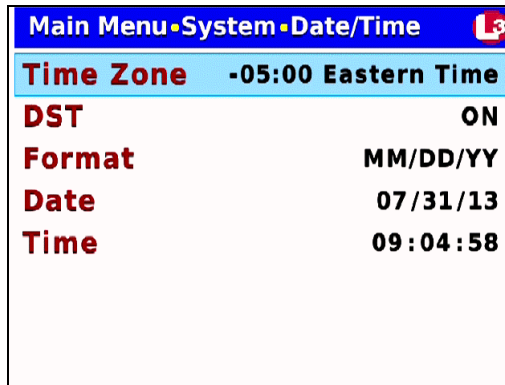
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



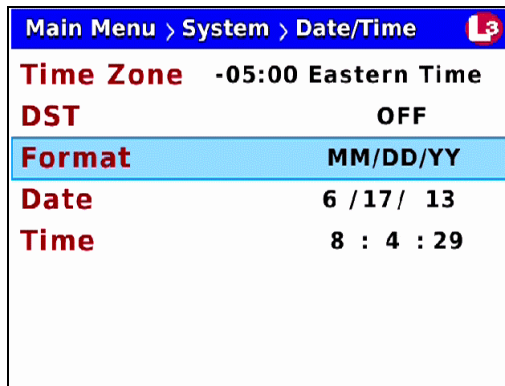
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **▶** or **◀** button to advance to that option.
- 4 Press **R** to select the **System** option. The System menu displays.



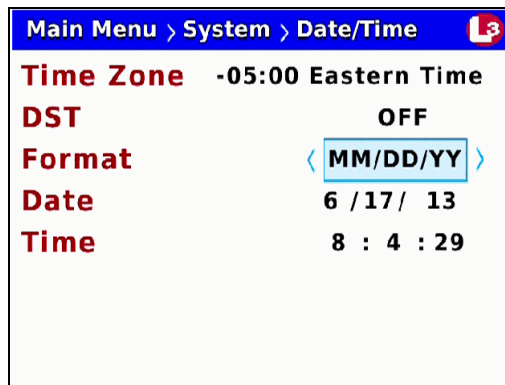
- 5 Press **R** to select the **Date/Time** option. The Date/Time screen displays.





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






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

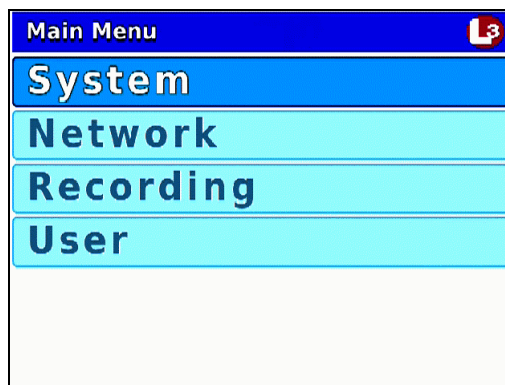





- 8 Use the  button to select the desired date format.
- 9 Press  *four times* to save your changes and exit this option.

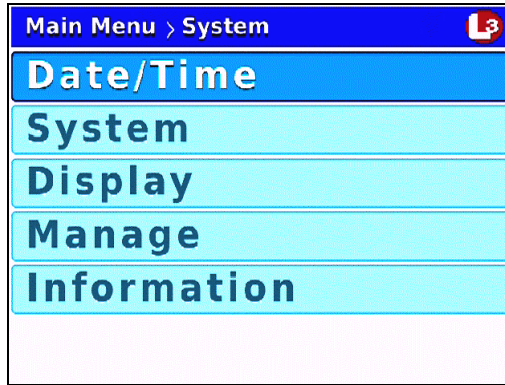
Selecting the Current Date

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.

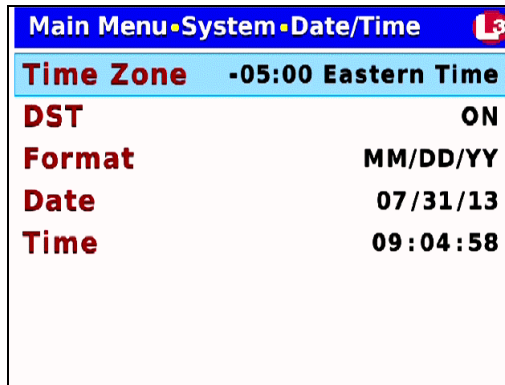
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



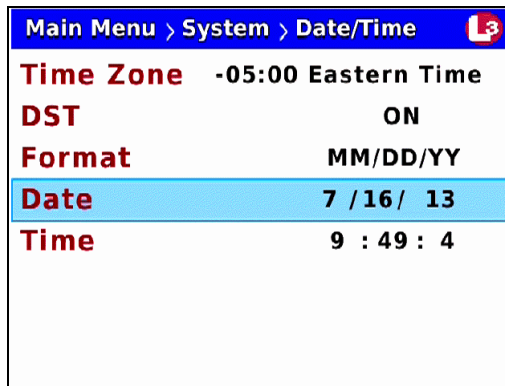
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.
- 4 Press  to select the **System** option. The System menu displays.



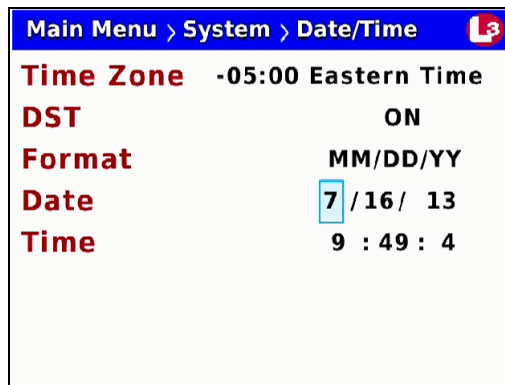
- 5 Press **R** to select the **Date/Time** option. The Date/Time screen displays.












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






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

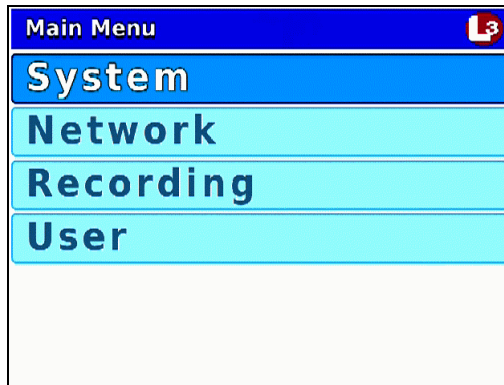





- 8 To change the *first* segment of the *Date* field, proceed to the next step. Otherwise skip to step 10.
- 9 Use the  or  buttons to move the numeric display higher or lower, respectively. Once the desired number displays, proceed to the next step.
- 10 To change the *second* segment of the *Date*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

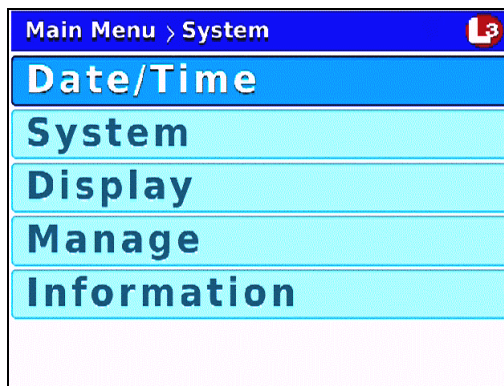
Selecting the Current Time


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.

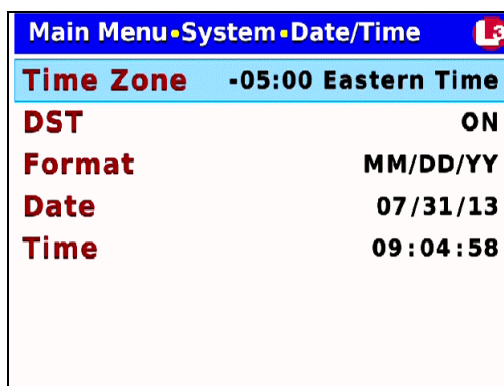
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.




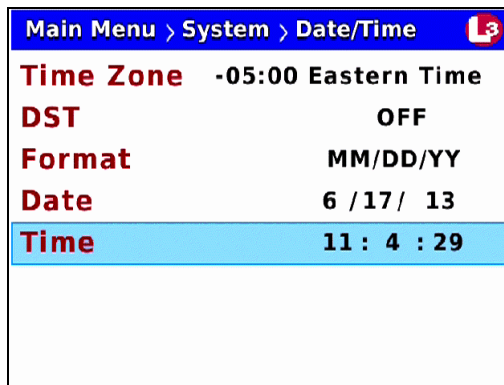
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.
- 4 Press  to select the **System** option. The System menu displays.



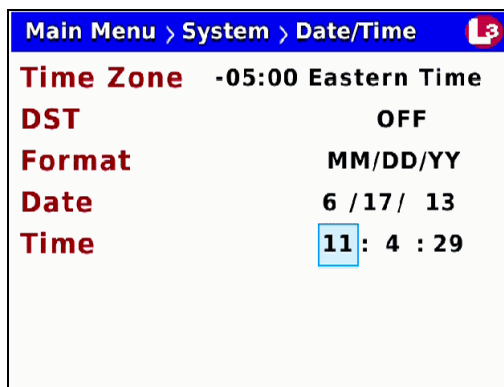
- 5 Press  to select the **Date/Time** option. The Date/Time screen displays.











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



- 7 Press **R** 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 **M** *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 44
- Turning Stealth Mode On/Off, page 47
- Changing the Pre/Post Record Settings, page 50
- Selecting the Camera(s) for Channel 2, page 54.

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.

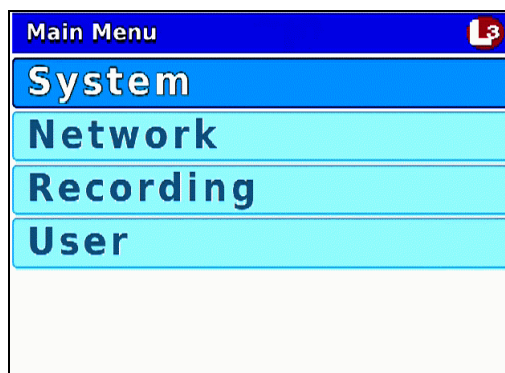
For specific instructions, see:



- Changing the Video Quality Setting, below
- Changing the Video Frames-Per-Second Setting for Regular Record, page 36
- Changing the Video Frames-Per-Second Setting for Background Record, page 39
- Changing the Video Resolution Setting, page 41.

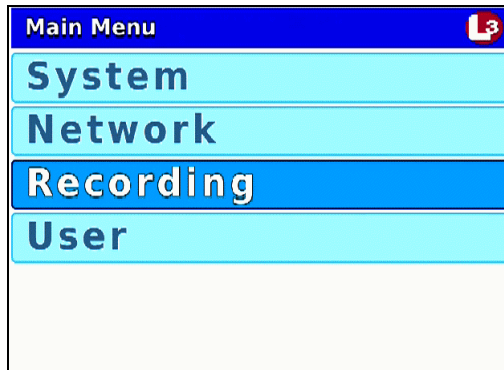
Changing the Video Quality Setting


This section describes how to change the quality setting for videos recorded from the Bullet camera. The higher the number, 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  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 select the **Video** option. The Video screen displays.





The screenshot shows a settings screen titled "Main Menu > Recording > Video" with a red "L3" logo in the top right corner. The screen displays a list of settings for two channels:

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 video quality for Channel 1 (Bullet camera connected to CAMERA 1 port), proceed to the next step.

– OR –



To change the video quality for Channel 2 (Bullet camera connected to CAMERA 2 port, if applicable), press  *three times* to advance to the *CH2 Quality* 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

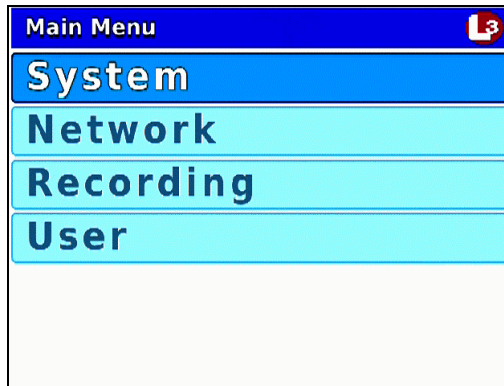
- 8 Use the  button to select a number between 2 – 3 (for CH1) or 2 – 5 (for CH2).
- 9 Press  twice to save your changes and exit the Video screen. The system will automatically reboot.



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

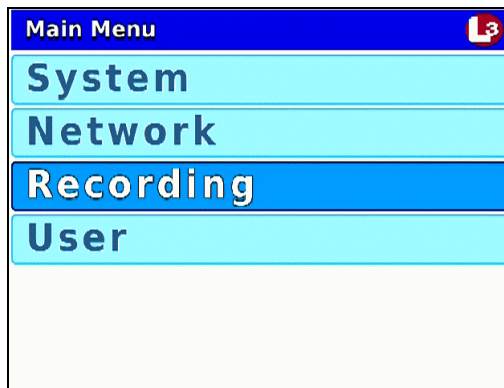
This section describes how to change the number of frames-per-second captured for videos recorded from Channel 1 (Bullet camera connected to CAMERA 1 port) or Channel 2 (Bullet camera connected to CAMERA 2 port) during regular record mode. To change the frames-per-second for videos captured during Background Record, see “Changing the Video Frames-Per-Second Setting for Background Record” on page 39.


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 select the **Video** option. The Video screen displays.

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 (Bullet camera connected to CAMERA 1 port), press  to advance to the *CH1 FPS* field.

– OR –



To change the frames-per-second for Channel 2 (Bullet camera connected to CAMERA 2 port), 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).

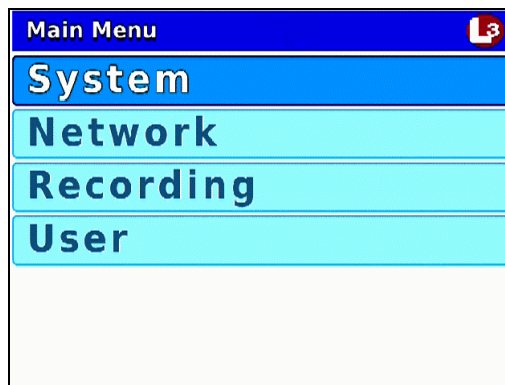
- 9 Press **M** twice to save your changes and exit the Video screen. The system will automatically reboot.

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

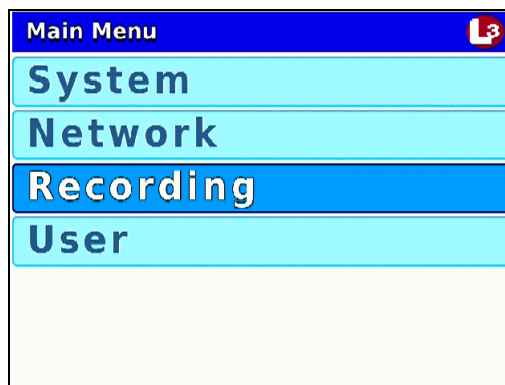
This section describes how to change the number of frames-per-second captured for videos recorded from Channel 1 (i.e., Bullet camera connected to CAMERA 1 port) during Background Record. For more information on Background Record, see “Turning Background Record On/Off” on page 44. To change the frames-per-second 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 **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.



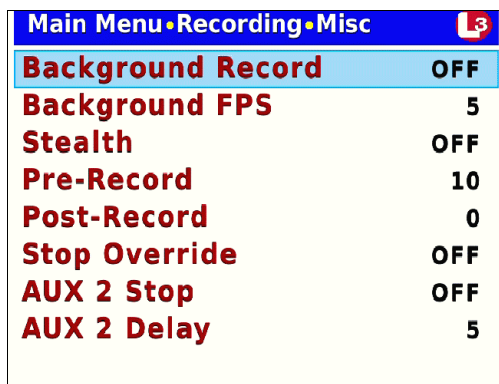
- 4 Press **R** to select the **Recording** option. The Recording menu displays.





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





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





- 7 Press  to advance to the *Background FPS* 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 *Background FPS* 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




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

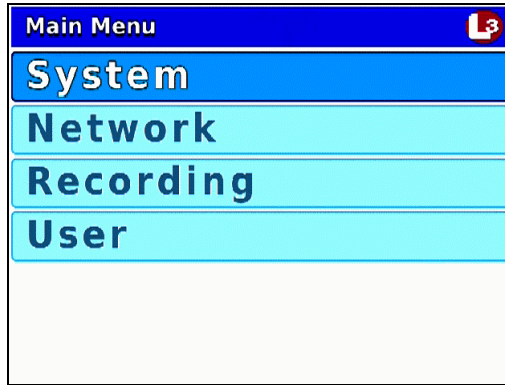
- 9 Use the  button to select the desired frames-per-second (2 or 5).
- 10 Press  twice to save your changes and exit the Misc screen. The system will automatically reboot.



Changing the Video Resolution Setting

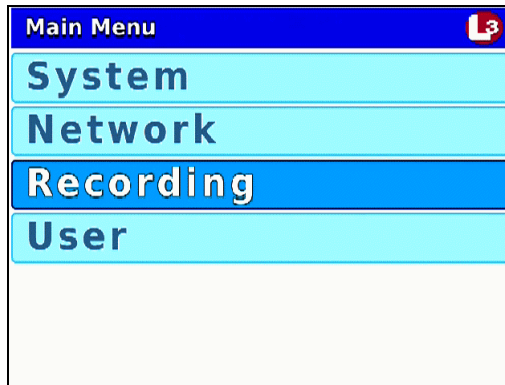
This section describes how to change the display resolution (pixel per inch) for videos recorded from Channel 1 (Bullet camera connected to CAMERA 1 port) and/or Channel 2 (Bullet camera connected to CAMERA 2 port, if applicable).


The higher the number, the clearer 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  again to select the **Video** option. The Video screen displays.

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 video resolution for Channel 1 (Bullet camera connected to CAMERA 1 port), press  twice to advance to the *CH1 Resolution* field.

– OR –


To change the video resolution for Channel 2 (Bullet camera connected to CAMERA 2 port), press  twice to advance to the *CH2 Resolution* 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 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

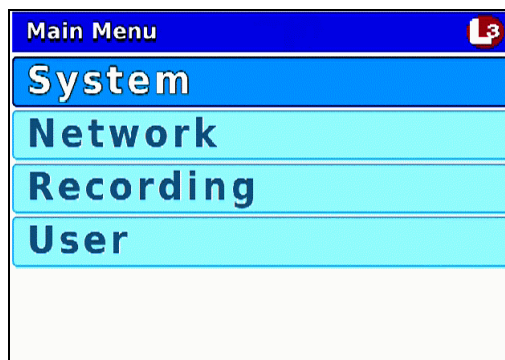
This section describes how to turn the Background Record feature *on* or *off*. This feature enables you to record continuously from the Channel 1 camera (i.e., Bullet camera connected to CAMERA 1 port) at a reduced frame rate without audio whenever your vehicle's ignition is on. The downside of this 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 **Q** 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.

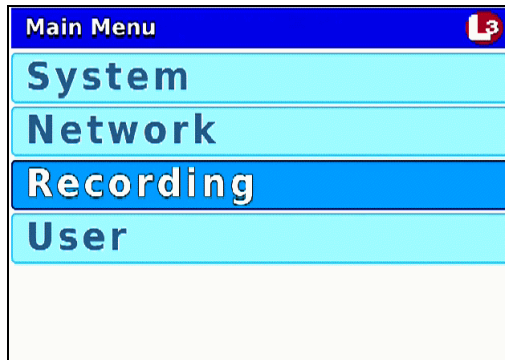
Because Background Recordings are captured at a much lower frames-per-second setting than Regular Recordings, they appear more like a series of “freeze frame” shots rather than a motion picture.

For more on the pre-record feature, see “Changing the Pre/Post Record Settings” on page 50.

- 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 **Q** 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.


Main Menu • Recording • Misc 	
Background Record	<input type="checkbox"/> 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 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.

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

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

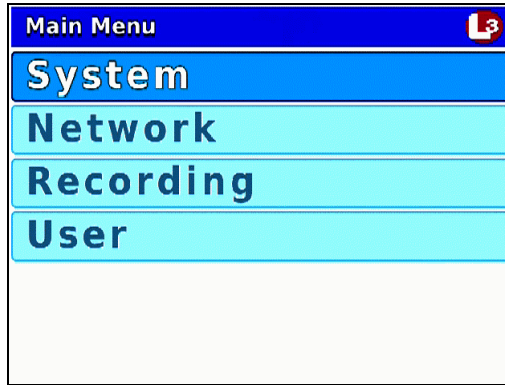
- 13 Use the  button to select the desired frames-per-second (2 or 5).
- 14 Press **M** twice to save your changes and exit the Misc screen. The system will automatically reboot.
- B** **NOTE:** By default, a *Background Record* indicator (pictured left) will display on the Flashback3 screen whenever *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

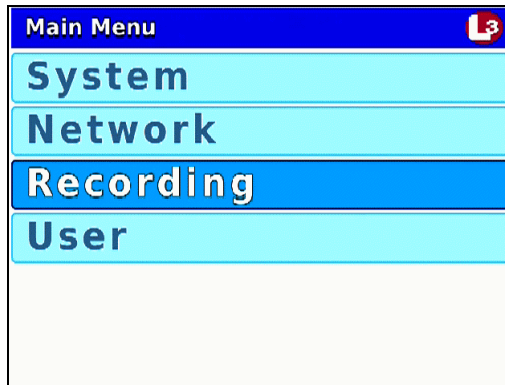
This section describes how to turn “Stealth” mode *on* or *off*, which determines whether or not the *Background Record indicator* **B** will display on the Flashback screen when *Background Record* is *on*.


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 **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.




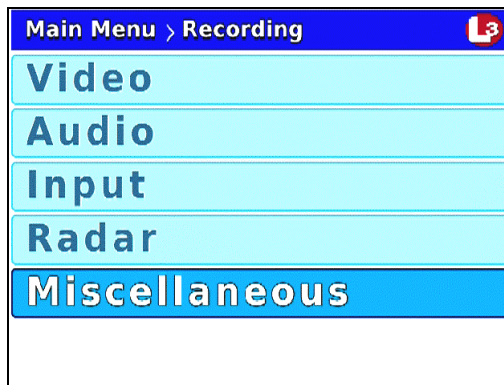
- 3 Press the  or  button until **Recording** is highlighted.



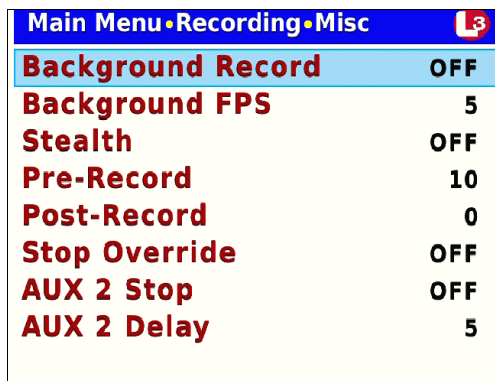
- 4 Press  to select the **Recording** option. The Recording menu displays.



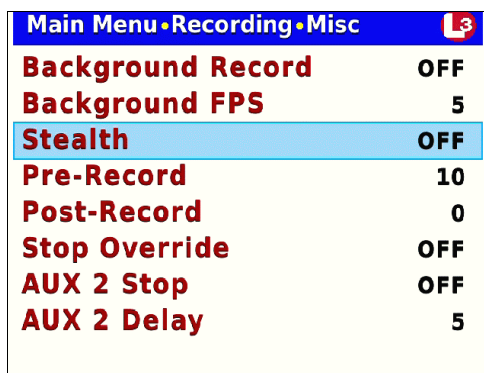
- 5 Press  to advance to the **Miscellaneous** option.



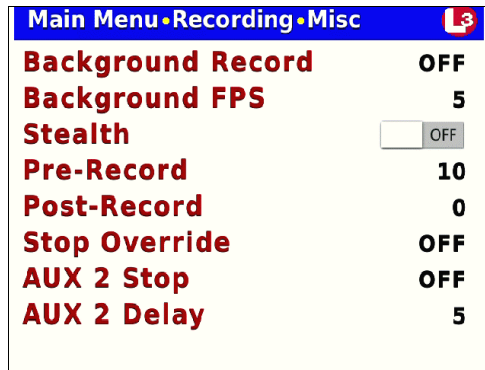
- 6 Press **R** to select the **Miscellaneous** option. The Misc screen displays.





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




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






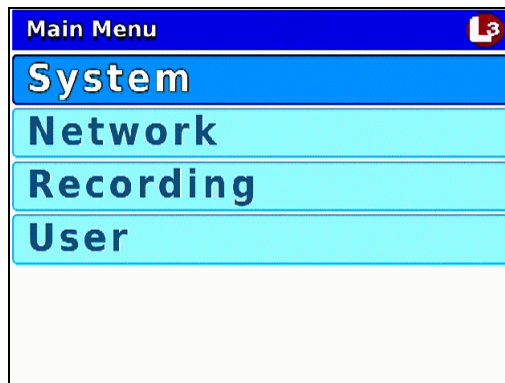
- 9 Press  to toggle the field value to **ON** or **OFF**.
- 10 Press  *four times* to save your changes and exit this option.



Changing the Pre/Post Record Settings

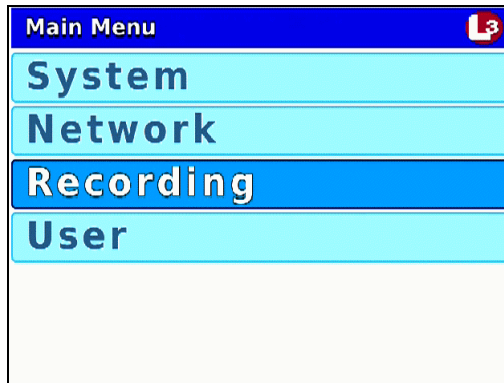
If desired, you may capture up to 60 seconds of video *before* a recording session begins and/or *after* a recording session ends. Many agencies are interested in seeing what happened x number of seconds *before* a recording was triggered by either a manual or automatic trigger.


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 . 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  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 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.

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

- 9 Press  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.

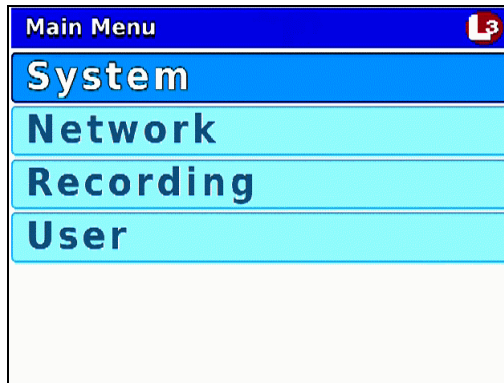
Main Menu • Recording • Misc 	
Background Record	OFF
Background FPS	5
Stealth	OFF
Pre-Record	10
Post-Record	0
Stop Override	OFF
AUX 2 Stop	OFF
AUX 2 Delay	5

- 15 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.
- 16 Press **M** *twice* to save your changes and exit the Misc screen. The system will automatically reboot.

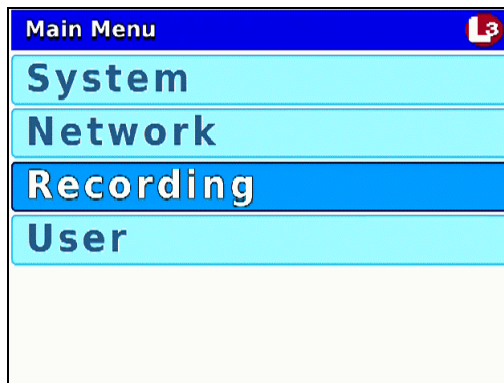
Selecting the Camera(s) for Channel 2

This section describes how to indicate whether or not you have a second Bullet camera recording on Channel 2. If there will be *no* camera recording on Channel 2, set the *CH2 Camera* field to **OFF**.

- 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.



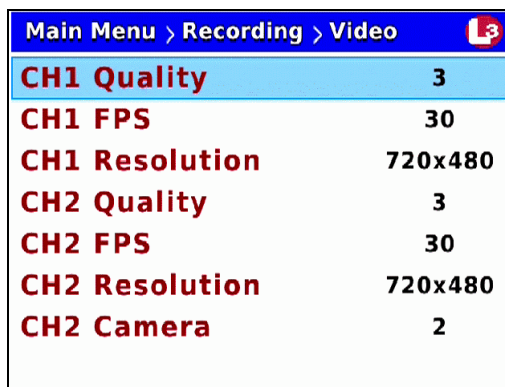
- 3 Press the **Left Arrow** or **Right Arrow** button until **Recording** is highlighted.



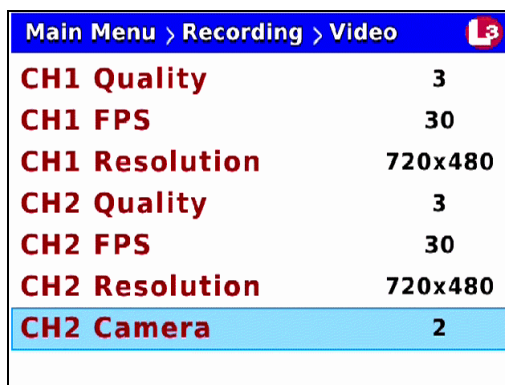
- 4 Press **R** to select the **Recording** option. The Recording menu displays.




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






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



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




Changing the Audio Settings

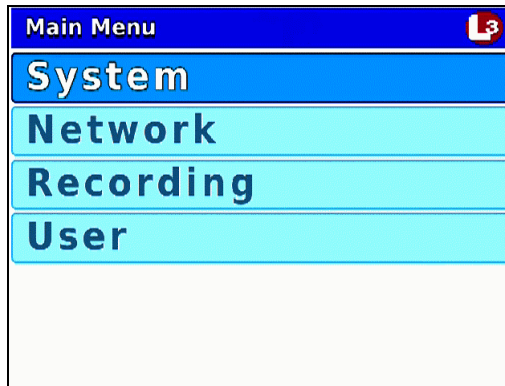
This section allows you to change the Flashback audio settings. For specific instructions, see:



- Turning the VLP1 Audio On/Off, below
- Turning the VLP2 Audio On/Off, page 59
- Turning the Record ‘Beep’ On/Off, page 61
- Turning the Keystroke ‘Beep’ On/Off, page 63
- Turning the Pre/Post Audio On/Off, page 66
- Changing the Gain Setting for the VLP1 Audio, page 68
- Changing the Gain Setting for the VLP2 Audio, page 71.

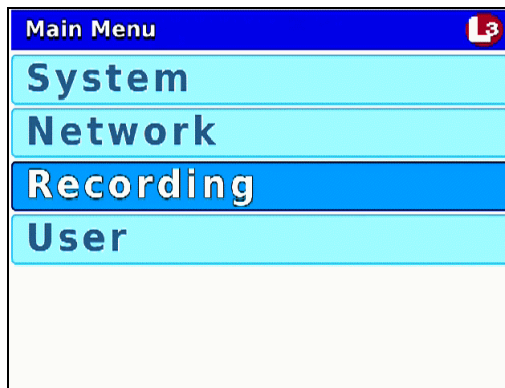
Turning the VLP1 Audio On/Off


This section describes how to turn your VLP1 port’s audio setting *on* or *off*. If this setting is *on*, audio from the VLP2 wireless microphone connected to input port VLP 1 will be recorded. If this setting is *off*, audio from the VLP2 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.



