

AXDSPX-WR INSTALLATION INSTRUCTION



- Includes all of the features of the AXDSP-X
- Housed in a water-resistant case
- Harnesses have a rubber boot that snaps into the housing

INTERFACE COMPONENTS

- AXDSP-X circuit board
- AXDSPX-WR harness (with gaskets)
- AXDSPX-WR enclosure (w/ case, cap, and 0-ring)

For **Dash Disassembly Instructions.** refer to metraonline.com. Enter the year, make, and model of the vehicle in the Vehicle Fit Guide for Radio Install kits.



Water-Resistant Digital Signal Processor with Chime Control and Digital Amp Turn-On Capability

INTERFACE FEATURES

- Selectable 31-band Graphic EQ or 5-band parametric EQ on each channel with high pass, low pass, and bandpass filters
- 6 inputs and 10 individually assignable outputs
- Selectable slope (12, 24, 36, or 48db per octave)
- Selectable Graphic or Parametric EQ
- Independent equalization on each of the 10 outputs
- Each channel can be delayed independently up to 10 ms
- Chime control for GM/Chrysler vehicles
- Clipping detection and limiting circuits
- Bass knob included
- Retains OE voice prompts (SYNC®/OnStar®/ Uconnect®/ BlueLink®/UVO®) if vehicle is equipped
- Retains factory chimes, including parking sensor and cross path detection alerts if vehicle is equipped
- Settings adjusted wirelessly in the free AX-DSP-XL app available for smartphones and tablets
- Easy behind the radio installation in most applications
- Can be used with factory and aftermarket radios
- Read, write, and store configurations for future recall
- Password protect feature available in the 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

Download AX-DSP-XL App

Android™ 9 or higher





ATTENTION: With the key out of the ignition, disconnect the negative battery terminal before installing this product. Ensure that all installation connections, especially the air bag indicator lights, are olugged in before reconnecting the battery or cycling the ignition to test this product. NOTE: Refer also to the instructions included with the

aftermarket accessory before installing this device.

PREFACE

In the following section, **Installation Options**, choose the installation type, then either click on the hyperlink, or reference the page number.

The AXDSPX-WR provides a 12v 1-amp output to turn on an aftermarket amplifier. If installing multiple amplifiers, an SPDT automotive relay will be required if the current exceeds that amount. Use Metra part number **E-123** (sold separately) for best results.

The AXDSPX-WR can also grow as your stereo system grows. Start off by adding a subwoofer, then add on from there. Simply reference the **Installation Options** page to change the AXDSPX-WR to the new system. All 10 channels of the AXDSPX-WR can be assigned however needed for the installation at hand. If 10 channels of a subwoofer signal is needed, the AXDSPX-WR can do it.

INSTALLATION OPTIONS

Aftermarket radio system:

The AXDSPX-WR can be used with an aftermarket radio to improve the overall listening experience for car audio enthusiasts. Installers will connect the RCA inputs from the AXDSPX-WR to the outputs from the aftermarket radio; **Front**, **Rear**, **Sub** (sub is optional). (refer to page 4)

Adding a subwoofer to an existing radio:

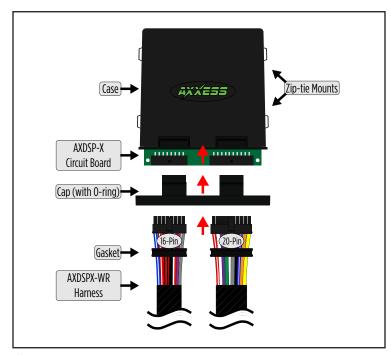
This feature offers the Installer the ability to add an aftermarket subwoofer to an existing radio. (refer to page 5)

Full range system to an existing radio:

This option allows the Installer to wire the AXDSPX-WR directly to the speaker outputs from an existing radio for a full range audio signal (high-level). (refer to page 6)

