

#### INTERFACE COMPONENTS

- AXDSPL-CH3 interface
- AXDSPL-CH3 interface harness
- AXDSPL-CH3 vehicle T-harness
   Bass knob

#### **APPLICATIONS**

Visit axxessinterfaces.com for current application list

# Chrysler **DSP Interface With Pre-Wired Harness 2011–2018**

#### **INTERFACE FEATURES**

- Includes a DSP (Digital Signal Processor)
- 15 Band graphic EQ
- 4 inputs and 6 individually assignable outputs
- Independent equalization for front, rear, and sub
- Selectable low pass, band pass, and high pass filters
- Selectable crossover slopes; 12db, 24db, 36db, 48db
- Each channel can be delayed independently up to 10ms
- Clipping detection and limiting circuits
- Retains factory parking sensor chimes
- Retains U-Connect voice prompts
- Adjustable chime level
- Can be used in amplified and non-amplified models
- Easy behind the radio installation with pre-wired harness
- Internal header port for adding interface modules
- Bass knob included for level control of subwoofer amp
- Settings adjusted via Bluetooth® in a smart device application (tablet or mobile phone), compatible with both Android and Apple devices
- Read, write, and store configurations for future recall
- Password protect feature available in the mobile app
- Micro-B USB updatable

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#### **TOOLS & INSTALLATION ACCESSORIES REQUIRED**

- Crimping tool and connectors, or solder gun, solder, and heat shrink • Tape • Wire cutter
- Zip ties Multimeter

#### **Google Play Store**



## Apple App Store



#### INSTALLATION OPTIONS

#### Adding a sub to a factory system:

This feature offers the ability to add a subwoofer to a factory system, whether amplified or non-amplified. (refer to page 3)

#### Adding a full-range amp & sub to a factory system:

This feature offers the ability to add a full-range amp and sub to a factory system, whether amplified † or non-amplified. (refer to page 4)

For amplified models the amp must be bypassed/unplugged, and With OE Amplifier chosen in the Configuration tab under Vehicle Type. Use Axxess <u>AXABH-CH2</u> (sold separately) to bypass the amp for best results.

#### 16-pin header port:

Inside the interface is a 16-pin header port for adding optional modules (sold separately). Page 5 and 6 will show the installation and use of these modules.

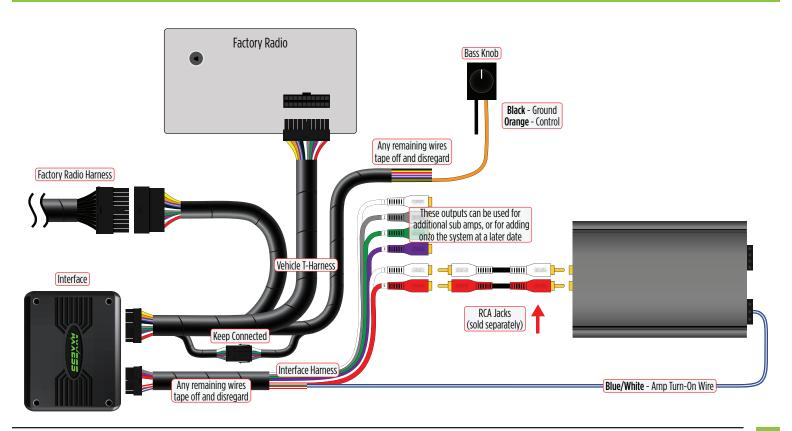
- **AXDSPL-BT** Bluetooth streaming interface
- AXDSPL-SP Toslink digital output

**Note:** The interface provides a 12-volt 1-amp output to turn on aftermarket amp(s). If installing multiple amps, an SPDT automotive relay will be required if the amp turn-on current of all amps combined exceeds 1-amp. Use Metra part number E-123 (sold separately) for best results.

