



COBAN EDGE Installation Manual

Revised 3/8/2012

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Introduction

COBAN manufactures state-of-the-art Mobile Data Computers and Digital Video Recording Equipment for use in the Public Safety, Utility and Military community. In addition to innovative mobile computing devices and digital video technology, COBAN employs the latest communication, database, and storage technologies to deliver complete and scalable solutions to our customers, regardless of the size of the agency.

Due to variations in vehicles, Agency equipment requirements, and the placement of existing equipment, every installation in a Public Safety Vehicle is unique. This Manual assumes, and illustrates, installations in Ford Crown Victoria, Chevy Impala, Silverado, Tahoe, Caprice as well as Dodge Charger and Magnum.

The information contained herein is subject to change without notice. COBAN Technologies reserves the right to make changes to this product, has no obligation to update or keep current the information contained within, and assumes no responsibility for any errors or omissions that may be present in this document.

Manual Name: COBAN Technologies – EDGE Hardware Installation Manual

Issue Date: March 08, 2012

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UNDER NO CIRCUMSTANCES WILL COBAN TECHNOLOGIES BE LIABLE FOR ANY LOSS OR DAMAGES RESULTING FROM THE USE OF THIS MANUAL.

FOR HELP WITH ANY QUESTIONS REGARDING INSTALLATION OR THE USE OF THIS MANUAL, PLEASE CONTACT COBAN SUPPORT AT: 281-561-2570

Warnings and Safety Issues

Failure to properly install, operate, and care for the COBAN System can increase the risk of **ELECTRIC SHOCK** or **FIRE**. Failure to properly install and secure the COBAN System in accordance with this manual can increase the risk of any component becoming dislodged from its mounting structure and may possibly result in **SERIOUS INJURY** or **DEATH** to the **VEHICLE PASSENGERS**, or **DAMAGE TO THE COBAN SYSTEM**.

Do not expose any Component of the COBAN System to Liquid or Moisture.

- Do not install this apparatus near water or expose it to rain, moisture, chemicals, and dripping or splashing liquids of any type
- Do not clean the COBAN System with water, liquid cleaners, solvents, or aerosols

Prevent the COBAN System from overheating.

- Do not block any Ventilation Openings
- Install in a well ventilated area
- Do not place the COBAN System near any soft surface that may block ventilation openings
- Do not install near any heat sources or any apparatus that produces heat

Stay away from DANGEROUS VOLTAGE inside the COBAN System; DO NOT take the COBAN System Apart.

- Contact with energized parts inside the COBAN System can cause **SERIOUS INJURY** or **DEATH** from **ELECTRIC SHOCK**
- Do not attempt to service, modify, repair, or tamper with the COBAN System
- Refer all Servicing to the COBAN Customer Service Department or COBAN Authorized Service Personnel

Avoid damaging any electrical Wires or Cables.

- Protect the Cables from being stepped on or pinched, particularly at Plugs, and the point where they exit from the apparatus
- Do not jerk, knot, sharply bend, or otherwise abuse the Cables
- Do not expose Cables or electrical Wiring to sources of Heat
- When connecting and disconnecting Plugs, **PULL ON THE PLUGS, DO NOT PULL ON THE CABLE**, and be sure to check the alignment of the Pins for damage prior to plugging them in
- Arrange all Connectors and Cables so that passengers are not likely to trip over them or accidentally pull on them as they move around, or enter and exit the vehicle
- If any Cable or Wire becomes damaged in any way, immediately discontinue use of the COBAN System and call the COBAN Customer Service Department or COBAN Authorized Service Personnel

Only use COBAN approved and authorized Attachments, Accessories, and Peripherals.

Always disconnect the Vehicle Battery Ground Lead prior to installing any Component.

Always remove the fuse at the 12v positive Battery Terminal before Jump-starting or Charging the Battery while it is still in the Vehicle

The USER acknowledges and understands that the installation of after-market equipment in motor vehicles can compromise a vehicle's safety-related design characteristics, including but not limited to:

- Airbags, including but not limited to potential obstruction of airbag deployment;
- Front and Rear Passenger compartments, including but not limited to potential for ergonomic problems, physical obstacles, etc.
- Trunk/gas tank protection, including but not limited to the potential for trunk-mounted equipment to exacerbate tank vulnerability in a rear collision.

COBAN shall bear no liability whatsoever for any claims, expenses, losses or costs relating to the safety of any equipment provided hereunder or the safety of any installations thereof.

Digital Video Surveillance Systems, including in-vehicle systems, offer new functionality and added convenience, but they may also introduce some unique security and privacy exposures. These exposures include, but are not limited to, policies and operating procedures related to: a) the capture, transfer, and management of digital images; b) the use of these digital images in legal proceedings; and c) the use of these digital images for other purposes.

Numerous techniques are available that may mitigate some of these unique security and privacy risks, including ensuring that security reliance is not placed solely on the system, and that the system and resulting images are used only in compliance with comprehensive department policies and standard operating procedures. The USER acknowledges and understands that the USER is solely responsible for developing, implementing and maintaining appropriate Security and Privacy Policies and operating procedures for the system(s) described in this SOW, and ensuring on-going compliance with them.

COBAN shall bear no liability whatsoever for, and the USER hereby fully, irrevocably and unconditionally release COBAN and its successors and assigns from, any claims, expenses, losses, or costs relating to the USER's use of the materials, system or services provided by COBAN hereunder, including any claims based on the content of any information captured on any video recorder provided hereunder. The USER will be solely responsible for any and all such claims made against COBAN which are based on the USER's use of the materials, system or services provided by COBAN hereunder,

The USER acknowledges and agrees that COBAN's performance hereunder does not include any obligation to provide testimony or other evidence of any kind in any legal, regulatory, administrative or other proceeding excluding subpoenas issued by judge or court of law. In the event that COBAN is requested by the "Department or the USER" to be the expert witness to provide testimony or any evidence of any kind in connection with its performance hereunder, whether required by the USER or any other third party, the USER agrees to pay COBAN's time and materials rates plus COBAN's actual expenses incurred in the provision of such testimony or evidence.

