



**Zepco “Mini” DVR
Mobile Digital Video Recorder –
Compact Flash**

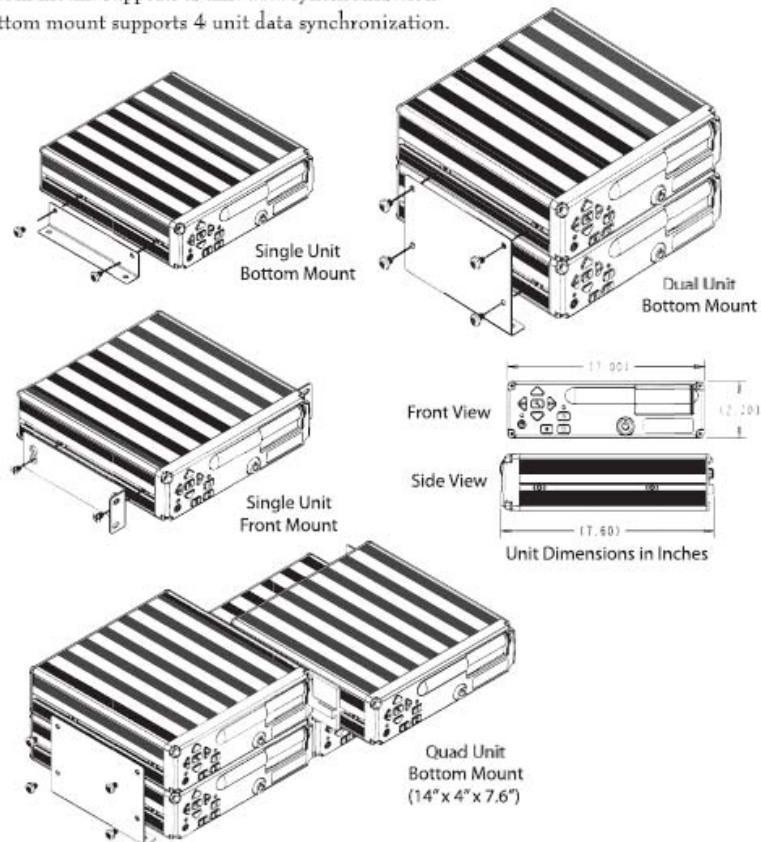
(MDVR-CF)

Installation Quick-Start Guide

Mechanical Configurations

The extruded aluminum design allows for multiple mechanical configurations of 1 unit, 2 units or 4 units. The units can communicate together to allow for passing of GPS data, accelerometer data, and control data from one unit to the others. Additionally, trigger data can be transferred from one to the others allowing this configuration to multiply the number of trigger inputs and outputs available.

- § Lockable compact flash compartment.
- § Password protected power down and menu options.
- § No external lock-box needed for most installations.
- § Single unit front mount (automotive DIN installation).
- § Single unit bottom mount.
- § Dual unit bottom mount supports 2 unit data synchronization.
- § Quad unit bottom mount supports 4 unit data synchronization.



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1 – CD w/ Client Software,
Digital Users Manual & Digital
Installation Quick Start Guide



1 – Master Harness



2 or 4 FBNC/MRCA Adapter *



Parts List

1 – MDVR-CF (1 or 2 cameras)



1 or 2 5M Video/Audio Cable *



1 or 2 Day/Night 8.0mm Color
Cam w/Audio *



1 or 2 12V Power Extension *



* Quantity Depends on Order

Providing Power for Your Camera(s)

NOTE: TURN OFF DVR BEFORE PLUGGING IN CAMERAS!

Internal to the MDVR-CF is a regulated power supply that provides 12V to power up your cameras.



With Zepco's custom power extension cable providing external power to your cameras is made easy. Be sure your MDVR-CF is installed in a good, tight location.



NOTE: If you find that you are not getting pictures when you are looking at video on your CF card, this would be the first place to look. Ensure your camera are getting power.

Camera & Audio Cables

Your video/audio cable attaches to the 'V in' (video in) and 'A in' (audio in) at the rear of the MDVR-CF.



Your cabling has BNC connectors for your video and audio channels. You then have male and female power jacks on each end of your cable. Be sure you install the cable correctly – the female power jack goes to the camera side. There's nothing worse than uninstalling something you just installed because it is backwards – trust us, you will only do it once! 😊

Connecting to the MDVR



In order to make the cable connection to your MDVR-CF, you need to insert an adapter. Included in your MDVR system are (2) FBNC/MRCA adapters or (4) if you ordered a two-channel MDVR-CF.

