

#### GM ONSTAR CLASS II DATA BUS INTERFACE

# **GM05-08**

INSTALLATION INSTRUCTIONS

### (For Amplified Sound Systems Only)

The GMOS-08 is designed to be used with vehicles that have a factory amplified system. Besides retaining the onstar system, the gmoso8 will also retain the warning chimes that will be lost when the factory radio is removed, and also provide a 12 volt accessory wire for proper radio operation. The gmos-08 now provides mute, parking brake, vss or speed sense, and a reverse output to make installing an aftermarket navigational radio simpler and less time consuming.

> \* READ IMPORTANT WARNING ON PAGE 1 BEFORE ATTEMPTING ANY INSTALLATION

(Note: This interface will also work in vehicles listed below that are not equipped with Onstar)

#### **APPLICATIONS**

CHEVY Equinox 2005-06

PONTIAC Torrent 2006

#### INTERFACE COMPONENTS

- GMOS-08 Data Interface
- 14 pin harness with rca's
- 16 pin harness to 24 pin GM harness and 12 pin Onstar harness

1-800-221-0932

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### GM05-08

## \* IMPORTANT WARNING

THIS PRODUCT INCLUDES INSTRUCTIONS FOR INSTALLATION WHICH MUST BE CAREFULLY FOLLOWED. THE INSTRUCTIONS ARE WORDED IN SUCH A MANNER TO ASSUME THAT THE INSTALLER IS CAPABLE OF COMPLETING THESE TYPE OF ELECTRONIC INSTALLATIONS. IF YOU ARE UNCLEAR AS TO WHAT YOU ARE INSTRUCTED TO DO OR BELIEVE THAT YOU DO NOT UNDERSTAND THE INSTRUCTIONS SO AS TO PROPERLY AND SAFELY COMPLETE THE INSTALLATION <u>YOU SHOULD</u> <u>CONSULT A TECHNICIAN WHO DOES HAVE THIS KNOWLEDGE AND</u> <u>UNDERSTANDING.</u> FAILURE TO FOLLOW THESE INSTRUCTIONS CAREFULLY AND TO INSTALL THE INTERFACE AS DESCRIBED COULD CAUSE HARM TO THE VEHICLE OR TO SAFETY SYSTEMS ON THE VEHICLE. INTERFERENCE WITH CERTAIN SAFETY SYSTEMS COULD CAUSE HARM TO PERSONS AS WELL. IF YOU HAVE ANY QUESTIONS IN THIS REGARD PLEASE CALL THE HELP LINE OR THE METRA AT 1-800-221-0932 FOR ASSISTANCE.

# TOOLS REQUIRED FOR INSTALLATION

- Cutting Tool Tape Crimping Tool
- Connectors (ie: butt-connectors, bell caps, etc.)

## WIRING UP THE GMOS-08

- \* **Important:** Before beginning any of the following, disconnect the negative battery terminal to prevent accidental short circuit.
- \*\*Note: The ignition power source of most factory GM radios keep the radio on until one of the doors is opened. This is called the R.A.P. (retained accessory power). The GMOS-08 is designed to retain this feature.

## IMPORTANT!

THE BROWN LOOP ON THE 16 PIN HARNESS <u>MUST</u> BE CUT, THEN TAPED UP. PLEASE REFER TO THE ONSTAR LEVEL ADJUSTMENT SECTION FOR FURTHER DETAILS ABOUT THE BROWN WIRE.

# <u>CONNECTIONS TO BE MADE ON THE</u> <u>24 PIN LT. BLUE HARNESS:</u>

- 1. Connect the yellow wire to the radio's 12 volt battery or memory wire.
- 2. Connect the black wire to the radio's ground wire.

When completed, plug the 16 pin harness into the GMOS-08.

## <u>CONNECTIONS TO BE MADE ON THE</u> 14 PIN HARNESS:

- 1. Connect the blue/white wire to the radio's amp turn on wire.
- 2. Connect the red wire to the radio's ignition or accesory wire.
- Connect the rca cables to the radio's rca outputs. if no rca outputs are available, use the Metra Line output converter part # ALOC648 (sold separately).

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- 4. The white rca goes to the front left rca output of the radio.
- 5. The gray rca goes to the front right rca output of the radio.
- 6. The green rca goes to the the left rear rca output of the radio.
- 7. The purple rca goes to the right rear rca output of the radio.