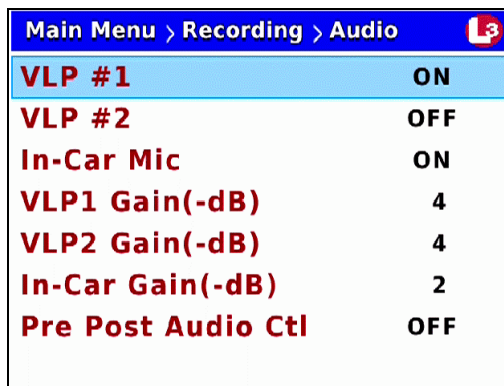
- 4 Press  to select the **Recording** option. The Recording menu displays.



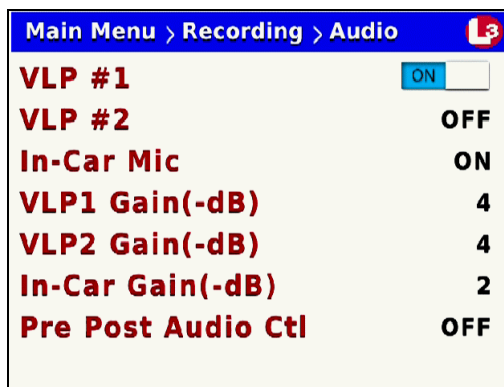
- 5 Press  to advance to the **Audio** option.



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






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

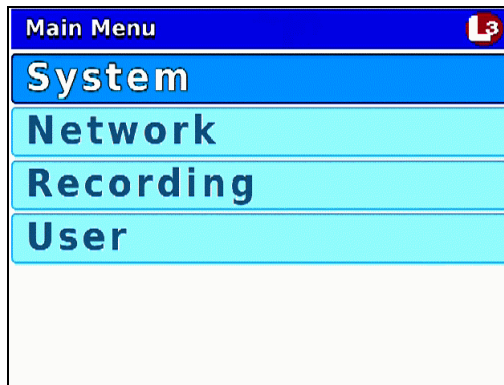




- 8 Press **▶** to toggle the field value to **ON** or **OFF**.
- 9 Press **M** *four times* to save your changes and exit this option.

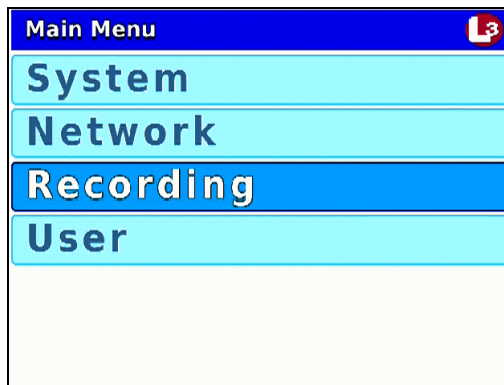
Turning the VLP2 Audio On/Off


This section describes how to turn your VLP2 port's audio setting *on* or *off*. If this setting is *on*, audio from the VLP2 wireless microphone connected to input port VLP 2 will be recorded. If this setting is *off*, audio from the VLP2 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.



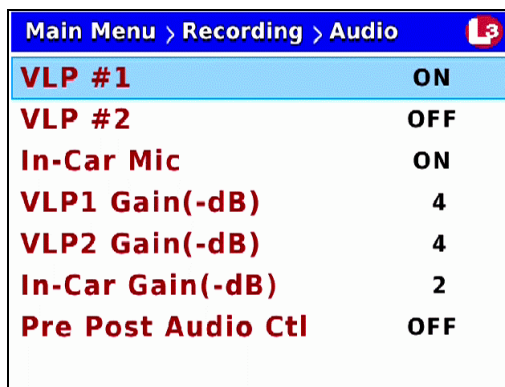
- 4 Press  to select the **Recording** option. The Recording menu displays.



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

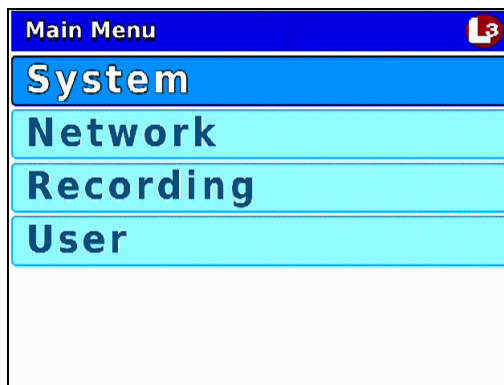


- 9 Press **▶▶** to toggle the field value to **ON** or **OFF**.
- 10 Press **M** *four times* to save your changes and exit this option.

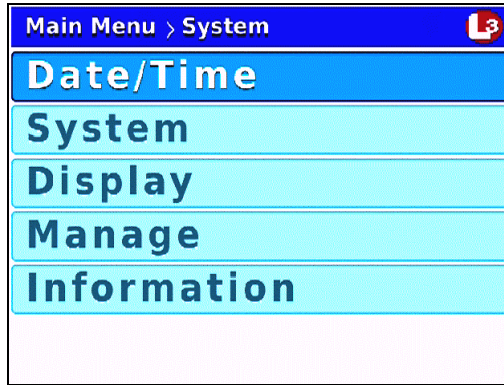
Turning the Record ‘Beep’ On/Off

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.

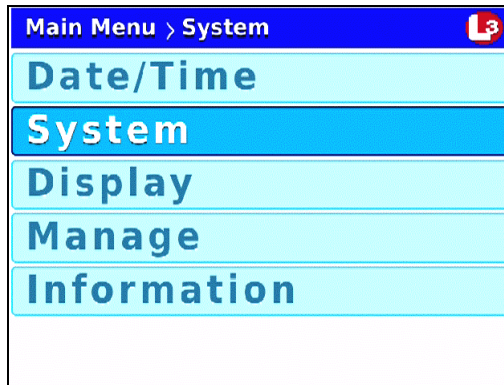
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



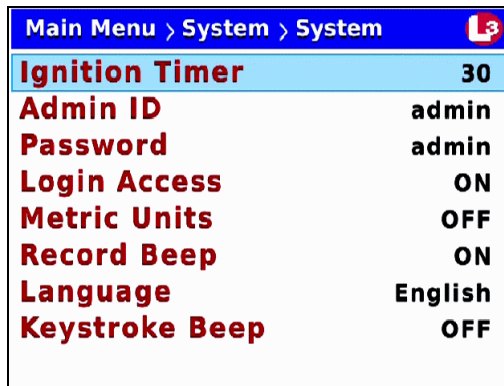
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **▶▶** or **◀** button to advance to that option.
- 4 Press **R** to select the **System** option. The System menu displays.



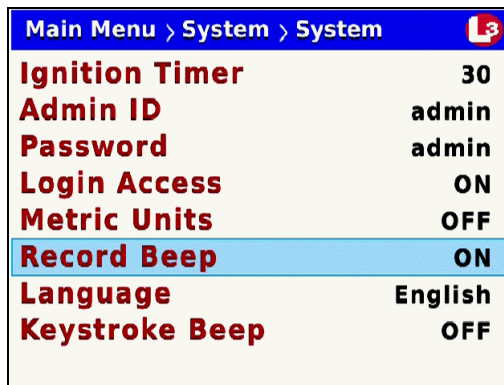
- 5 Press **▶** to advance to the **System** option.



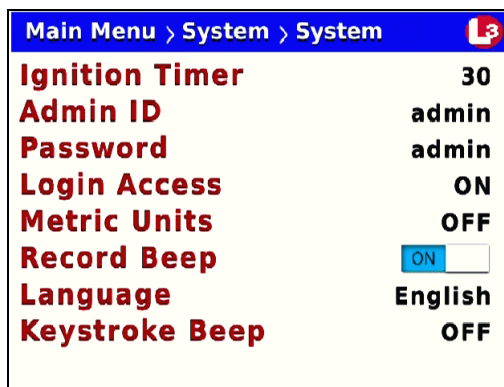
- 6 Press **R** to select the **System** option. The System screen displays.



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



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

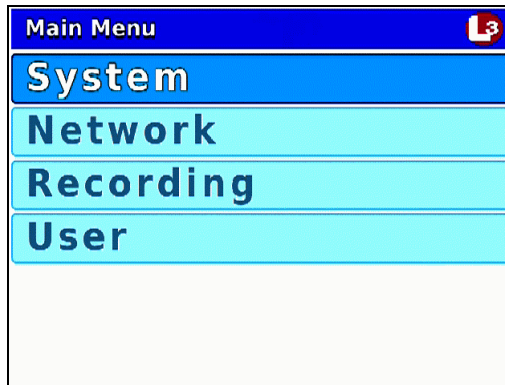


- 9 Press **▶** to toggle the field value to **ON** or **OFF**.
- 10 Press **M** *four times* to save your changes and exit this option.

Turning the 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 **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.

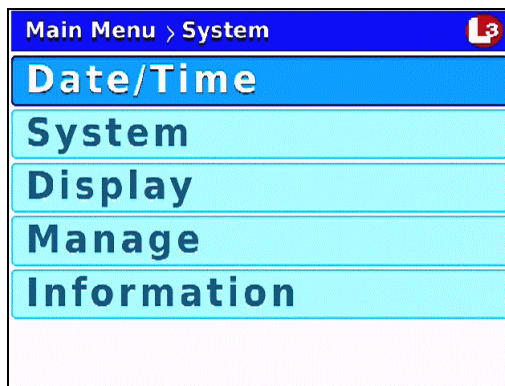



3 If **System** is highlighted, proceed to the next step.

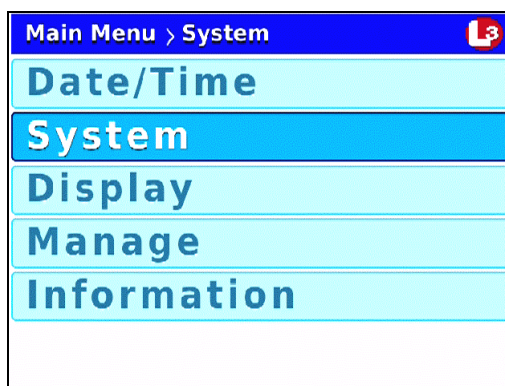
– OR –


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  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

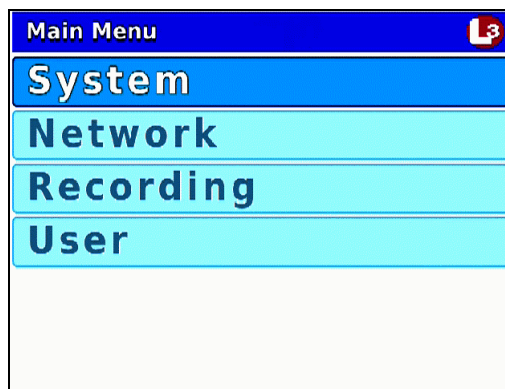
- 9 Press  to toggle the field value to **ON** or **OFF**.
- 10 Press  *four times* to save your changes and exit this option.



Turning the Pre/Post Audio On/Off

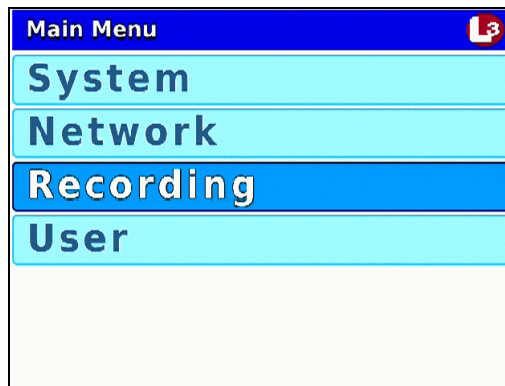
This section describes how to turn the audio *on* or *off* for your pre- and post-recordings. Including audio in these recordings will *increase* your file size; omitting audio from these recordings will *reduce* your file size.


For more information on pre- and post-recordings, see “Changing the Pre/Post Record Settings” on page 50.

- 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.




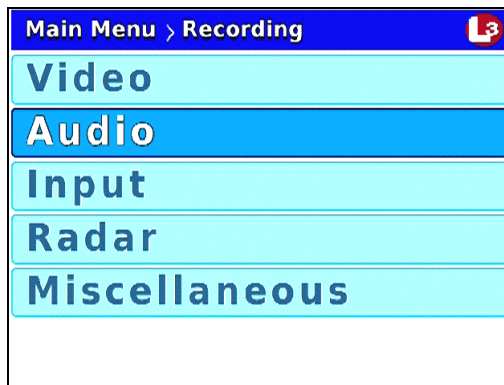
- 3 Press the  or  button until **Recording** is highlighted.




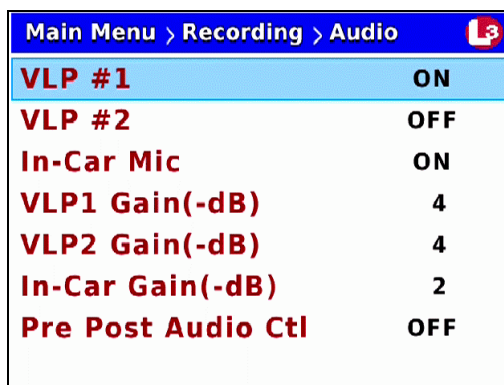
- 4 Press  to select the **Recording** option. The Recording menu displays.




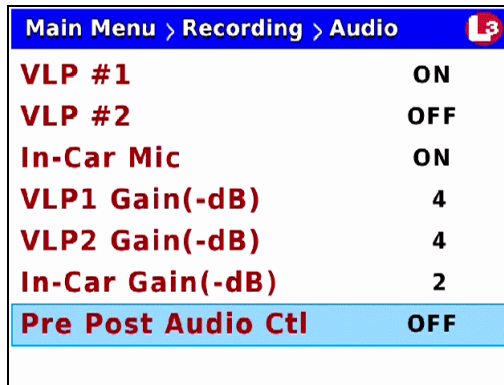
- 5 Press  to advance to the **Audio** option.



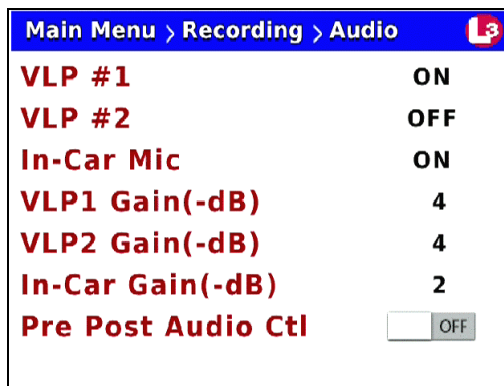
- 6 Press  to select the **Audio** option. The Audio screen displays.



- 7 Press  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

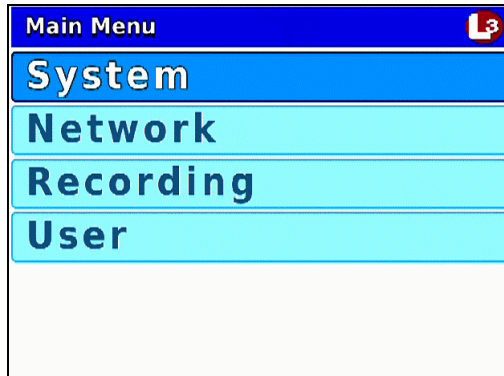
This section describes how to adjust the strength of the audio line level signal into the DVR for the VLP2 wireless microphone connected to input port VLP 1. This signal has an effect on volume:

- 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.

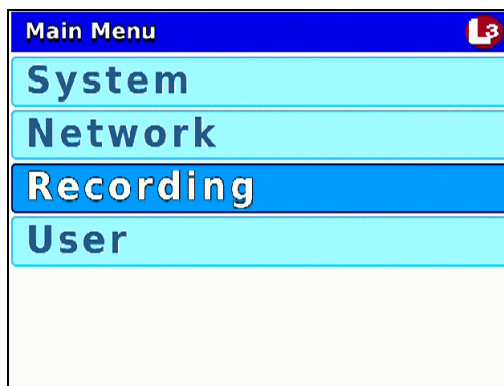
It's recommended that you adjust this setting up or down in *small increments* until you hear an improvement. If you notice increased distortion after changing this setting, go back to the Audio screen and increase the numeric value of the *VLP1 Gain(-dB)* field.

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 **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.



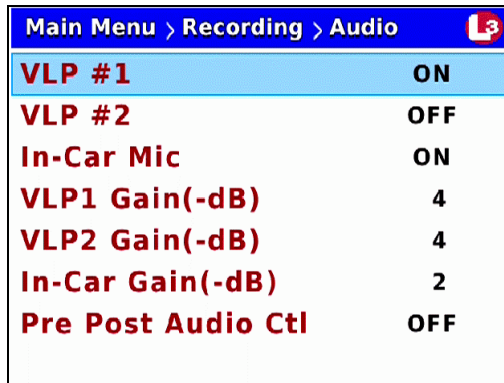
- 4 Press **R** to select the **Recording** option. The Recording menu displays.



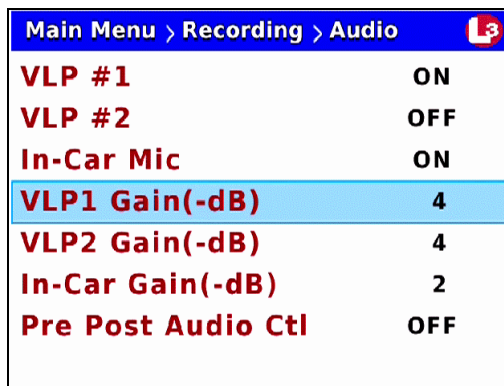
- 5 Press **Right Arrow** to advance to the **Audio** option.



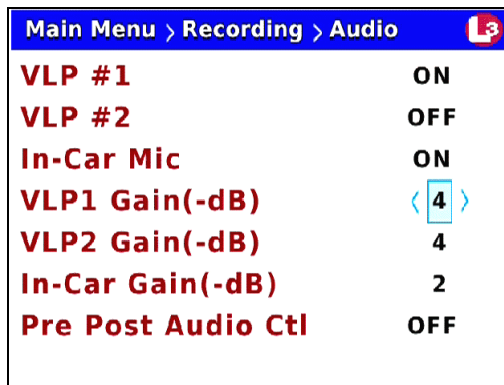
- 6 Press **R** to select the **Audio** option. The Audio screen displays.






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



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



- 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

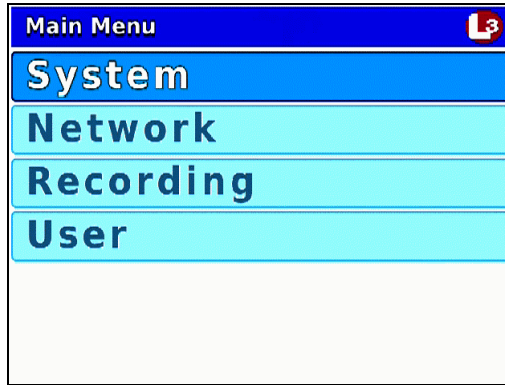
This section describes how to adjust the strength of the audio line level signal into the DVR for the VLP2 wireless microphone connected to input port VLP 2. This signal has an effect on volume:



- 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.

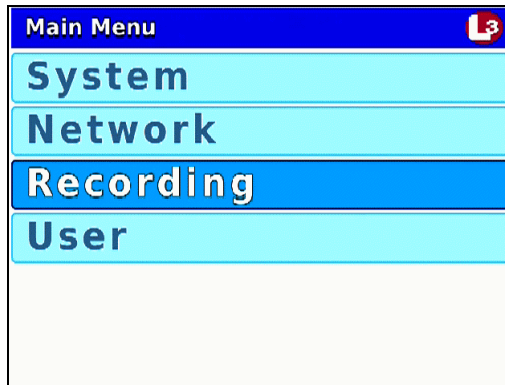
It's recommended that you adjust this setting up or down in small increments until you hear an improvement. If you notice increased distortion after changing this setting, go back to the Audio screen and increase the numeric value of the *VLP2 Gain(-dB)* field.


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.




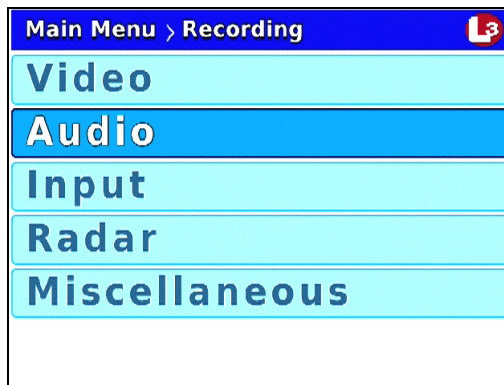
- 3 Press the  or  button until **Recording** is highlighted.



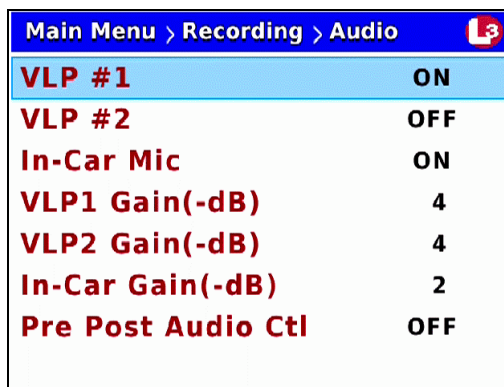
- 4 Press  to select the **Recording** option. The Recording menu displays.



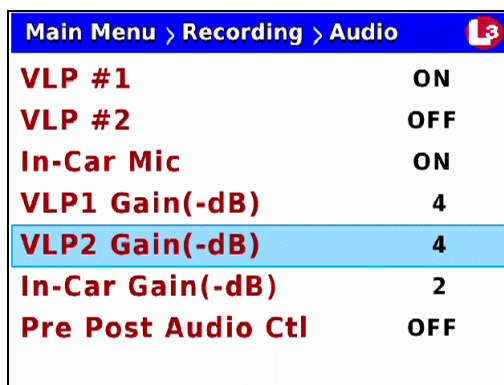
- 5 Press  to advance to the **Audio** option.




- 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.

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 *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.

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 equipment is typically installed at system-start up.

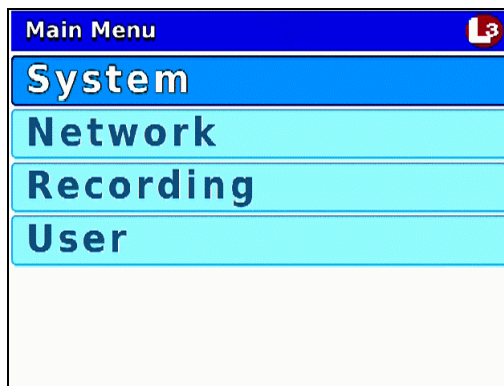
For more information, see:



- Turning the Lights Trigger On/Off, next page
- Turning the Siren Trigger On/Off, page 77
- Turning the Aux 1 Trigger On/Off, page 80
- Turning the Aux 2 Trigger On, page 82
- Turning the Aux 2 Trigger Off, page 88
- Turning the Speed Trigger On/Off, page 91
- Turning the ‘Stop Override’ Feature On/Off, page 95
- Turning the VLP2 Microphone Trigger On/Off, page 97

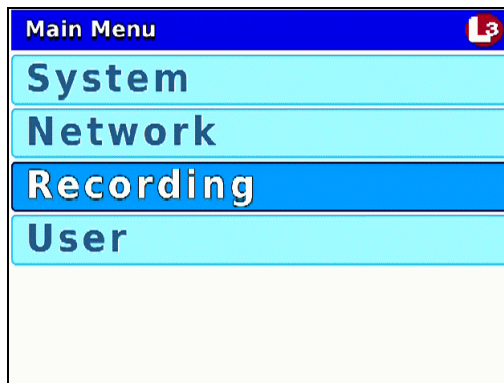
Turning the Lights Trigger On/Off


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.



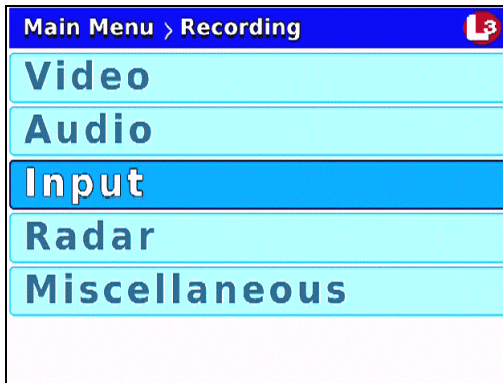
- 3 Press the  or  button until **Recording** is highlighted.



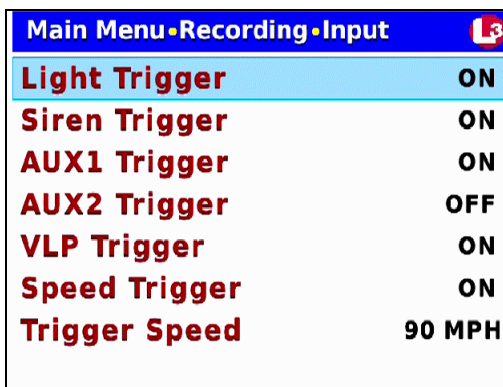
- 4 Press  to select the **Recording** option. The Recording menu displays.



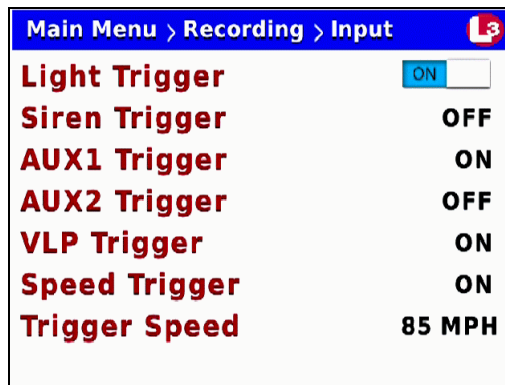
5 Press **▶|** twice to advance to the **Input** option.





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






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

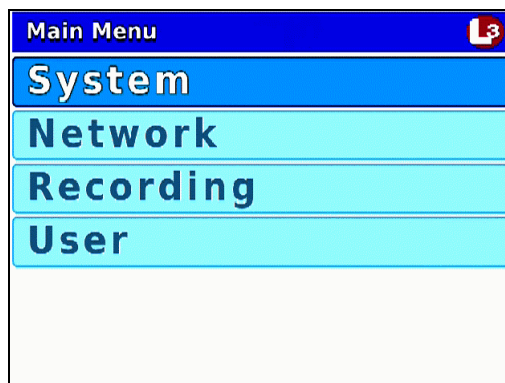




- 8 Press  to toggle the field value to **ON** or **OFF**.
- 9 Press  *four times* to save your changes and exit this option.

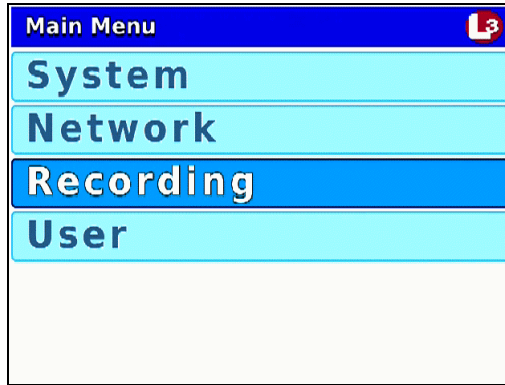
Turning the Siren Trigger On/Off

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.



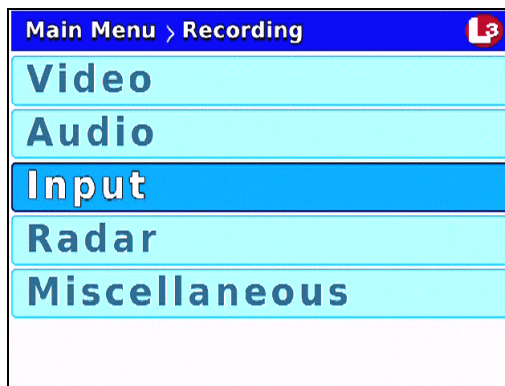
- 3 Press the  or  button until **Recording** is highlighted.




- 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.

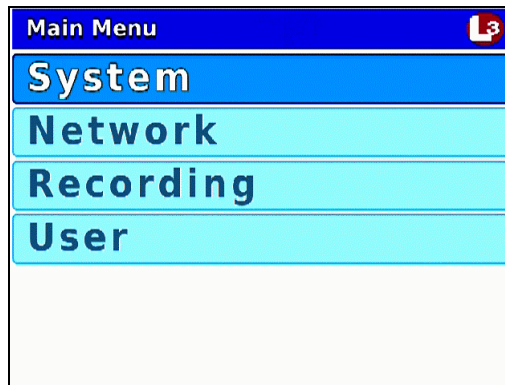
Main Menu > Recording > Input 	
Light Trigger	ON
Siren Trigger	<input type="checkbox"/> OFF
AUX1 Trigger	ON
AUX2 Trigger	OFF
VLP Trigger	ON
Speed Trigger	ON
Trigger Speed	85 MPH

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

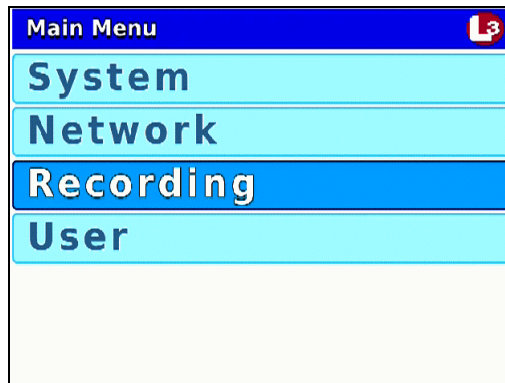
Turning the Aux 1 Trigger On/Off

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 is activated.

- 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.




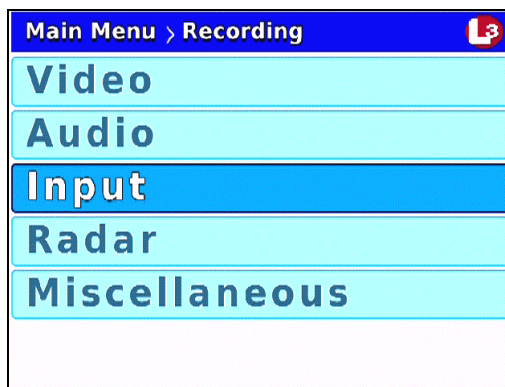
- 3 Press the **□** or **▶** button until **Recording** is highlighted.




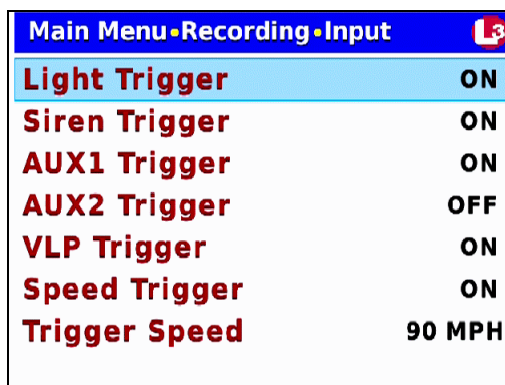
- 4 Press **R** to select the **Recording** option. The Recording menu displays.