Ensure the BNC connections are locked to the adapter



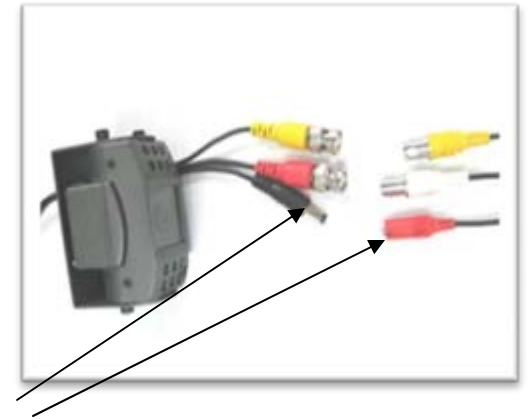
When Zepco installs MDVR systems, we wrap all connectors with electrical tape to ensure a firm connection at the DVR and at the camera. These are rugged automotive connectors, however extremely rough roads could shake them loose. A little tape can save troubleshooting time later!

Securing Cameras and Cabling



Once you've determined the location for your cameras you need to drill a hole for your cabling. Zepco suggests a 1" 3/8 in. hole. ALWAYS use a proper sized grommet to ensure that there will be no cuts or scrapes from sharp edges on the video cable.

Making the right connections is critical to a working system. A general rule of thumb is that your video connection is YELLOW, audio is WHITE and the power is RED. As you can see in this illustration the audio from this camera is RED however we still connect it to the WHITE connector of the video cable. The power connector, regardless of color, is obviously different than the audio/video connectors and will only plug into one available connector (black to red in this picture).

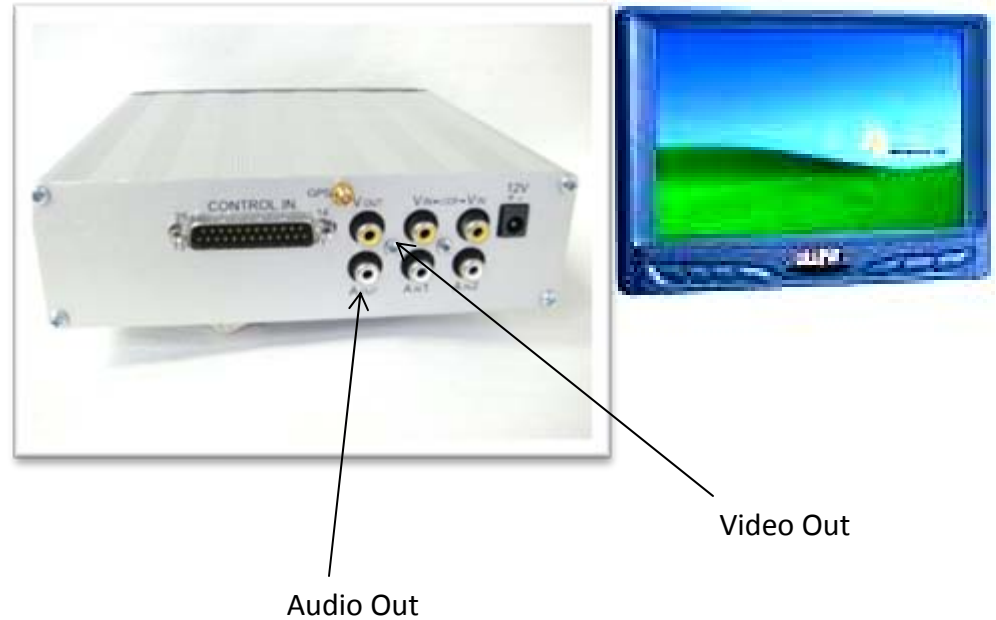


Once again, since we're installing a video system in a mobile environment we like to take the extra step to ensure sound connections for all our connections in the video system.