Tools and Electrical Parts List

COBAN DOES NOT supply Tools and Materials for installations. Due to the uniqueness of every installation, COBAN cannot predict exactly what tools, electrical connectors, or hardware may be necessary for each individual installation. COBAN provides a connector kit and hardware kit that includes the basic connectors and hardware for most installs, however this may not cover every installation. It is recommended that the installing technicians have a ready supply of these basic tools and supplies on hand:

- 8" x 12" x $\frac{3}{4}$ " thick - plywood
- Liquid Nail™ adhesive (this brand only)
- Power drill (12V minimum)
- Drill bits (various sizes)
- $\frac{5}{16}$ " driver bit
- #20 Torx™ bit
- $\frac{7}{16}$ " socket with ratchet (full socket set is recommended)
- $\frac{7}{16}$ " wrench
- Adjustable wrench
- Phillips screwdriver
- Wire cutters
- Wire crimpers
- $\frac{3}{4}$ " antenna hole saw
- Razor knife
- Windproof lighter (for shrink terminals)
- Wire fish
- Electrical tape
- Silicone sealant (to seal grommet in firewall, after wire is run through it)
- Assortment of fuses
- 16AWG stranded primary wire
- 14AWG stranded primary wire
- Various sizes of cable zip ties
- Various sizes of wire loom
- Various sizes and types of electrical connectors

Note: COBAN requires the use of shrink type connectors only for waterproofing purposes; please remember to apply heat to shrink the ends of the connectors. Failure to shrink these connectors as prescribed may result in VOIDING THE COBAN WARRANTY if there is exposure to corrosion or moisture in these electrical connections.

WARNING: The use of "Vampire Clips" and "Scotch Locks" is NOT ALLOWED by COBAN due to frequent failure and connectivity degradation over time, and said use thereof will VOID THE COBAN WARRANTY, unless the following criteria are followed explicitly:

- Only allowed when used to tap into the vehicle factory wire harness
- Only 3M™ brand T-taps and spades are allowed
- Allowed for use to tap into only the factory wire harness of the brake sensor circuit, gunlock sensor circuit, and door sensor circuits

In addition to the installation of these specified taps, each connection will be further secured by wrapping with electrical tape, cold shrink tape, or heat shrink tubing.

Standard System Components

EDGE CPU

Physical Dimensions	- 7.0" (w) x 3.0" (H) x 8.0" (D)
Processor	- Intel® Atom® processor 1.6 GHz
DRAM	- 1GMB RAM
Operating System	- Microsoft Windows Embedded
PCMCIA Slot	- None
Serial Port	- (2) RS-232 serial ports GPS, radar gun, magnetic strip reader, RF modem, fingerprint device, wireless communication device, etc.
10/100/1000 Network Port:	- (2)10/100/1000 BaseT LAN Port
USB Port	- (4) USB Ports
Digital I/O	- (8) digital inputs and (8) digital outputs
Operating Temperature	- -20°C ~ 60°C
Storage Temperature	- -30°C ~ 70°C
Power Supply	- Power supply input range 9V ~ 16V DC with built-in uninterrupted power supply (UPS)



EDGE Monitor

Model	- 5.7" sun light readable touch screen with LED
Touch Screen	- Glove friendly, touch screen monitor
Max. Color	- 32 bits
Pixels	- 640 (W) x 480 (H)
Viewing Angle	- +/- 45°
Contrast Ratio	- > 18
Surface Treatment	- Anti-glare and hard coating
Input	- VGA
Operating Temperature	- 0°C ~ 50°C



EDGE Primary Camera

Manufacturer	- Sony
Digital Zoom	- 10X optical zoom and 4X digital zoom
Communication	- High speed serial communication
Lux	0.25 lux
Operating Temperature	- -20°C
Features	- Programmable customer preset function - Auto iris, real time light compensation - Optional covert low-lux rearview camera



Wireless Microphone

Modulation Mode	- Bi-directional digital spread spectrum (DSS)
Frequency	- 902 ~ 928MHz
Operating Range	- 1000 ft
Battery	- Rechargeable Li-Ion battery
Air Time	- 8 ~ 10 hours of continuous operation
Standby Time	- 14 ~ 16 days
Microphone	- Integrated internal microphone
Channels	- 20 channels with automatic synchronization



Mobile Drive

Removable Storage	- 40GB(Std)/80GB auto grade hard drive 32GB/64GB/128GB industrial grade solid-state disk (optional)
Vibration	- Random 10-2000 Hz 16.3G(X,Y,Z)
Shock	- 1,500G/0.5ms, 50G/ 11ms
Operating Temperature	- -40°C ~ 85°C
Storage Temperature	- -40°C ~ 100°C
Interface	- USB 2.0
Physical Dimensions	- 6" (W) x 5" (H) x 1.75" (D)
Capacity	- MPEG1: 600MB/hr 352 X 240 MPEG2: 1.2GB/hr 704 X 480 MPEG4: 300-400 MB/hr



Wireless Microphone Receiver

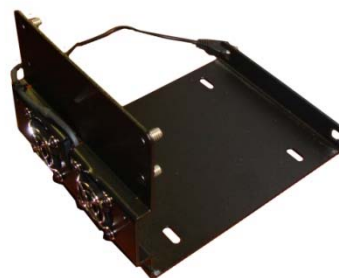


EDGE Smart Power Unit (SPU)



Mounts

CPU Mount



Visor Camera Mount



Monitor Mount



Electrical Hardware

Closed In-Line ATC Fuse Housing w/15a Fuse

- Rated for up to 30a, with no less than 14g connection wire

Used to Fuse:

- 12v Power at Battery

Heat Shrink Butt Connectors

- (4) 16g-14g Blue
- (1) 12g-10g Yellow

Used to Connect:

- Inline Fuse
- Power Distribution Wire Harness
- Splice at Light Bar Control Head

Ring Terminals

- (2) 5/16" - 16g-14g

Used to Connect:

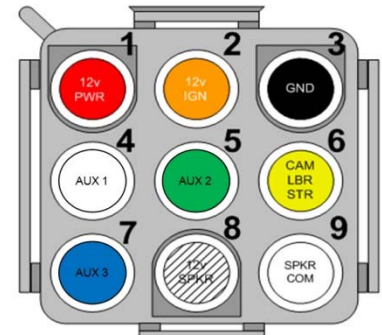
- 12v Battery Power
- Battery Ground

9 Pin Power Distribution Wire Harness

(adheres to "MNSTAR Enforcer Harness-C27")



Pin ID	Wire Size (AWG)	Wire Color	Wire Marking	Circuit Function
#1	14	Red	PWR 12V	12V Power
#2	16	Orange	IGN 12V	Ignition Input
#3	14	Black	GND	Ground
#4	16	White	CAM BRK	Auxiliary #1*
#5	16	Green	CAM GUN	Auxiliary #2*
#6	16	Yellow	CAM STR LBR 12V	Light bar/Strobe Input*
#7	16	Blue	CAM SPR	Auxiliary #3
#8	16	White/Black	SPKR 12V	Sire Speaker Load*
#9	16	White	SPKR COM	Siren Speaker Common*



*Optional functions (to be determined by Department Fleet Manager)

Note: The installation technician will need to match the above wire type and color scheme when installing the system.