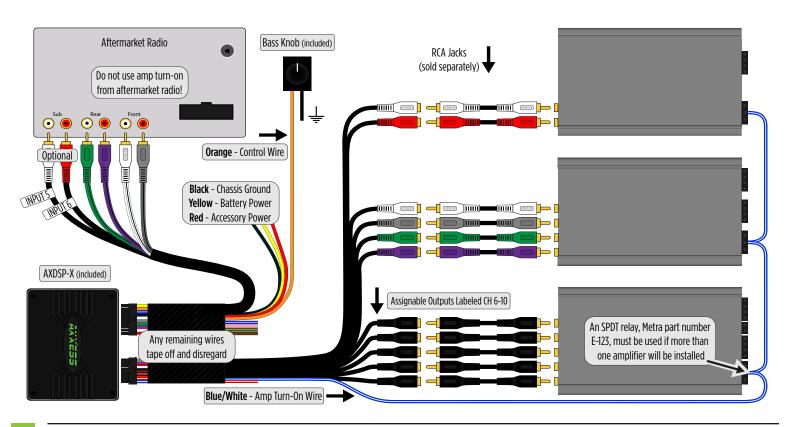
INSTALLATION

- With the arrow stamped onto the cap facing upwards, push the 16-pin connector from the AXDSPX-WR harness into the left side of the cap. The locking clip on the connector should face upward. Make sure the gasket is seating properly in the cap. (Figure A)
- 2. With the arrow stamped onto the cap still facing upwards, push the 20-pin connector from the AXDSPX-WR harness into the right side of the cap. The locking clip on the connector should face upward. Make sure the gasket is seating properly in the cap. (Figure A)
- Plug the 16-pin and 20-pin connectors from the AXDSPX-WR harness into the AXDSP-X circuit board. (Figure A)
- 4. Slide the assembly into the case, then click it shut. Zip-tie the enclosure to a secure location to secure it. Make sure the Axxess logo is facing up to further ensure that no outside elements can enter the enclosure.
- Complete all necessary connections to the radio and vehicle, but leave the amp turn-on wire disconnected.
- **6.** Download and install the **AX-DSP-XL app** for your smart device.
- Open the app and follow the instructions on the Bluetooth Connection tab to pair the mobile device to the AXDSPX-WR.
- **8.** Scroll to the **Configuration** tab then select **General** as the vehicle type.
- **9.** Connect the amp turn-on wire from the AXDSPX-WR.
- **10.** Adjust the DSP settings in the app as desired. Refer to the instructions starting on (page 7) for an explanation of each tab in the app. (refer to page 7)

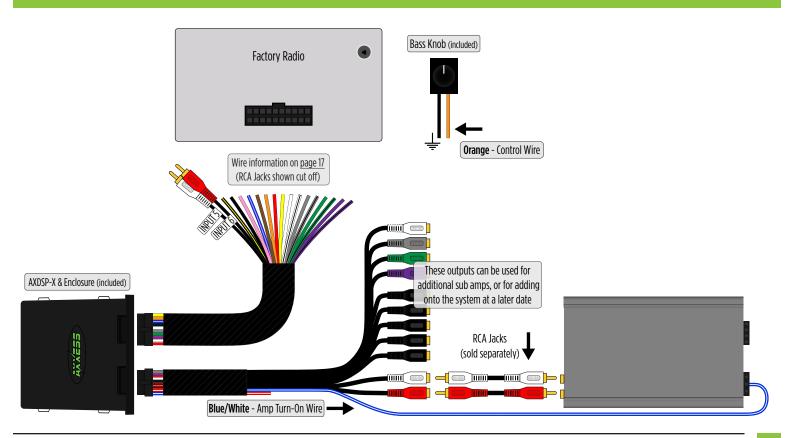


(Figure A)

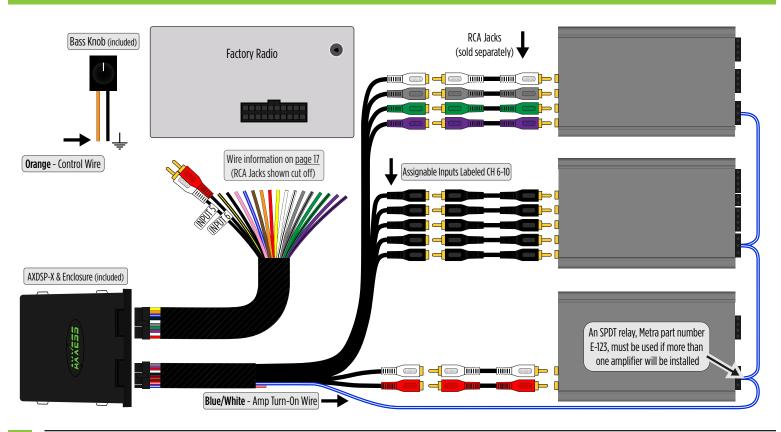
AFTERMARKET RADIO SYSTEM



ADDING A SUBWOOFER TO AN EXISTING RADIO



FULL RANGE SYSTEM TO AN EXISTING RADIO



PINOUT

Input Connector

Input 6 - Subwoofer Right Input **Input 5** - Subwoofer Left Input Purple RCA Jack - Rear Right Input * Green RCA Jack - Rear Left Input * **Gray RCA Jack** - Front Right Input * White RCA Jack - Front Left Input * Black/Yellow - Future Use

Black - Chassis Ground

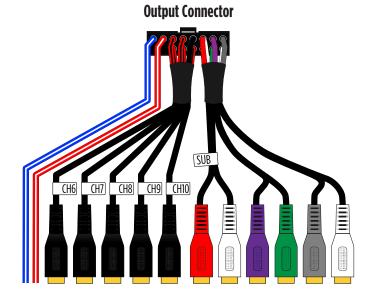
Pink -Not applicable in this application. **Blue/Pink** -Not applicable in this application.

