



INSTALLATION INSTRUCTIONS

Axxess bassknob for AX-DSP subwoofer control

AX-BASSKNOB

This is an add-on accessory for the AX-DSP. If you are using the AX-DSP to install an aftermarket subwoofer and would like quick independent control of the subwoofer gain.

Installation is extremely easy.

- Connect the **Orange** wire on the AX-BASSKNOB to the **Orange** wire on the AX-DSP 20-pin harness or the vehicles specific harness that was purchased.
- Connect the **Black** wire on the AX-BASSKNOB to a chassis ground in the vehicle.

We provide two mounting options for the AX-BASSKNOB, there is a detachable mount so the gain control knob can be mounted under a dash or in a pocket, also provided, a washer and locking nut so the gain control can be flush mounted.

1-800-221-0932

www.axxessinterfaces.com

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INTERFACE FEATURES

- Designed for GM Ethernet amplifiers
- Ethernet data interface w/AXDSP-X (digital signal processor) built-in
- Includes an amplifier bypass harness
- Retains factory chimes including parking sensor chimes
- Retains vehicle's voice prompts
- Chimes and voice prompts go through the aftermarket amplifier and/or cluster
- Selectable 31 Band graphic EQ or 5 Band Parametric EQ
- 10 individually assignable outputs

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**.

GENERAL MOTORS 2019-UP ETHERNET DSPX PACKAGE

Visit axxessinterfaces.com for current application list.

INTERFACE COMPONENTS

- AXDSPX-ETH1 interface
- AXDSPX-ETH1 harness
- LD-DSP-ETH1
- LD-DSP-ETH2
- AXBK-1
- AXDSPX-ETH1 interface harness (male connectors: 8-pin, 16-pin)
- Amplifier bypass harness (female connectors: 8-pin black and 20-pin green)

- Independent equalization on each of the 10 outputs
- Independent high pass, low pass, and bandpass filters
- Each channel can be delayed independently up to 10ms
- Clipping detection and limiting circuits
- 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 REQUIRED