Cables and Extensions - Details

All Cables and Extensions running between Components are color coded at the plug for easy identification.

Black – CPU to LCD



Blue – CPU to Optional 2nd Detached Camera



Green – CPU to Primary Camera



Red – CPU to Receiver



CPU Installation Prep work

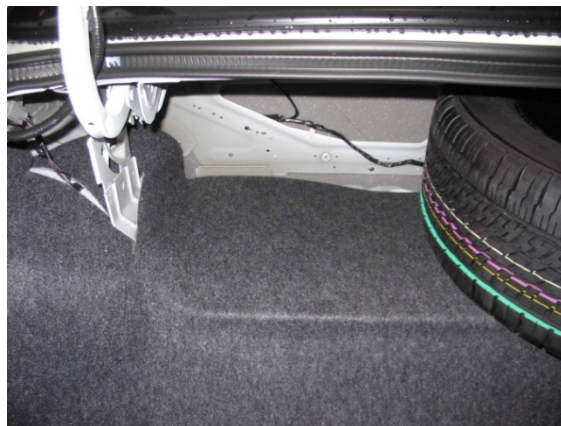
The CPU and Smart Power Module should be mounted directly on the pullout tray in the trunk. If there is no tray available; the Components should be mounting on a piece of plywood at least three quarter inch ($\frac{3}{4}$ ") thick, which could be glued to the Deck above the fuel tank.

Note: COBAN Technologies **WILL NOT** takes responsibility for a DAMAGED FUEL TANK if units are installed by a Third Party Contractor or Fleet Personnel.

Plywood Deck Mount

Locate an appropriate space on the Trunk Deck for mounting the Smart Power Module.

WARNING: The Installation Technician **MUST** ensure that the installation of the CPU mount does not in any way compromise the integrity of the vehicle's Fuel Tank. Be sure that the fastening screws are not longer than the thickness of the Plywood. Use the recommended glue, as fast drying glues become brittle, and can easily vibrate loose from the Deck surface.



1. Remove carpet and apply adequate amount of Liquid Nail to the mounting surface.



2. Press a piece of plywood (minimum $\frac{3}{4}$ " thick) firmly onto the glue.



3. Replace the carpet over the plywood, and allow sufficient time for the glue to set.

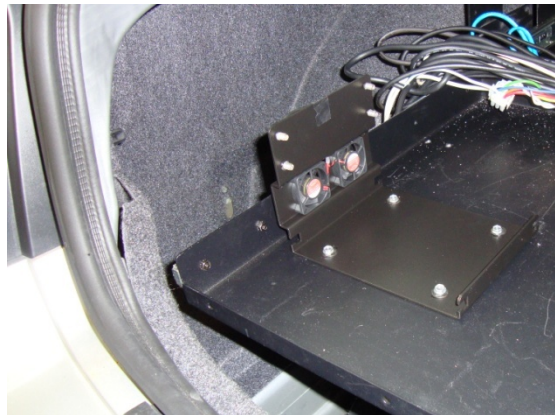
WARNING: Liquid Nail™ requires 8 hours to set, and 24 hours to completely cure. It is not recommended to release the vehicle back into service before the full curing time has been reached.

LIQUID NAIL™ IS HIGHLY FLAMMABLE AND SHOULD NOT BE EXPOSED TO OPEN FLAME OR SPARKS BEFORE THE FULL CURING TIME HAS BEEN REACHED.



Tray Mount

1. Set the CPU Mount onto the sliding tray and mark the position for pilot holes.
2. Use a $\frac{5}{16}$ " metal drill bit to drill the four pilot holes in the sliding metal tray.
3. Secure the CPU mount to the sliding metal tray using four (4) $\frac{1}{2}$ " self tapping screws.

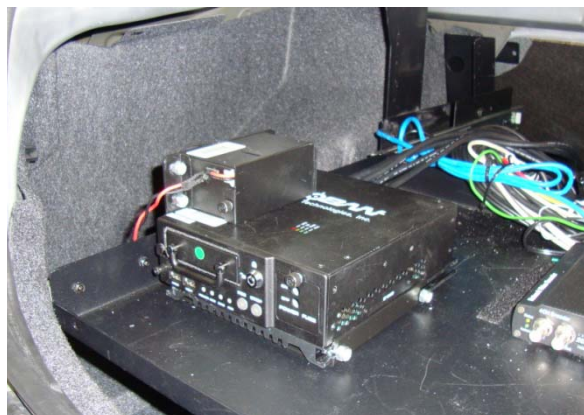


CPU Installation

1. Slide the CPU into the CPU Mount and secure it in place using four $\frac{1}{4}$ -20 x $\frac{1}{2}$ " hex head bolts with nylon threaded nuts.
2. The four (4) $\frac{1}{4}$ -20 x $\frac{1}{2}$ " hex head bolts with nylon threaded nuts slide into the grooves in the railing of the CPU and secure it to the CPU Mount.



3. Tighten the four (4) $\frac{1}{4}$ -20 x $\frac{1}{2}$ " hex head bolts with nylon threaded nuts with a crescent wrench and ensure that the CPU is secured in place.
4. Install the SPM into the bracket located above the CPU.
5. Install and tighten four (4) $\frac{1}{4}$ -20 x $\frac{1}{2}$ " hex head bolts with nylon threaded nuts with a crescent wrench to secure it in place.



6. Plug the red and black wire connector from the SPU into the UPS connector plug on the back of the CPU.
7. Plug the 9-pin Molex connector into the 9-pin connector plug.
8. Plug the CPU Mount fan unit USB into a USB port located on the front or rear panel of the CPU.



Front Camera Installation

The camera mount installation procedure described in the following steps was captured during the installation of the EDGE system in an overhead/visor orientation in a Ford Crown Victoria. Different installation procedures will need to be followed for installation of the EDGE system on other types of vehicles. For more information please contact COBAN Technologies for more details on your specific vehicle type and orientation.

CAUTION: COBAN Technologies will not assume any responsibility or liability in the event that any type of damage is caused to the windshield by a third party installer during the installation process.

