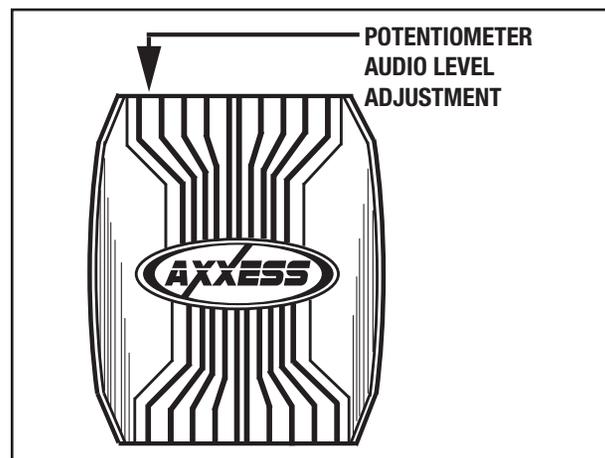


### **\*IMPORTANT WARNING**

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.**

### **AUDIO LEVEL CONTROL**



When using the CHTO-013 with a radio that has a high audio 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 both of the harnesses from the CHTO-013.
3. Locate the potentiometer next to the 14-pin connector at the end of the CHTO-013.
4. Taking a small flat headed screwdriver, turn the potentiometer counter-clockwise to lower the input level going to the factory amplifier.
5. After making the adjustment reconnect the wire harnesses.

## **CHTO-013**

### **INSTALLATION INSTRUCTIONS**

***\* READ IMPORTANT WARNING INSIDE BEFORE ATTEMPTING ANY INSTALLATION***

THE CHTO-013 IS DESIGNED TO BE USED WITH VEHICLES THAT HAVE A FACTORY AMPLIFIED SYSTEM. THE CHTO-013 WILL PROVIDE A 12-VOLT SWITCHED WIRE FOR PROPER RADIO OPERATION. THE CHTO-013 NOW PROVIDES MUTE, PARKING BRAKE, VSS OR SPEED SENSE, AND A REVERSE OUTPUT TO MAKE INSTALLING AN AFTERMARKET NAVIGATIONAL RADIO SIMPLER AND LESS TIME COMSUMING.

### **INTERFACE COMPONENTS**

- CHTO-013 • 14-PIN HARNESS WITH RCA'S
- (2) 12-PIN HARNESSES TO 22-PIN CHRYSLER HARNESSES

### **TOOLS REQUIRED FOR INSTALLATION**

Cutting Tool • Tape • Crimping Tool • Connectors



## CHTO-013

### APPLICATIONS

#### CHRYSLER

300 2008-UP\*  
 ASPEN 2008-09\*  
 SEBRING 2007-10\*  
 TOWN & COUNTRY 2008-UP\*

#### DODGE (cont.)

NITRO 2007-UP\*  
 RAM 1500 2009-UP\*  
 RAM 2500/3500 2010-UP\*

#### JEEP

COMMANDER 2006-2007  
 and 08-10\*  
 COMPASS 2007-08 and 09-UP\*  
 GRAND CHEROKEE 2005-2007  
 and 08-UP\*  
 PATRIOT 2007-08 and 09-UP\*  
 WRANGLER 2007-UP\*

#### DODGE

AVENGER 2008-UP\*  
 CALIBER 2007-08 and 09-UP\*  
 CHALLENGER 2009-UP\*  
 CHARGER 2008-10\*  
 DAKOTA 2008-UP\*  
 DURANGO 2008-UP\*  
 GRAND CARAVAN 2008\*  
 JOURNEY 2009-UP\*  
 MAGNUM 2008-09\*

#### MITSUBISHI

RAIDER 2006-07 and 08-09\*

\* **NOTE:** THE CHTO-013 COMES WITH 2 DIFFERENT CHRYSLER 22-PIN HARNESSES. THE APPLICATIONS WITH A (\*) USE THE BIGGER OF THE TWO HARNESSES. THE BIGGER OF THE TWO HARNESSES ALSO HAVE 2 LARGER TERMINALS, ONE AT EACH END OF THE CONNECTOR.



#### KNOWLEDGE IS POWER

Enhance your installation and fabrication skills by enrolling in the most recognized and respected mobile electronics school in our industry. Log onto [www.installerinstitute.com](http://www.installerinstitute.com) or call 800-354-6782 for more information and take steps toward a better tomorrow.



Metra recommends MECP certified technicians.

### WIRING UP THE CHTO-013

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

\* **NOTE: THE ACCESSORY POWER SOURCE OF MOST ALL CHRYSLER VEHICLES KEEPS THE RADIO ON UNTIL ONE OF THE DOORS IS OPENED. THIS IS CALLED R.A.P. (RETAINED ACCESSORY POWER). THE CHTO-013 IS DESIGNED TO RETAIN THIS FEATURE.**

\* **NOTE: THE VEHICLES IGNITION SWITCH MUST BE IN THE OFF POSITION BEFORE PLUGGING THE CHTO-013 MODULE IN. ALSO THE KEY MUST BE CYCLED AT A MEDIUM PACE AT LEAST TWO TIMES BEFORE BEGINNING TESTING.**

### CONNECTIONS TO BE MADE ON THE 22-PIN HARNESS:

1. Connect the **yellow** wire to the radio's 12v battery or memory wire.
2. Connect the **black** wire to the radio's ground wire.
3. Connect the **orange** wire to the radio's illumination wire. If wire is not present, tape up wire.
4. For the **Caliber only**, connect the **blue/white** wire to the **blue/white** wire in the 14-pin harness, which connects to the radio's amplifier turn-on wire.

### CONNECTIONS TO BE MADE ON THE 14-PIN HARNESS

1. Connect the **blue/white** wire to the radio's amplifier turn-on wire.
2. Connect the **red** wire to the radio's Igniton 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 # ALOC648, (SOLD SEPARATELY).
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.

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

Connect the **brown** wire to the mute wire of the aftermarket radio.  
 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.

Connect the **green/purple** wire to the reverse wire of the aftermarket radio.

When completed, plug the 14-pin harness into the CHTO-013.

### INSTALLING THE CHTO-013

1. With all connections completed to the aftermarket radio, plug the 22-pin connector into the vehicle's corresponding wiring harnesses.
2. Cycle the key by turning the ignition on then back off, then back on again to test the radio.

### TESTING THE CHTO-013

1. Turn the ignition on then the radio to verify the radio works. Check balance and fader controls for proper operation. If controls are backwards, check to see if the RCA's are in the correct location.