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

Google Play Store



Apple App Store

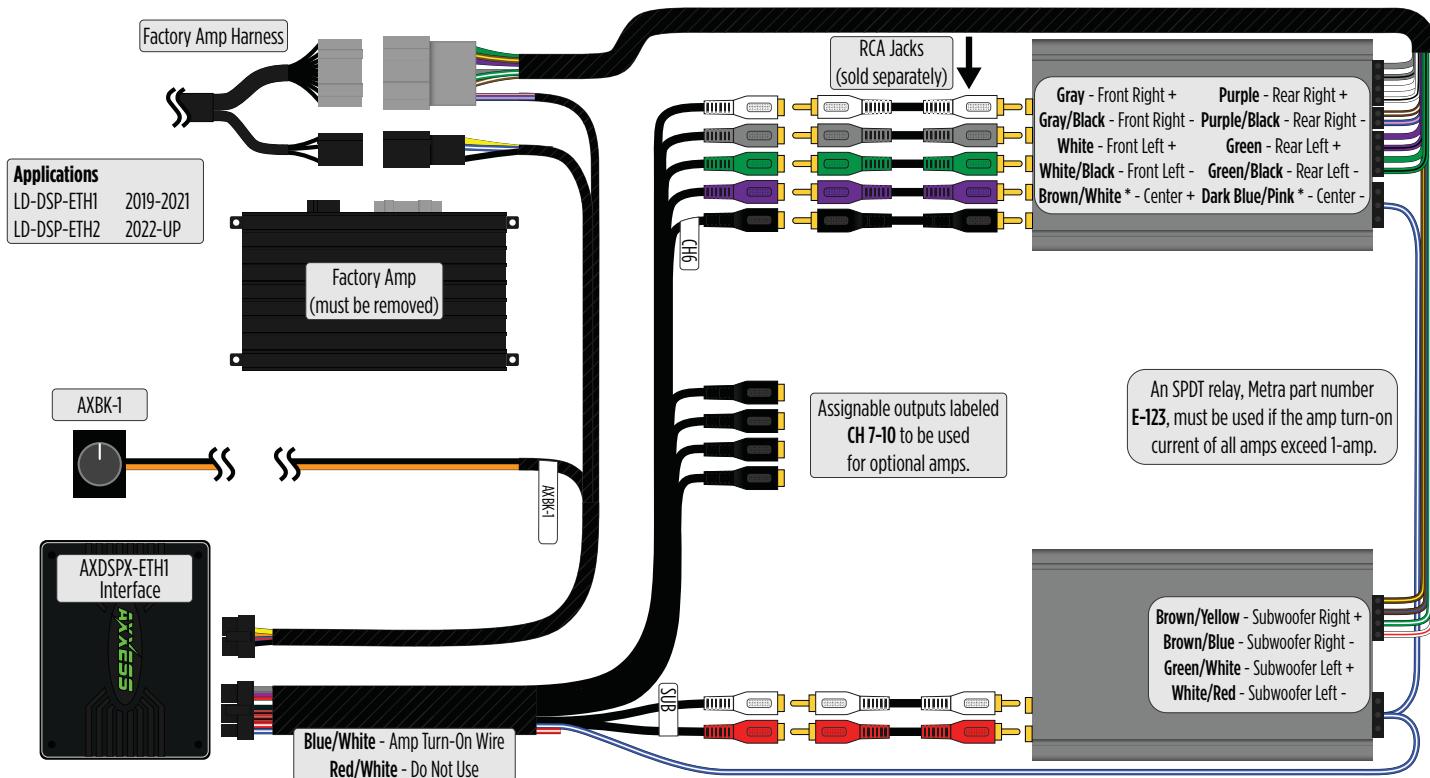
iOS 12.1 or higher



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 plugged in before reconnecting the battery or cycling the ignition to test this product.

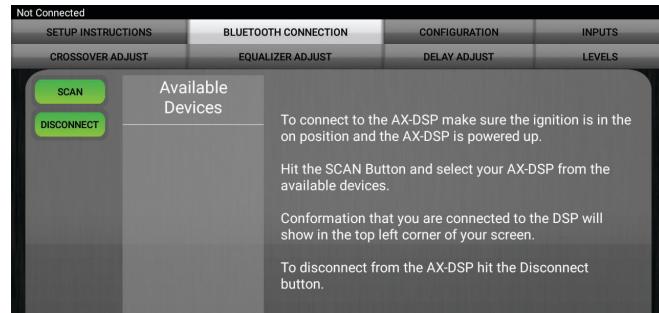
NOTE: Refer also to the instructions included with the aftermarket radio.

CONNECTIONS

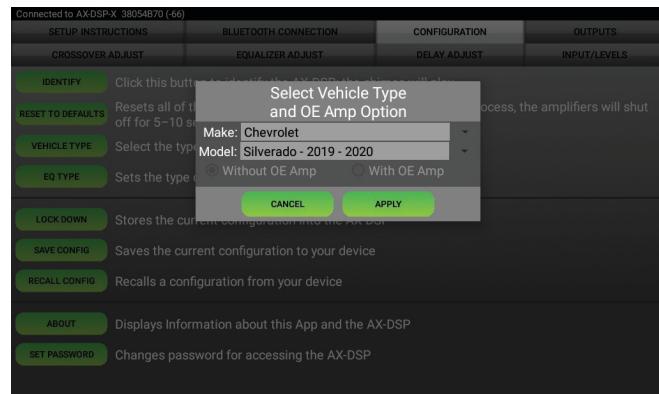


INSTALLATION

1. Locate the factory amp (†), unplug all connectors, then remove the amp.
2. Install the **AXDSPX-ETH1 harness** and make all necessary connections, but leave the amp turn-on wire disconnected.
3. Plug the 8-pin and 16-pin connectors from the **AXDSPX-ETH1 harness** into the **AXDSPX-ETH1 interface**.
4. Download and install the AXDSP-X app from the [Google Play Store](#) or [Apple App Store](#).
5. Open the app and follow the instructions on the **Bluetooth Connection** tab to pair the mobile device to the AXDSPX-ETH1. (Figure A)
6. Scroll to the **Configuration** tab then select the vehicle type. Press the **Lock Down** button to save the configuration. (Figure B)
7. Connect the amp turn-on wire from the **AXDSPX-ETH1 harness**.
8. Click the **Identify** button to confirm that the AXDSPX-ETH1 is connected properly. If so, a chime will be heard from the front left speaker or gauge cluster. Test all functions of the installation for proper operation.
9. 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.



(Figure A)



(Figure B)

TROUBLESHOOTING

- If the **Red** light in the AXDSPX-ETH1 interface is blinking, it is not communicating with the vehicle. Remove the key from the ignition, unplug the connectors from the interface, then inspect all connections made. If everything is proper, connect the harnesses back into the interface, cycle the key to ignition, then re-inspect. The **Red** light should be solid.

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



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.edu or call 386-672-5771 for more information and take steps toward a better tomorrow.