Note:

1. Remove the screw from the passenger side Visor Clip.



2. Use the passenger side Visor Clip to temporarily secure the Camera Mount.



3. Secure the Camera Mount to the headliner with the two (2) provided 1 1/4" self tapping screws.



- Secure the Camera to the Camera Mount with the supplied $\frac{1}{4}$ - 20 x $\frac{1}{2}$ " bolt and washer.



- Ensure that the zoom switch is correctly situated in the Camera Mount Arm so it can be activated by the driver.

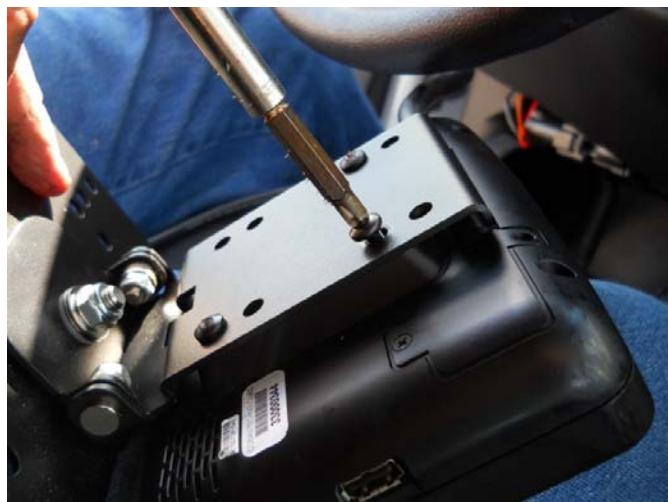


- Ensure there are enough slack on the cable to allow camera rotation.



Ford Crown Victoria Monitor Installation

1. Use four (4) provided 10-32 X $\frac{3}{8}$ " Phillips pan head screws to secure the monitor mount to the back of the EDGE monitor.



2. Align Monitor Mount between the two visors; secure the mount with four (4) provided #10-16 x 1 $\frac{1}{4}$ " self tapping screws.
3. To ensure a solid mount, make sure the monitor mount is screwed onto the support beam.
4. Secure and zip ties the cable to the mount. Please ensure there are enough slack on the cable to allow rotation of the monitor. Ensure there are enough slack on the cable to allow monitor rotation.



Note: The monitor mount provides three possible mounting positions on the camera mount, forward, middle, and back. Choose the position that best fits the needs of the vehicle and user when installing.

2010 Dodge Charger Monitor & Camera Installation

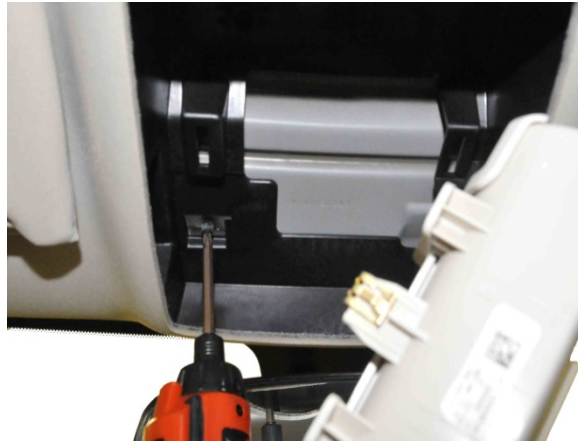
The camera mount installation procedure described in the following steps was captured during the installation of the EDGE system in an overhead/visor orientation in a Dodge Charger. Different installation procedures will need to be followed for installation of the EDGE system on other types of vehicles. For more information please contact COBAN Technologies for more details on your specific vehicle type and orientation.

CAUTION: COBAN Technologies will not assume any responsibility or liability in the event that any type of damage is caused to the windshield by a third party installer during the installation process.

1. Remove the overhead dome light compartment by pulling it straight downward.



2. Remove the screw securing the dome light compartment.



3. Disconnect the cable to the dome light.



4. Remove both visor clips to release the dome light compartment.



5. Disconnect the cable and remove the dome light compartment.
6. Re-install both visor Clips.



7. Align the Charger adapter plate onto the roof crossbar of the vehicle.
8. Secure the front part of the adapter plate (facing driver) using the three (3) provided 10-16 x $\frac{3}{4}$ " self tapping screws.



9. Secure the rear part of the adapter plate (facing windshield) using the two (2) provided 10-16 x $\frac{3}{4}$ " self tapping screws.



10. Use four (4) provided 10-32 X $\frac{3}{8}$ " Phillips pan head screws to secure the Edge monitor to the back of the monitor mount.



11. Align the monitor mount onto the 4 threaded studs that are on the Charger adaptor plate.
12. Secure the monitor mount with four (4) $\frac{1}{4}$ -20 hex nuts.
13. Secure and zip ties the cable to the mount. Please ensure there are enough slack on the cable to allow rotation of the monitor.

Note: The monitor mount provides three possible mounting positions on the camera mount, forward, middle, and back. Choose the position that best fits the needs of the vehicle and user when installing.



14. Secure the Camera to the Camera Mount, which is attached to the Charger adapter plate, with the supplied $\frac{1}{4}$ - 20 x $\frac{1}{2}$ " bolt and washer.



15. Ensure that the zoom switch is correctly situated in the Camera Mount Arm so it can be activated by the driver.

16. Ensure there are enough slack on the cable to allow camera rotation.



17. Once completed, utilize $\frac{1}{4}$ " split loom to dress the opening of the liner. The monitor should stow in the cavity that is left by the dome light. The camera should tuck right behind the rear view mirror.



Tahoe Monitor Installation

The camera mount installation procedure described in the following steps was captured during the installation of the EDGE system in an overhead/visor orientation in a Chevy Tahoe. Different installation procedures will need to be followed for installation of the EDGE system on other types of vehicles. For more information please contact COBAN Technologies for more details on your specific vehicle type and orientation.

CAUTION: COBAN Technologies will not assume any responsibility or liability in the event that any type of damage is caused to the windshield by a third party installer during the installation process.