Brown - Future Use

Orange - Control Wire for Bass Knob

Red - Accessory Power Yellow - Battery Power

* Cut off RCA jack for speaker level input



Blue/White - Amp Turn-On **Red/White** - Future Use

Channel 6-10 - User Assignable Outputs

Purple RCA Jack - User Assignable Output Green RCA Jack - User Assignable Output Grav RCA Jack - User Assignable Output **Sub RCA Jacks** - Use Assignable Outputs White RCA Jack - User Assignable Output

MOBILE APP: QUICK SETUP STEPS THROUGH AXDSP-XL APP

Download AX-DSP-XL AppAndroid™ 9 or higher



3. Open the app: Select **Bluetooth Connections** page.

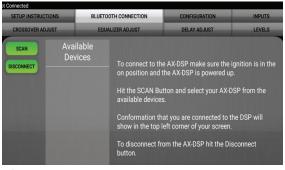
Select **Scan,** all available AXDSP devices within range will be displayed. Select your AXDSP and hit connect. (Figure A)

2. Turn Vehicle Ignition on. Make sure the Remote Turn on lead is disconnected.

- **L** Select the Configuration page.
 - Select Vehicle Type Icon
 - Select the Vehicle Make: (Example: **DODGE**)
 - Select the Vehicle's model: _____ (Example: DURANGO)

Download and install the **AX-DSP-XL app** for your smart device.

- Select With OE Amp or Without OE Amp
- Hit Apply (Figure B)
- **5.** Make sure radio volume is all the way down.
- **6.** Connect the amp turn-on wire from the **AXDSPX-WR T-harness** to the aftermarket amplifiers.



(Figure A)



(Figure B)

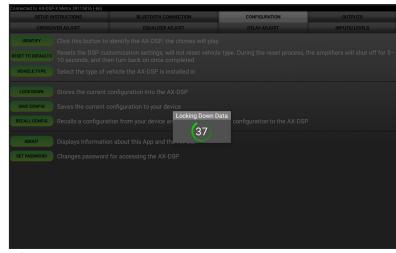


iOS® 12.1 or higher

MOBILE APP: QUICK SETUP STEPS THROUGH AXDSP-XL APP (CONT.)

- 7. From the Configuration page click the Identify button to confirm that the AXDSPX-WR is connected properly. If so, a chime will be heard from the front left speaker.
- **8.** Press the **Lock Down** button to save the configuration. (Do not turn ignition off until this process is completed) (Figure C)
- **9.** Select the **Bluetooth Configurations** page and disconnect the DSPX.
- **10.** Turn ignition off, close all door then lock vehicle using the key fob. The vehicle will need to sit uninterrupted for 10 minutes while the vehicle goes to sleep. (Make sure Key fob is 15 feet away from the vehicle)
- **11.** Unlock Vehicle, turn ignition on and test radio's functions.
- **12.** Adjust the DSP settings in the app as desired. Refer to the instructions under the **Setup Instructions** tab, or online at **Axxessinterfaces.com** for an explanation of each tab in the app.

Locking Down Data



(Figure C)

Last and the most important:

You MUST lock down your configuration and cycle the key!!!

SPECIFICATIONS

Input Impedance 1M Ohm
Input Channels 6

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 10

Output Voltage Up to 5-volts RMS

Output Impedance 50 Ohms

Equalizer Type 31 Band Graphic EQ, +/- 10dB

THD <0.03% Frequency Response 20Hz - 20kHz

Crossover 3-Way LPF, BPF, HPF THP per channel

Crossover Type Linkwitz-Riley 24db slope

Sampling 48kHz

S/N Ratio 105dB @ 5-volts RMS

Operating Voltage 10-16 volts DC

Standby Current Draw 7mA
Operation Current Draw 150mA

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

or with ignition





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 - 5:00 PM Sunday: 10:00 AM - 4:00 PM



Metra recommends MECP certified technicians