Metra recommends MECP certified technicians



CARACTERÍSTICAS DE LA INTERFAZ

- Interfaz de datos ethernet con AXDSP-X (procesador de señal digital) integrado
- Incluye un arnés de derivación de amplificador
- Conserva los tonos de fábrica, incluidos los tonos de sensor de estacionamiento
- Conserva los mensajes de voz del vehículo
- Los tonos y los mensajes de voz pasan por el amplificador y/o clúster genérico
- Equalizador gráfico de 31 bandas o equalizador paramétrico de 5 bandas seleccionable
- 10 salidas asignables individuales
- Ecualización independiente en cada una de las 10 salidas
- Filtros de paso de banda, paso bajo y paso alto independientes

Visite el sitio metraonline.com. para consultar las instrucciones de desarme del tablero. Ingrese el año, el modelo y la marca del vehículo en la guía de compatibilidad de vehículos sobre kits de instalación de radios.

GENERAL MOTORS MODELOS 2019-Más PAQUETE DSPX ETHERNET

Para consultar la lista actualizada de aplicaciones, visite el sitio axxessinterfaces.com

COMPONENTES DE LA INTERFAZ

- | | |
|---|---|
| <ul style="list-style-type: none">• Interfaz AXDSPX-ETH1• Arnés AXDSPX-ETH1• LD-DSP-ETH1• LD-DSP-ETH2• AXBK-1 | <ul style="list-style-type: none">• Arnés de interfaz AXDSPX-ETH1 (conectores macho: 8 pins, 16 pins)• Arnés de derivación de amplificador (conectores hembra: negro de 8 pins y verde de 20 pins) |
|---|---|

- Cada canal puede tener un retraso independiente de hasta 10 ms
- Detección de cortes y circuitos de limitación
- Ajustes configurables mediante Bluetooth® en una aplicación de dispositivo inteligente (tableta o teléfono celular), compatible con dispositivos Android y Apple
- Configuraciones de lectura, escritura y guardado para uso futuro predeterminado
- Función de protección de contraseñas disponible en las aplicaciones móviles
- Actualizable mediante micro USB B

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HERRAMIENTAS NECESARIAS

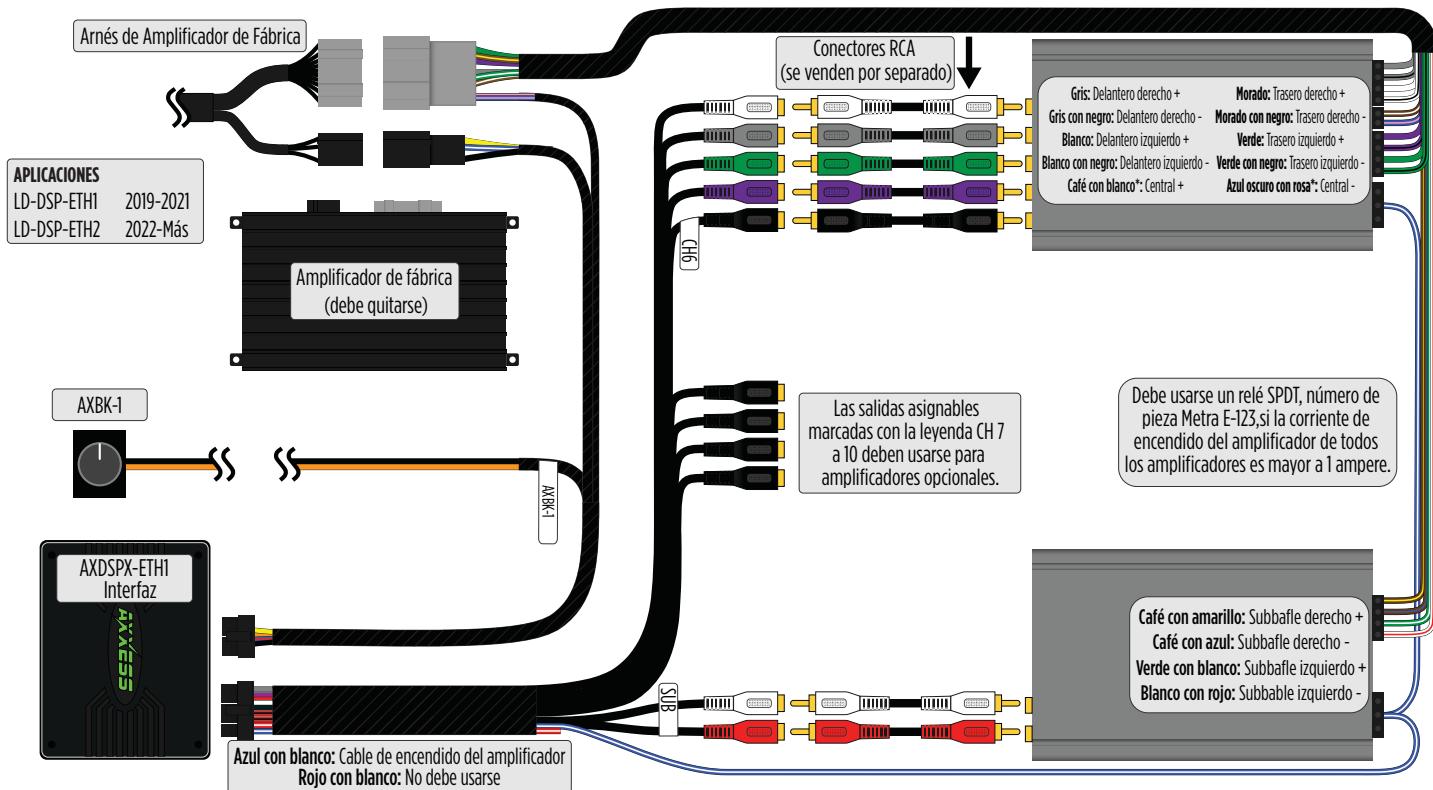
- Herramienta de prensado y conectores o pistola de soldadura hilo de soldadura y tubo termoretractil
- Cinta • Cortador de cables • Abrazaderas de plástico