1. Remove clear light cover from overhead dome light.



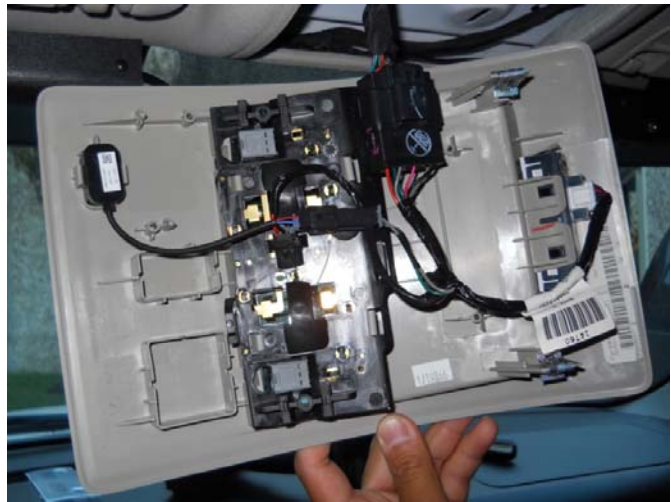
2. Remove the two (2) T15 screws to remove the overhead dome light.



3. Pull down dome light from the side farthest away from the windshield to release dome light.



4. Disconnect all cables to the dome light except the passenger airbag light



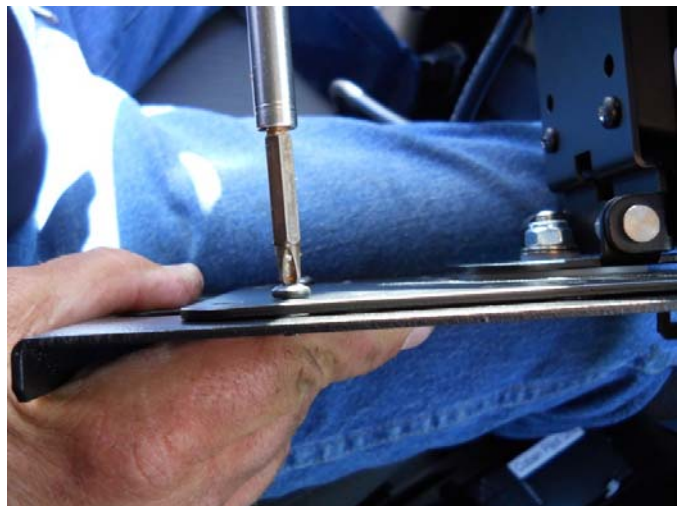
5. Remove the two (2) T15 screws



6. Use four (4) provided 10-32 x 3/8" Philips panhead screws to secure the monitor to the back of the Edge monitor.



7. Secure the Edge monitor mount to the Tahoe adapter plate using the four (4) provided 10-32 x 3/8" Philip panhead screws.



8. Plug in passenger airbag light to the Tahoe adapter plate



9. Ensure the light are snapped in securely.



10. Align the monitor mount between the two visors.



11. Secure the mount by using the one (1) provided # 10-16x $\frac{3}{4}$ " self tapping screws to the front of the mount.



12. Secure the rest of the mount by using two (2) provided # 10-16 x $\frac{3}{4}$ " self tapping screws to the round cutout on the front of the mount.



13. Dress the dome light cutout with split loom.
14. Secure and zip ties the cable to the mount. Please ensure there are enough slack on the cable to allow rotation of the monitor.



2012 Chevy Caprice Monitor Installation

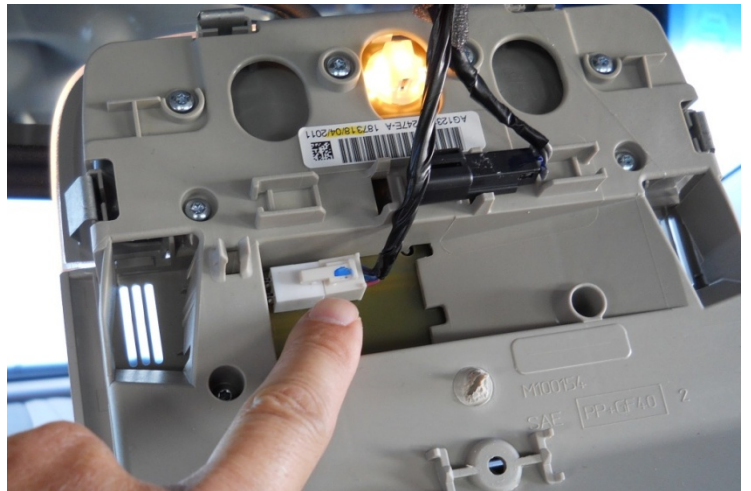
The camera mount installation procedure described in the following steps was captured during the installation of the EDGE system in an overhead/visor orientation in a Chevy Caprice. Different installation procedures will need to be followed for installation of the EDGE system on other types of vehicles. For more information please contact COBAN Technologies for more details on your specific vehicle type and orientation.

CAUTION: COBAN Technologies will not assume any responsibility or liability in the event that any type of damage is caused to the windshield by a third party installer during the installation process.

1. Remove overhead dome light by pulling down the front dome light assembly and slide forward to release the two (2) latches.



2. Disconnect the cable to the dome light



3. Remove the two (2) visor clips by removing the plastic tab on the back.



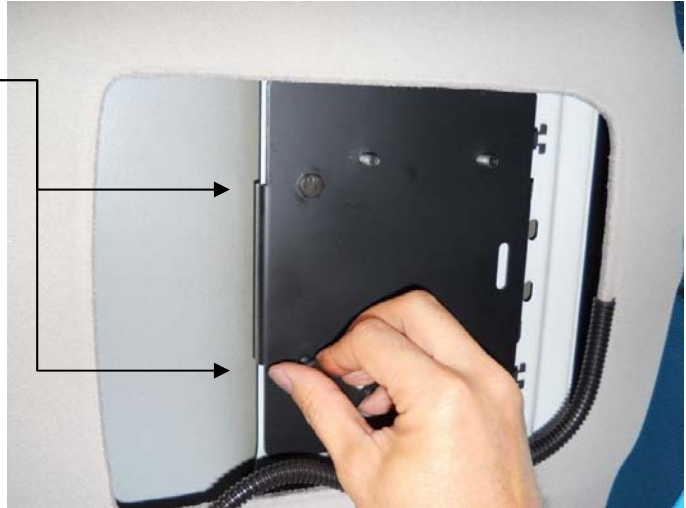
4. Remove the four (4) T20 Screws that hold the dome light compartment.