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





- 6 Press  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.

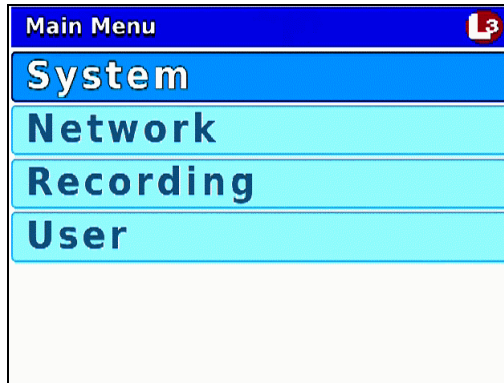
Turning the Aux 2 Trigger On

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.

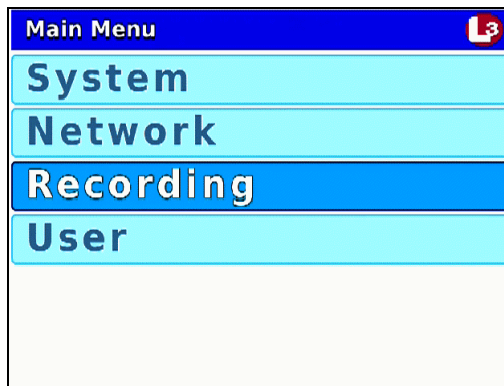
If desired, you can program the DVR to automatically stop an Aux 2 triggered recording **X** number of minutes after the triggering activity ceases. For example, if your Aux 2 device is a motion detector, the “triggering activity” would be motion. If the *AUX 2 Delay* field is set to **5**, then after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

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



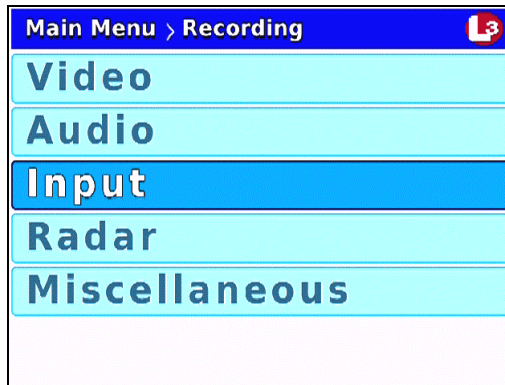
- 3 Press the **Left Arrow** or **Right Arrow** button until **Recording** is highlighted.



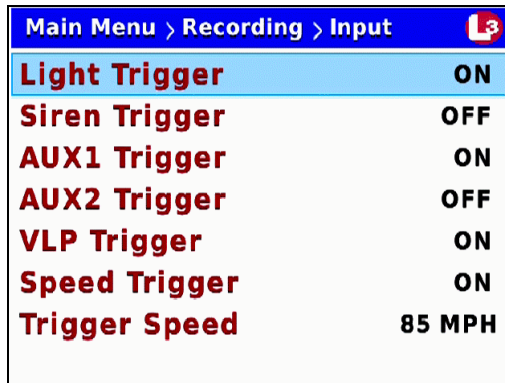
- 4 Press **R** to select the **Recording** option. The Recording menu displays.



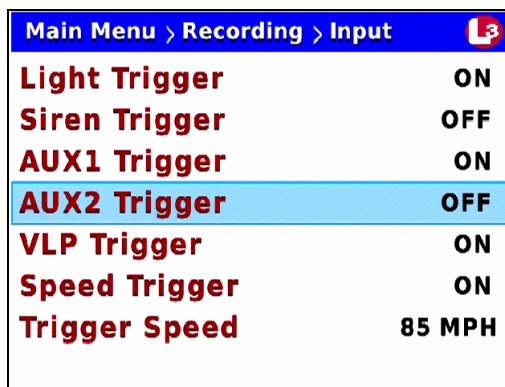
- 5 Press **Right Arrow** *twice* to advance to the **Input** option.



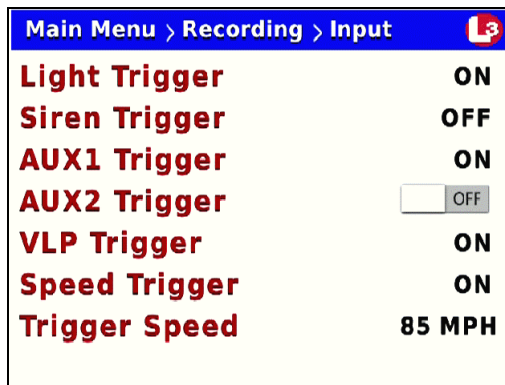
- 6 Press **R** to select the **Input** option. The Input screen displays.



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



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

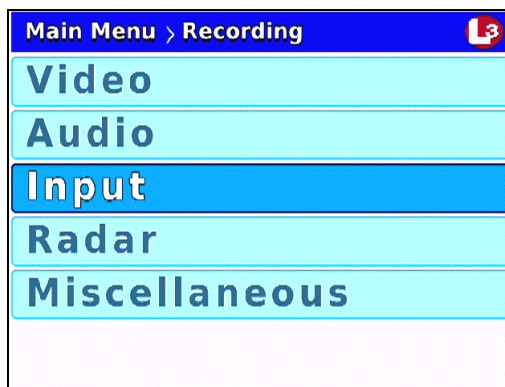


- 9 Press **▶** to toggle the field value from **OFF** to **ON**.

***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 **Ⓜ** *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 **M**.
- 23 Press **▶** to advance to the *AUX 2 Delay* 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

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

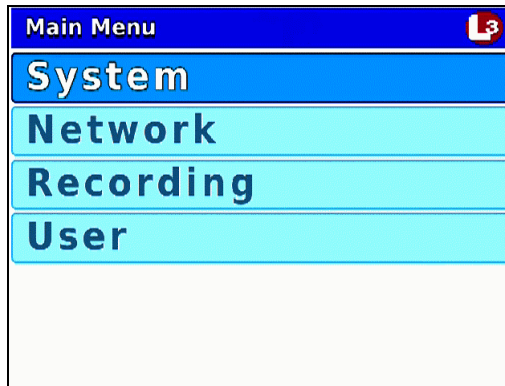
Main Menu • Recording • Misc 	
Background Record	OFF
Background FPS	5
Stealth	OFF
Pre-Record	10
Post-Record	0
Stop Override	OFF
AUX 2 Stop	OFF
AUX 2 Delay	5



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

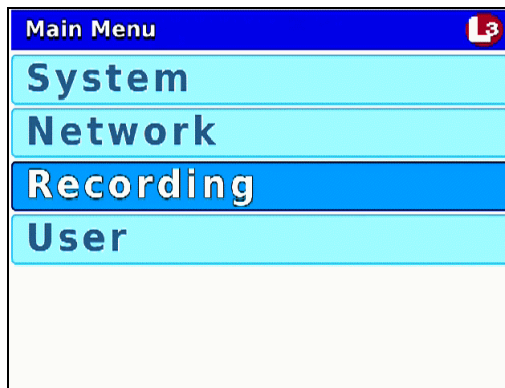
Turning the Aux 2 Trigger Off


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 **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.




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



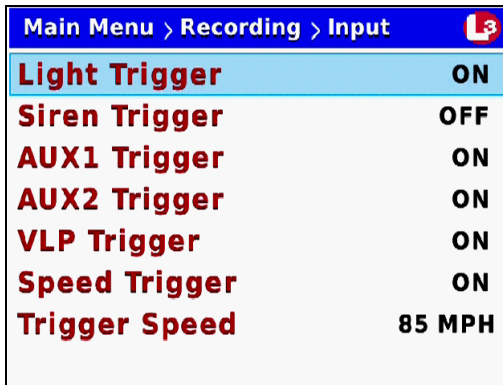
- 4 Press  to select the **Recording** option. The Recording menu displays.



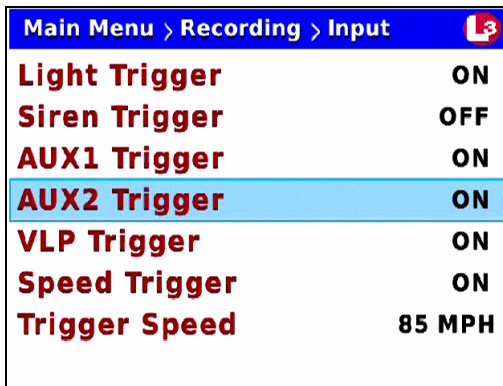
- 5 Press  *twice* to advance to the **Input** option.



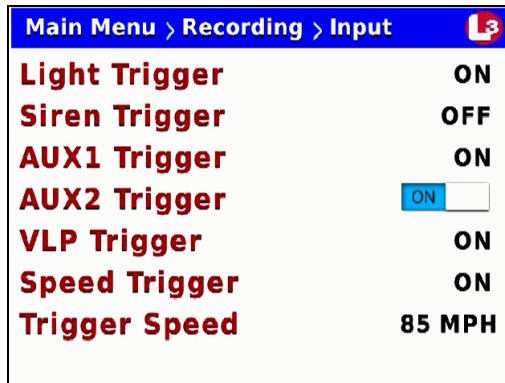
- 6 Press **R** to select the **Input** option. The Input screen displays.





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






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

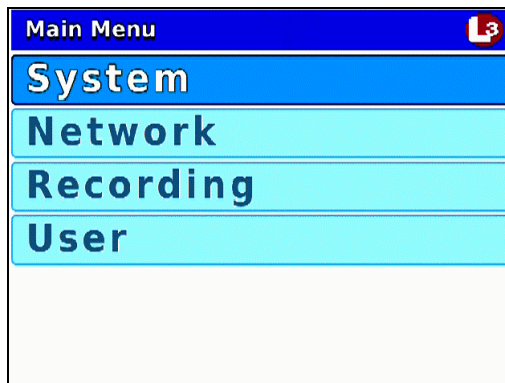




- 9 Press  to toggle the field value from **ON** to **OFF**.
- 10 Press  *four times* to save your changes and exit this option.

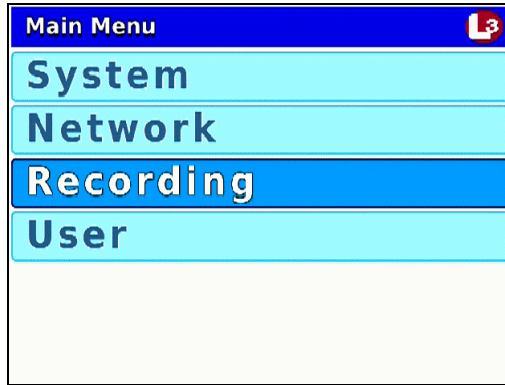
Turning the Speed Trigger On/Off

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.



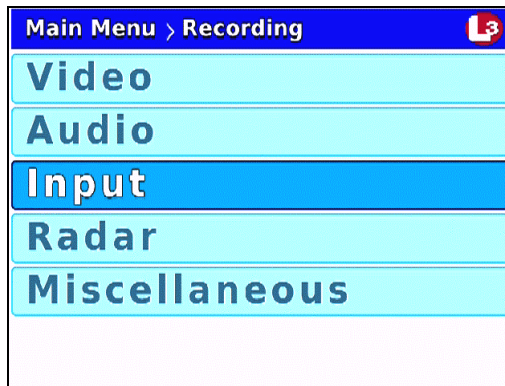
- 3 Press the  or  button until **Recording** is highlighted.




- 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.

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


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

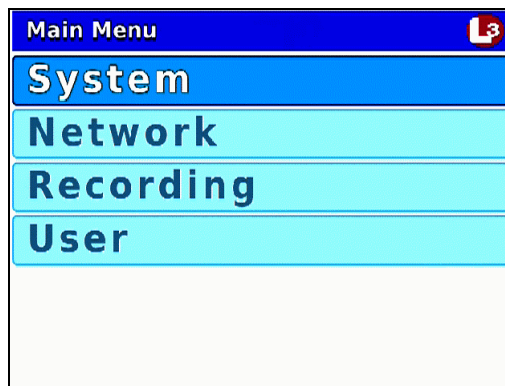
14 Use the **▶** or **◀** button to select the desired trigger speed (65 – 100). Once the desired trigger speed displays, proceed to the next step.



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

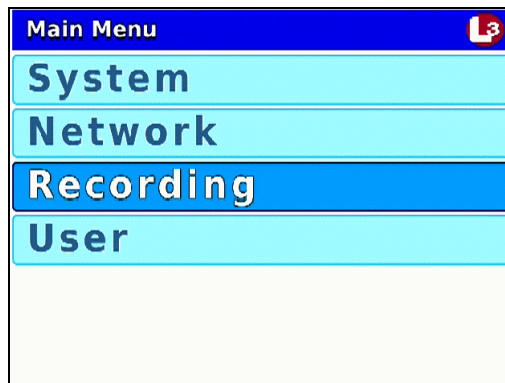
Turning the 'Stop Override' Feature On/Off


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.




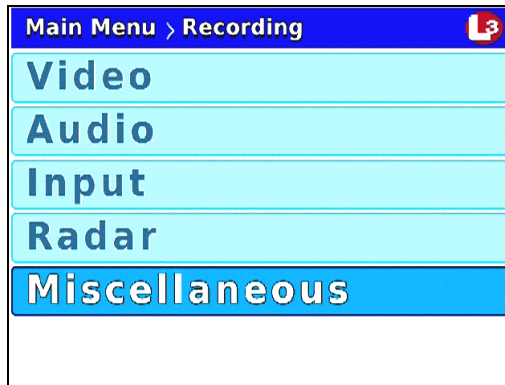
- 3 Press the  or  button until **Recording** is highlighted.



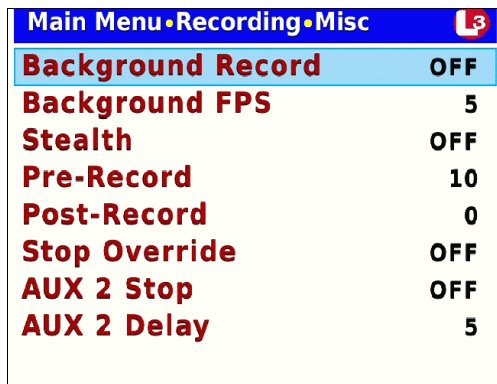
- 4 Press  to select the **Recording** option. The Recording menu displays.




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



- 6 Press  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 **R** to select the *Stop Override* field.

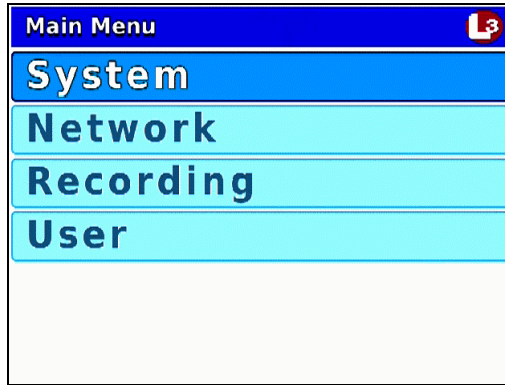
Main Menu • Recording • Misc	
Background Record	OFF
Background FPS	5
Stealth	OFF
Pre-Record	10
Post-Record	0
Stop Override	<input type="checkbox"/> OFF
AUX 2 Stop	OFF
AUX 2 Delay	5



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

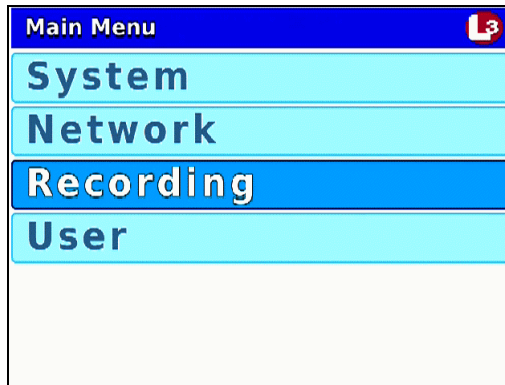
Turning the VLP2 Microphone Trigger On/Off


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

- 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.




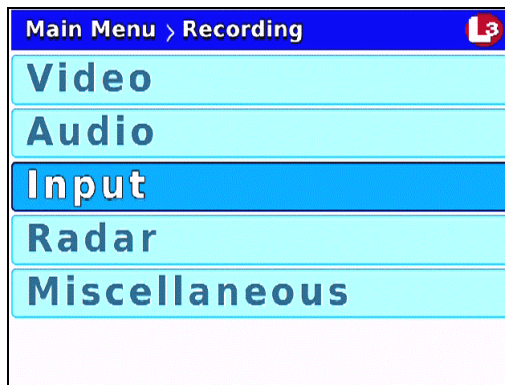
- 3 Press the  or  button until **Recording** is highlighted.



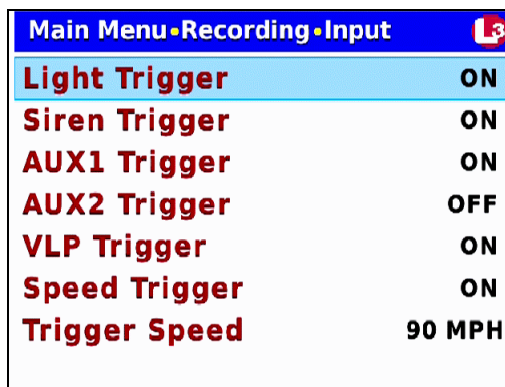
- 4 Press  to select the **Recording** option. The Recording menu displays.



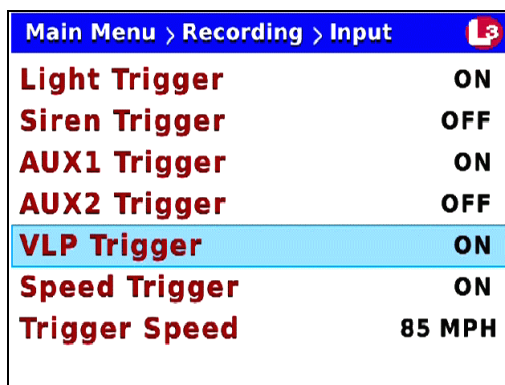
- 5 Press  twice to advance to the **Input** option.



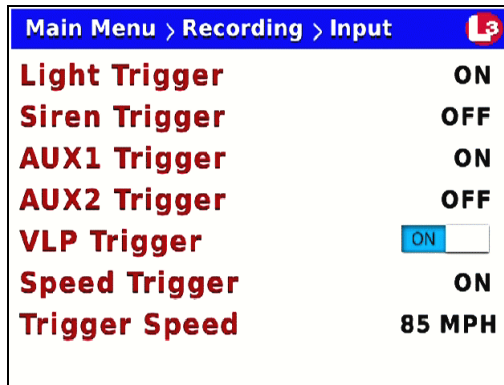
- 6 Press **R** to select the **Input** option. The Input screen displays.





- 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 Flashback3 monitor during a recording
- The Flashback Player while viewing a video off the server or off a backup disc.*

For specific instructions, see:

*Affects
Flashback
monitor only*

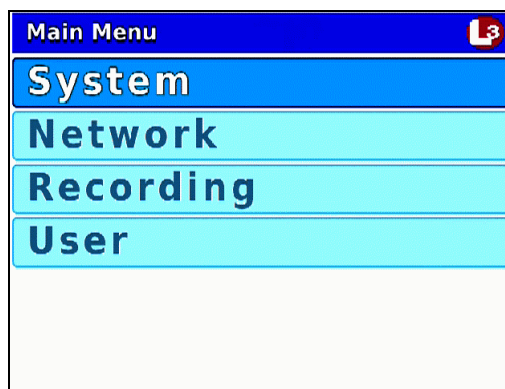
- Turning the Radar Display On, next page
- Turning the Radar Display Off, page 104
- Turning the Lights Display On/Off, page 106
- Turning the Siren Display On/Off, page 108
- Turning the Brakes Display On/Off, page 111
- Turning the Aux 1 Display On/Off, page 113
- Turning the Aux 2 Display On/Off, page 115
- Turning the Speed Display On/Off, page 118
- Turning the Metric Units Display On/Off, page 120
- Turning the 'GPS' Display On/Off, page 123
- Turning the 'Voltage' Display On/Off, page 125
- Turning the 'WLAN' Display On/Off, page 128.

Turning the Radar Display On

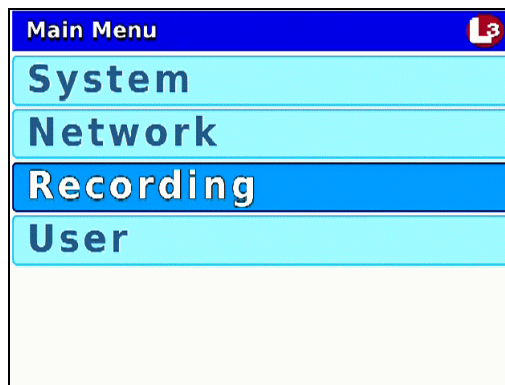
This section describes how to turn the radar display *on*. When this display is *on*, selected radar indicators will display on your Flashback monitor.

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

- 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.




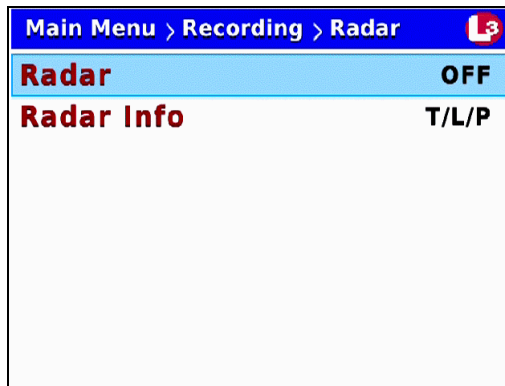
- 4 Press **R** to select the **Recording** option. The Recording menu displays.




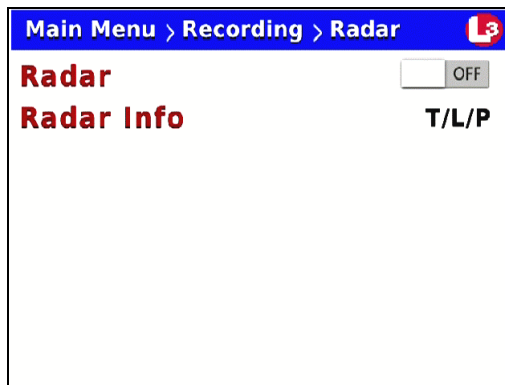
- 5 Press  *twice* to advance to the **Radar** option.




- 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 **OFF** to **ON**.
- 9 Examine the current radar settings in the *Radar Info* field, as described below.

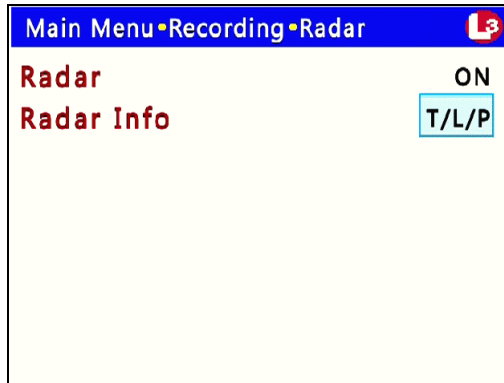
Available Radar Displays	
T	Target Speed. The MPH or KPH reading of a speeding vehicle.
L	Lock Speed. The minimum MPH or KPH reading that you're looking for when you aim your radar device at a speeding vehicle.
T/L	The target <i>and</i> lock speeds, as described above.
T/L/P <i>(system default)</i>	The 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 .
- 11 Press  to advance to the *Radar Info* field.



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

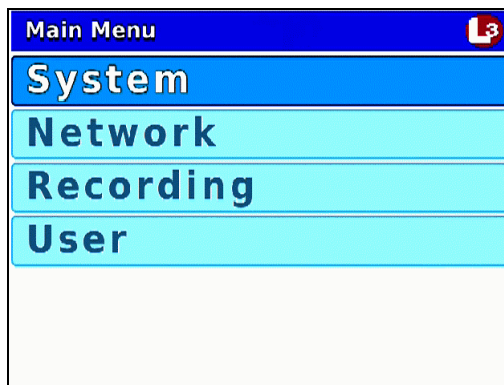


- 13 Use the **▶** button to select the radar information you wish to display.
- 14 Press **M** four times to save your changes and exit this option.

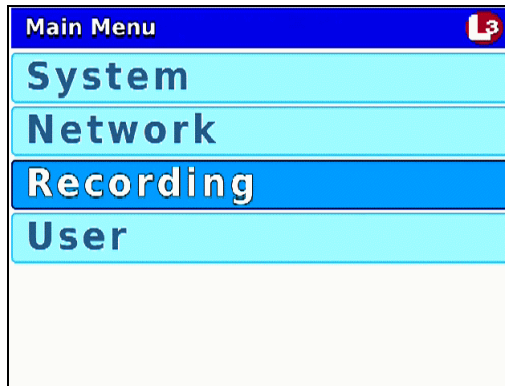
Turning the Radar Display Off

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 **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



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



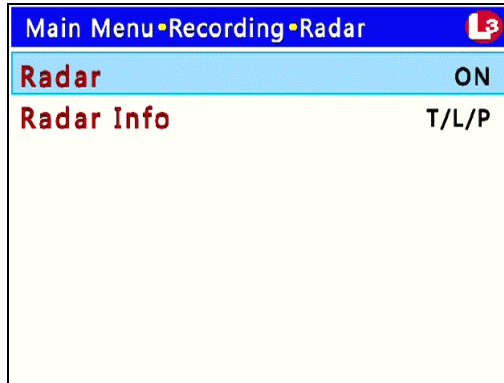
- 4 Press **R** to select the **Recording** option. The Recording menu displays.



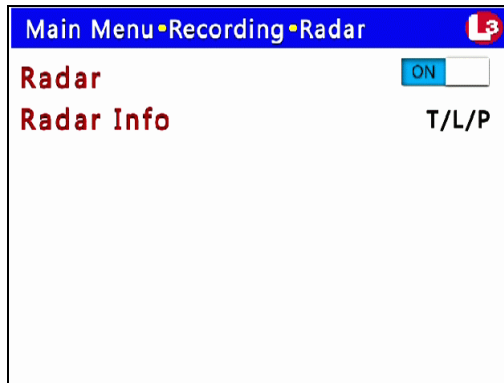
- 5 Press **⏪** *twice* to advance to the **Radar** option.



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



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

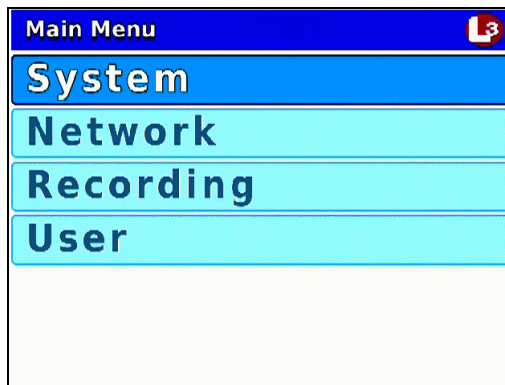





- 8 Press **▶** to toggle the field value from **ON** to **OFF**.
- 9 Press **M** *four times* to save your changes and exit this option.

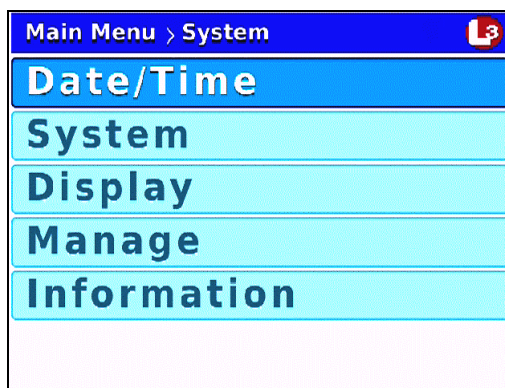
Turning the Lights Display On/Off

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.

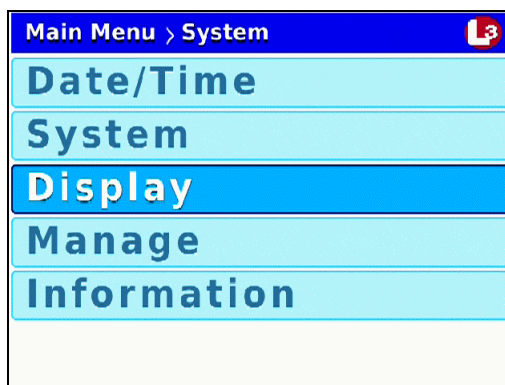
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.





- 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  to select the *Light trigger* field.

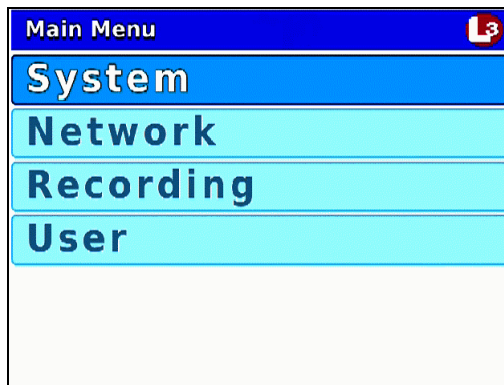
Main Menu > System > Display 	
Light trigger	ON <input type="checkbox"/>
Siren trigger	ON
Brakes trigger	ON
Aux1 trigger	ON
Aux2 trigger	OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	OFF

- 8 Press  to 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  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.

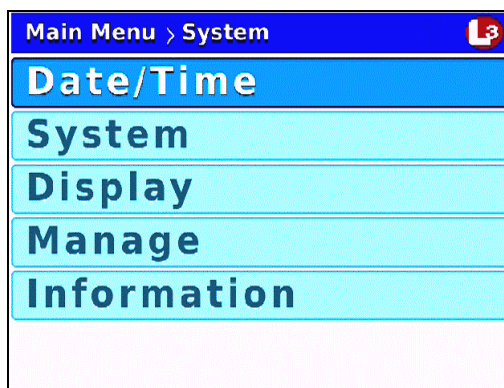


3 If **System** is highlighted, proceed to the next step.

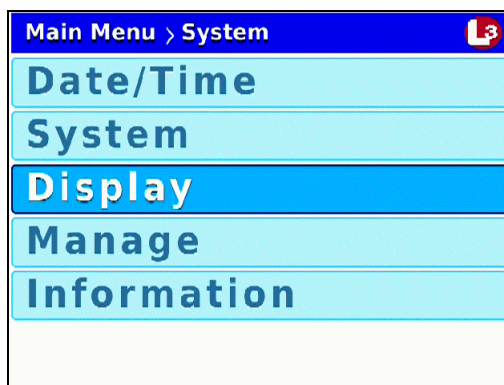
– OR –


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  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  to select the *Siren trigger* field.