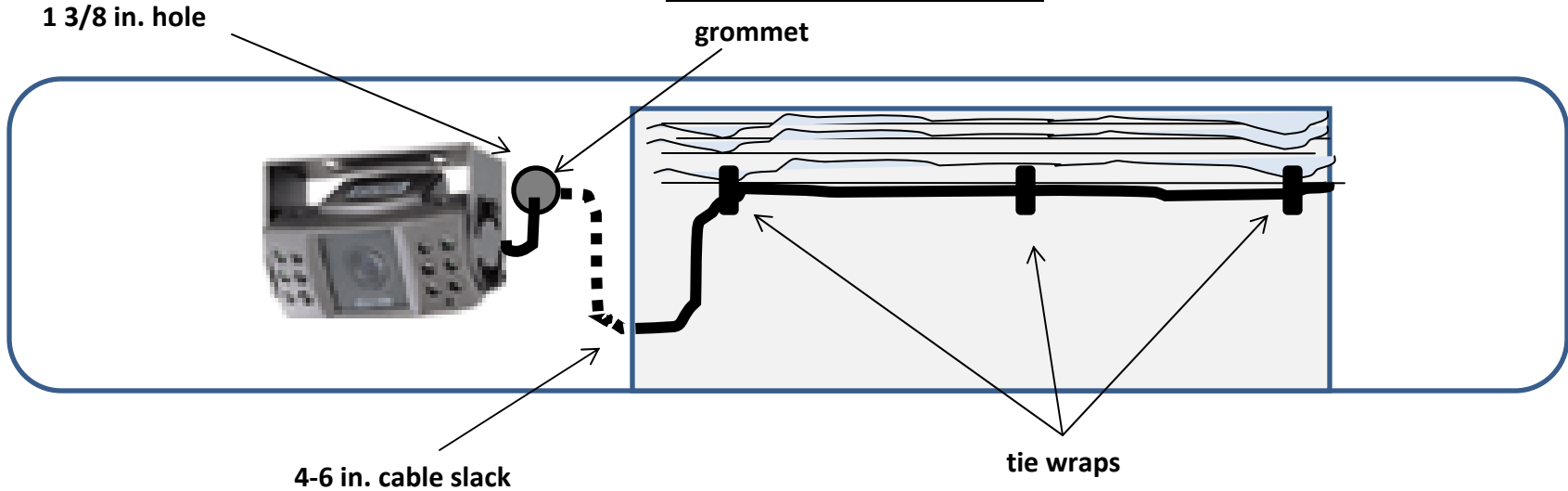
Camera Views – Making Adjustments

The best way to ensure your camera(s) are recording the view you want is to align them at the installation. The focus of the cameras will be correct from the factory. We recommend using a small inexpensive LCD monitor for camera alignment. This would also be the last step in the installation process.

NOTE! Before reinstalling ceiling panels and “buttoning up the vehicle,” power up the MDVR-CF system, line up your cameras and ensure the entire system is operating correctly!

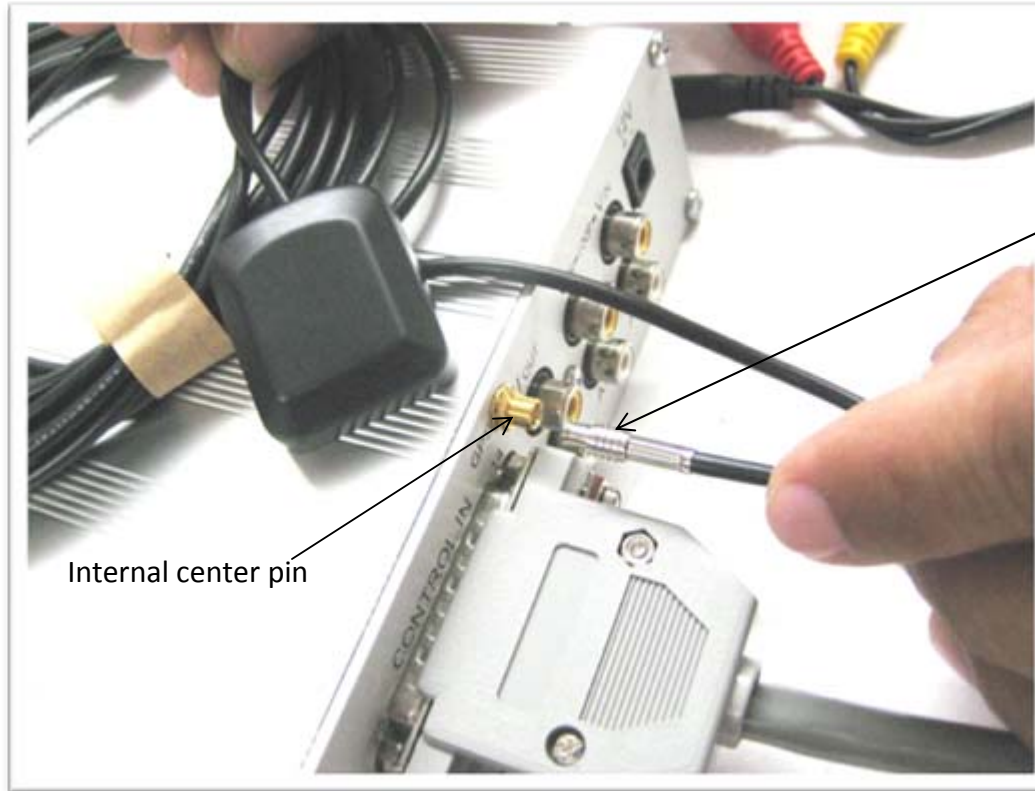


Strain Reliefs



We highly recommend providing strain relief to all cables in any mobile environment. Take up & secure all slack and ensure all camera connections remain intact while moving your cables out of the way. Tie wrap your slack to an existing wiring bundle or other secured areas behind your ceiling panels.