5. Slide in the Caprice adapter plate onto the roof crossbar of the vehicle.



6. Secure the back part of the adapter plate by using the two (2) provided $\frac{1}{4}$ - 20 hex bolts



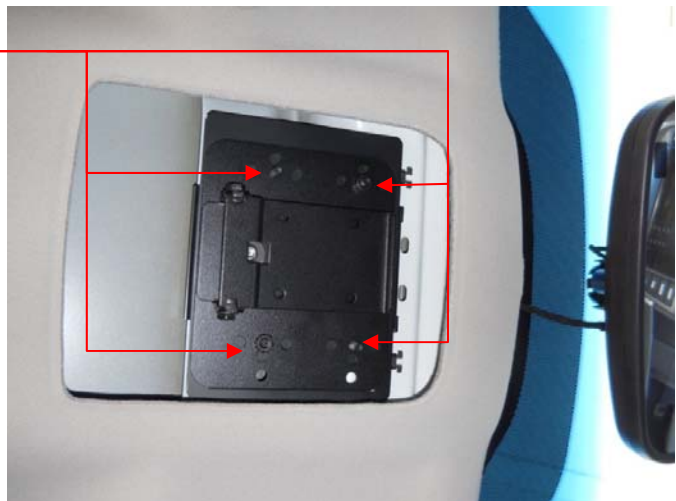
7. Secure the front of the adapter plate using one (1) provided # 10-16 x $\frac{3}{4}$ " self tapping screws.



NOTE: To ensure a solid mount, make sure the monitor mount is screwed onto the support beam.



8. Secure the monitor mount with four (4) provided $\frac{1}{4}$ -20 kep nuts.



9. Use four (4) provided # 10-32 x 3/8" Philips pan head screws to secure the Edge monitor to the back of the monitor mount.



10. Dress the cutout of dome light area with 1/4" Split Loom.
11. Secure and zip ties the cable to the mount. Please ensure there are enough slack on the cable to allow rotation of the monitor.



Wireless Microphone Receiver Installation

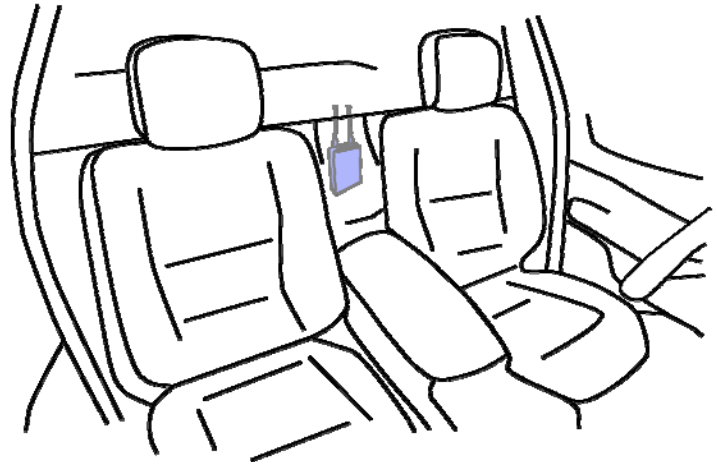
The COBAN EDGE wireless mic receiver is used to synchronize the wireless mic used by the officer with the EDGE recorder.

Note: The wireless microphone receiver mount installation procedure described in the following steps and recommended by COBAN is to install the components on the divider between the front and backseats of a vehicle. Different installation procedures will need to be followed for installation of the system in other situations. Please contact COBAN Technologies for more details on your specific vehicle type and installation orientation.

- Secure a 3" strip of 3M Dual Lock reclosable fastener tape to each side of the wireless microphone receiver.



- Secure a corresponding 3" strip of 3M Dual Lock reclosable fastener tape to the center divider of the vehicle.
- Press the wireless microphone receiver onto the CPU so that the 3" strips of 3M Dual Lock reclosable fastener tape line up and lock into place.