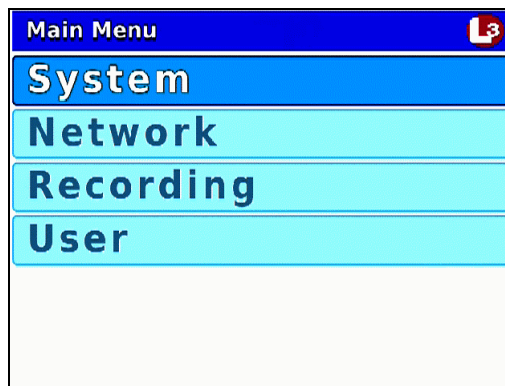
Main Menu > System > Display 	
Light trigger	ON
Siren trigger	<input checked="" type="checkbox"/>
Brakes trigger	ON
Aux1 trigger	ON
Aux2 trigger	OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	OFF




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

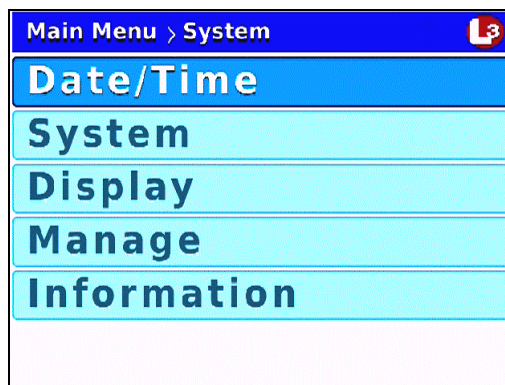
Turning the Brakes Display On/Off


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.

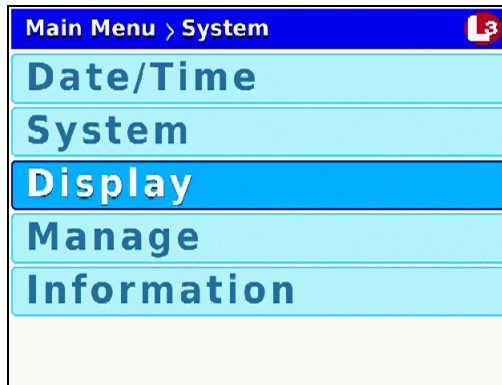
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



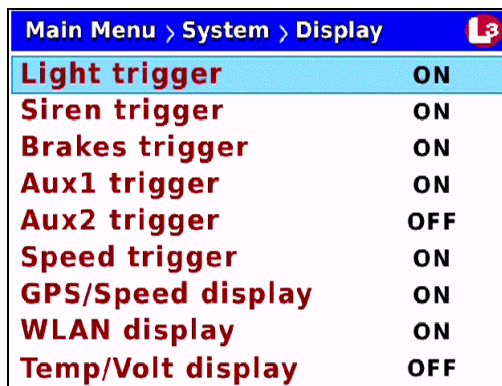
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.
- 4 Press  to select the **System** option. The System menu displays.



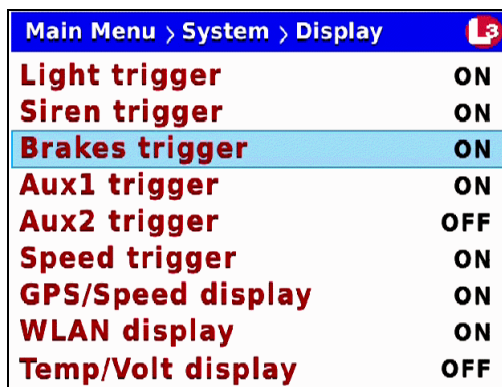
- 5 Press  twice to highlight the **Display** option.



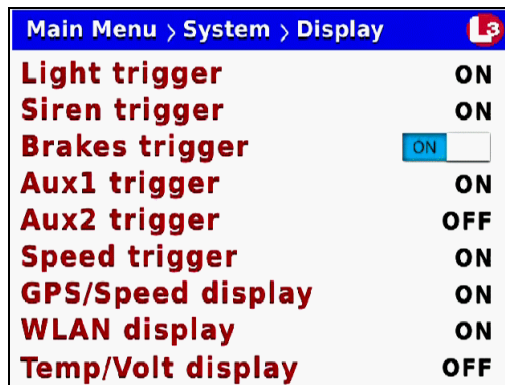
- 6 Press **R** to select the **Display** option. The Display screen displays.



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



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

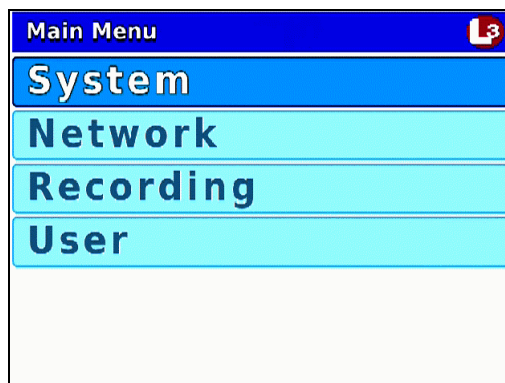


- 9 Press **▶** to toggle the field value to **ON** or **OFF**.
- 10 Press **M** *four times* to save your changes and exit this option.

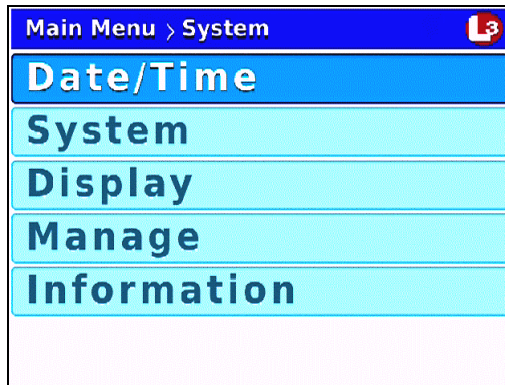
Turning the Aux 1 Display On/Off

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.

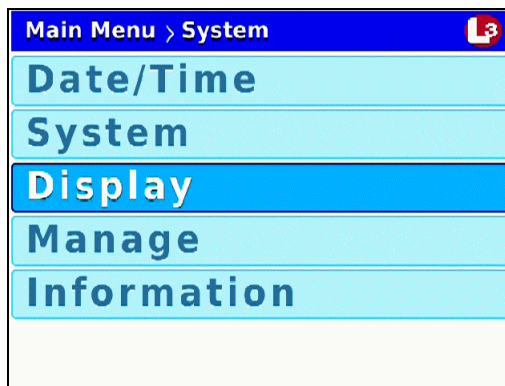
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



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

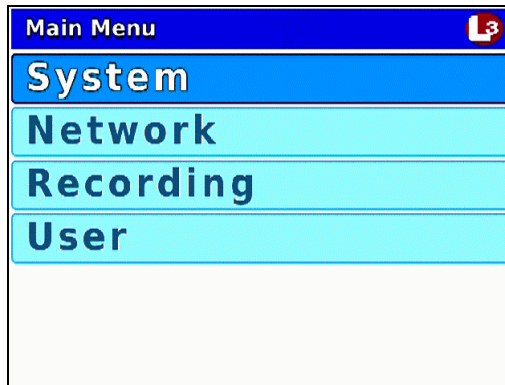
Main Menu > System > Display 	
Light trigger	ON
Siren trigger	ON
Brakes trigger	ON
Aux1 trigger	<input checked="" type="checkbox"/>
Aux2 trigger	OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	OFF




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

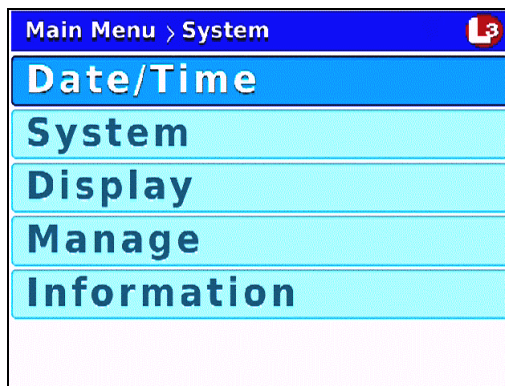
Turning the Aux 2 Display On/Off


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.

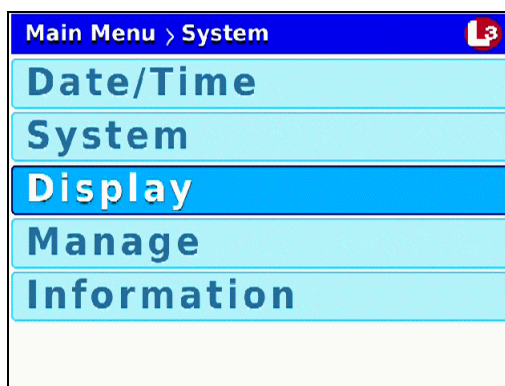
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.





- 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  *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.

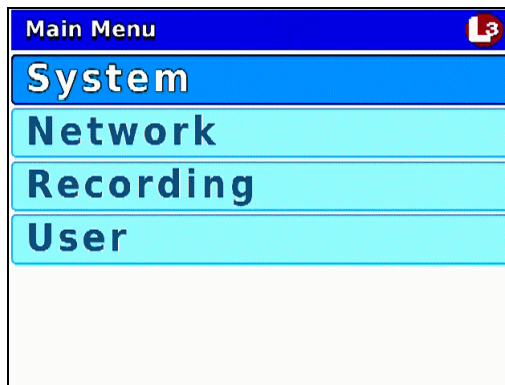
Main Menu > System > Display 	
Light trigger	ON
Siren trigger	ON
Brakes trigger	ON
Aux1 trigger	ON
Aux2 trigger	<input type="checkbox"/> OFF
Speed trigger	ON
GPS/Speed display	ON
WLAN display	ON
Temp/Volt display	OFF

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

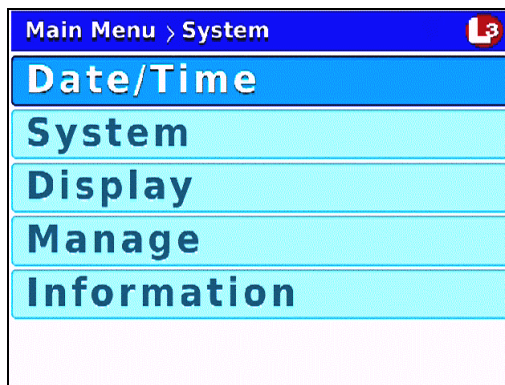
Turning the Speed Display On/Off

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 **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.

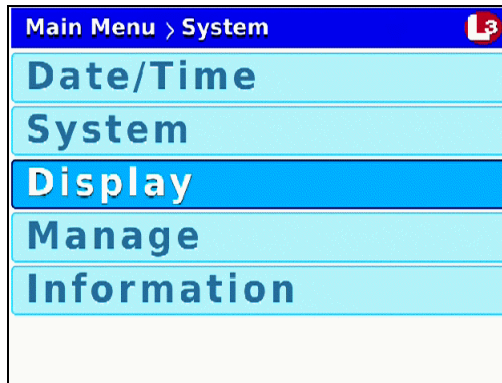


- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **▶** or **◻** button to advance to that option.
- 4 Press **R** to select the **System** option. The System menu displays.

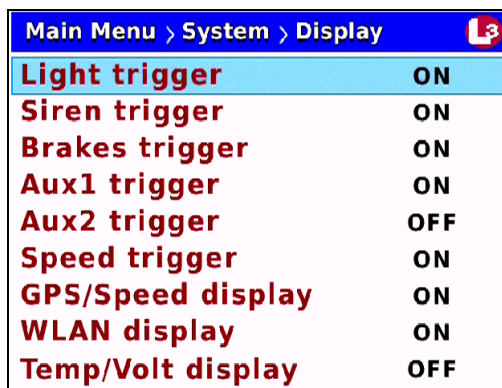


* This *Metric Units* field is located on the *System* screen (**Main Menu**→ **System**→ **System**)

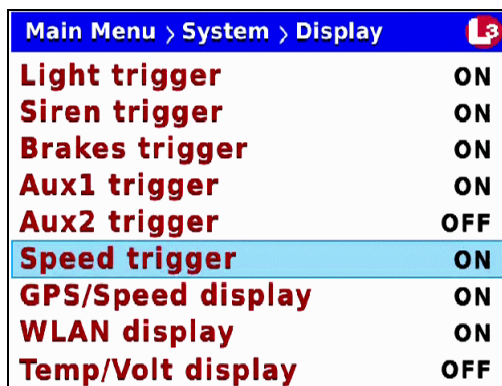
- 5 Press **▶** twice to highlight the **Display** option.




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





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






- 8 Press **R** 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"/> 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.

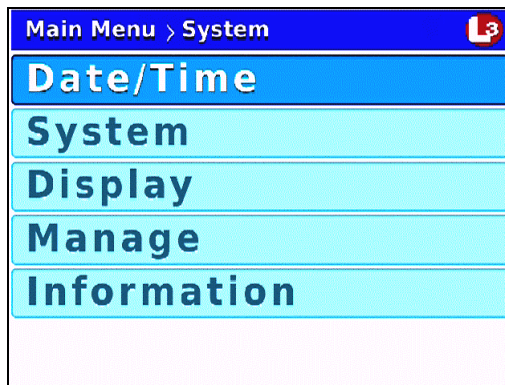
Turning the Metric Units Display On/Off

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.

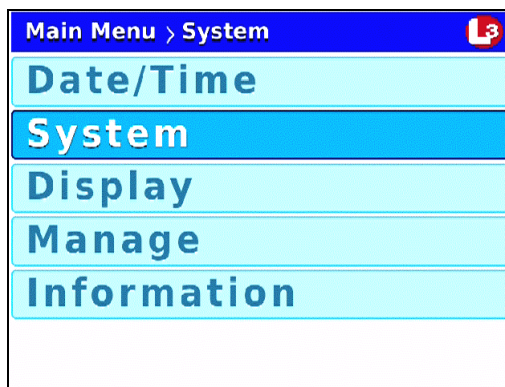
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.

Main Menu 
System
Network
Recording
User

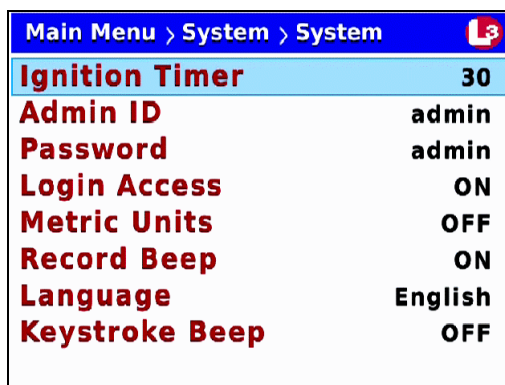
- 3 If **System** is highlighted, proceed to the next step.
 – OR –
 If **System** is *not* highlighted, press the  or  button to advance to that option.
- 4 Press  to select the **System** option. The System menu displays.



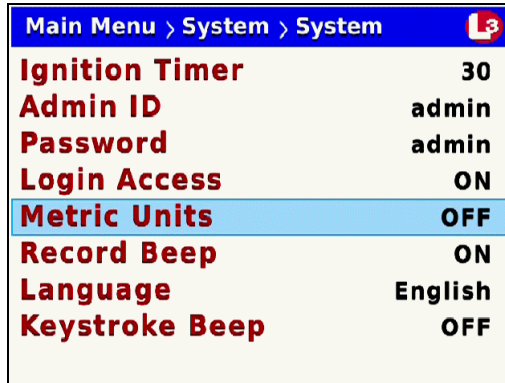
- 5 Press **▶** to advance to the **System** option.



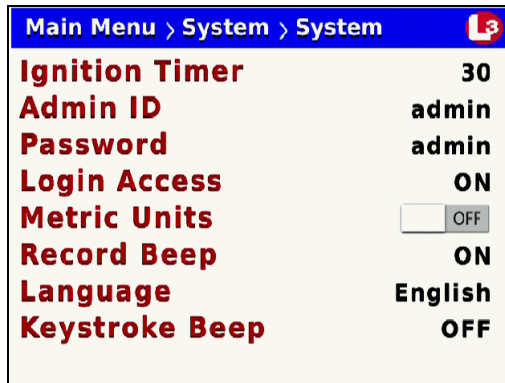
- 6 Press **R** to select the **System** option. The System screen displays.



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



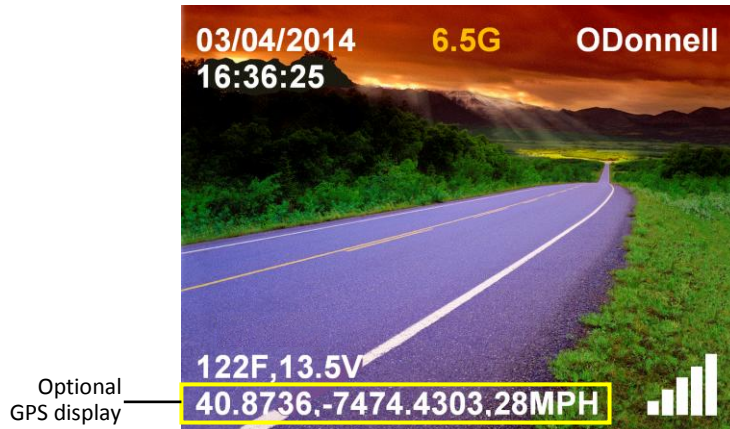
- 8 Press **R** to select the *Metric Units* field.



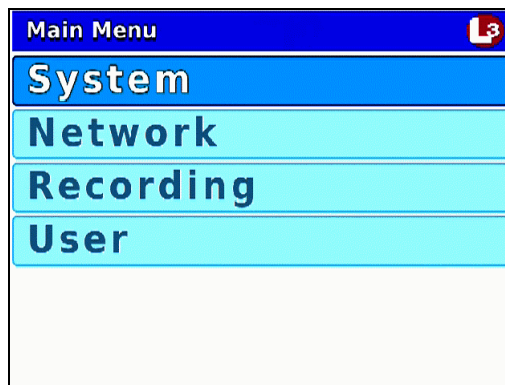
- 9 Press **▶** to toggle the field value to **ON** or **OFF**:
ON..... Speeds will display in KPH (kilometers-per-hour)
OFF Speeds will display in MPH (miles-per-hour)
- 10 Press **M** *four times* to save your changes and exit this option.

Turning the 'GPS' Display On/Off

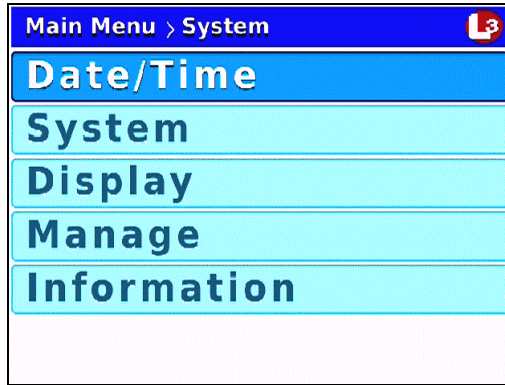
This section describes how to turn the on-screen GPS indicator On/Off, as shown below. By default, this indicator is *on*.



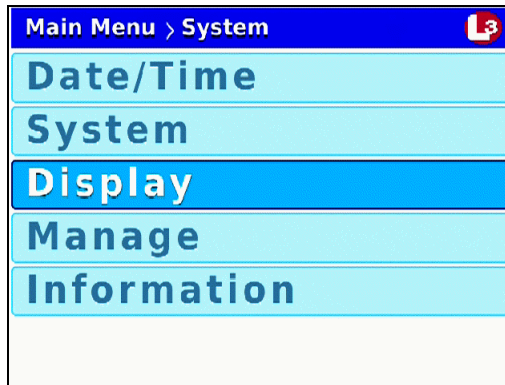
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



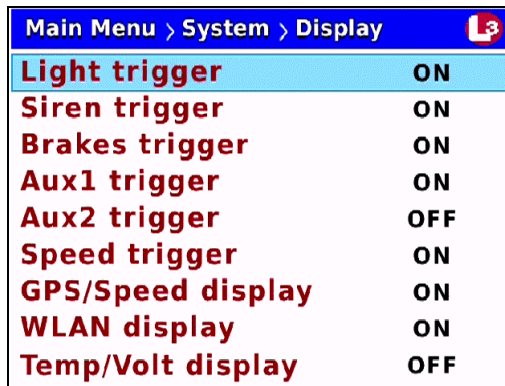
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **▶** or **◻** button to advance to that option.
- 4 Press **R** to select the **System** option. The System menu displays.




- 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 *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

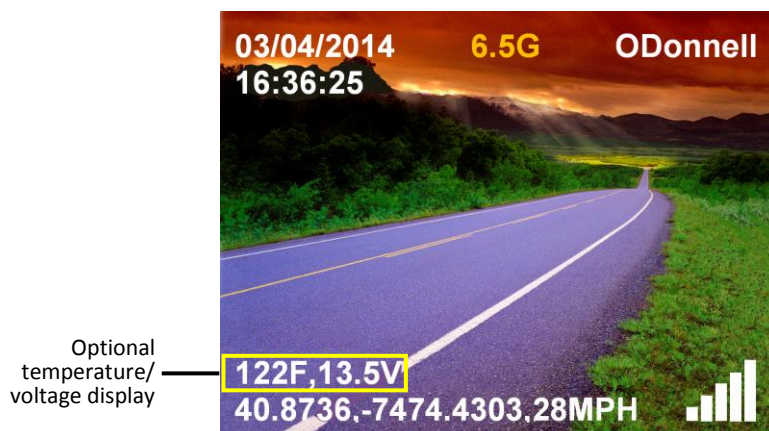
- 8 Press **R** to select the *GPS/Speed display* field.

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

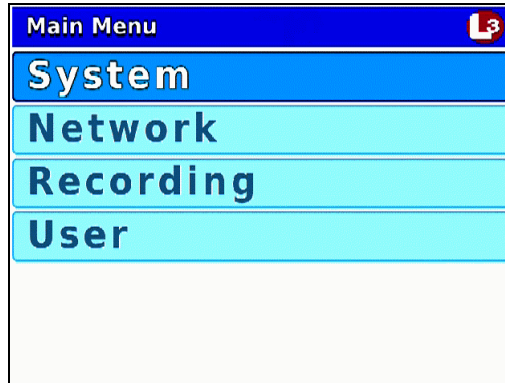
- 9 Press **▶** to toggle the field value to **ON** or **OFF**.
- 10 Press **M** *four times* to save your changes and exit this option.

Turning the Temp/Voltage Display On/Off

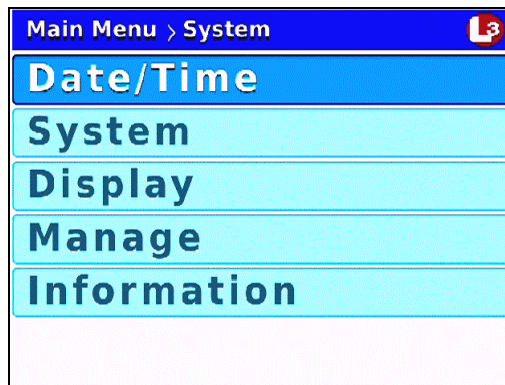
This section describes how to turn the on-screen temperature and voltage indicator *on* or *off*, as shown below. This indicator displays the DVR's internal voltage. By default, this indicator is *on*.



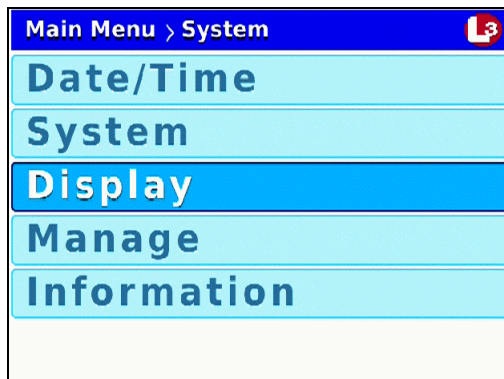
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



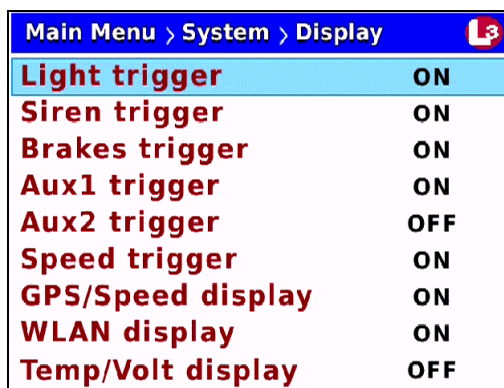
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **▶** or **◻** button to advance to that option.
- 4 Press **R** to select the **System** option. The System menu displays.



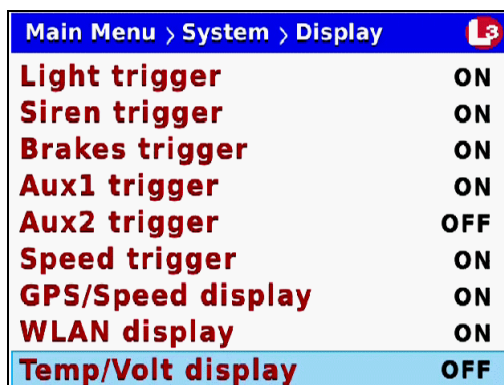
- 5 Press **▶** *twice* to highlight the **Display** option.



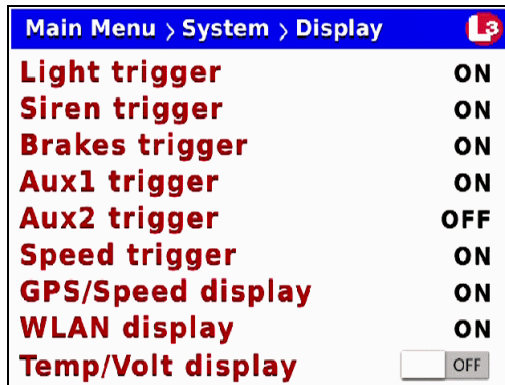
- 6 Press **R** to select the **Display** option. The Display screen displays.





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



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






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

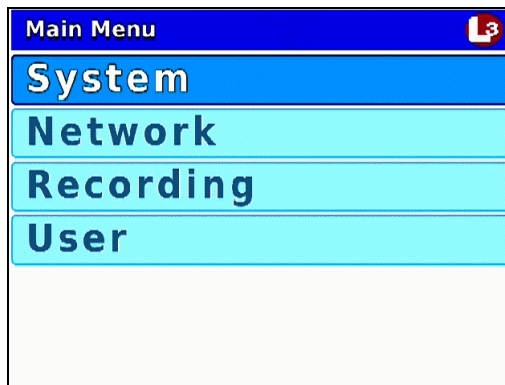
Turning the 'WLAN' Display On/Off

This section describes how to turn the wireless LAN connection indicator On/Off, as shown below. When the bars are green (pictured below), 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*.




- 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.

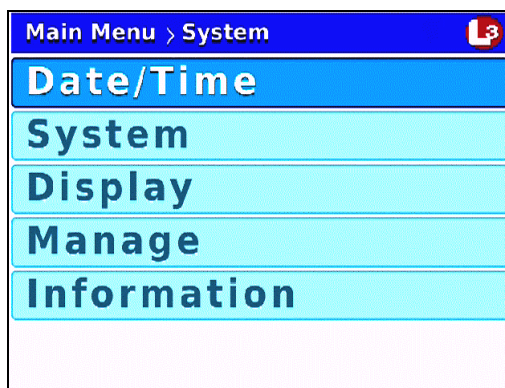


3 If **System** is highlighted, proceed to the next step.

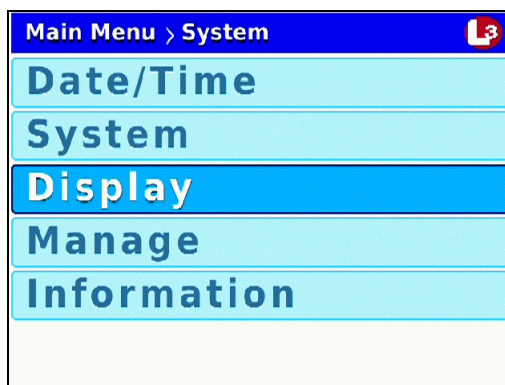
– OR –


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  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  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  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).

These procedures should be performed under the guidance of your agency's IT staff or an L-3 Mobile-Vision Support professional.

For specific instructions, see:

- Entering/Changing the Wireless IP, below
- Entering/Changing the Wireless IP Mask, page 134
- Entering/Changing the Wireless Gateway IP, page 137
- Turning the Wireless DHCP Option On/Off, page 140.

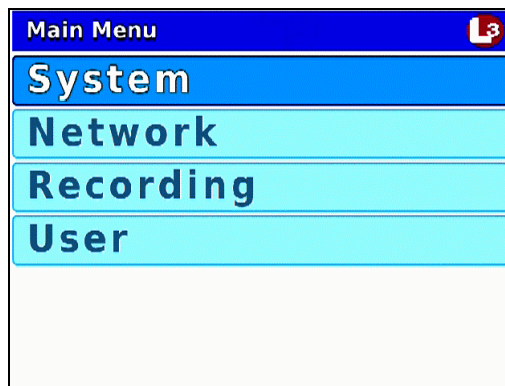
Entering/Changing the Wireless IP

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

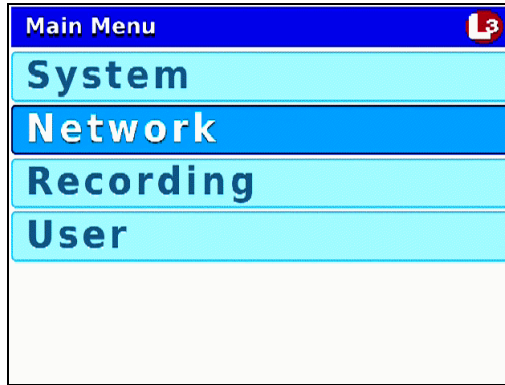


NOTE: If you want your DHCP server to automatically provide the wireless IP addresses to this DVR, do *not* enter this field. Instead, turn the Wireless DHCP option *on*, as described in "Turning the Wireless DHCP Option On/Off" on page 140.

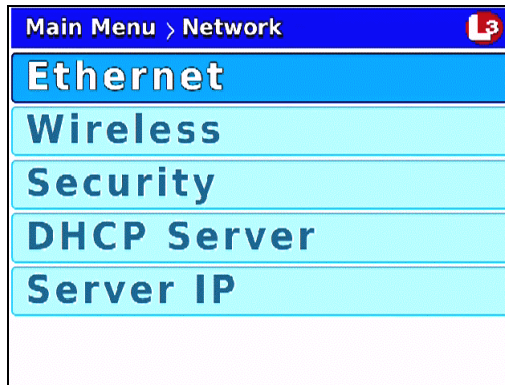
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



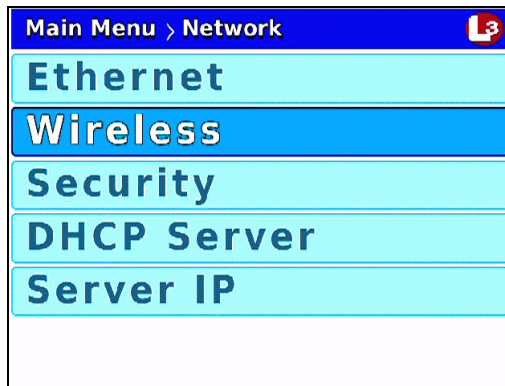
- 3 Press the **▶||** or **◻** button until **Network** is highlighted.