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The following wires on the 14 pin harness are for the aftermarket radios that have navigation built in:

- 1. Connect the Brown wire to the mute wire of the aftermarket radio.
- 2. Connect the Green wire to the parking brake wire of the aftermarket radio.
- Connect the Blue/Pink wire to the VSS or speed sense wire of the aftermarket radio.
- 4. Connect the Green/Purple wire to the reverse wire of the aftermarket radio.

When completed, plug the 14 pin harness into the GMOS-08.

## INSTALLING THE GMOS-08

- 1. With all connections completed to the aftermarket radio, plug the 24 and 12 pin harnesses into the vehicles coresponding wiring harnesses.
- 2. Reconnect the negative battery terminal.
- Cycle the key by turning the ignition on then back off, then on again to test the radio.

## TESTING THE GMOS-08

- Turn the ignition on then the radio on to verify that the radio works. Check the balance and fader controls of the radio for proper operation. If controls are backwards, check to see if the rca's are in the correct location.
- Push the Onstar button (if equipped) to verify Onstar is working. The radio will shut off or mute, depending if the **brown** wire is connected, and Onstar will be heard through the left front speaker. Turn off Onstar and the radio will turn back on.

# **ONSTAR LEVEL ADJUSMENT**

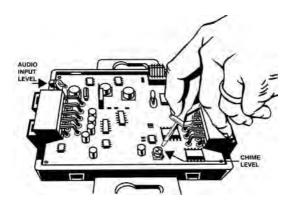
TO adjust the Onstar volume level find the BROWN wire that you cut on the 16th pin harness, you wil use the BROWN that is by itself, with no other wire with it. Push the blue Onstar button, while the voice is speaking tap the BROWN wire to ground. There are 4 volume settings for Onstar, once the 4th setting is reached and the BROWN wire is tapped to ground it will automatically go back to the first volume setting. Once the volume is set it will stay at that volume until the BROWN wire is tapped to ground again. This can be set during installation and then left alone. If user adjustment is desired, a momentary contact switch (sold separately) can be added. Connect one terminal from the switch to ground and the other terminal to the brown wire. The volume will change one level every time the switch is pressed.

### TROUBLESHOOTING:

#### Chime Too Loud/Soft:

There are some instances where the chime is too loud or too soft. To resolve this follow these steps:

- 1. Make sure the ignition is turned to the "off" position.
- 2. Disconnect the 14 pin and 16 pin wire harnesses from the GMOS-08
- 3. Open up the GMOS-08 by squeezing the sides of the top cover
- 4. Locate the potentiometer facing up on the circuit board, this is the Chime potentiometer
- Taking a small flat headed screwdriver, turn the potentiometer clockwise to decrease the chime level; turning the potentiometer counterclockwise will increase the chime level
- After adjustment replace top cover of GMOS-08 and reconnect wire harnesses.



#### Distorted Audio Output:

When using the GMOS-08 with a radio that has a high pre-out voltage, usually greater than 2 volts, the audio signal may become distorted. To resolve this follow these steps:

- 1. Make sure the ignition is turned to the "off" position
- 2. Disconnect the 14 pin and 16 pin wire harnesses from the GMOS-08
- 3. Open up the GMOS-08 by squeezing the sides of the top cover
- 4. Locate the potentiometer next to the 14 pin board mounted connector located at the end of the GMOS-08
- 5. Taking a small flat headed screwdriver, turn the potentiometer counterclockwise to lower the input level going to the factory amplifier
- 6. After adjustment replace top cover of GMOS-08 and reconnect wire harnesses.

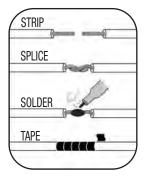
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# FINAL WIRING CONNECTIONS

Make wiring connections using the EIA color code chart shown below and the instructions included with the head unit. Metra recommends making connections as shown below; Strip, Splice, Solder, Tape. Isolate and individually tape off ends of any unused wires to prevent electrical short circuit.

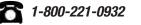
## Metra/eia Wiring Code

12V Ignition / Acc	Red
12V Batt / Memory	Yellow
Ground	Black*
Power Antenna	Blue
Amp Turn-On	Blue / White
Amp Ground	Black / White
Illumination	Orange
Dimmer	Orange / White
Right Front (+)	Gray
Right Front (-)	Gray / Black
Left Front (+)	White
Left Front (-)	White / Black
Right Rear (+)	Violet
Right Rear (-)	Violet / Black
Left Rear (+)	Green
Left Rear (-)	Green / Black



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**INSTGMOS-08** 





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