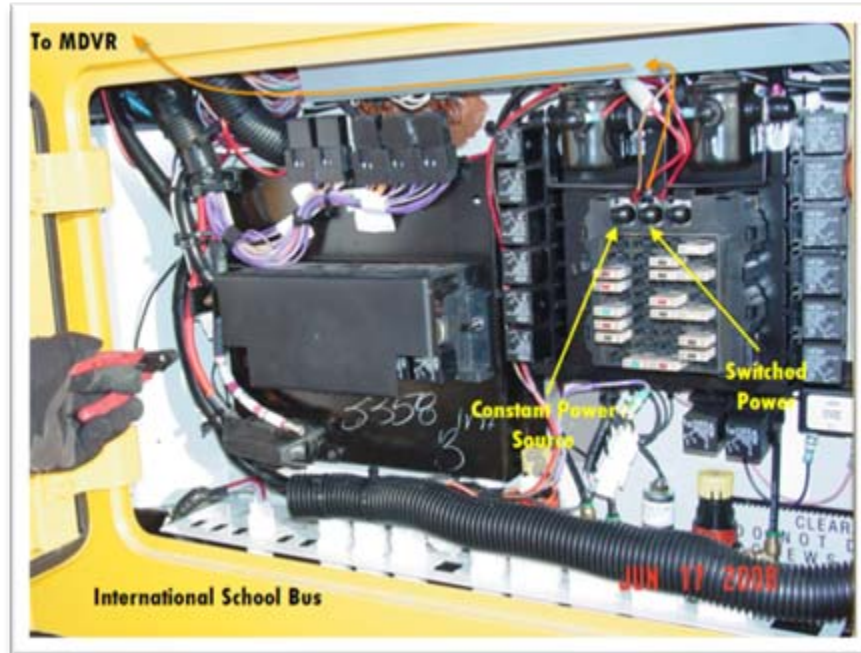
Installing GPS



If the GPS option was ordered, your system will include a GPS receiver that is installed internally. Connect the GPS antenna at the rear of your MDVR-CF system then run the antenna cable to the top of your vehicle. The magnetic antenna must be placed on top of the vehicle for a full view of the sky.

The same rules apply for securing slack cabling in a mobile environment: proper strain reliefs, tie-wraps for a secure installation, a proper sized hole for access to the roof of the vehicle with protective rubber grommet. Be sure and provide a water tight seal where the GPS cable enters the vehicle.

Powering the MDVR- CF System



Because of the many brands and models of fleet vehicles, not every installation is the same. Ideally, we suggest that you run your harness to your power panel for easy connections. In this illustration, we are installing on an International school bus and the power panel is accessed outside the bus, just under the driver's window. The harness was not long enough to reach the compartment so extensions were spliced inside the bus. Be sure and use the same gauge cable and if at all possible follow the existing color scheme too.

WARNING: Each MDVR-CF must have a proper **GROUND**, **CONSTANT POWER** and **SWITCHED POWER** source. **NOTE: connecting power to your MDVR-CF system is the LAST thing you want to do. The entire system should be installed and all connections made before connecting to the power source.**

Warranties & Repairs

All hardware for your Mobile Digital Video System comes with a **STANDARD 1-YEAR WARRANTY**. If you have an MDVR issue please contact a Zepco technician at 800-527-4305. We provide free troubleshooting via telephone and internet. If it is determined that repairs cannot be made via phone or internet, the technician will provide you with an RMA number to ship the defective system to Zepco at:

Zepco Sales & Service
ATTN: RMA # *****
508 N. Central Expressway
Richardson, TX 75080

NOTE: The customer is responsible for shipping AND please don't open cameras or the mobile digital video recorder as it ***could VOID your warranty***. A 3-year and a 5-year extended warranty is available – contact your salesman.

Once the hardware is received at Zepco Sales & Service we target a 48 hour turn-around. If the repair can't be completed at Zepco, and the unit needs to be sent to the factory for 2nd level repairs, the Zepco technician will inform you.

NOTE: All repairs that are OUT-OF-WARRANTY are subject to Zepco's standard labor rate (currently \$85/hour), whether at Zepco or on client's site. In addition to parts and labor, travel & living expenses will be billed for all non-warranty work performed at client's site.