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



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



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

Main Menu > Network > Wireless	
IP Address	192.168. 10.106
NetMask	255.255.255. 0
Gateway	192.168. 10. 10
DHCP	OFF

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

Main Menu > Network > Wireless	
IP Address	192.168. 10.106
Netmask	255.255.255. 0
Gateway	192.168. 10. 10
DHCP	OFF

- 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 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**.

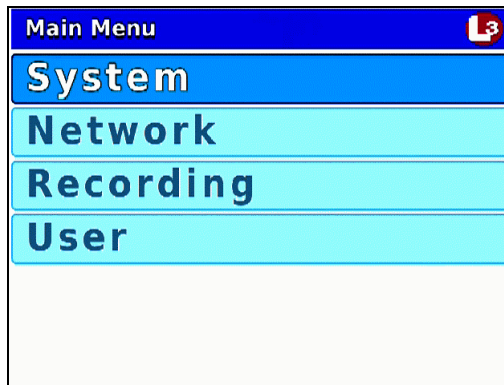


WARNING: If you are using both a *wireless* network and an *Ethernet* network, each Subnet must be **unique**. You cannot use the same Subnet for both networks!

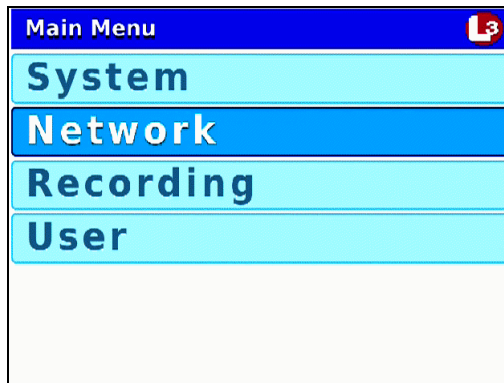


NOTE: If you want your DHCP server to automatically provide the wireless IP addresses to this DVR, do *not* enter this field. Instead, turn the Wireless DHCP option *on*, as described in "Turning the Wireless DHCP Option On/Off" on page 140.

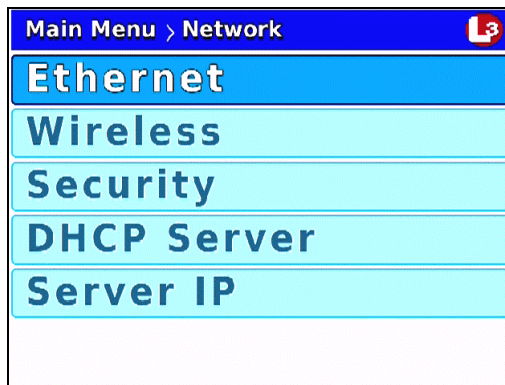
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



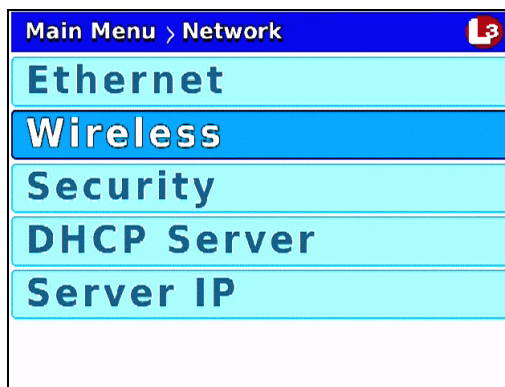
- 3 Press the **▶** or **◀** button until **Network** is highlighted.



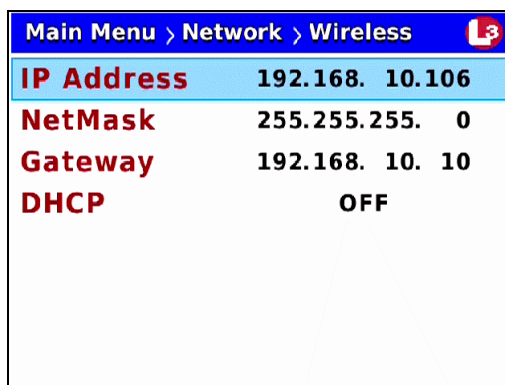
- 4 Press **R** to select the **Network** option. The Network menu displays.




- 5 Press **▶|** 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.

Main Menu > Network > Wireless 	
IP Address	192.168. 10.106
Netmask	255.255.255. 0
Gateway	192.168. 10. 10
DHCP	OFF

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

Main Menu > Network > Wireless 	
IP Address	192.168. 10.106
Netmask	255.255.255. 0
Gateway	192.168. 10. 10
DHCP	OFF

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

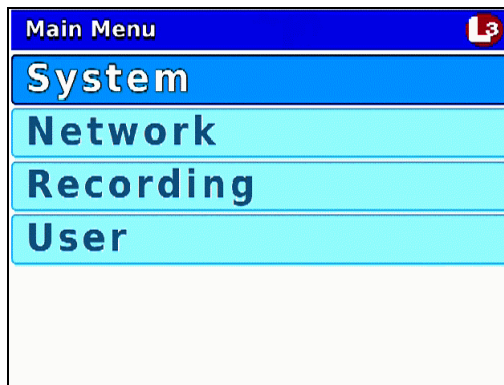
Entering/Changing the Wireless Gateway IP

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.

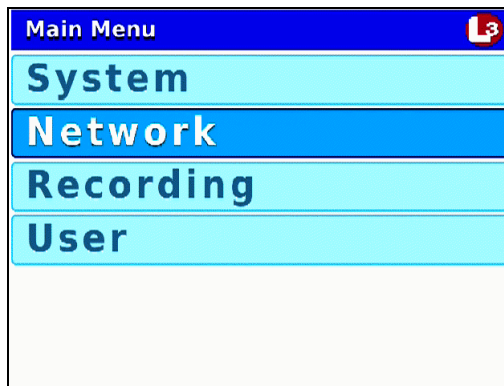


NOTE: If you want your DHCP server to automatically provide the wireless IP addresses to this DVR, do *not* enter this field. Instead, turn the Wireless DHCP option *on*, as described in “Turning the Wireless DHCP Option On/Off” on page 140.

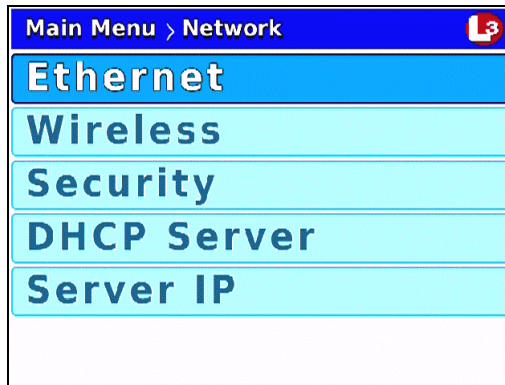
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



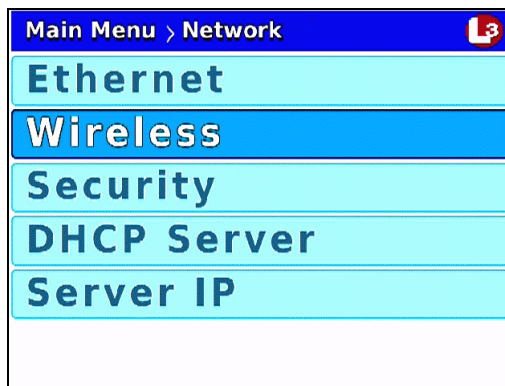
- 3 Press the **Left Arrow** or **Right Arrow** button until **Network** is highlighted.



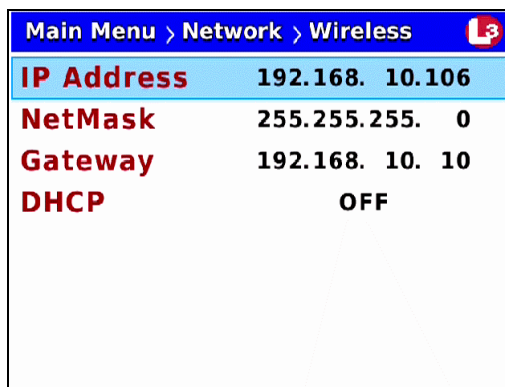
- 4 Press **R** to select the **Network** option. The Network menu displays.




- 5 Press **▶|** 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.

Main Menu > Network > Wireless 	
IP Address	192.168. 10.106
Netmask	255.255.255. 0
Gateway	192.168. 10. 10
DHCP	OFF

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

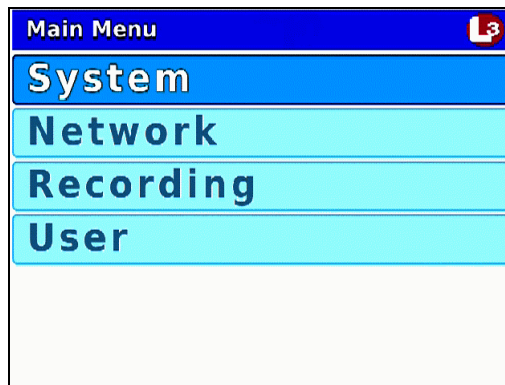
Main Menu > Network > Wireless 	
IP Address	192.168. 10.106
Netmask	255.255.255. 0
Gateway	192.168. 10. 10
DHCP	OFF

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

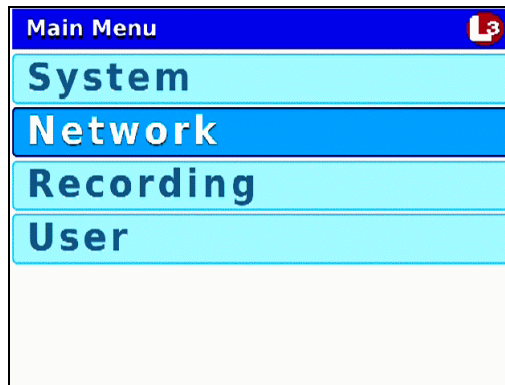
Turning the Wireless DHCP Option On/Off

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.

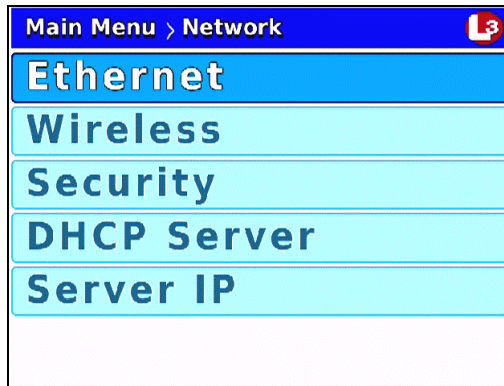
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



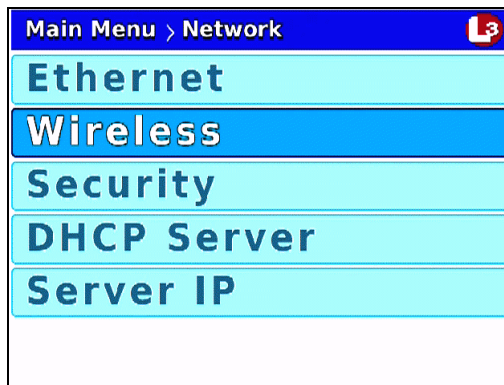
- 3 Press the **Left Arrow** or **Right Arrow** button until **Network** is highlighted.



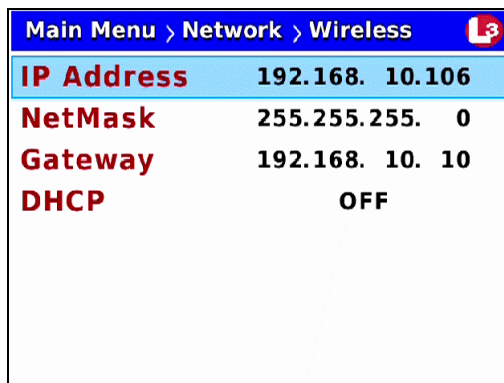
- 4 Press **R** to select the **Network** option. The Network menu displays.




- 5 Press **▶|** 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.

Main Menu > Network > Wireless 	
IP Address	192.168. 10.106
Netmask	255.255.255. 0
Gateway	192.168. 10. 10
DHCP	OFF

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

Main Menu > Network > Wireless 	
IP Address	192.168. 10.106
Netmask	255.255.255. 0
Gateway	192.168. 10. 10
DHCP	<input type="checkbox"/> 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.

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 131
- Entering/Changing the Wireless IP Mask, page 134
- Entering/Changing the Wireless Gateway IP, page 137.

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 L-3 Mobile-Vision Support technician.

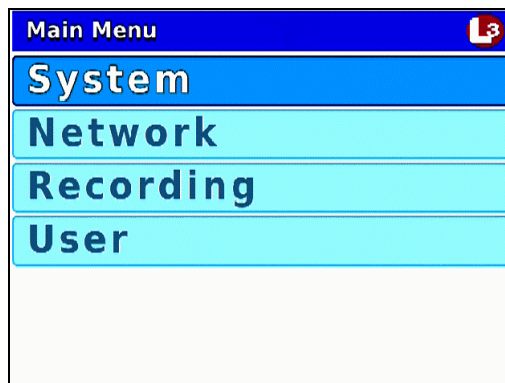
For specific instructions, see:

- Changing the Wireless Security Mode, below
- Changing the Wireless Authentication Type, page 145
- Changing the Wireless Encryption Type, page 148
- Entering the Wireless Encryption Key, page 151
- Entering Your Wireless SSID, page 154
- Entering a Wireless Password, page 157
- Turning the Wireless SSL Indicator On/Off, page 160.

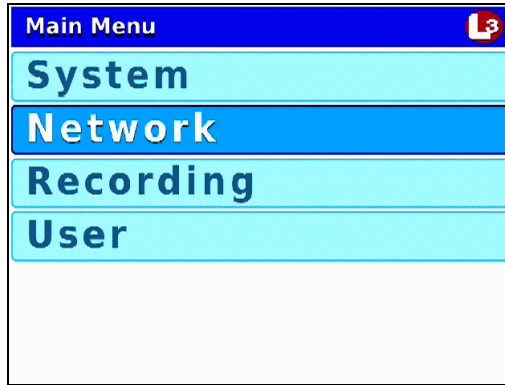
Changing the Wireless Security Mode

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

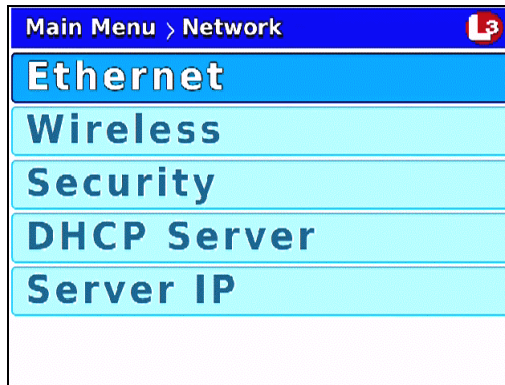
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



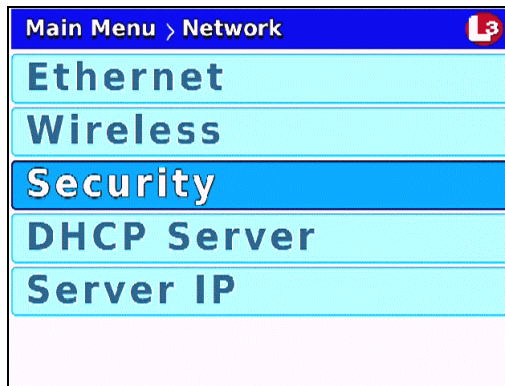
- 3 Press the **▶** or **◀** button until **Network** is highlighted.



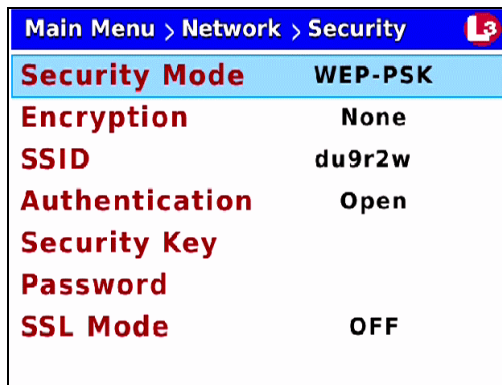
- 4 Press **R** to select the **Network** option. The Network menu displays.




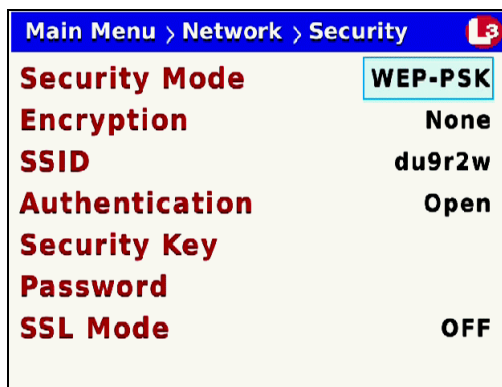
- 5 Press **▶** twice to advance to the **Security** option.






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



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



- 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 Flashback3 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 151 for instructions.

Changing the Wireless Authentication Type

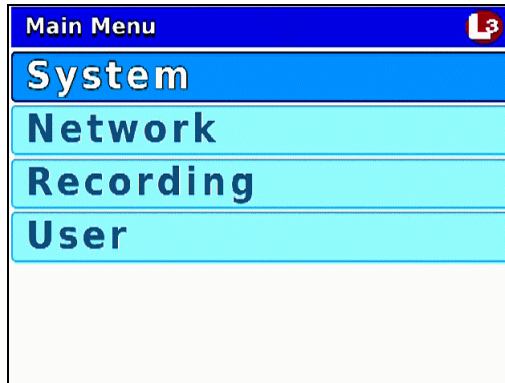
This section describes how to change the authentication type used by the wireless mode displayed in the *Security Mode* field on the Security screen. By default, this option is set to **None**.



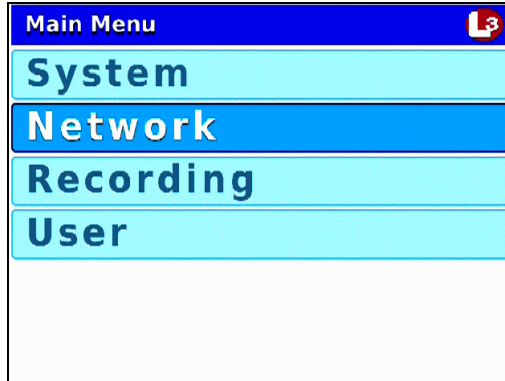
NOTE: If you selected wireless mode WPA-PSK or WPA2-PSK, this field is not required.

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

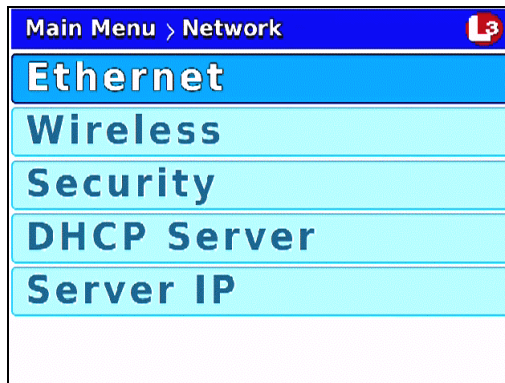
- 2 Press **M**. The Main Menu displays.



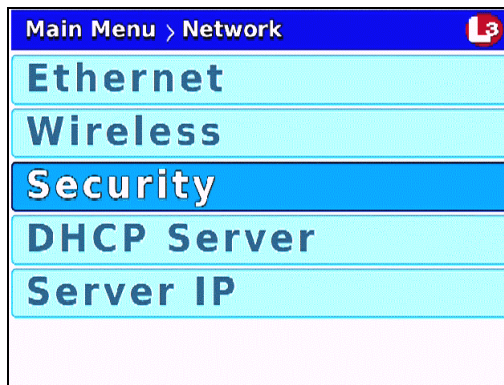
- 3 Press the **▶** or **◀** button until **Network** is highlighted.



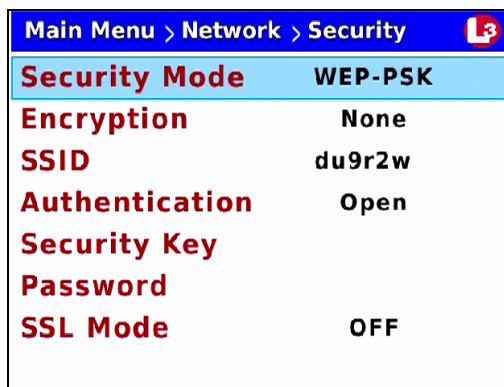
- 4 Press **R** to select the **Network** option. The Network menu displays.



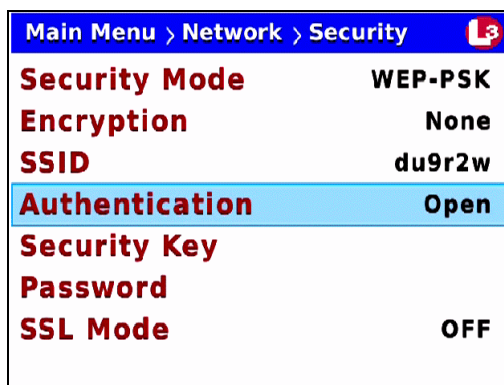
- 5 Press **▶** *twice* to advance to the **Security** option.



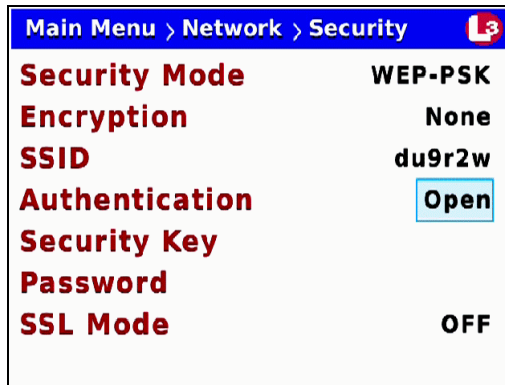
- 6 Press **R** to select the **Security** option. The Security screen displays.



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



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

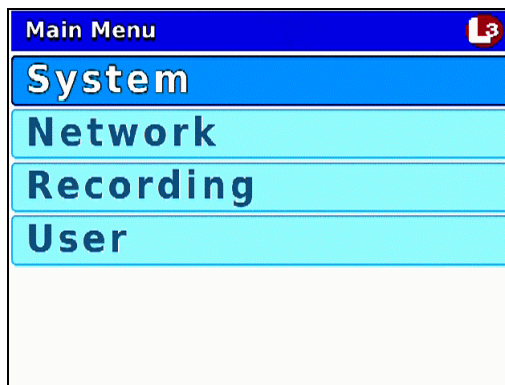


- 9 Using the ◀ or ▶ buttons, display the authentication type you wish to use.
- 10 Press **M** four times to save your changes and exit this option.

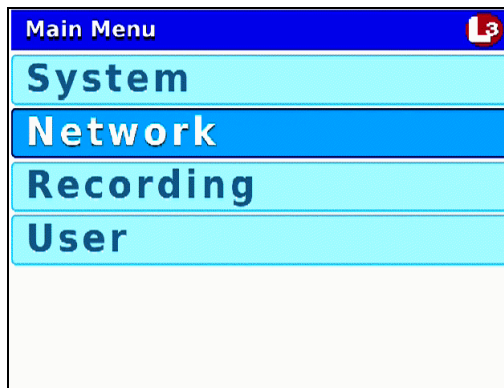
Changing the Wireless Encryption Type (WPA-PSK & WPA Enterprise only)

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**.

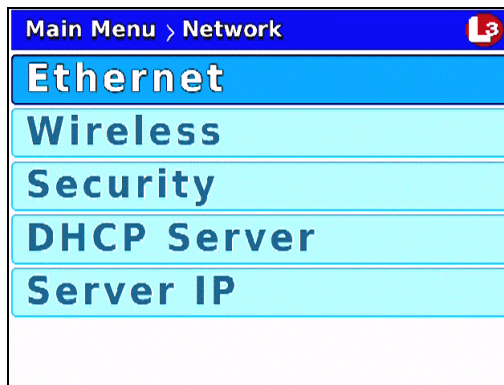
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



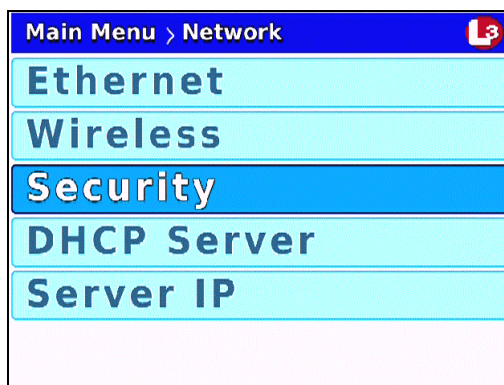
- 3 Press the ▶ or ◀ button until **Network** is highlighted.




- 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 **R** 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 **M** *four times* to save your changes and exit this option.

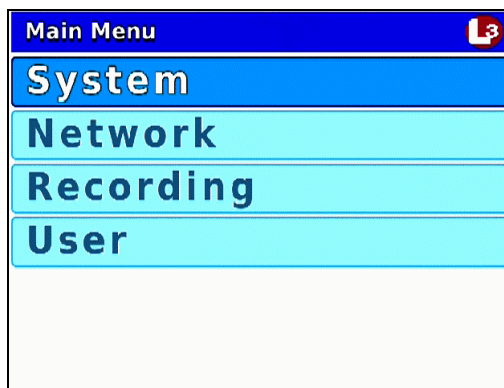
Entering the Wireless Encryption Key (WEP-PSK mode only)

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.

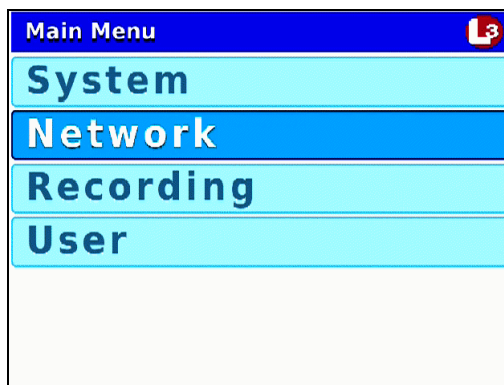
Your encryption key must be either 10 digits long (for 64 bits/ascii) or 26 digits long (for 128 bits/hex). It may include any combination of the following characters: a – f; 0 – 9.

System default is **64**.

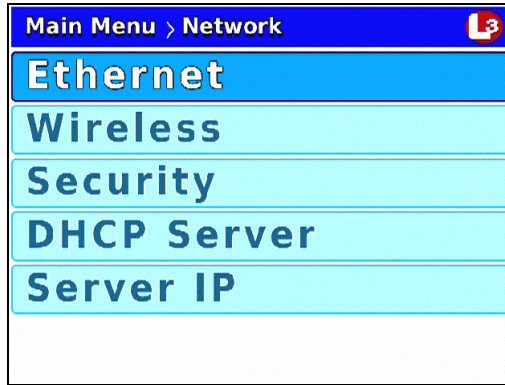
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.




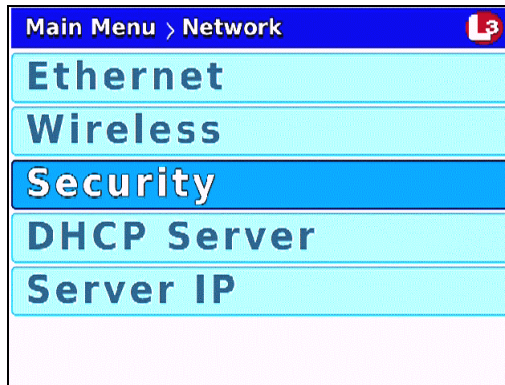
- 3 Press the **Left Arrow** or **Right Arrow** button until **Network** is highlighted.




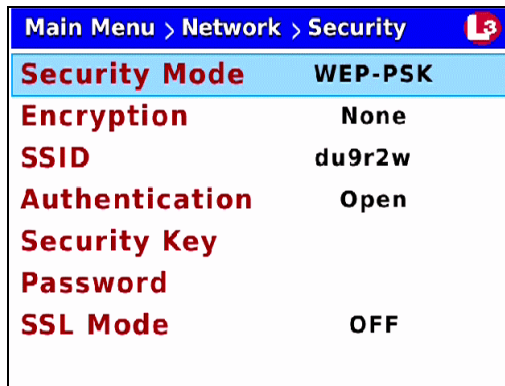
- 4 Press **R** to select the **Network** option. The Network menu displays.




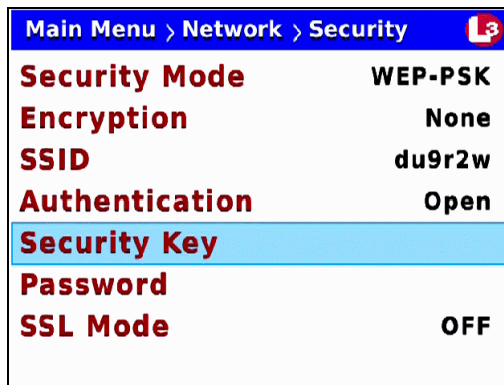
- 5 Press  twice to advance to the **Security** option.



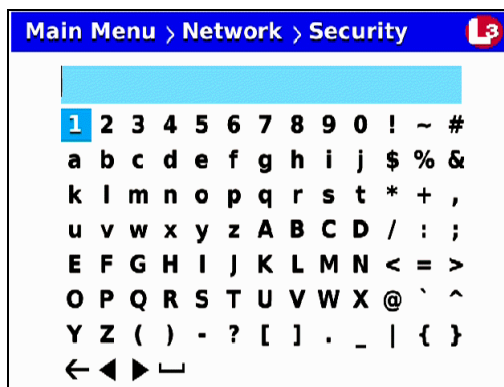
- 6 Press  to select the **Security** option. The Security screen displays.



- 7 Press  three times to advance to the *Security Key* field.



- 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 following characters: a – f; 0 – 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.
- Press **◀** to highlight the **←** icon.
- Press **R** several times until the existing key is deleted.
- Using the following navigation buttons, highlight the first letter of your key.
 - ◀** Up
 - ▶** Down
 - ▶** Right
 - ◀** Left.
- 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.

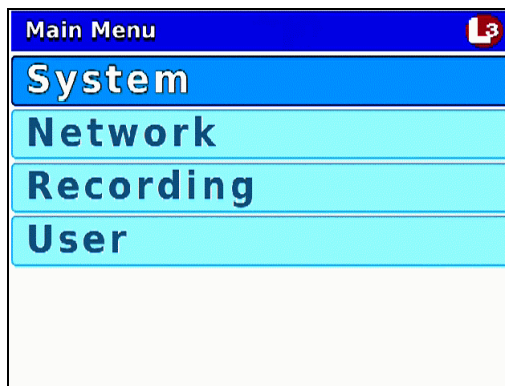
- 15 Once the correct key displays, press  *four times* to exit this option.