Apple App Store
iOS 12.1 or higher



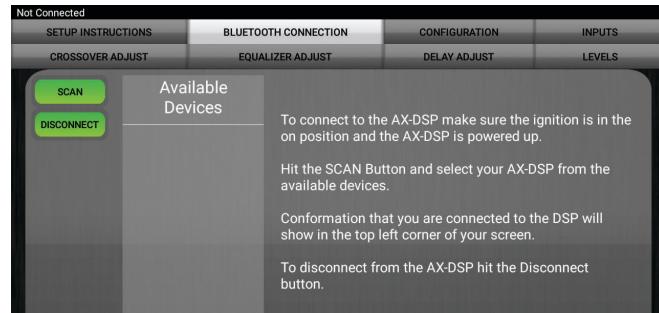
ATENCIÓN: Sin tener la llave puesta en la marcha, desconecte la terminal negativa de la batería antes de instalar este producto. Asegúrese de que todas las conexiones de la instalación, en especial las luces indicadoras de las bolsas de aire, estén conectadas antes de volver a conectar la batería o dar vuelta a la marcha para probar este producto.
NOTA: También consulte las instrucciones incluidas con el radio genérico.

CONEXIONES

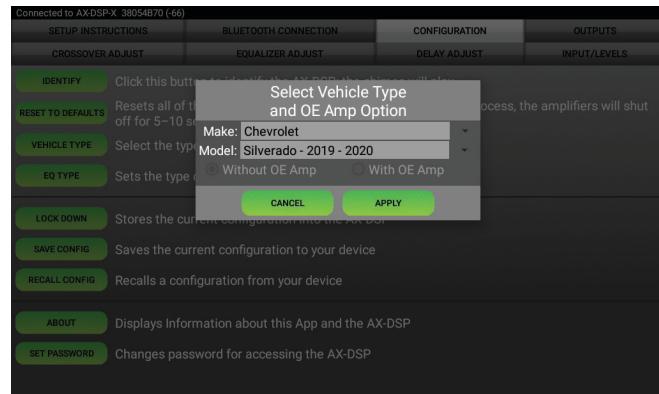


INSTALACIÓN

1. Ubique el amplificador de fábrica (†), desconecte todos los conectores y quite el amplificador.
2. Instale el arnés AXDSPX-ETH1 y realice todas las conexiones necesarias, pero deje sin conectar el cable de encendido del amplificador.
3. Conecte los conectores de 8 pins y 16 pins del arnés AXDSPX-ETH1 a la interfaz AXDSPX-ETH1.
4. Descargue la aplicación AXDSP-X de Google Play Store o Apple App Store e instálela.
5. Abra la aplicación y siga las instrucciones que están en la pestaña de conexión por Bluetooth para emparejar el dispositivo móvil al AXDSPX-ETH1. (Figura A)
6. Pase a la pestaña de “Configuración” y seleccione el tipo de vehículo. Oprima el botón “Bloquear” para guardar la configuración. (Figura B)
7. Conecte el cable de encendido del amplificador que está en el arnés AXDSPX-ETH1.
8. Haga clic en el botón “Identificar” para confirmar que el AXDSPX-ETH1 esté conectado correctamente. Si lo está, se escuchará un tono en la bocina delantera izquierda o el tablero de instrumentos. Pruebe todas las funciones de la instalación para confirmar que funcionen correctamente.
9. Ajuste la configuración de DSP en la aplicación de acuerdo con sus preferencias. Consulte las instrucciones que se encuentran en la pestaña “Instrucciones de configuración” o visite el sitio axxessinterfaces.com para más información detallada acerca de cómo funcionan las pestañas de la aplicación.