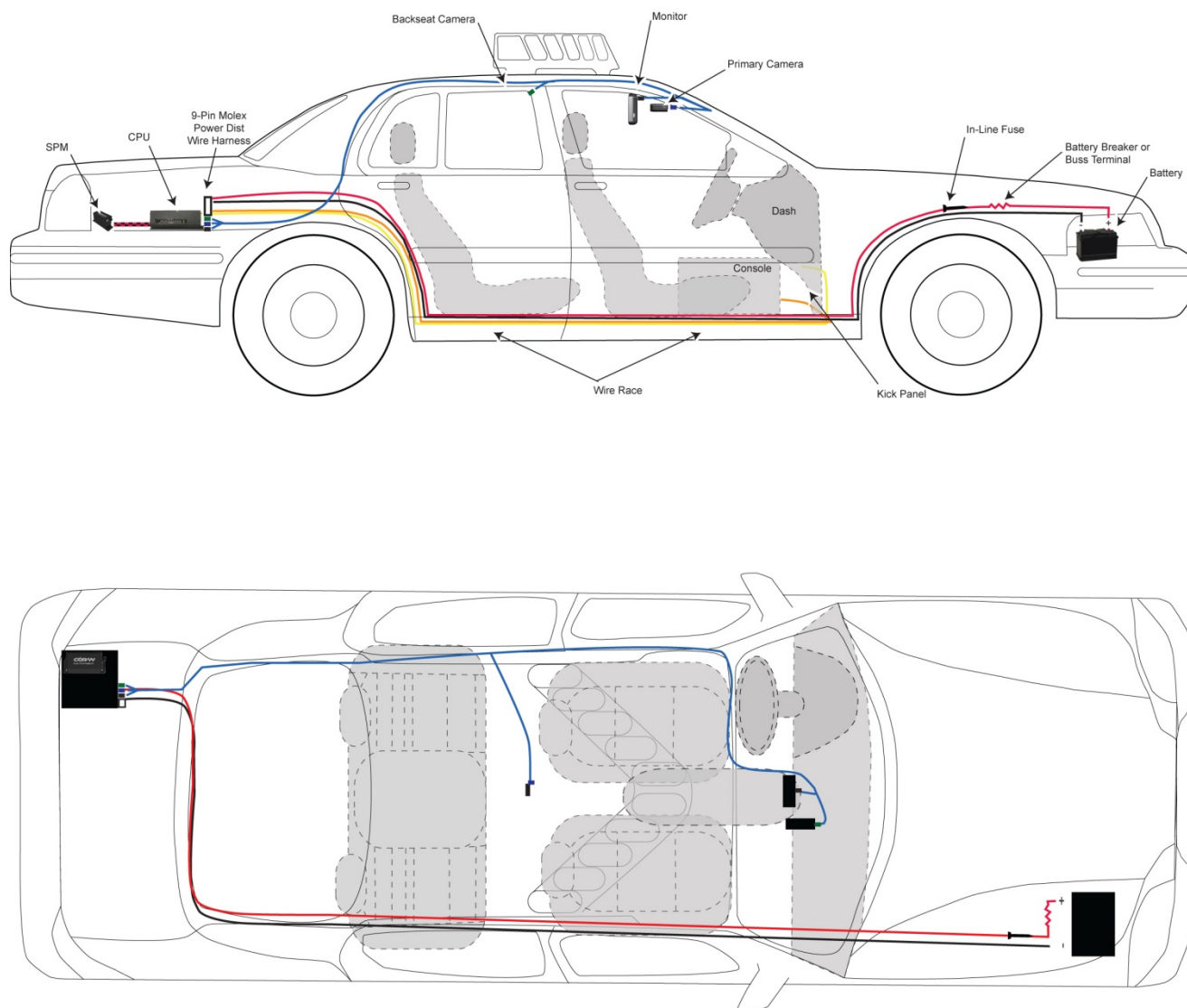
Cable Routing

COBAN Technologies recommends installing all EDGE system components prior to routing cabling throughout the vehicle.

Note: The cable routing described in the following steps was captured during the installation of the EDGE system in an overhead/visor orientation in a Dodge Charger. Different installation procedures will need to be followed for installation of the EDGE system on other types of vehicles. For more information please contact COBAN Technologies for more details on your specific vehicle type and orientation.

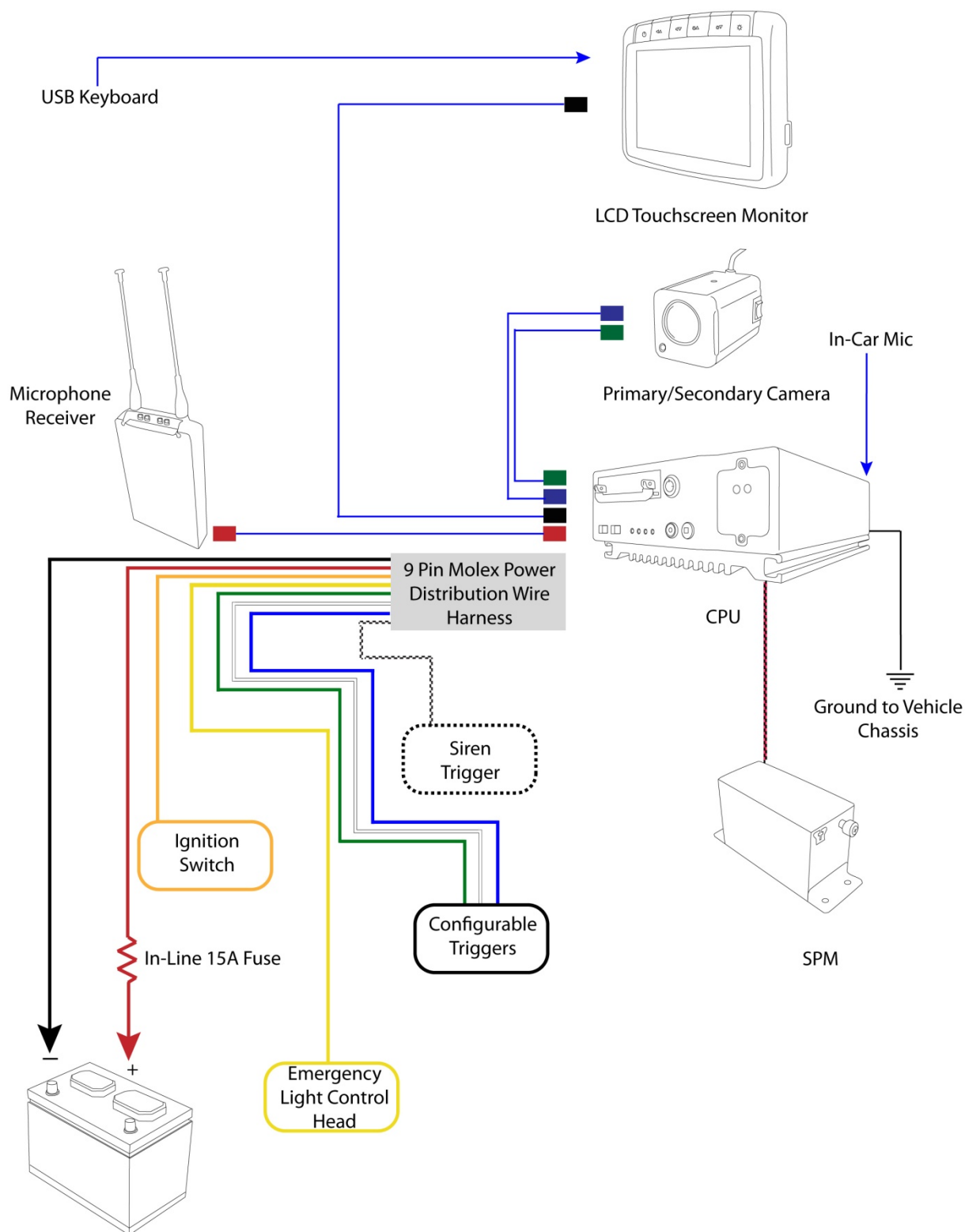
Route all color-coded COBAN EDGE system cables from the CPU to the COBAN components installed in the head liner of the vehicle as shown in the illustration below.

WARNING: ALWAYS make sure to remove the In-line Fuse on the 12V power wire leading to the COBAN equipment prior to 'jump-starting' any vehicle equipped with COBAN video equipment, as 'power surge' may severely damage the system. COBAN Technologies will not be held liable for any damages to its equipment if these instructions are not followed explicitly.