Entering Your Wireless SSID

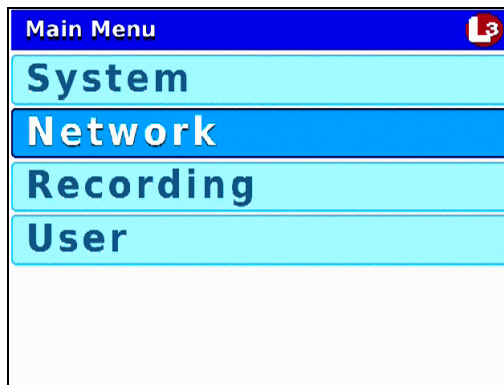
This section describes how to enter the name of your wireless network, also referred to as a *wireless service set identifier* (SSID).

This field is required for all wireless modes.

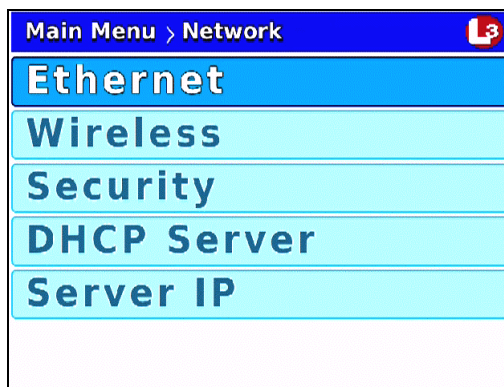
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



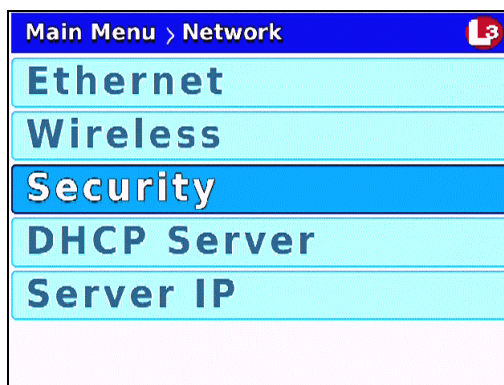
- 3 Press the  or  button until **Network** is highlighted.



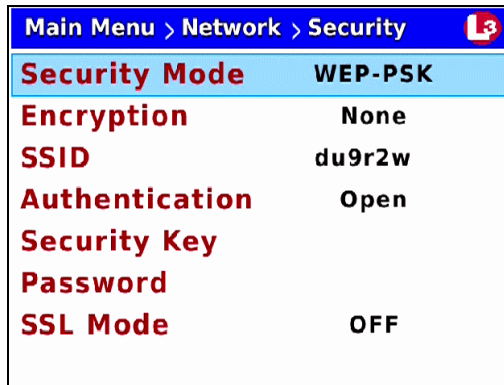
- 4 Press **R** to select the **Network** option. The Network menu displays.




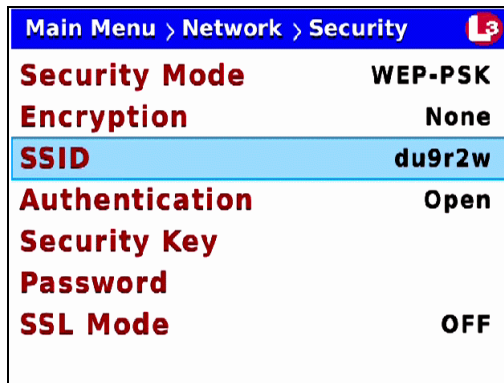
- 5 Press **▶||** *twice* to advance to the **Security** option.



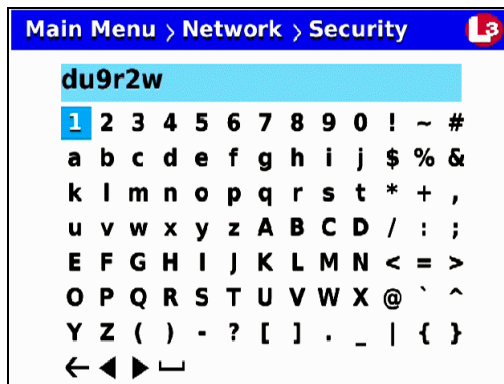
- 6 Press **R** to select the **Security** option. The Security screen displays.



- 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.

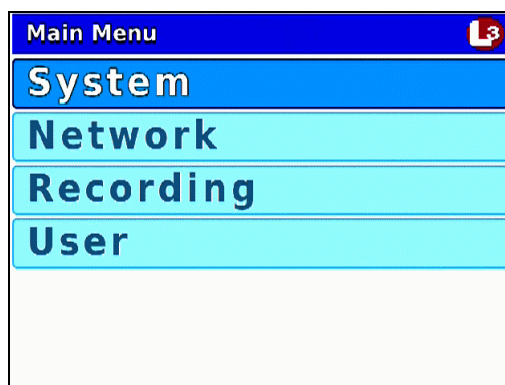
- 10 Press  to highlight the  icon.
- 11 Press  several times until the existing network name is deleted.
- 12 Using the following navigation buttons, highlight the first letter of your wireless network.
 -  Up
 -  Down
 -  Right
 -  Left
- 13 Press . The selected character displays at the top of the 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.

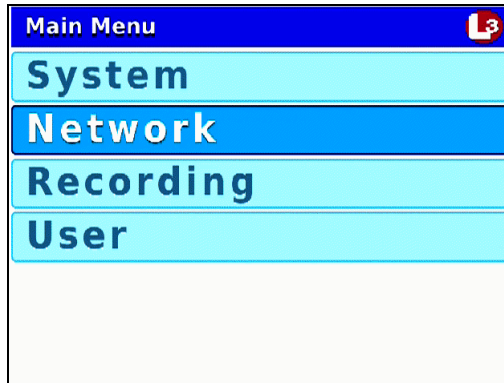
Entering a Wireless Password (WPA-PSK & WPA2-PSK mode only)


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.

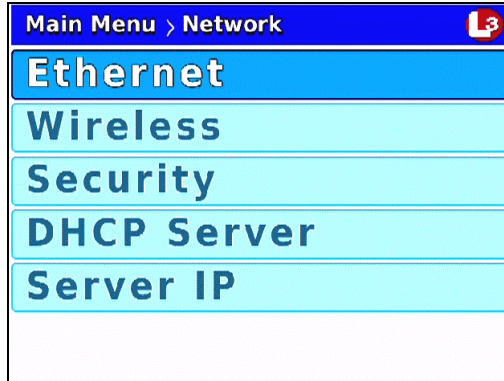
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.




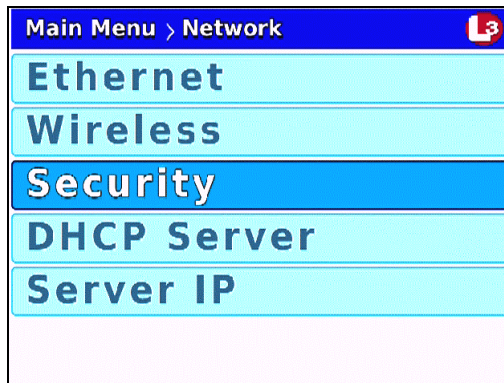
- 3 Press the  or  button until **Network** is highlighted.




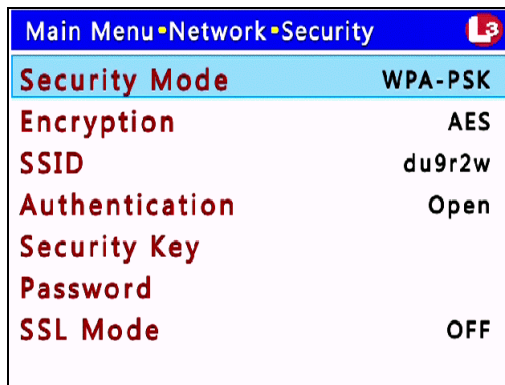
- 4 Press  to select the **Network** option. The Network menu displays.




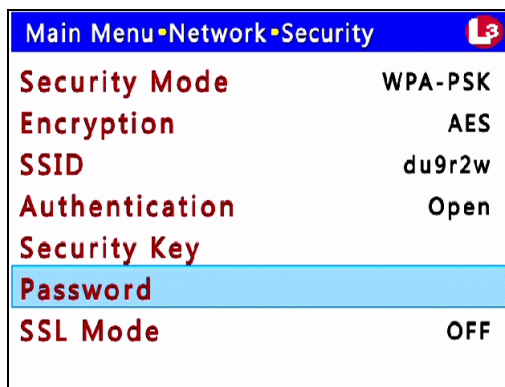
- 5 Press  *twice* to advance to the **Security** option.




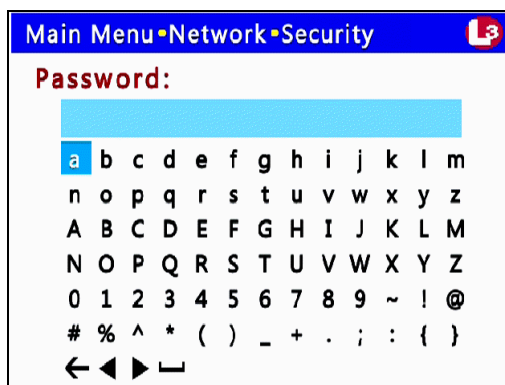
- 6 Press  to select the **Security** option. The Security screen displays.












- 7 Press  twice to advance to the *Password* field.



- 8 Select  to select the *Password* field. A data entry keyboard displays.






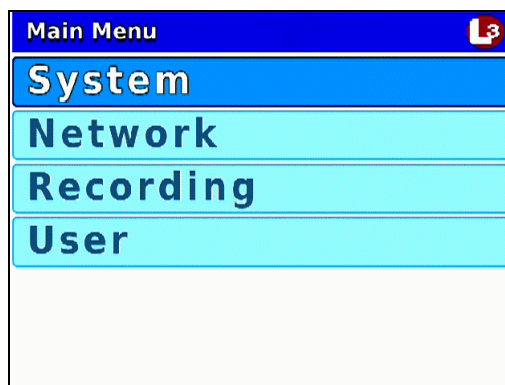
You will be using this keyboard to spell out your WPA-PSK/WPA2-PSK wireless password.



- 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.

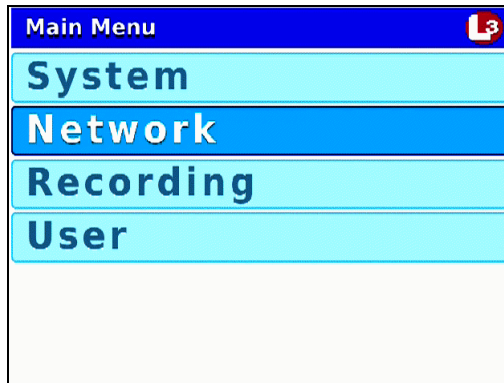
Turning the Wireless SSL Indicator On/Off


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.

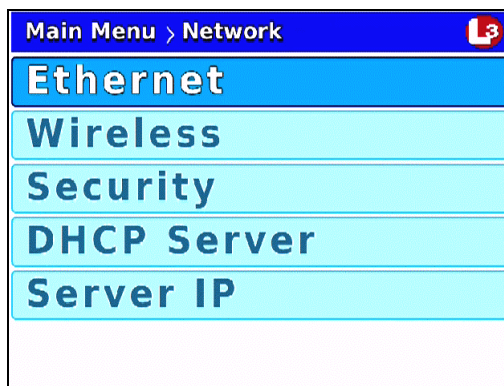
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.




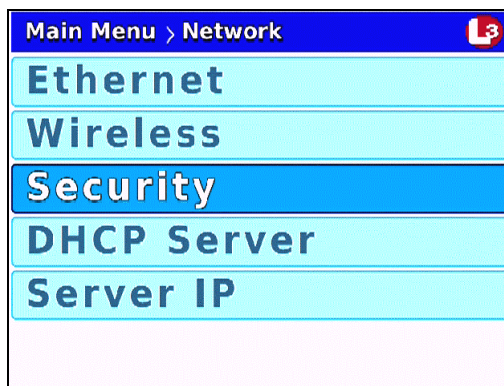
- 3 Press the  or  button until **Network** is highlighted.




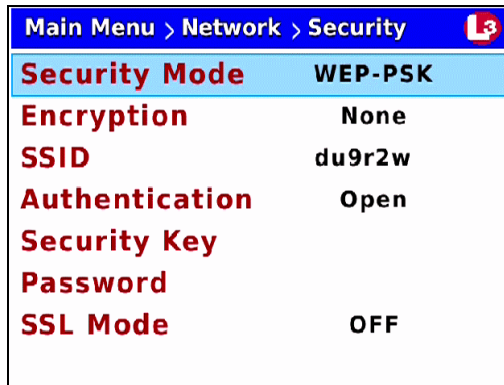
- 4 Press  to select the **Network** option. The Network menu displays.



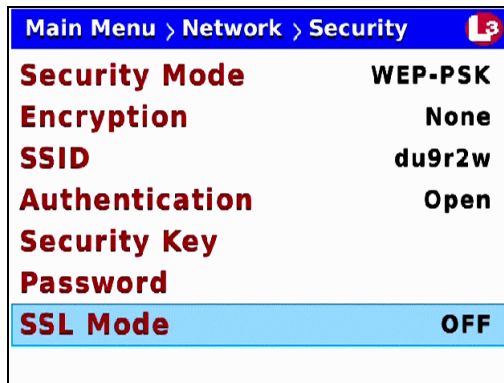
- 5 Press  *twice* to advance to the **Security** option.



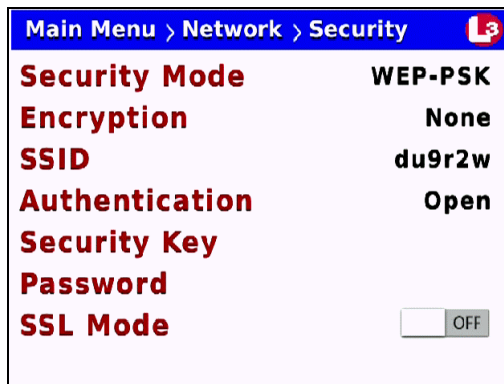
- 6 Press  to select the **Security** option. The Security screen displays.



- 7 Press **⏏** to advance to the *SSL Mode* field.



- 8 Press **R** to select the *SSL Mode* 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.
- 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

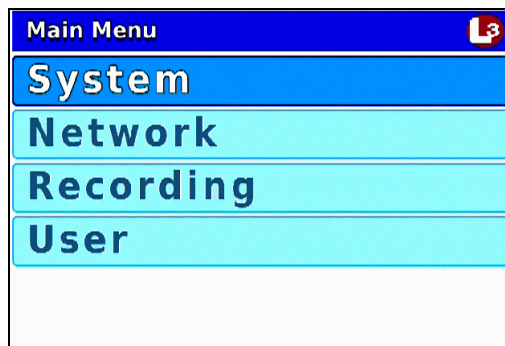
This section describes how to perform the following tasks:

- Program the ignition timer, below
- Enter the DES Admin ID and password, page 165
- Enable/disable the USB Login Feature, page 169.

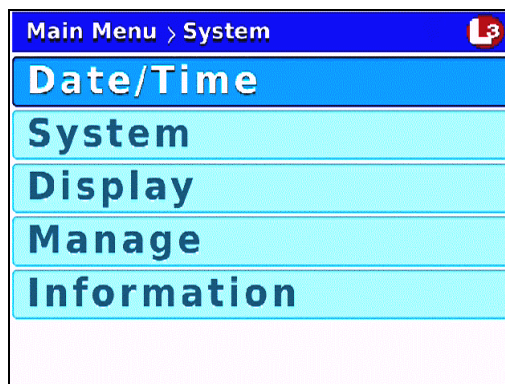
Programming the Ignition Timer

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.

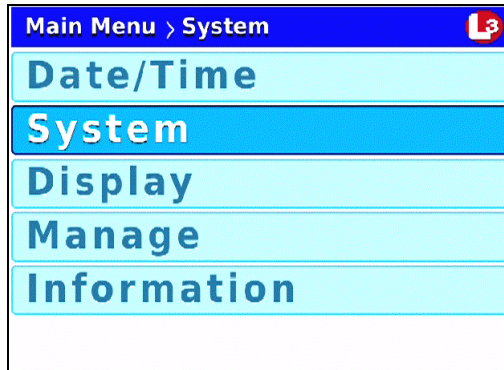
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



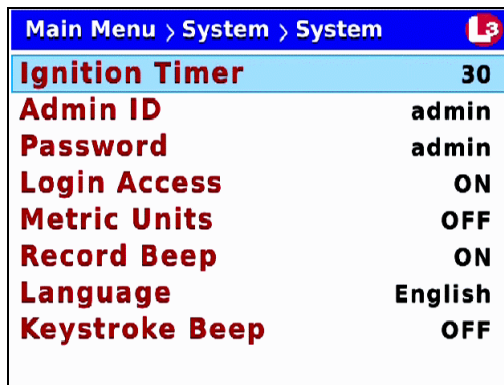
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **▶** or **◀** button to advance to that option.
- 4 Press **R** to select the **System** option. The System menu displays.



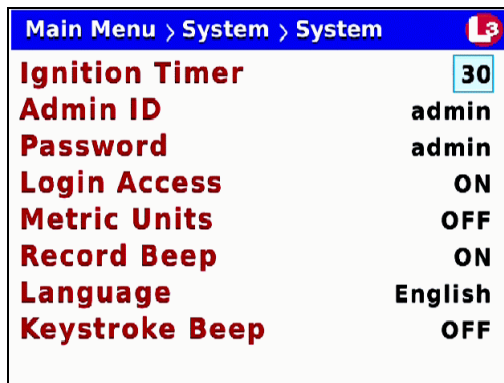
- 5 Press **▶||** to advance to the **System** option.



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



- 7 Press **R** to select the *Ignition Timer* field.

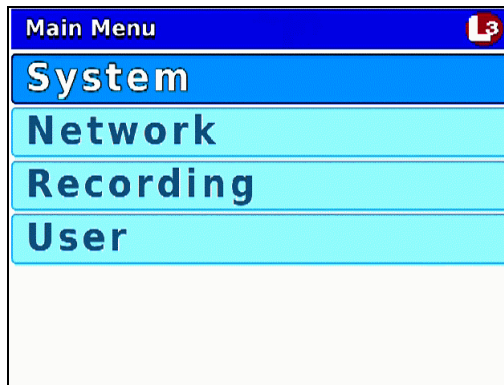


- 8 Using the **◀** or **▶** buttons, display the number of minutes you wish to select.
- 9 Press **M** *four times* to save your changes and exit this option.

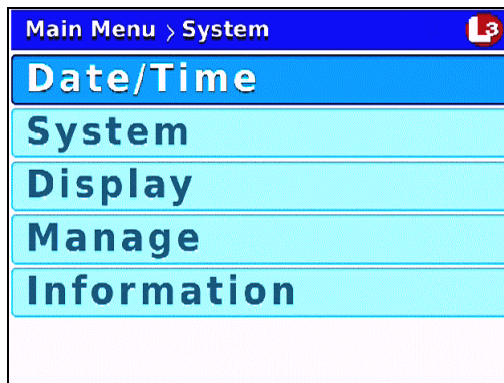
Changing the DES Admin ID and Password

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.

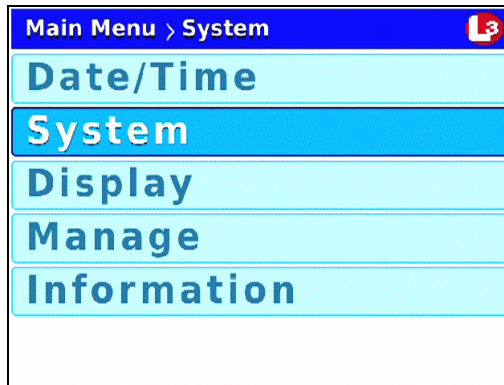
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



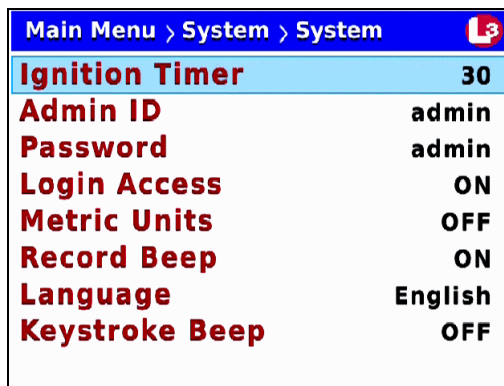
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **▶** or **◀** button to advance to that option.
- 4 Press **R** to select the **System** option. The System menu displays.



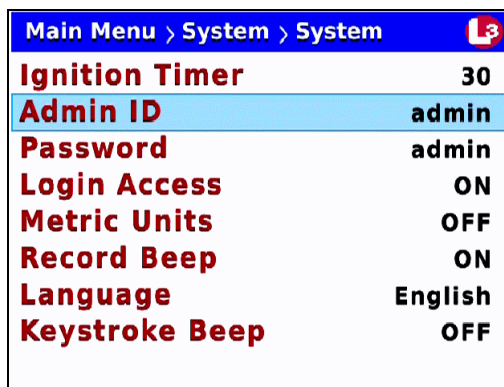
- 5 Press **▶** to advance to the **System** option.



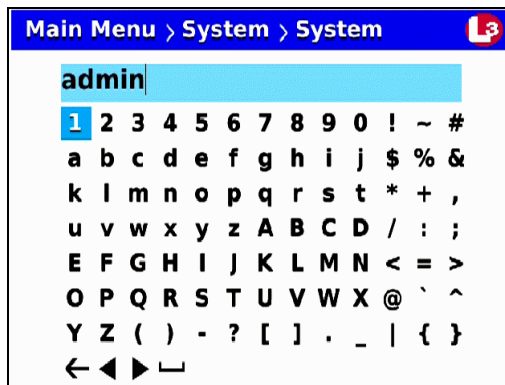
- 6 Press **R** to select the **System** option. The System screen displays.

















- 7 Press **▶|** to advance to the *Admin ID* field.

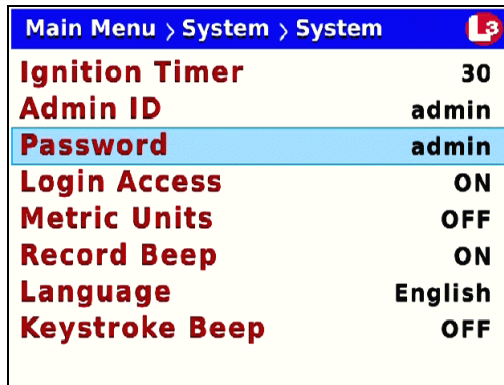


- 8 Press **R** to select the *Admin ID* field. A data entry keyboard displays.

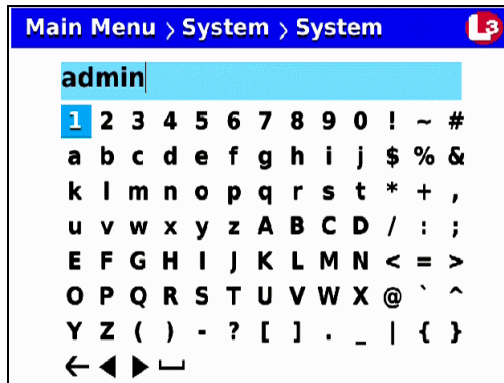


You will be using this keyboard to spell out your DES Administrator's User ID. Begin by deleting the old Admin ID, as described in steps 9 and 10.

- 9 Press  to highlight the  icon.
 - 10 Press  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 . 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 **R** 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 **O** to highlight the **←** icon.
- 18 Press **R** 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 **R**. 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.

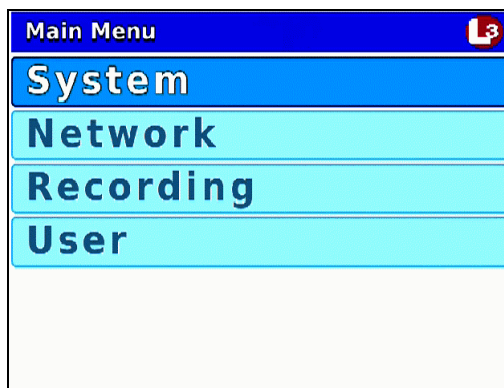
- 22 Once the correct password displays, press **M** *four times* to save your changes and exit this option.

Enabling/Disabling the USB Login Feature

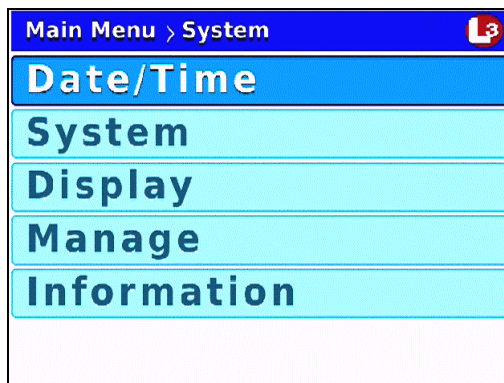
When the USB login feature is *enabled*, officers can use a USB login key to login to the DVR. When the USB login feature is *disabled*, officers *cannot* use a USB login key to login to the DVR. By default, the USB login feature is *enabled*.

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 17.

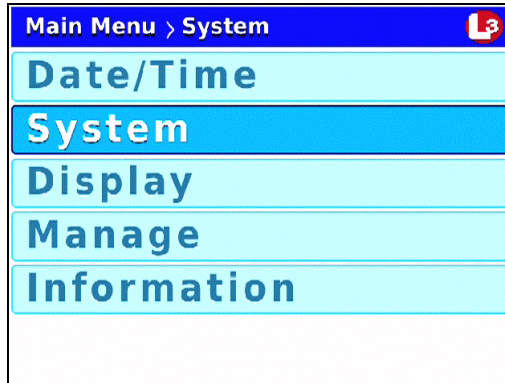
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



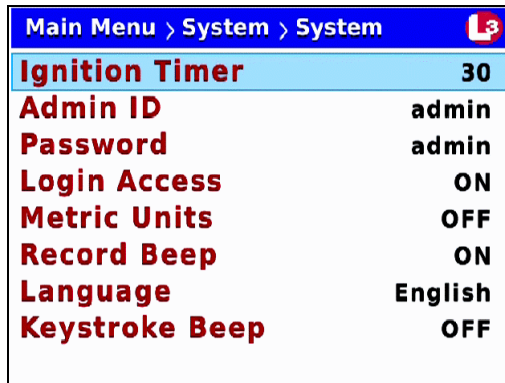
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **▶** or **◀** button to advance to that option.
- 4 Press **R** to select the **System** option. The System menu displays.



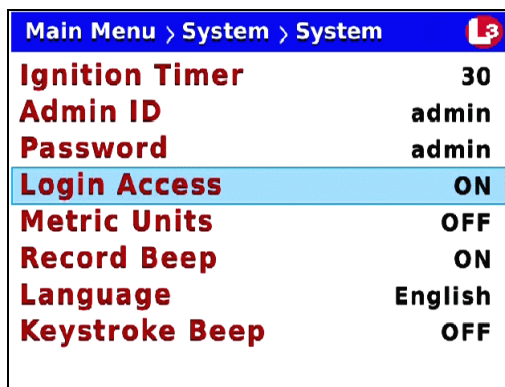
- 5 Press **▶** to advance to the **System** option.



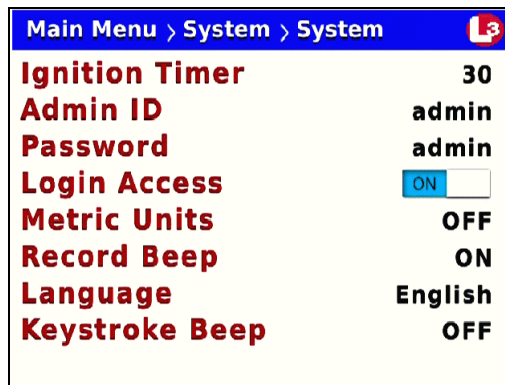
- 6 Press **R** to select the **System** option. The System screen displays.



- 7 Press **▶||** *three times* to advance to the *Login Access* field.



- 8 Press **R** to select the *Login Access* field.

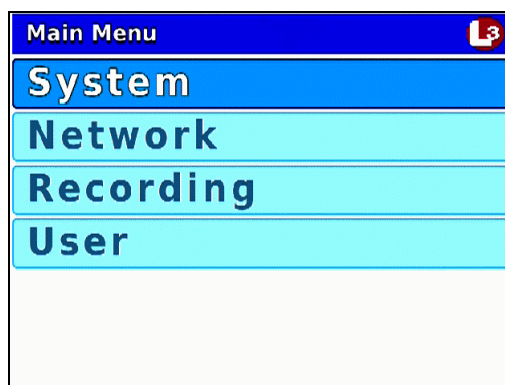


- 9 Press **▶** to toggle the field value to **ON** (enabled) or **OFF** (disabled).
- 10 Press **M** *four times* to save your changes and exit this option.

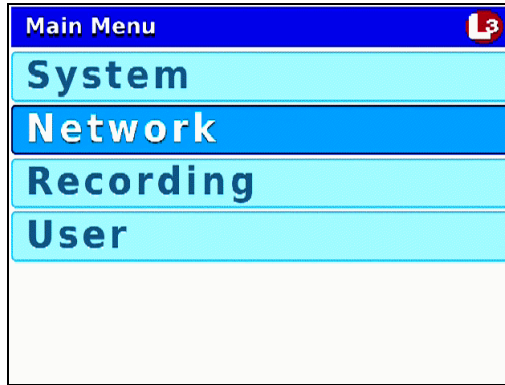
Entering the Server Address

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 L-3 Mobile-Vision Technical Support Engineer.

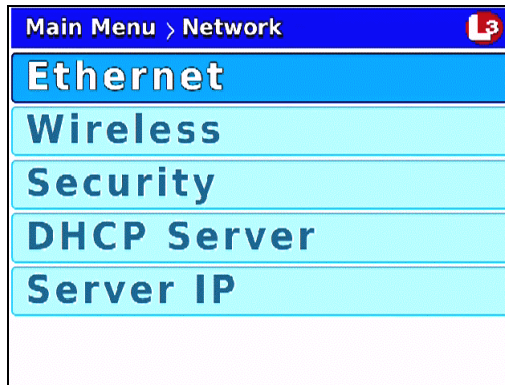
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



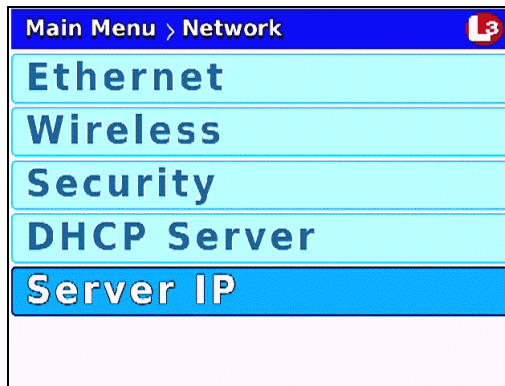
- 3 Press the **▶** or **◀** button until **Network** is highlighted.



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



- 5 Press **0** to advance to the **Server IP** option.



- 6 Press **R** to select the **Server IP** option. A data entry keyboard displays.