(Figura A)



(Figura B)

RESOLUCIÓN DE PROBLEMAS

- Si parpadea la luz **Roja** en la interfaz AXDSPX-ETH1, eso quiere decir que no se está comunicando con el vehículo. Quite la llave de la marcha, desconecte los conectores de la interfaz y proceda a revisar todas las conexiones que se realizaron. Si todo está correcto, vuelva a conectar los arneses a la interfaz, gire la llave en la marcha y vuelva a revisarlas. La luz **Roja** debería ser fija.

¿Tienes dificultades? Estamos aquí para ayudar.



Póngase en contacto con nuestra
línea de soporte técnico en:

386-257-1187



O por correo electrónico a:
techsupport@metra-autosound.com

Horario de Soporte Técnico (hora estándar del este)

Lunes - Viernes: 9:00 AM - 7:00 PM

Sábado: 10:00 AM - 7:00 PM

Domingo: 10:00 AM - 4:00 PM



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Mejore sus habilidades de instalación y
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dispositivos electrónicos móviles más reconocida
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avance hacia un futuro mejor.



**Metra recomienda técnicos
con certificación del Programa
de Certificación en Electrónica
Móvil (Mobile Electronics
Certification Program, MECP).**



Axxess 10-Channel Digital Signal Processor

INTERFACE FEATURES

- 31 Band graphic EQ
- 6 Inputs, 10 individually assignable outputs
- Independent equalization on each of the 10 outputs
- Independent high pass, low pass, and bandpass filters
- Each channel can be delayed independently up to 10ms
- Easy behind the radio installation in most applications
- Can be used with OE and aftermarket radios
- Chime control for GM/Chrysler vehicles
- Clipping detection and limiting circuits

- Bass knob included
- Retains OE voice prompts (SYNC® and OnStar®)
- Retains factory chimes including parking sensor and cross path detection alerts
- 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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INTERFACE COMPONENTS

- AX-DSP-X interface
- AX-DSP-X harness (16-pin & 20-pin)

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
iOS 12.1 or higher



PREFACE

The AX-DSP-X can be used with an aftermarket system, OEM system, and also an OEM system that is amplified with either an analog or digitally controlled (fixed signal) OEM amplifier. The AX-DSP-X can also grow as your stereo system grows. Start off by adding a subwoofer to an OEM system, then add on from there. Simply reference the [Installation Options](#) page to change the AX-DSP-X to the new system. All 10 channels of the AX-DSP-X can be assigned however needed for the installation at hand. If 10 channels of a subwoofer signal is needed, the AX-DSP-X can do it.

In the following section, [Installation Options](#), choose the installation type, then either click on the hyperlink, or reference the page number.

It is highly suggested to use an AX-DSP-X pre-wired harness (sold separately) unless you are installing it with an aftermarket radio. As such, the instructions are written in that manner. Certain connections to the vehicle are unique per vehicle and will require the pre-wired harness to reference to.

The AX-DSP-X 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.

If installing the AX-DSP-X behind the radio to install a sub amp, the OEM amp can be retained for mids/highs. If installing the AX-DSP-X at the OEM amp location, the OEM amp must be fully removed.

In most cases the CAN Bus wires need to be connected in order for the AX-DSP-X to communicate with the vehicle to turn on and provide an amp turn-on output.

INSTALLATION OPTIONS

Aftermarket radio system:

The AX-DSP-X 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 AX-DSP-X to the outputs from the aftermarket radio; **Front, Rear, Sub** (sub is optional). When using an aftermarket radio with the AX-DSP-X, **General** must be chosen for the vehicle type. ([refer to page 4](#))

Adding a subwoofer to an OEM System:

This feature offers the Installer the ability to add an aftermarket subwoofer to an OEM system, whether the OEM system is non-amplified, or amplified with an analog or digitally controlled (fixed signal) amplifier. If the vehicle is equipped with noise canceling mics, they must be disabled for this type of system. ([refer to page 5](#))

OEM System without an amplifier:

This option allows the Installer to wire the AX-DSP-X directly to the speaker outputs from the OEM radio for an audio signal (high-level). ([refer to page 6](#))

OEM System with an “analog” amplifier:

This option allows the Installer to tap directly to the output of the OEM radio and feed an audio signal into the AX-DSP-X. This type of installation requires the removal of the factory amplifier, and will provide a full range signal to the input side of the AX-DSP-X. ([refer to page 7](#))