Wiring Diagram

Connect the COBAN cables and the 9-Pin Molex wires to the appropriate components and triggers as shown below:

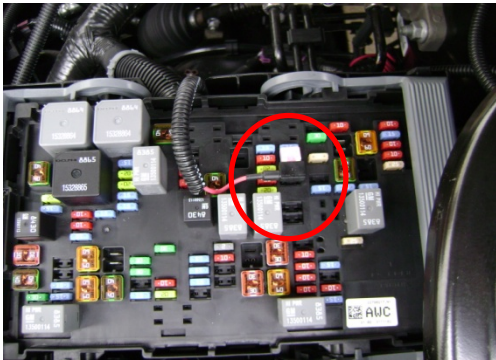


Power, Ground and Ignition

Recommended for **Power and Ground will be at main car battery**, unless approve by Coban elsewhere. Ignition will be determined depending on vehicle type. Example: photos



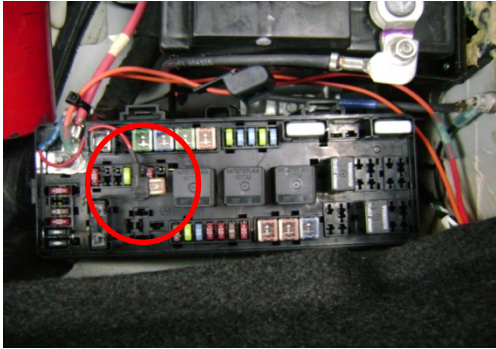
Crown Victoria ignition under glove box



Tahoe ignition fuse box under hood



Caprice ignition right rear trunk police package. Battery, ignition, and light bar



Charger ignition fuse box inside trunk

Tapping to Strobe Pack or Control Head for Light Bar Signal

The Department will need to determine the desired trigger position of the Light-bar to activate the Camera System prior to Installation.

Some strobe packs and power distribution packs may require a fuse tap, depending on the model of the light bar.

Locate the light bar power distribution pack or control head.

- Switch the light bar ON and OFF while testing for the signal with a voltage meter. Most light bar power distribution packs have a label indicating the activation positions. [1, 2, 3, etc.]
- Ensure that the signal reads between 8 to 13 volts in ACTIVE position, and 0.0 volts in INACTIVE position.

Note: Use a butt connector to securely tap into the Signal Wire

Optional COBAN Accessories

Drivers License Card Reader

- COBAN recommends 'Dual-Lock' or 'Double Sided Adhesive Tape' (by 3M™ Products) for mounting this Accessory.
- The Card Reader will be plugged into the USB Port on the back of the Monitor, or in some cases, it may be plugged into the USB Port on the face of the CPU.

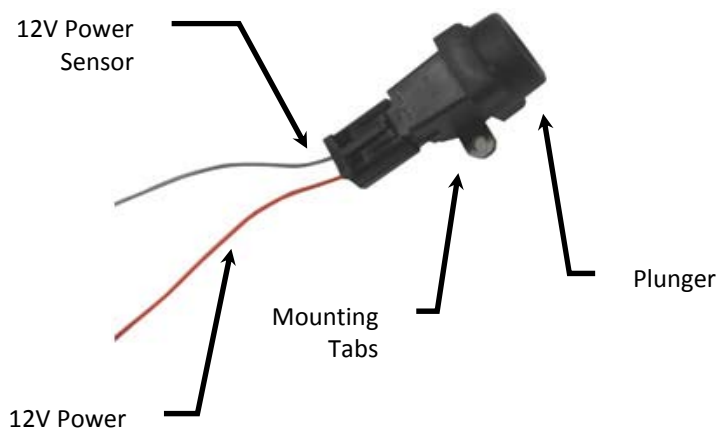


Crash Sensor

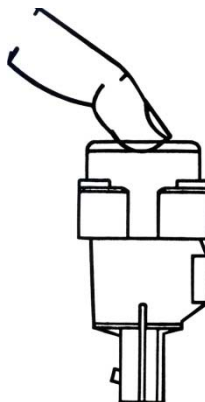
- This Accessory is best mounted in the Trunk of the Vehicle, preferably near the 'Emergency Fuel Cut-Off Switch' (in Crown Vic's) or in the corresponding location on the passenger side.
- This Component must be mounted in a vertical position, as level as possible, to the framework of the Vehicle Chassis, and be easily located by the Vehicle Operator in the event that it needs to be reset.
- The Crash Sensor will be wired into the COBAN Power Distribution Wire Harness.

12v Power Sensor – Blue Wire
Splices to Blue 'Spare' wire on Power Distribution Wire Harness

12v Power – Red Wire
Splices into Red wire on Power Distribution Wire Harness



- Depress the Plunger at the top of the Crash Sensor after installation; before testing the System; and before the vehicle is released into service.



GPS

- This Accessory can be mounted almost anywhere, although the recommended location is the on the passenger side Dashboard of the Vehicle.
- COBAN recommends 'Dual-Lock' or 'Double Sided Adhesive Tape' (by 3M™ Products) for mounting this Accessory.
- Plug the GPS into the USB Port on the face of the COBAN CPU.



Fixed Mount Antenna with Low Loss Cable (for Wireless Upload)

- This Accessory should be mounted either on the Trunk Lid (at least one foot (1') away from the rear Windshield), or on the Roof of the Vehicle (preferably forward of the Light-bar), at least one foot (1') from any other Antennae, or the Light-bar.
- This Antenna operates on the "line-of-sight" concept, and needs a clear path to locate the Access Point.
- The Low Loss Cable should be routed as far away from any High Frequency or High Voltage equipment and their related Cables and Wiring as possible.
- COBAN recommends routing this cable along the same route as the COBAN color coded cables.
- This Accessory will be plugged into the back of the CPU, near the Pig-Tails, utilizing an 'RP SMA Male' connector.



Low Loss
Antenna
Cable



Low Profile
Antenna



Securing
Collar



O-ring

MDT Integration

This Option is not an Accessory, but instead a Cable that allows the COBAN System to communicate with another Mobile Data Terminal in the vehicle through an Ethernet Crossover Cable

The Crossover Cable will have one end plugged into the COBAN CPU Ethernet Port on the face of the CPU, and the other end plugged into the Ethernet Port on the Departments' Mobile Data Terminal already in place in the vehicle.



Wide Angle Camera

This Camera is often used to view the Prisoners in the rear passenger compartment; through the rear Windshield; or passenger side windows of the Vehicle. It utilizes a 'Proprietary' Camera mount designed by COBAN, and should be secured firmly to the side Structural Rib, or the Roll Bar of the Prisoner Cage (mounting locations will vary according to Department specifications).

As this is a Wide Angle Camera, some view adjustments will need to be made by the Technician during the testing phase and before releasing the vehicle back into service.

This Accessory will be plugged into the designated Color Coded Pig-Tail on the CPU (blue), or may possibly be routed through a 'Multi-Camera Junction Box' (depending on the number of Cameras being installed in that particular vehicle), that will be mounted near the CPU. COBAN will have Tags on the Cables and the Multi-Camera Junction Box to designate Camera 1, 2, or 3 and these Cameras will be placed in locations designated by Department specifications.