Main Menu • Network • Server IP							
Server Addresses							
.	.	.	0	0.	0.	0.	0
0.	0.	0.	0	0.	0.	0.	0
0.	0.	0.	0	0.	0.	0.	0
0.	0.	0.	0	0.	0.	0.	0
0.	0.	0.	0	0.	0.	0.	0
0.	0.	0.	0	0.	0.	0.	0
0.	0.	0.	0	0.	0.	0.	0
0.	0.	0.	0	0.	0.	00	

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

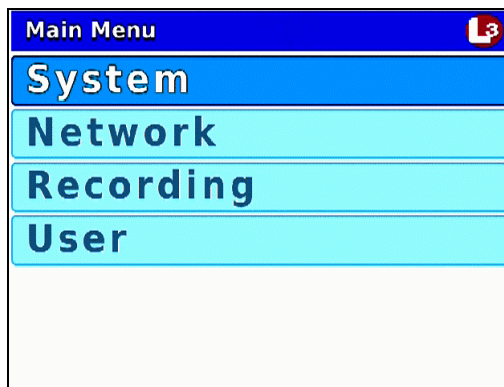
Entering the Officer Name

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:

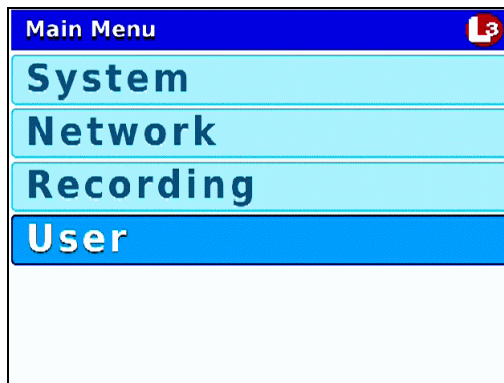
- Scenario 1.** You are the *only person* who drives the vehicle in which the DVR is installed. In this case, you can enter your name *once* to ensure that all future videos recorded on the DVR will be linked to you.
- Scenario 2.** You need to login to a DVR but you have either lost, misplaced, or forgotten your USB login key.

By default, the *Officer Name* field is set to **No Name**.

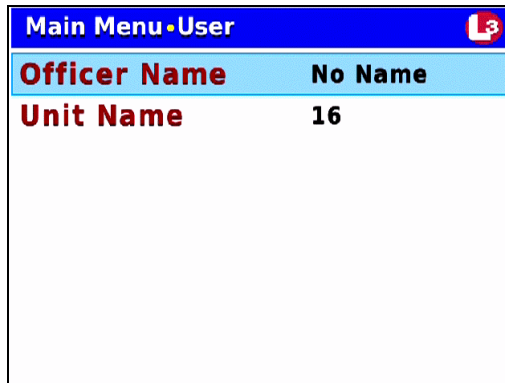
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



- 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 **R**. 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

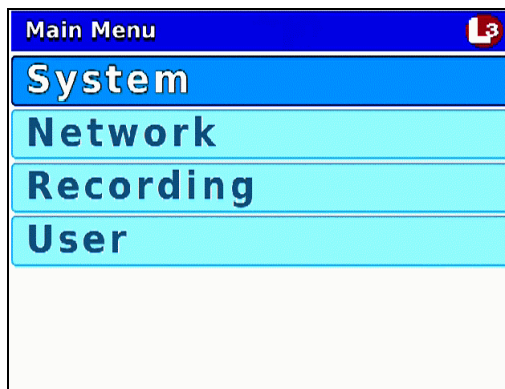
To insert a space, use the  icon.

- 11 Once the correct name displays, press  *three times* to save your changes and exit this option.

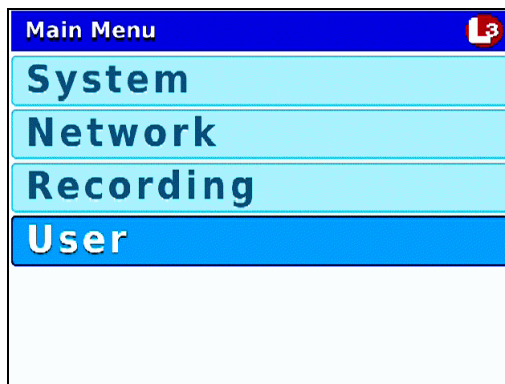
Entering the DVR Unit Name

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.”

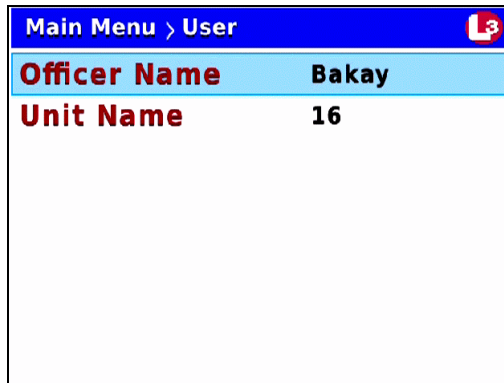
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



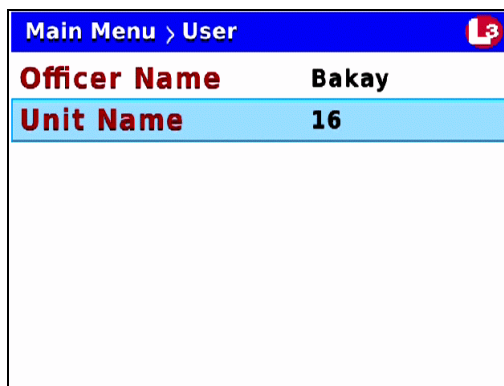
- 3 Press the  or  button until **User** is highlighted.



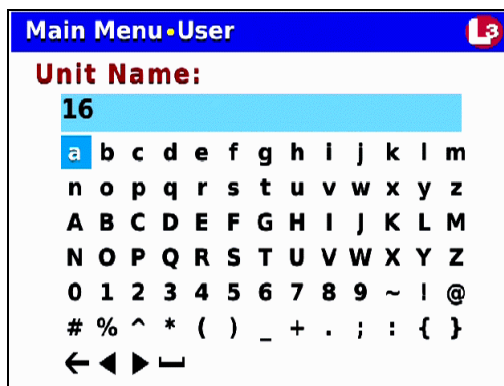
- 4 Press **R** to select the **User** option. The User screen displays.



- 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 **←** icon.
- 8 Press **R** 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 Flashback3 firmware. If you have an Extended Maintenance Agreement (EMA) with L-3 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 180.

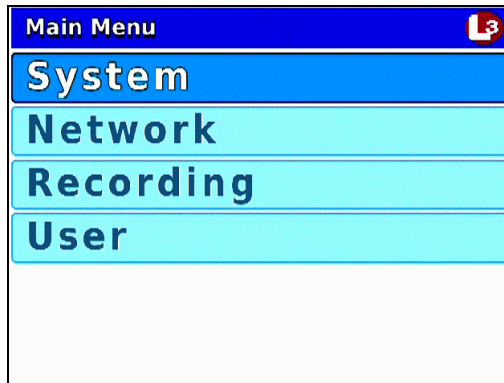
For more information, see:

- Viewing the Current Firmware Version, next page
- Transferring a Firmware File from a USB Drive to a DVR, page 180.

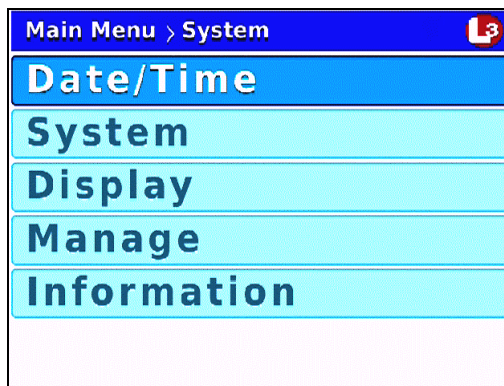
Viewing the Current Firmware Version

This section describes how to view the firmware version that is currently installed on your DVR.

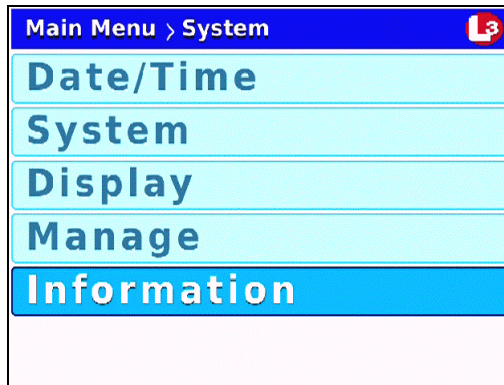
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



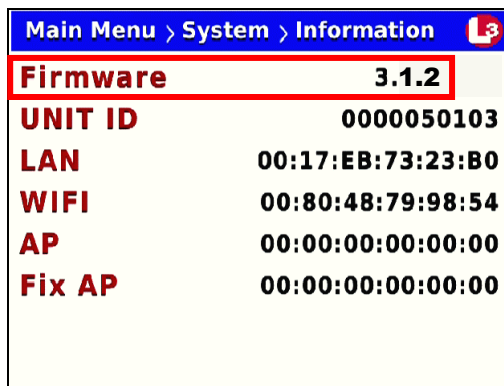
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **▶** or **◀** button to advance to that option.
- 4 Press **R** to select the **System** option. The System menu displays.



- 5 Press **▶** to advance to the **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.

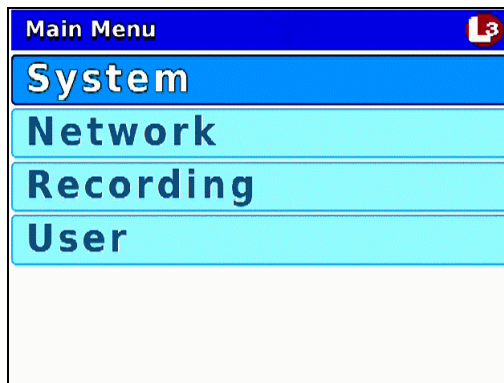
Transferring a Firmware File from a USB Drive to a DVR

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*.

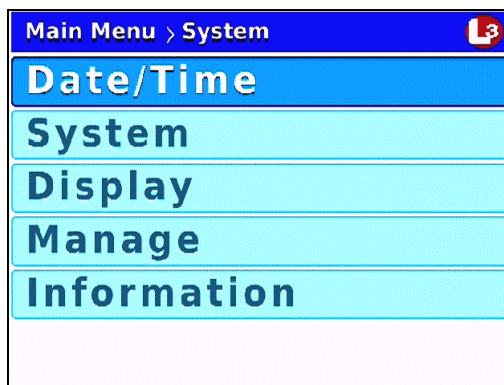
- 1 Verify that all videos have been removed from the Flashback3 DVR unit. If there are any videos remaining on the DVR’s SD card, remove the card from the DVR and perform a manual upload. For more information on manual uploads, see “Manually Uploading Videos from an SD card Reader or ESU” in chapter 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.



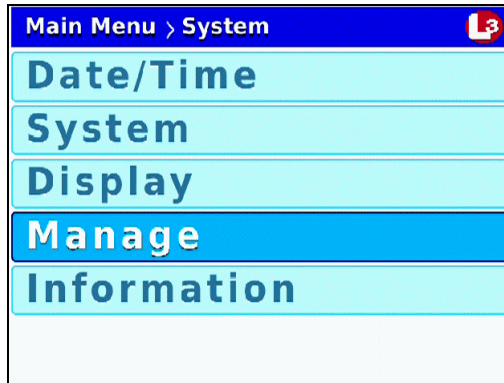
- 3 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 4 Press **M**. The Main Menu displays.



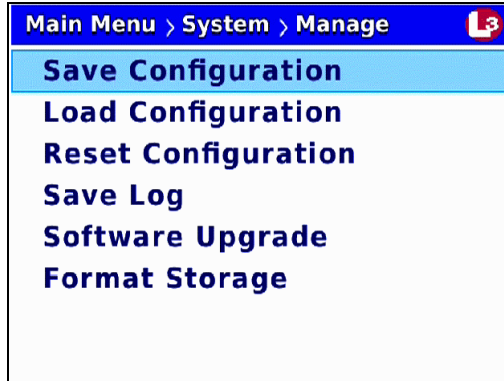
- 5 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **▶** or **◻** button to advance to that option.
- 6 Press **R** to select the **System** option. The System menu displays.



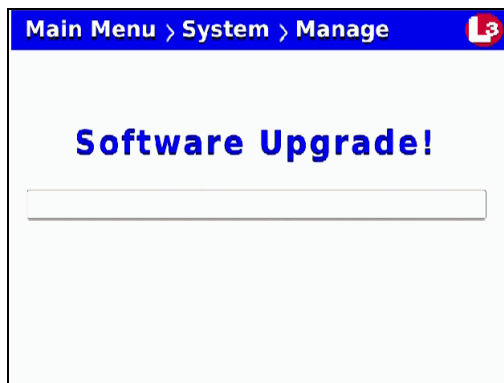
- 7 Press **⏏** *twice* to advance to the **Manage** option.



- 8 Press **R** to select the **Manage** option. The Manage screen displays.

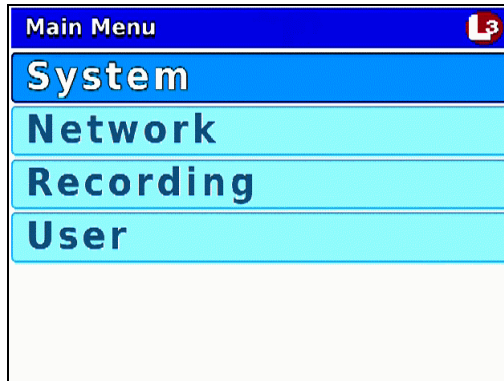


- 9 Press **⏏** *twice* to advance to the **Software Upgrade** option.
- 10 Press **R** to select the **Software Upgrade** option. The system begins updating your DVR. This process may take a minute or two. You will see the following status message on your screen during the upload.

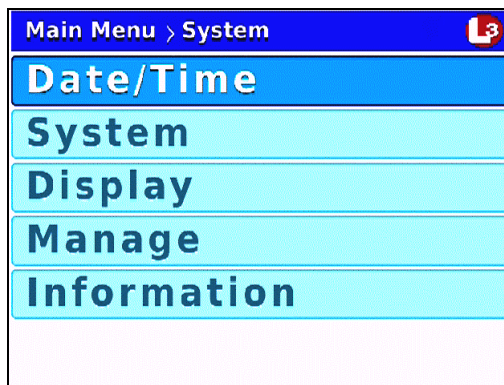


Once the process is complete, a confirmation message will display, then the DVR will automatically reboot.

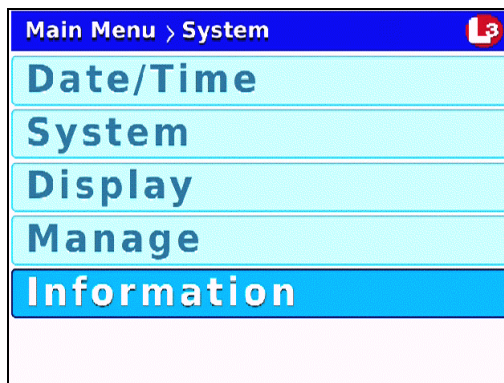
- 11 Once the reboot is complete and the USB drive has stopped blinking, you may remove the USB drive from the DVR.
- 12 Press the **AUTO** button to turn Auto mode *off*.
- 13 Press **M**. The Main Menu displays.




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



- 15 Press **↓** to advance to the **Information** option.



- 16 Press **R** to select the **Information** option. The Information screen displays.

Main Menu > System > Information 	
Firmware	3.1.2
UNIT ID	0000050103
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

- 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, below
- Copying the `config.xml` File from a USB Drive to Your DVR, page 187.

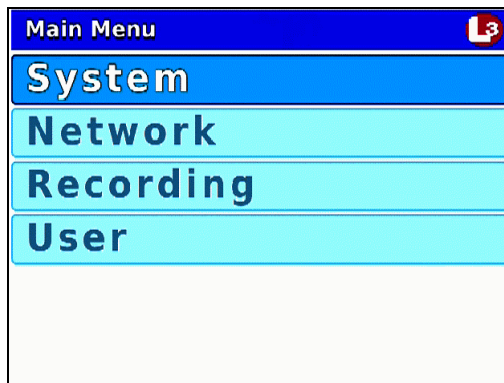
Copying the `config.xml` File from Your DVR to a USB Drive

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*.

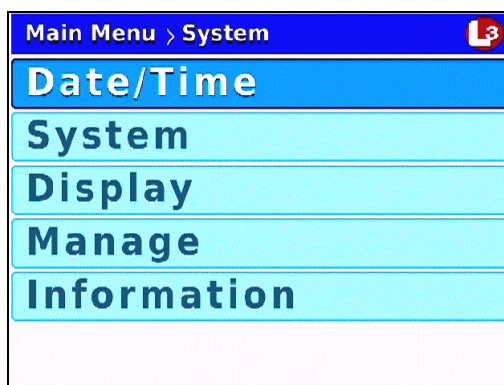
- 1 Insert a USB memory stick in the Flashback’s USB port.



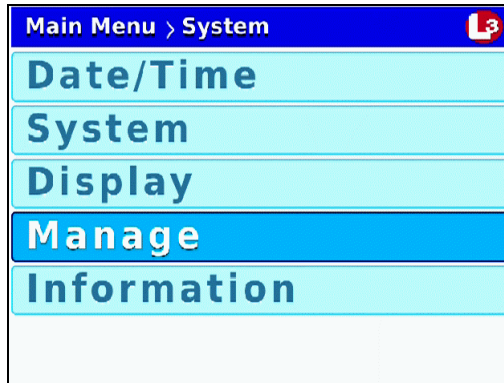
- 2 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 3 Press **M**. The Main Menu displays.



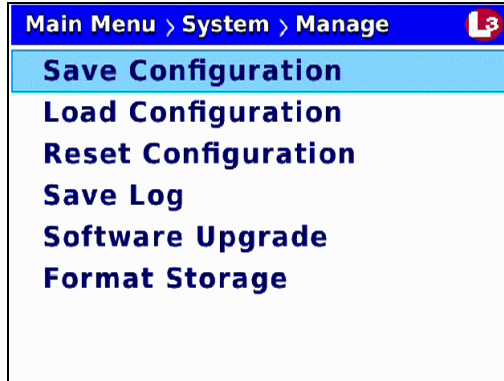
- 4 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **▶** or **◻** button to advance to that option.
- 5 Press **R** to select the **System** option. The System menu displays.



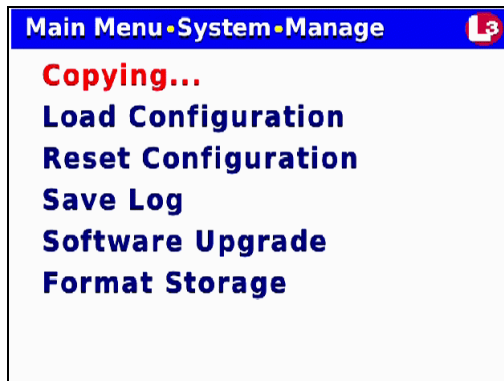
- 6 Press **□** *twice* to advance to the **Manage** option.



- 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

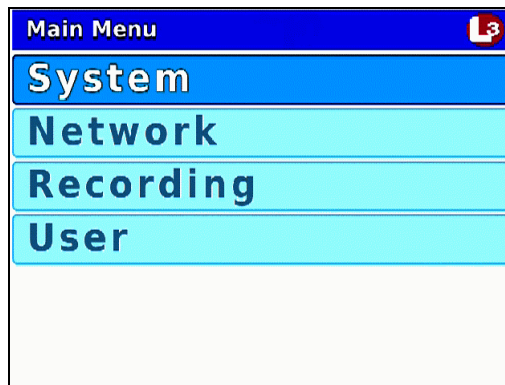
This section describes how to copy a DVR configuration file—config.xml—from a USB memory stick to your DVR. This file contains all of a DVR’s settings, allowing you to copy settings from one DVR to another.

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*.

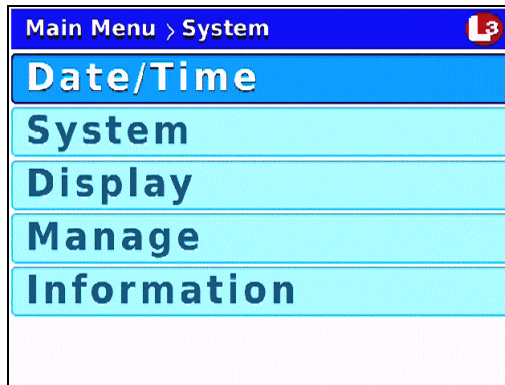
- 1 Take the USB drive that contains the config.xml file and insert it into the USB port on the front of your DVR.




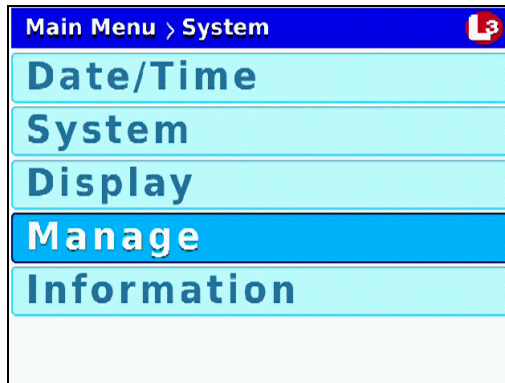
- 2 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 3 Press **M**. The Main Menu displays.




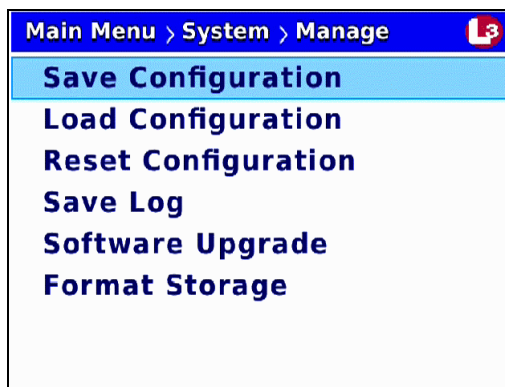
- 4 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **▶** or **■** button to advance to that option.
- 5 Press **R** to select the **System** option. The System menu displays.




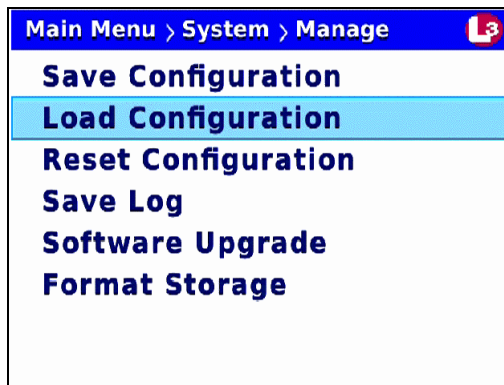
- 6 Press  twice to advance to the **Manage** option.



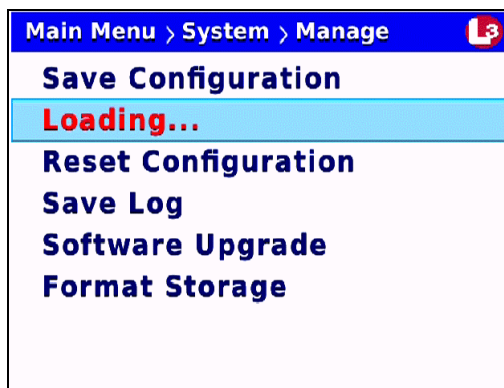
- 7 Press  to select the **Manage** option. The Manage screen displays.



- 8 Press  to advance to the **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.



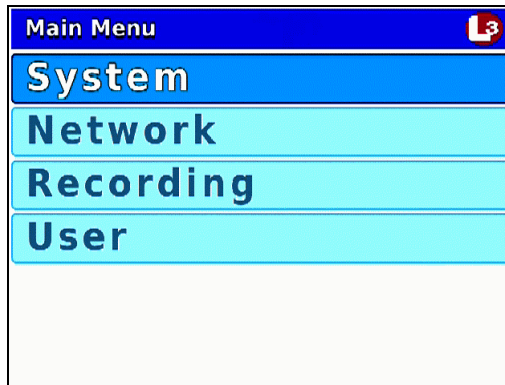
Once the **Loading...** message disappears, the transfer is complete.




- 10 Press **M** *three times* to exit this option. The system will automatically reboot.

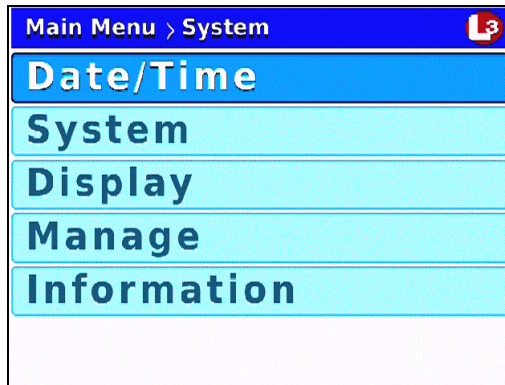
Resetting the DVR to its Factory Settings

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.

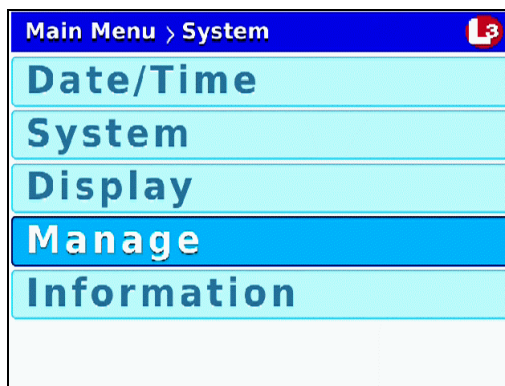
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.




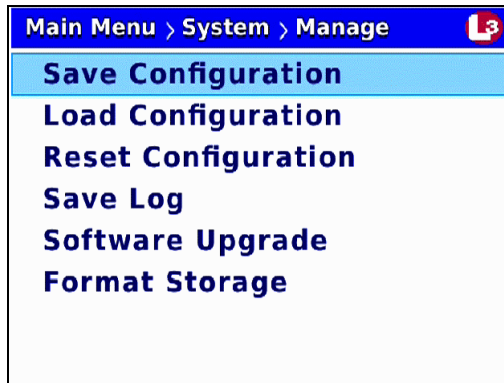
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.
- 4 Press  to select the **System** option. The System menu displays.



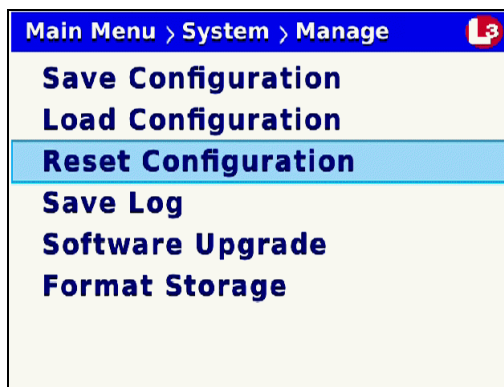
- 5 Press  *twice* to advance to the **Manage** option.



- 6 Press  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.



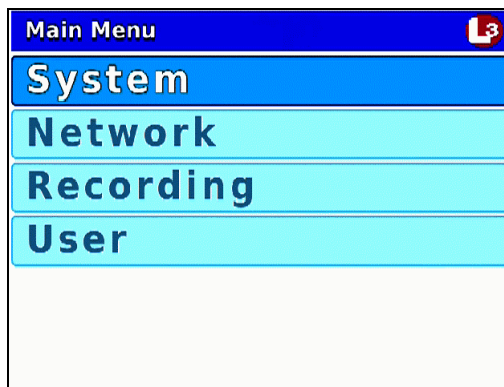
Copying the DVR Log Files to a USB Drive

This section describes how to copy the DVR log files to a USB memory stick. These files are used by L-3 Mobile-Vision support staff to troubleshoot technical problems. Perform this task when instructed to do so by your L-3 Mobile-Vision Technical Support Engineer.

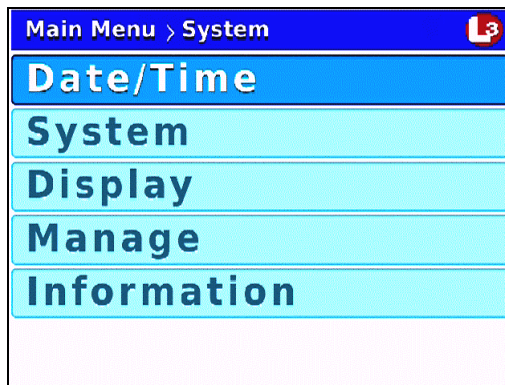
- 1 Insert a **blank** USB memory stick in the Flashback's USB port.



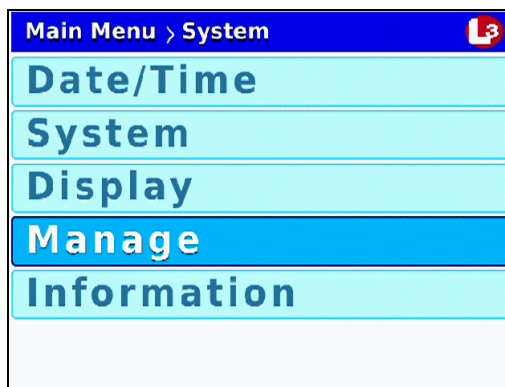
- 2 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 3 Press **M**. The Main Menu displays.




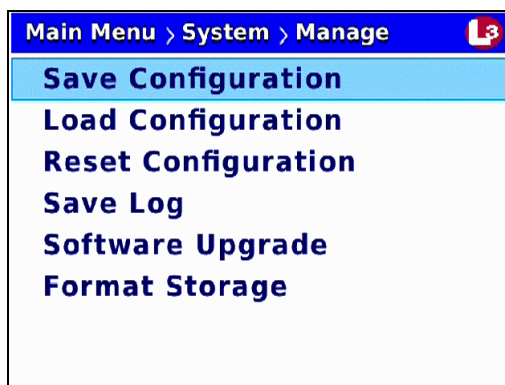
- 4 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **▶** or **■** button to advance to that option.
- 5 Press **R** to select the **System** option. The System menu displays.




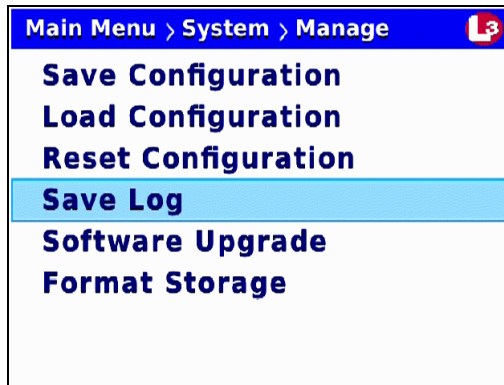
- 6 Press  twice to advance to the **Manage** option.



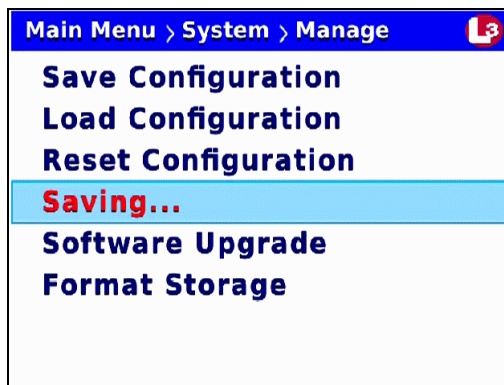
- 7 Press  to select the **Manage** option. The Manage screen displays.