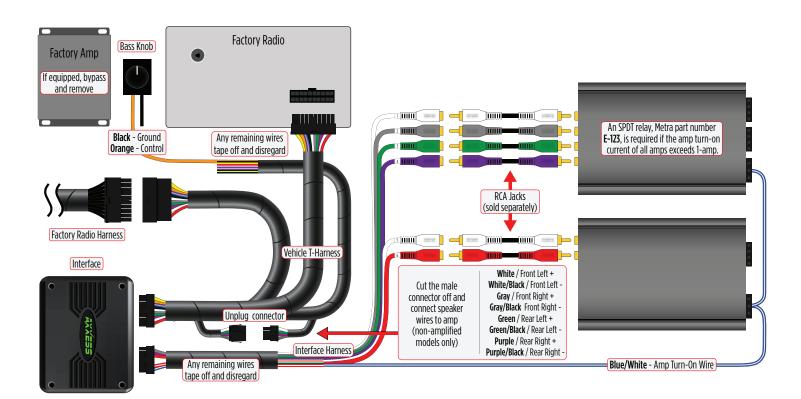
#### **INSTALLATION**

- 1. Remove the factory radio †, then unplug all connectors.
- Install the AXDSPL-CH3 vehicle T-harness to the vehicle and make all necessary connections, but leave the amp turn-on wire disconnected.
- 3. Plug the AXDSPL-CH3 vehicle T-harness to the AXDSPL-CH3 interface.
- **4.** Plug the **AXDSPL-CH3 interface harness** to the **AXDSPL-CH3 interface**.
- 5. Download and install the AX-DSP-X app from the Google Play Store or Apple App Store.
- **6.** Cycle the ignition on.
- **7.** Open the app then select the **Bluetooth Connection** tab. Follow the instructions to pair the mobile device to the interface. Refer to page 6 for more information.
- 8. Scroll to the Configuration tab then select the vehicle type. Press the Lock Down ‡ button to save the configuration. Refer to page 7 for more information.
- **9.** Connect the amp turn-on wire.
- **10.** Adjust the settings in the app as desired. Press the **Lock Down** ‡ button to save any new configurations.
- Refer to Metra online for dash disassembly. If Metra makes a dash kit for the vehicle, disassembly will be within those instructions.
- ‡ Anytime the interface is locked down the key must be cycled off then back on

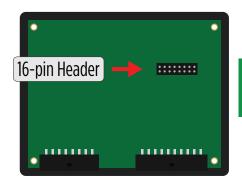
## **ADDING A SUB TO A FACTORY SYSTEM**



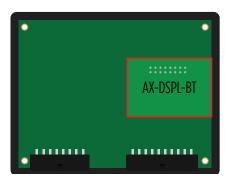
#### **ADDING A FULL-RANGE AMP & SUB TO A FACTORY SYSTEM**



#### **BLUETOOTH STREAMING INTERFACE**







- The AXDSPL-BT Bluetooth streaming interface can be used to stream media directly to the interface.
- While streaming media the volume on the phone will be used. As an option, the AXBK-1 (sold separately) can be used to control the volume.

**Note:** The bass knob included with the **AXDSPL-CH3** can be used if it will not be used to control a subwoofer.

- **1. Important!** Unplug the interface from the vehicle.
- Remove (4) Phillips screws securing the interface, then remove the top cover, exposing the circuit board within.
- **3.** Locate the 16-pin header on the circuit board.
- 4. Important! Referencing how the AXDSPL-BT is laid out in the picture, carefully line up the header pins to the interface. Gently press down to secure.

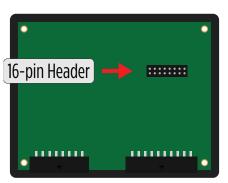
**Note:** Both interfaces may be damaged if installed wrong.

**5.** Reinstall the top cover to complete the installation.

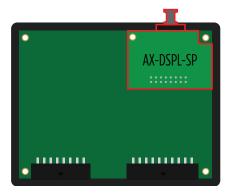
#### **AXBK-1 Installation:**

Connect the Brown wire from the interface to the Orange wire from the AXBK-1.Ground the Black wire from the AXBK-1.

## **TOSLINK DIGITAL OUTPUT**







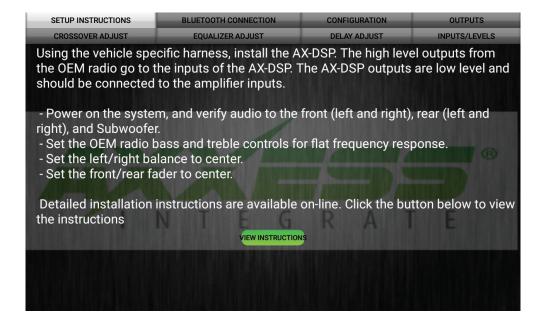
- The **AXDSPL-SP** Toslink digital output can be used for adding a digital output to the interface.
- **1. Important!** Unplug the interface from the vehicle.
- 2. Remove (4) Phillips screws securing the interface, then remove the top cover, exposing the circuit board within.
- **3.** Locate the 16-pin header on the circuit board.
- **4.** Important! Carefully line up the header pins to the **AXDSPL-SP**, with the Toslink port facing outward. Gently press down to secure.

