



## GM ONSTAR CLASS II DATA BUS INTERFACE

# GMOS-09

### INSTALLATION INSTRUCTIONS

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

The GMOS-09 is designed to be used in amplified and Onstar equipped vehicles with the "Dock and Lock" style harness, the radio harness that stays mounted in the dash when the radio is removed. The radio itself is held in by two spring loaded clips, one on each side. Besides retaining Onstar, the GMOS-09 retains the warning chimes that will be lost when the factory radio is removed. The GMOS-09 will also provide a 12 volt switched accessory wire for proper radio operation. The GMOS-09 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.

**\*Note:** This interface will also work in amplified vehicles listed below that are not equipped with Onstar.

### APPLICATIONS

- Oldsmobile Aurora 2001-2003
- Pontiac Bonneville 2000-2005

### INTERFACE COMPONENTS

- GMOS-09
- 10 pin harness with RCA's
- 16 pin harness to 32 pin GM harness



1-800-221-0932

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[www.metraonline.com](http://www.metraonline.com)

INST-GMOS09

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## \* **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 YOU SHOULD CONSULT A TECHNICIAN WHO DOES HAVE THIS KNOWLEDGE AND UNDERSTANDING. **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.**



## **KNOWLEDGE IS POWER**

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## **TOOLS REQUIRED FOR INSTALLATION**

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

## **WIRING UP THE GMOS-09**

*\* **Important:** Before beginning any of the following, disconnect the negative battery terminal to prevent accidental short circuit.*

*\*\***Note:** The ignition power source of most GM keeps the radio on until one of the doors is opened.*

*This is called the R.A.P. (retained accessory power). The GMOS-09 is designed to retain this feature.*

### **IMPORTANT!**

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

## **CONNECTIONS TO BE MADE ON THE 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 accessory wire.
3. Connect the RCA cables to the radio's RCA outputs.

*If no RCA outputs are available, use the Metra line output converter, part # ALOC608 (SOLD SEPARATELY).*



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

**he 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.
  3. 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-09.**

## **CONNECTIONS TO BE MADE ON THE 32 PIN GM HARNESS:**

1. Connect the yellow wire to the radio's 12 volt battery or memory wire.
2. Connect the blue wire to the radio's antenna turn on wire.
3. Connect the orange wire to the radio's illumination wire (if wire is not present, tape wire off).
4. Connect the black wire to the radio's ground wire.

**Note: For 2000 and 2001 model year vehicles, cut and isolate the Blue/White wire that is going to pin A6 of the 32 way GM connector. See label on wire.**

**Note: For 2002 through 2005 model year vehicles, cut and isolate the Blue/White wire that is going to pin A3 of the 32 way GM connector. See label on wire.**

## **INSTALLING THE GMOS-09**

1. *With all connections completed to the aftermarket radio, plug the 32 pin harness into the vehicles wiring harness.*

***\*Note:** Some minor modifications may be necessary to the sub dash cavity to accommodate the GMOS-09.*

2. *Reconnect the negative battery terminal.*
3. *Cycle the key by turning the ignition on then back off, then on again to test the radio.*

## **TESTING THE GMOS-09**

1. *Turn the ignition on if not already, and then turn the radio on to verify that the radio works. Check the balance and fader control of the radio for proper operation.*
2. *Push the Onstar button (if so equipped) to verify Onstar is working properly. The radio will shut off and Onstar will be heard through the front speakers.*

## **ONSTAR LEVEL ADJUSTMENT**

*To adjust the Onstar volume level find the BROWN wire that you cut on the 16th pin harness, you will 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.*

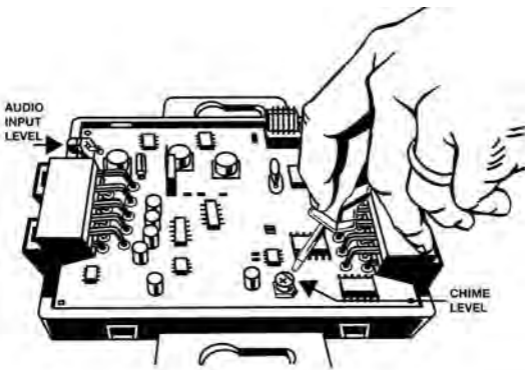
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## TOUBLESHOOTING:

### *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-09.
3. Open up the GMOS-09 by squeezing the sides of the top cover.
4. Locate the potentiometer facing up on the circuit board, this is the Chime potentiometer.
5. Taking a small flat headed screwdriver, turn the potentiometer clockwise to decrease the chime level; turning the potentiometer counterclockwise will increase the chime level.
6. After adjustment replace top cover of GMOS-09 and reconnect wire harnesses.



### *Distorted Audio Output:*

When using the GMOS-09 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-09.
3. Open up the GMOS-09 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-09.
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-09 and reconnect wire harnesses.