OEM System with a “digitally controlled” amplifier:

Digitally controlled systems function differently than analog systems. They have a fixed level audio signal that is controlled through the vehicle’s CAN bus. In most cases the programming content (audio) provided is just two channels, which can be either front or rear. The other channels are for content like Phone/Bluetooth, SMS reader, SYNC, or OnStar. The AX-DSP-X can retain these OEM features, and also provide a clean audio signal. This type of installation requires the removal of the factory amplifier, and will provide a full range signal to the input side of the AX-DSP-X. ([refer to page 7](#))

INSTALLATION

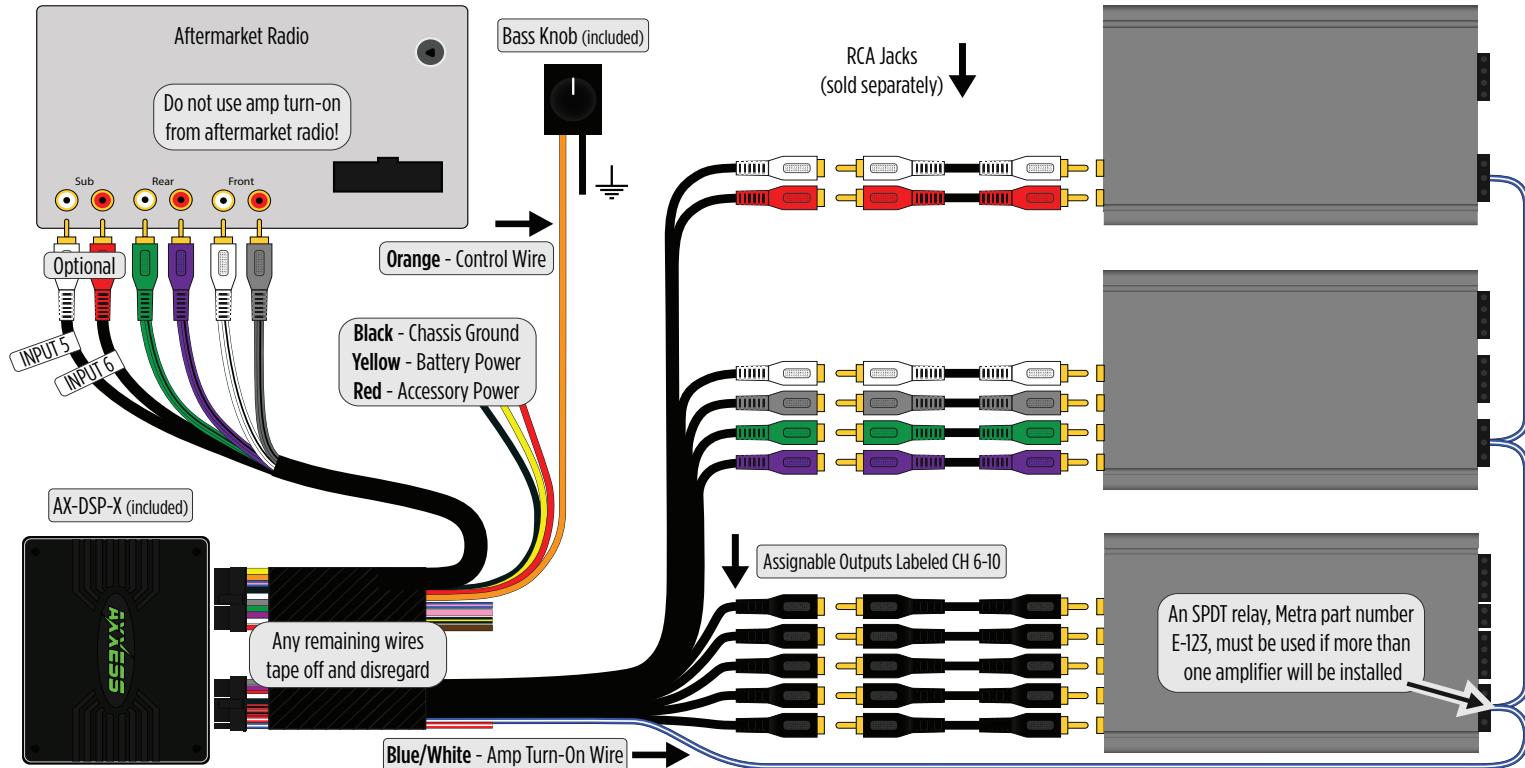
Factory Radio Systems

1. Remove the factory radio*, then unplug all connectors.
 2. Install the vehicle specific T-harness (sold separately) and make all necessary connections, but leave the amp turn-on wire disconnected.
 3. Plug the 20-pin AX-DSP-X harness into the AX-DSP-X.
 4. Plug the 16-pin AX-DSP-X harness into the AX-DSP-X.
 5. Plug all connectors back into the OEM radio.
 6. Download and install the AX-DSP-X app from the [Google Play Store](#) or [Apple App Store](#).
 7. Using the app, select the vehicle.
 8. Connect the amp turn-on wire from the AX-DSP-X.
 9. Test all functions of the installation, then reassemble the dash to complete the installation.
- * Refer to [Metra online](#) for dash disassembly. If Metra makes a dash kit for the vehicle, disassembly will be within the instructions.

