

## SCHOOL BUS VIDEO QUICK WIRING for CF & HD DVRs

### Power Harness Cable

Wire Color	Pin #	Function
Red	16	+12v Battery (Fused 3-5A)
White (Trigger 3-Ign)	6	+12v Ignition On
Black	17	-12V Ground

### Event Marker Button Cable

Wire Color	Connect to Main Power Harness
Red	White Wire+12v after Ignition
White	Green wire for Trigger 6 (Event)

### Triggers Harness Cable

Function	Pin #	Wire Color
Trigger 1- Stop Arm	20	Red wire
Trigger 2- Brakes	5	Brown wire
Trigger 4- Right Turn	7	White wire
Trigger 5- Left Turn	8	Yellow wire
Trigger 6- Event	9	Green wire

If you purchased CF cards from FMI, then your entire system User Guides, Bus Quick Wiring, MVS Warranty, and Player Software are on one of the CF cards included with this shipment.

If you did not buy CF cards from FMI, then you can access the above by visiting our online Customer Resources FTP at:

<http://www.AmericanBusVideo.com/CUSTOMER-FTP/>

## SCHOOL BUS QUICK PROGRAMING for CF & HD DVRs

The following DVR programming will require a DVR system installed and a display monitor plugged into the rear output video of the DVR.

- All programming should be performed without a CF card in the DVR.
- Navigation of the system requires no remote; it uses the navigation control buttons on the left face of the DVR.
- Middle button with magnifying glass logo is the “Menu” button, the arrow buttons are the navigational direction and the right arrow key is also the “select” button.

## **Programming for basic School Bus DVR:**

Hold Menu button down for 2 seconds and the Main Menu screen will show up on the display monitor

### **MAIN MENU**

Highlight Select Setup, press right arrow button

#### **SETUP MENU**

Video in Select....set to Multiplexed

(only appears in 2 channel DVR systems)

Audio Volume...set to 3db, 3db

Time Setup...unless you are a DC politician this one should be easy

Password Setup...when asked for password enter via arrow buttons;

L,R,L,R,L,R

**Password Menu**...highlight All Keys...press right arrow button, highlight "Disabled" and press up or down arrow button to change to "Enabled", then press Menu button to back out to Main Menu

### **MAIN MENU**

Highlight Select Titles, press right arrow button

#### **TITLES MENU**

System Name highlighted press right arrow button

Enter bus number (down arrow for numbers and up arrow for letters)

Press menu button 1 time to back out to Titles Setup Menu

Trigger setup same as Title Setup, this is where you can add a letter for triggers then press Menu button to back out to Main Menu

### **MAIN MENU**

Highlight Select Trigger Setup, press right arrow button

#### **TRIGGER SETUP**

(Only needed if your installer has connected triggers to lights, stop are brake..)

Activate the trigger device, ie. Brake and see what number displays on the screen when the trigger is activated. That number is then associated with the device activation. Example Brake flashed 4 on the screen. It is important to wire them the same so you will reduce confusion when the numbers are displayed. Then follow suite with the balance of the triggers you have connected so you know what numbers mean when they are displayed on the screen.

System Name highlighted press right arrow button

Driver Event Marker button should be pressed to see at trigger number is displayed. Once the number is seen change the status on the Trigger Setup from “Display Only” to “Event” just for this trigger. Then press Menu button to back out to Main Menu

## **MAIN MENU**

Highlight Select Record Setup, press right arrow button

### **RECORD SETUP**

Record Mode... highlighted press right arrow button Erase Oldest to loop video

Audio on...unless your district is in PA (legal issue over audio recording)

Image Size...320x240 unless you only have 1 camera, then 640x240

Image Quality...Med High

Frame Rate... 15 PFS

Advanced Options...Record off delay should be set to 5 minutes

(This is the time the DVR stays on after ignition turned off, to record the driver looking for sleeping or hiding children on the bus)

Then press Menu button to back out to Main Menu

## **MAIN MENU**

Highlight Select GPS Setup (only if you purchased GPS DVR), press right arrow button

### **GPS SETUP**

Use GPS...Yes

Use GPS Time...Yes

GPS Time Zone (EST is -6), (CST is -7) , add or subtract for your time zone

User Guides, Bus Quick Wiring, MVS Warranty, and Player Software are available at: <http://www.AmericanBusVideo.com/CUSTOMER-FTP/>

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## GPS On Screen Mapping Feature

### CF Card Transfer Rates may not be what they claim to be on the package:

Video Streaming DVRs require extremely high transfer rates along with a internal processor capable of permitting sustained transfer of data at those extremely high rates to function properly. Some CF cards may have a peak transfer rate of what is listed on their label, but they cannot support that momentary peak rate full time. We recommend only using the cards we supply, or a high quality card like "SanDisk Extreme III" series to insure they function properly. Customers buying cheap CF cards from discount retailers or online suppliers have found many are far too slow for the DVR to function.

### Internet Interface:

Free On Screen Mapping feature (GPS equipped DVRs only) requires program access to the Internet for Google provided map & zoom features. This feature is disabled if our programs Internet access is not permitted.

### Communication port required:

HTTP Port 80 (TCP connection)

As long as this prefix is not blocked and the system has direct Internet access, it should work. If access is very slow, it may not download a tile in time to download another one. You would still see a .map file being created, but you should see at least a periodic tile get rendered. If you can pull up maps under <http://maps.google.com>http://maps.google.com on the destination machine, it should work.

### GPS Acquisition Delay:

The delay of the GPS system to acquire sufficient satellites for accurate measurements will take approximately 2-3 minutes from the power up time. It has been found that faster function has presented displayed measurements that could be erroneous, so this delay is a built in safeguard.

### Antenna Mounting:

The best function will be obtained by roof mounted GPS antennas. It is also a good idea to not coil up excess antenna cable as it can create an electromagnetic interference and be detrimental to the proper function of the GPS system. Excess cable should be loosely tucked behind bus panels and not tightly rolled up to insure peak performance.

	<b>Spec. American Made DVRs</b>	
	<b>Bid American Made DVRs</b>	

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