- 8 Press  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 L-3 Mobile-Vision Technical Support Engineer as an email attachment.

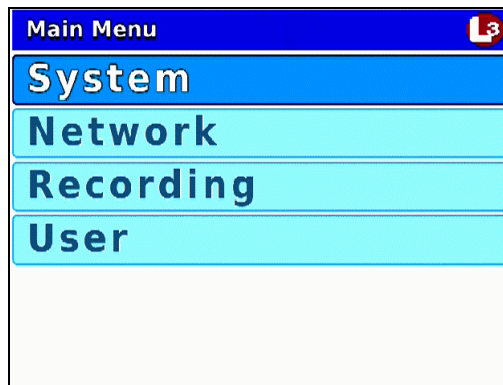
Formatting an SD card

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*.

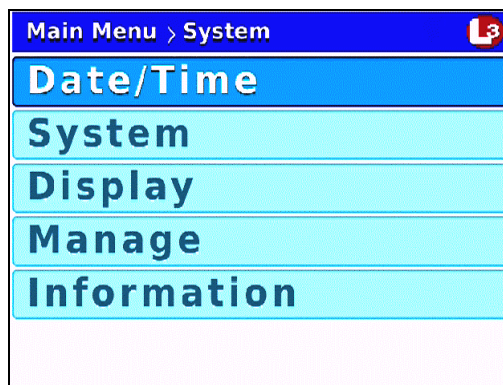
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Insert the SD card into your DVR's **SD CARD** slot.



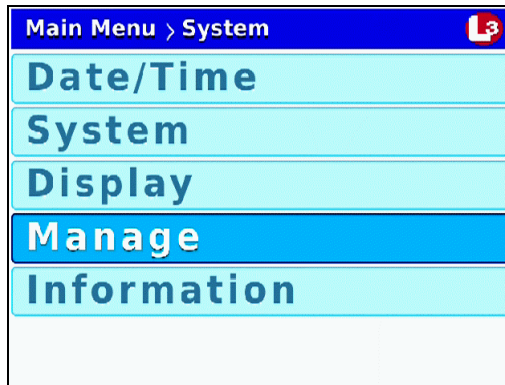
- 3 Press **M**. The Main Menu displays.



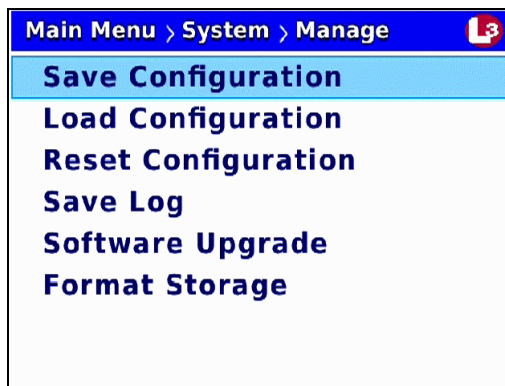
- 4 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **▶** or **◀** button to advance to that option.
- 5 Press **R** to select the **System** option. The System menu displays.



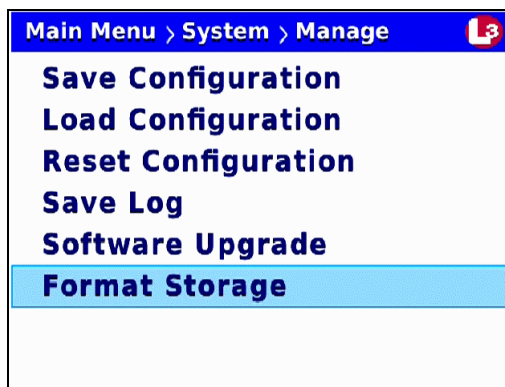
- 6 Press **◀** *twice* to advance to the **Manage** option.



- 7 Press **R** to select the **Manage** option. The Manage screen displays.



- 8 Press **0** to advance to the **Format Storage** option.



- 9 Press **R** 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.



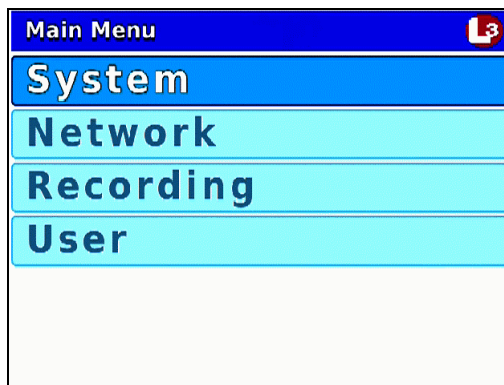
Once the red **Formatting...** message disappears, the format is complete.

- 10 Press **M** *three times* to exit this option.

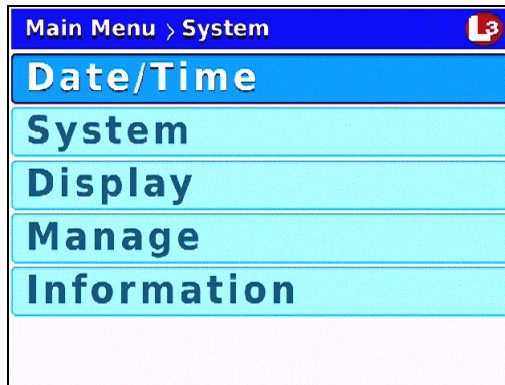
Viewing Your Flashback3 ID

This section describes how to view your Flashback3 ID. This is a unique identification code for your DVR, similar to a serial number.

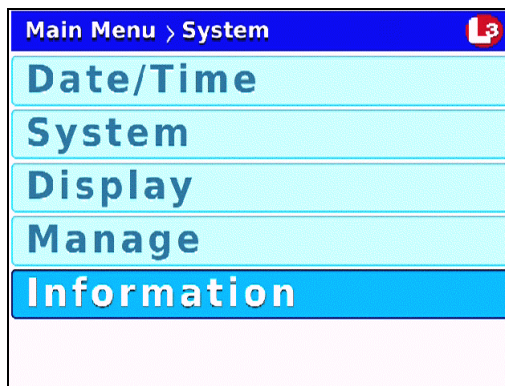
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the **AUTO** button until the **AUTO** light turns *off*.)
- 2 Press **M**. The Main Menu displays.



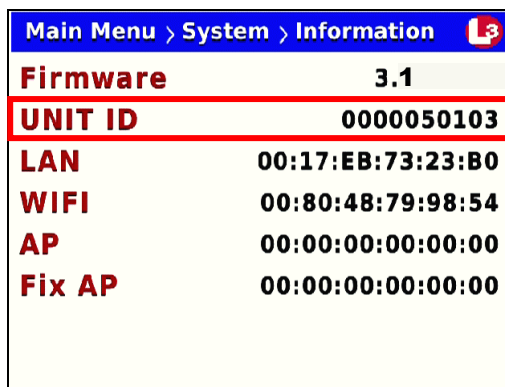
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the **▶** or **◀** button to advance to that option.
- 4 Press **R** to select the **System** option. The System menu displays.



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



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






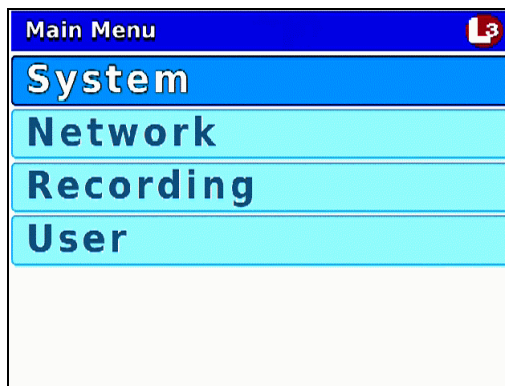
The Flashback3 ID displays in the *UNIT ID* field.




- 7 Press **M** *three times* to exit this option.

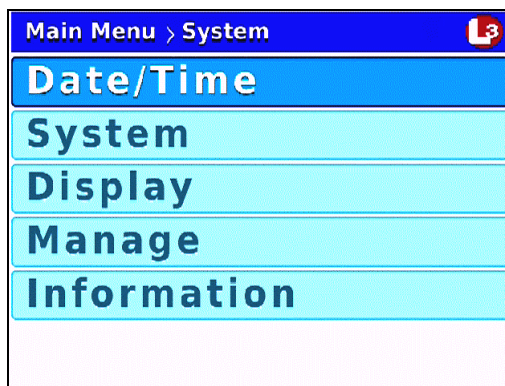
Viewing Media Access Control Addresses


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.

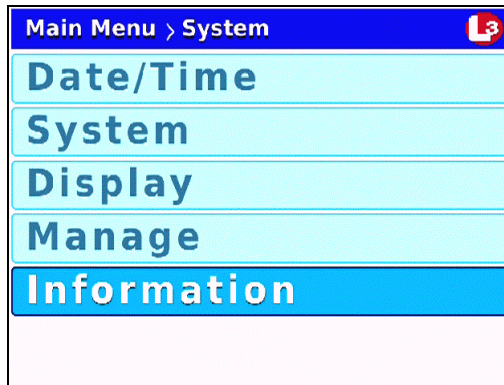
- 1 Make sure the door to your DVR is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)
- 2 Press . The Main Menu displays.



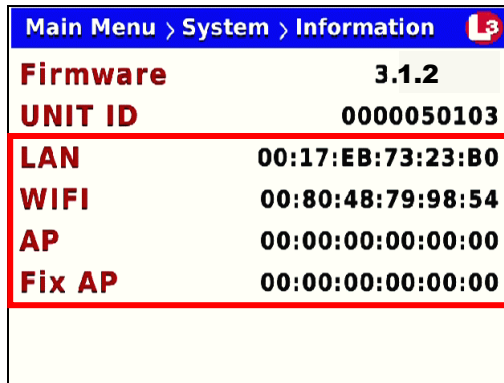
- 3 If **System** is highlighted, proceed to the next step.
– OR –
If **System** is *not* highlighted, press the  or  button to advance to that option.
- 4 Press  to select the **System** option. The System menu displays.



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



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



The Media Control Addresses (MACs) are described below.

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 **M** 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 202
- Adjusting the Monitor Hue Setting, page 202
- Adjusting the Monitor Saturation Setting, page 203
- Adjusting the Monitor Sharpness Setting, page 204
- Adjusting the Monitor Halftone Setting, page 205

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 123.

- 1 Press  +  simultaneously to enter Monitor Setup Mode. The yellow Contrast bar displays at the bottom of your monitor.



- 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 123.

- 1 Press ☀️ + AUTO simultaneously to enter Monitor Setup Mode. The yellow Contrast bar displays at the bottom of your monitor.



- 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.

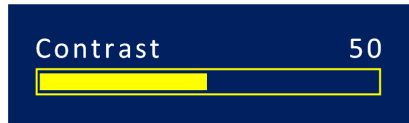
Adjusting the Monitor Hue Setting


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 123.

- 1 Press  +  simultaneously to enter Monitor Setup Mode. The yellow Contrast bar displays at the bottom of your monitor.



- 2 Press  *twice* 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 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 123.

- 1 Press  +  simultaneously to enter Monitor Setup Mode. The yellow Contrast bar displays at the bottom of your monitor.



- 2 Press  *three times* 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.

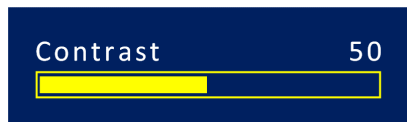
Adjusting the Monitor Sharpness Setting


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 123.

- 1 Press  +  simultaneously to enter Monitor Setup Mode. The yellow Contrast bar displays at the bottom of your monitor.



- 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 Monitor Halftone Setting

This section describes how to adjust the halftone setting for your Flashback monitor. Levels range from 0 – 100.

Once you change the halftone 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 Halftone bar. For instructions, see "Turning the 'GPS' Display On/Off" on page 123.

- 1 Press  +  simultaneously to enter Monitor Setup Mode. The yellow Contrast bar displays at the bottom of your monitor.



- 2 Press  *five times* to advance to the orange Halftone 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.

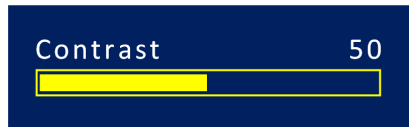
After several seconds of inactivity, the system will automatically exit Monitor Setup Mode.


Viewing the Monitor Version Number & Product ID

This section describes how to view the Flashback monitor's version number and product ID. Your L-3 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 123.

- 1 Press  +  simultaneously to enter Monitor Setup Mode. The yellow Contrast bar displays at the bottom of your monitor.



- 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

The Flashback3 was designed to be fully backward compatible with the Flashback2. To switch out a Flashback2 for a Flashback3, perform the following procedure.

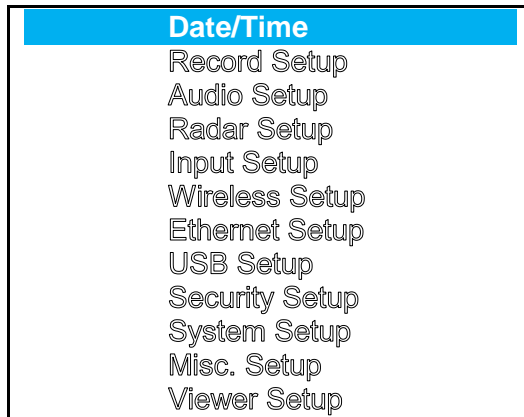
If your agency's wireless LAN is *not* configured for DHCP, you will need the *Can Reset DVR* permission to perform this task. For instructions, see "Assigning Permissions to a User" in chapter 8 of the *DEP Administrator's Guide*.

- 1 Power on the vehicle in which the Flashback2 is currently installed.
- 2 Insert a USB memory stick in the Flashback2's USB port.

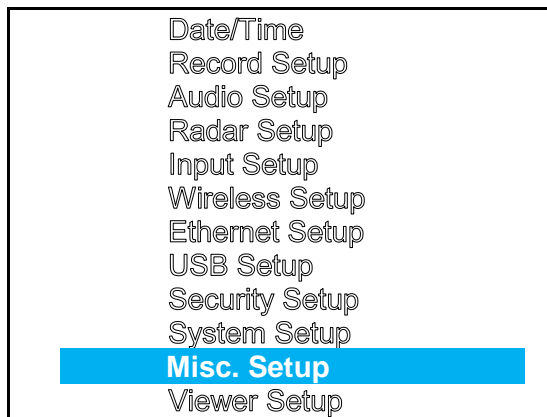


- 3 Make sure the door to the Flashback2 is open and Auto mode is *off*. (If necessary, press the  button until the  light turns *off*.)

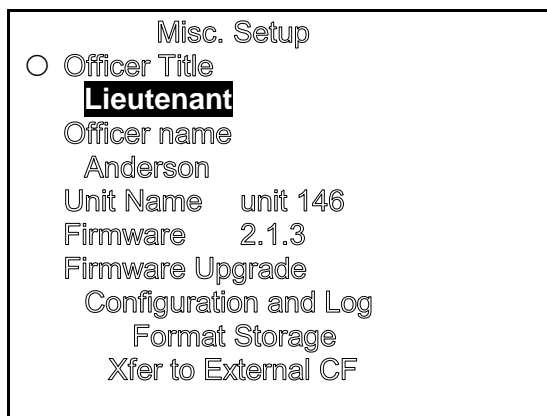
- 4 Press **M**. The Main Menu displays.





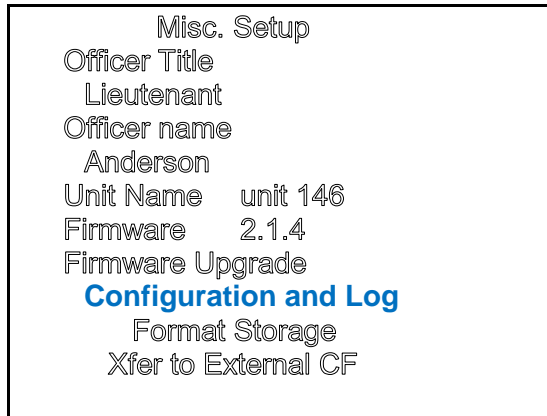
- 5 Press the **▶** or **◀** button until **Misc. Setup** is highlighted.




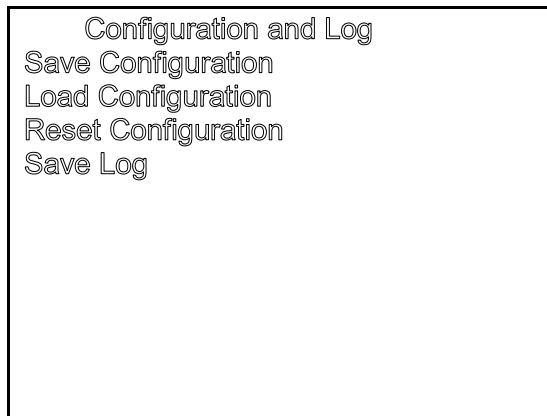
- 6 Press **R**. The Misc. Setup menu displays.



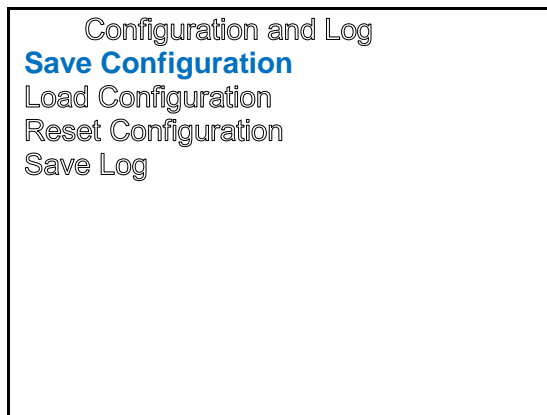
- 7 Use the  or  button to advance to the **Configuration and Log** option.



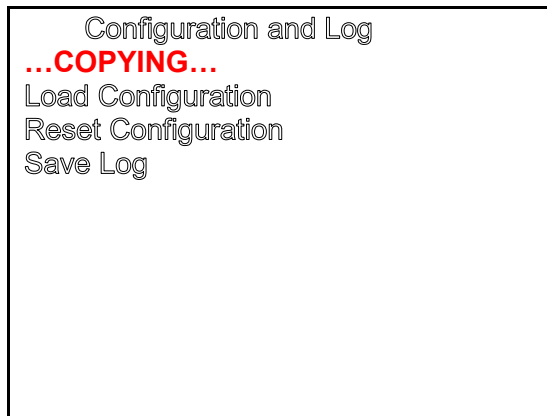
- 8 Press . The Configuration and Log screen displays.



- 9 Use the  or  button to highlight the **Save Configuration** option.



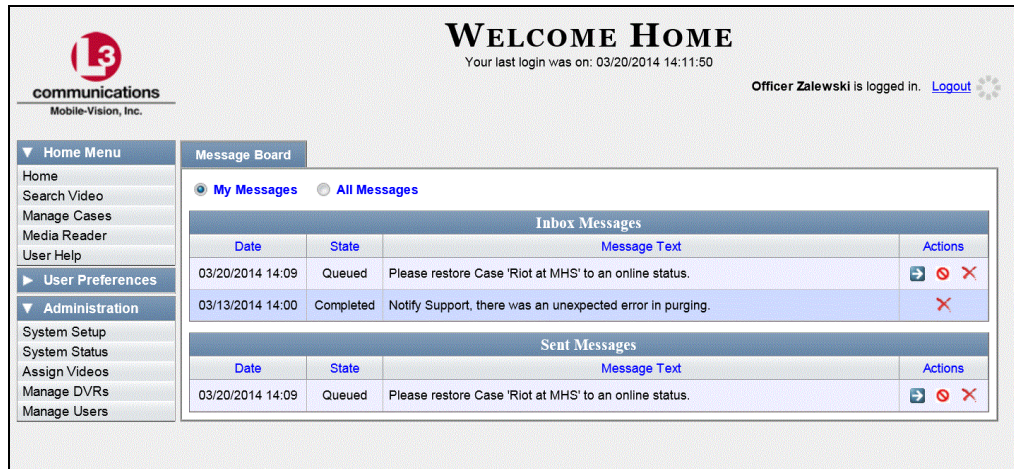
- 10 Press **R**. The system copies the Flashback2's configuration file to the USB drive. While this process takes place, a status message will display on-screen.



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 24.
– OR –
If your agency's wireless LAN is *not* configured for DHCP, proceed to the next step.
- 15 If your motorcycle is not within transmission distance, move it to within 300 feet of an access point.
- 16 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*.



WELCOME HOME
Your last login was on: 03/20/2014 14:11:50
Officer Zalewski is logged in. [Logout](#)

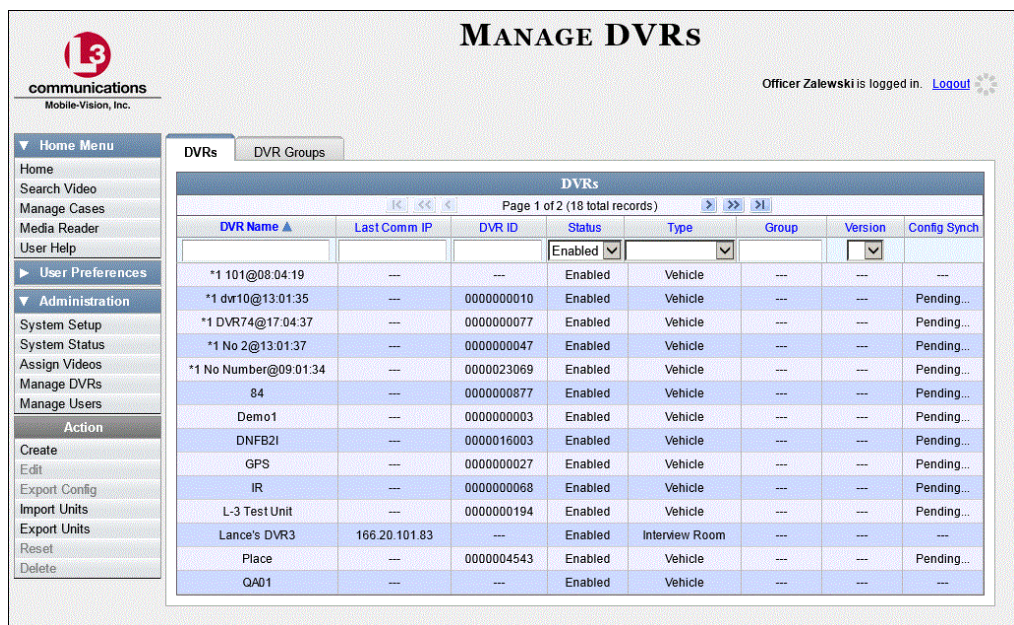
Message Board

My Messages All Messages

Inbox Messages			
Date	State	Message Text	Actions
03/20/2014 14:09	Queued	Please restore Case 'Riot at MHS' to an online status.	↩ 🗑 ✕
03/13/2014 14:00	Completed	Notify Support, there was an unexpected error in purging.	✕

Sent Messages			
Date	State	Message Text	Actions
03/20/2014 14:09	Queued	Please restore Case 'Riot at MHS' to an online status.	↩ 🗑 ✕

- 17 Go to **Administration** and click **Manage DVRs**. The Manage DVRs page displays.



MANAGE DVRs
Officer Zalewski is logged in. [Logout](#)

DVRs | **DVR Groups**

Page 1 of 2 (18 total records)

DVR Name ▲	Last Comm IP	DVR ID	Status	Type	Group	Version	Config Synchron
*1 101@08:04:19	---	---	Enabled	Vehicle	---	---	---
*1 dvr10@13:01:35	---	0000000010	Enabled	Vehicle	---	---	Pending...
*1 DVR74@17:04:37	---	0000000077	Enabled	Vehicle	---	---	Pending...
*1 No 2@13:01:37	---	0000000047	Enabled	Vehicle	---	---	Pending...
*1 No Number@09:01:34	---	0000023069	Enabled	Vehicle	---	---	Pending...
84	---	0000000877	Enabled	Vehicle	---	---	Pending...
Demo1	---	0000000003	Enabled	Vehicle	---	---	Pending...
DNFB2I	---	0000016003	Enabled	Vehicle	---	---	Pending...
GPS	---	0000000027	Enabled	Vehicle	---	---	Pending...
IR	---	0000000068	Enabled	Vehicle	---	---	Pending...
L-3 Test Unit	---	0000000194	Enabled	Vehicle	---	---	Pending...
Lance's DVR3	166.20.101.83	---	Enabled	Interview Room	---	---	---
Place	---	0000000453	Enabled	Vehicle	---	---	Pending...
QA01	---	---	Enabled	Vehicle	---	---	---

- 18 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.
- 19 Click on the Flashback2 record to highlight it.
- 20 Go to the **Action** column and click **Reset**. A confirmation message displays.
- 21 Click **Yes**.
- 22 Wait 10 minutes, then proceed to the next step.

- 23 Return to the motorcycle.
- 24 Insert the new Flashback3 unit and re-connect all wires and cables. If necessary, refer to the diagram on page 3.



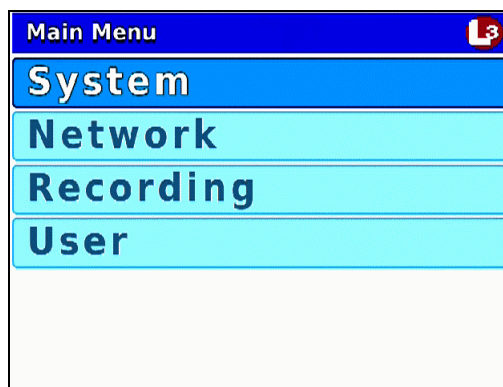
- 25 Make sure the door to the Flashback3 is open and the red power switch is in the AUTO (ON) position. Turn the motorcycle's ignition *on*.

Next, copy the Flashback2 configuration file from the USB drive to your Flashback3, as described in steps 26 – 34.

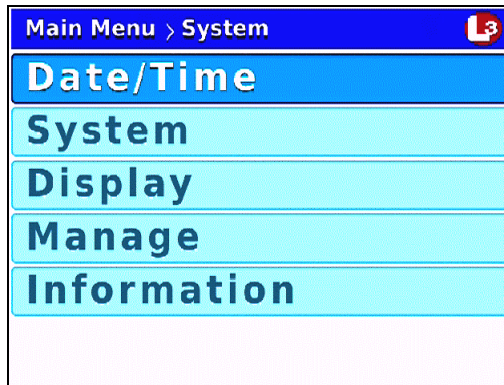
- 26 Take the USB drive that contains the Flashback2's *config.xml* file and insert it into the USB port on the front of the Flashback3 DVR.



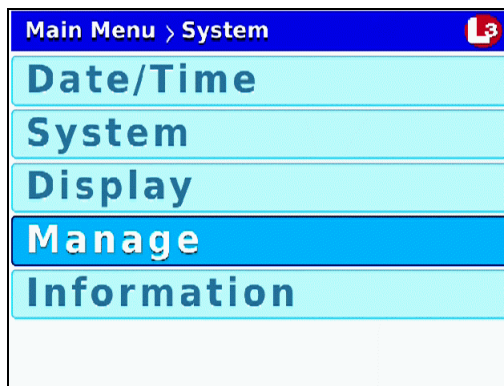
- 27 Press the **AUTO** button *twice* to turn Auto mode *off*.
- 28 Press **M**. The Main Menu displays.




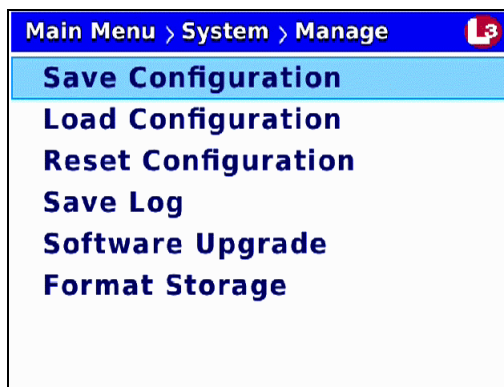
- 29 Press **R** to select the **System** option. The System menu displays.




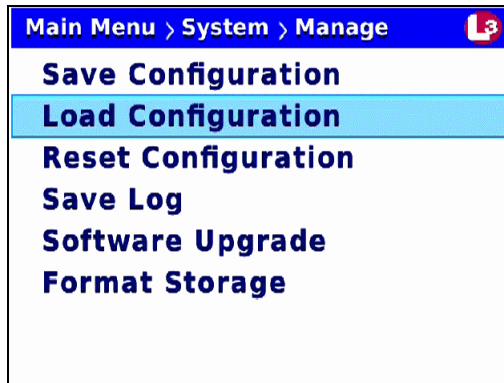
30 Press  twice to advance to the **Manage** option.



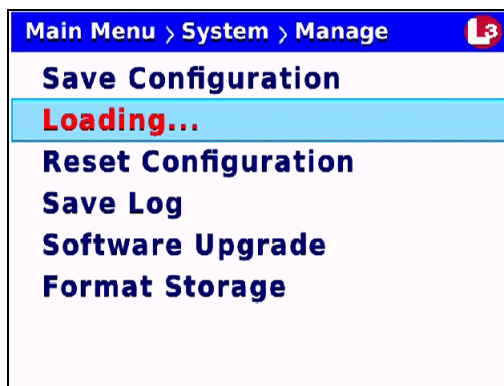
31 Press  to select the **Manage** option. The Manage screen displays.



32 Press  to advance to the **Load Configuration** option.



- 33 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.

- 34 Press **M** *three times* to exit this option.
- 35 Randomly check a few of your menu settings to verify that your Flashback2 settings have successfully transferred to the Flashback3.

DVR Specifications

Flashback3 Technical Specifications	
Recorder Type	Digital, mobile application specific.
Recording Media	Secure Digital (SD) card with maximum 64 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"> ▪ Bullet camera 1: 2 – 30 frames/second ▪ Bullet camera 2 (optional): 2 – 30 frames/second
Audio Inputs	<ul style="list-style-type: none"> ▪ VLP1 ▪ VLP2 (optional)
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 ▪ 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 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
Frame Rate set to 'Normal Record'	User selects up to 30 frames/second
Frame Rate set to 'Background Record'	User selects 2 or 5 frames/second

Flashback3 Technical Specifications	
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 and Camera 2 ▪ <i>Video Output.</i> Flashback monitor ▪ <i>VLP2s.</i> VLP1 and VLP2 ▪ <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>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 motorcycle's 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 L-3 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 a vehicle's DVR to automatically start recording without any action on the officer's part.

SD Card

The temporary storage device that stores Flashback 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 L-3 Mobile-Vision representative who assists with the installation of the Flashback Digital Evidence Collection system, including hardware (Flashback3) and software (DES) components.

Transmission

The process of transferring video files from your vehicle's DVR to the *server* via an *access point*. This transmission can occur either *automatically* (typical) or *manually*.

- ❑ *Automatic transmission.* Whenever your motorcycle 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@L-3Com.com
Address: L-3 Mobile-Vision
400 Commons Way, Suite F
Rockaway, NJ 07866

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