**Note:** Both interfaces may be damaged if installed wrong.

**5.** Reinstall the top cover provided with the **AXDSPL-SP** to complete the installation.

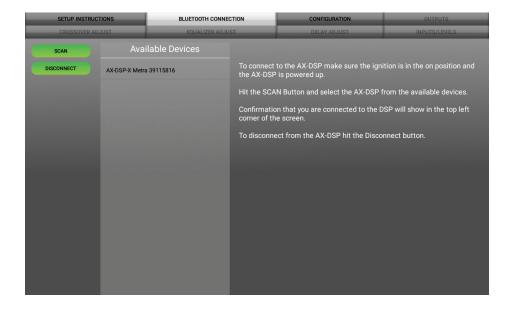
#### **MOBILE APP**

## **Setup Instructions**



General information tab for installing the interface.

## **Bluetooth Connection**

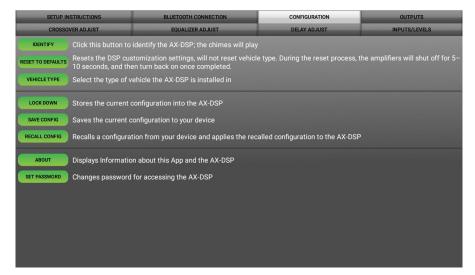


Scan - Press this button to start the Bluetooth pairing process, then select the interface
once it is found. "Connected" will appear in the top left corner of the app once paired.

**Note:** The ignition must be cycled on during this process.

• **Disconnect** - Disconnects the interface from the app.

## Configuration



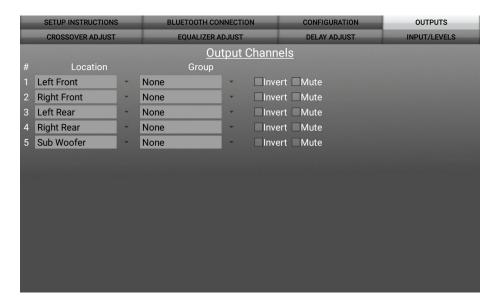
- **Identify** Click this button to send a test tone to the front left speaker\*. \* Only installations using the front left output (white RCA jack).
- **Reset to Defaults** Resets the interface to factory settings. During the reset process the amp(s) will shut off for 5-10 seconds.
- **Vehicle Type** Select the vehicle type from the drop down box, then click the apply button.
- Lock Down Click this button to save the selected settings.

**Attention!** This must be done before closing the app or cycling the key otherwise all new changes will be lost!

- **Save Configuration** Saves the current configuration to the mobile device.
- **Recall Configuration** Recalls a configuration from the mobile device.
- About Displays information about the app, vehicle, interface, and mobile device.
- **Set Password** Assign a 4-digit password to lock the interface. If no password is desired, use "0000". This will clear out any currently set password. It is not necessary to lock down the interface when setting a password.

**Note:** A 4-digit only password must be chosen otherwise the interface will show "password not valid for this device".

## **Outputs**



#### **Output Channels**

- **Location** Location of speaker.
- Group Used to join channels together for simple equalization. Example, left front woofer/midrange and left front tweeter will be considered simply left front. The letter M indicates the speaker assigned as the master speaker.
- **Invert** Will invert the phase of the speaker.
- Mute Will mute desired channel(s) for tuning individual channels.

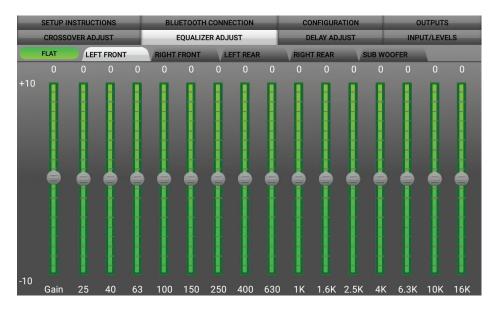
## **Crossover Adjust**



- Select the desired crossover filter per channel, low pass, band pass, or high pass.
- Select the desired crossover slope per channel, 12db, 24db, 36db, or 48db.
- Select the desired crossover frequency per channel, 20hz to 20khz.