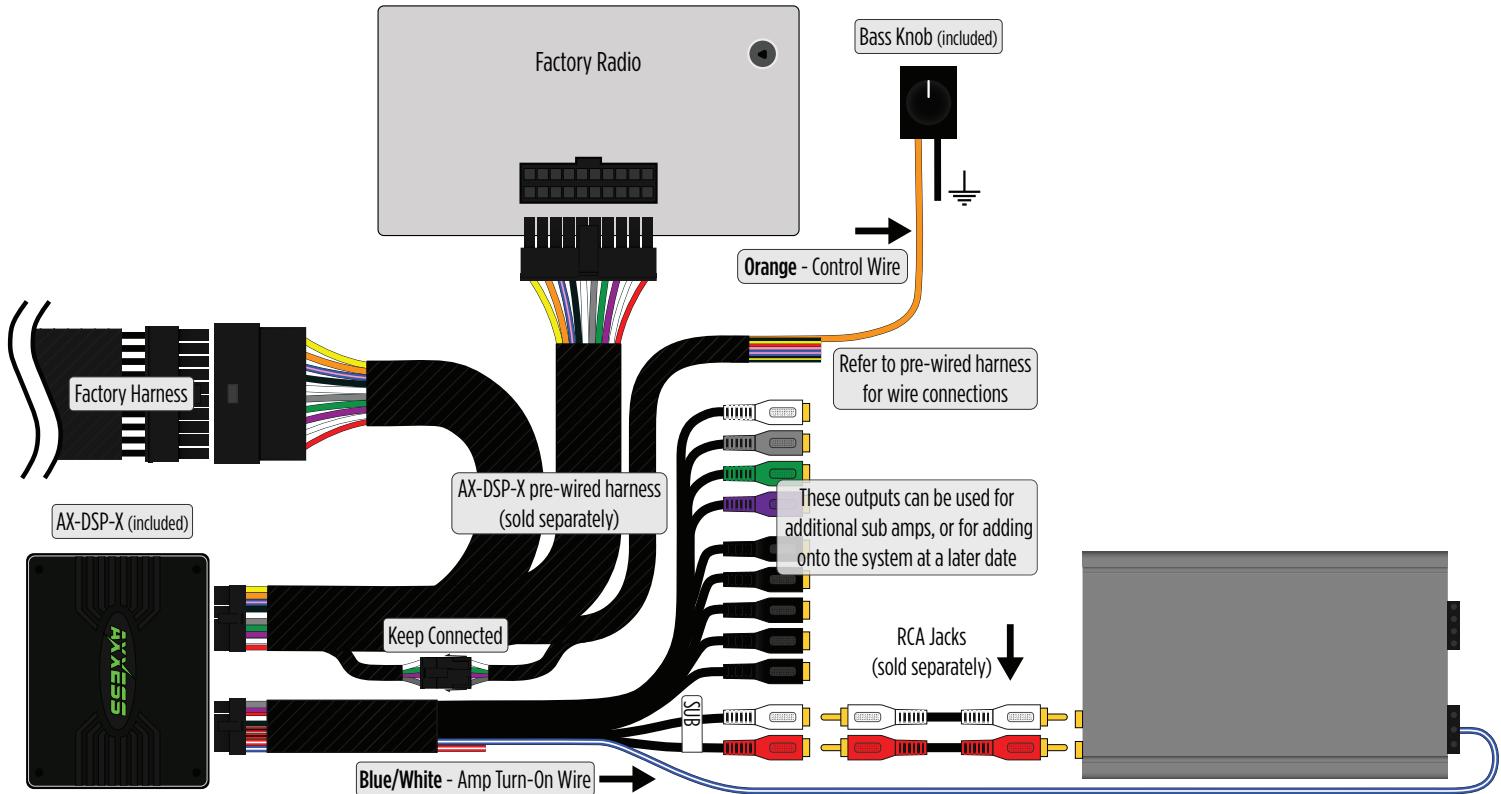
Aftermarket Radio Systems

1. Complete all necessary connections to the radio and vehicle, but leave the amp turn-on wire disconnected.
2. Plug the 20-pin AX-DSP-X harness into the AX-DSP-X.
3. Plug the 16-pin AX-DSP-X harness into the AX-DSP-X.