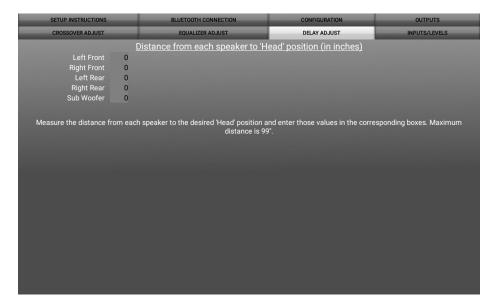
**Note:** The front and rear channels default to a 100Hz high pass filter to keep the low frequency signals out. If a subwoofer is not being installed, change the front and rear crossover points down to 20Hz for a full range signal, or to the lowest frequency the speakers will play down to.

## **Equalizer Adjust**



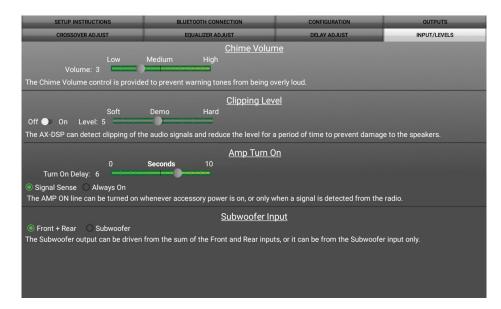
- All channels can be adjusted independently within this tab with 15 bands of available equalization. It is best to tune this by using an RTA (Real Time Analyzer).
- The **Gain** slider on the far left is for the channel selected.

## **Delay Adjust**



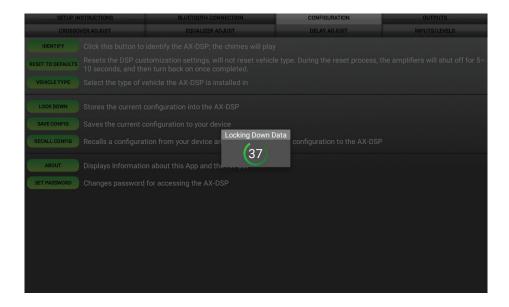
Allows a delay of each channel. If a delay is desired, first measure the
distance (in inches) from each speaker to the listening position, then
enter those values to the corresponding speaker. Add (in inches) to
the desired speaker to delay it.

## Inputs/Levels



- **Chime Volume** Allows the chime volume to be adjusted up or down.
- **Clipping Level** Use this feature to protect sensitive speakers like tweeters from being driven past their capabilities. If the output signal of the interface clips the audio will be reduced by 20dB. Turning down the stereo will allow the audio to come back at a normal level. The sensitivity of this feature can be adjusted to the listening preference of the user.
- Amp Turn On
- Signal Sense Will turn the amp(s) on when an audio signal is detected, and keep on for 10 seconds after the last signal. This ensures the amp(s) won't shut off between tracks.
- **Always On** Will keep the amp(s) on as long as the ignition is cycled on.
- Turn on Delay Can be used to delay audio output to avoid turn-on pops.
- Subwoofer Input Select Front + Rear

## **Locking Down Data**



Last and the most important.

You must lock down your

configuration and cycle the key!!!





## **SPECIFICATIONS**

Input Impedance 1M 0hm Input Channels

Input Options High Level or Low Level Input Type Differential balanced

Input Voltage 0 - 28-volts (peak-to-peak)

(high level range)

Input Voltage 0 - 4.9-volts (peak-to-peak)

(low level range)

**Ouput Channels** 6

**Output Voltage** Up to 5-volts RMS

Output Impedance 50 0hms

15 Band Graphic EQ. +/- 10dB Equalizer Type

THD < 0.03%

20Hz - 20kHz Frequency Response

Crossover Filter

Low pass, band pass, high pass Crossover Frequency Selectable 20hz to 20khz Crossover Slope 12db/24db/36db/48db

Crossover Type Linkwitz-Riley Sampling 48kH7

S/N Ratio 105dB @ 5-volts RMS

Operating Voltage Standby Current Draw 7mA Operation Current Draw 150mA

Adjustments/Controls Application via Bluetooth Remote Output 12 volts DC (signal sense

or with ignition

10-16 volts DC

Having difficulties? We're here to help.



Contact our Tech Support line at: 386-257-1187



Or via email at: techsupport@metra-autosound.com

## **Tech Support Hours (Eastern Standard Time)**

Monday - Friday: 9:00 AM - 7:00 PM Saturday: 10:00 AM - 7:00 PM Sunday: 10:00 AM - 4:00 PM



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