4. Download and install the AX-DSP-X app from the [Google Play Store](#) or [Apple App Store](#).
5. Using the app, select the vehicle.
6. Connect the amp turn-on wire from the AX-DSP-X.
7. Test all functions of the installation, then reassemble the dash to complete the installation.

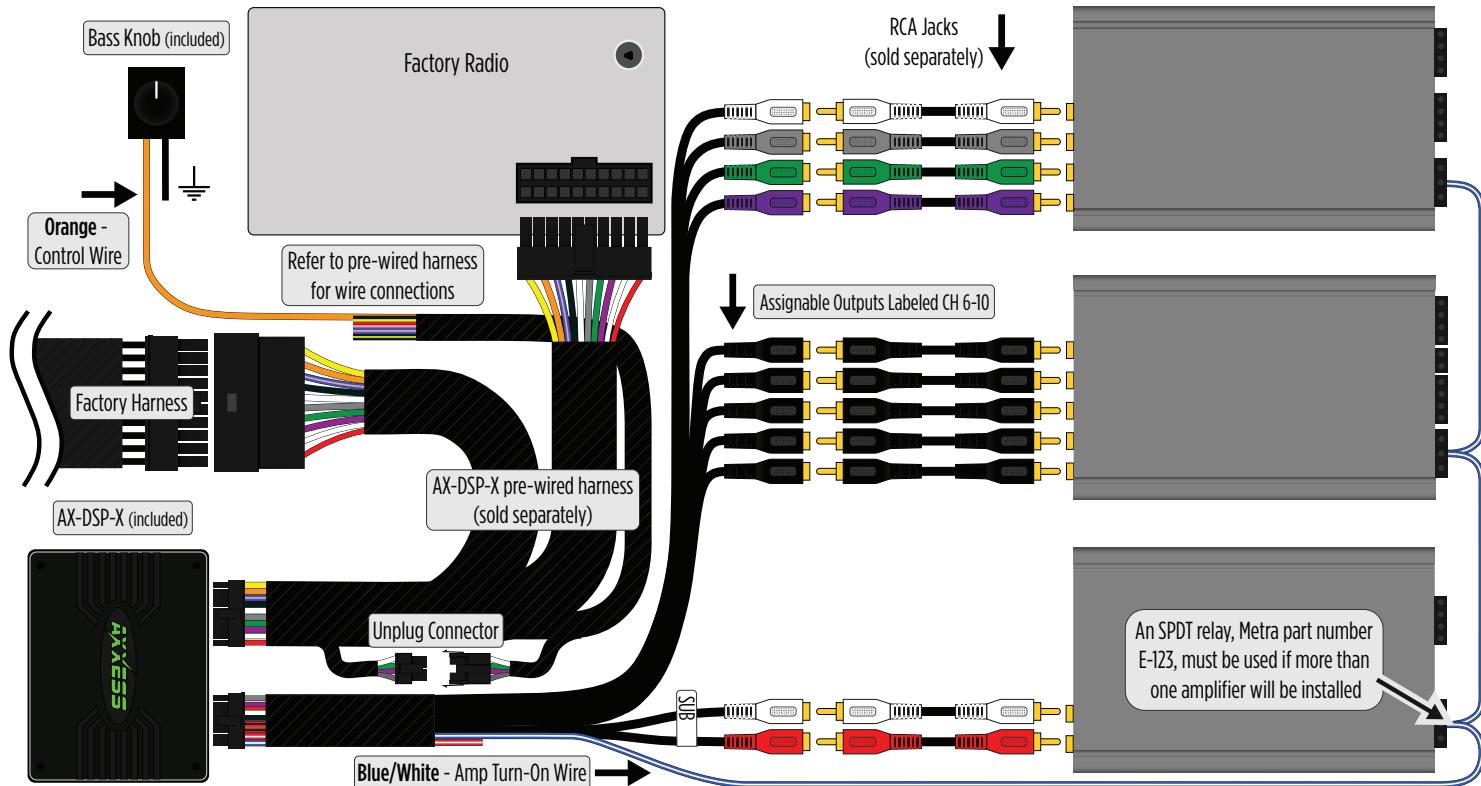
AFTERMARKET RADIO SYSTEM



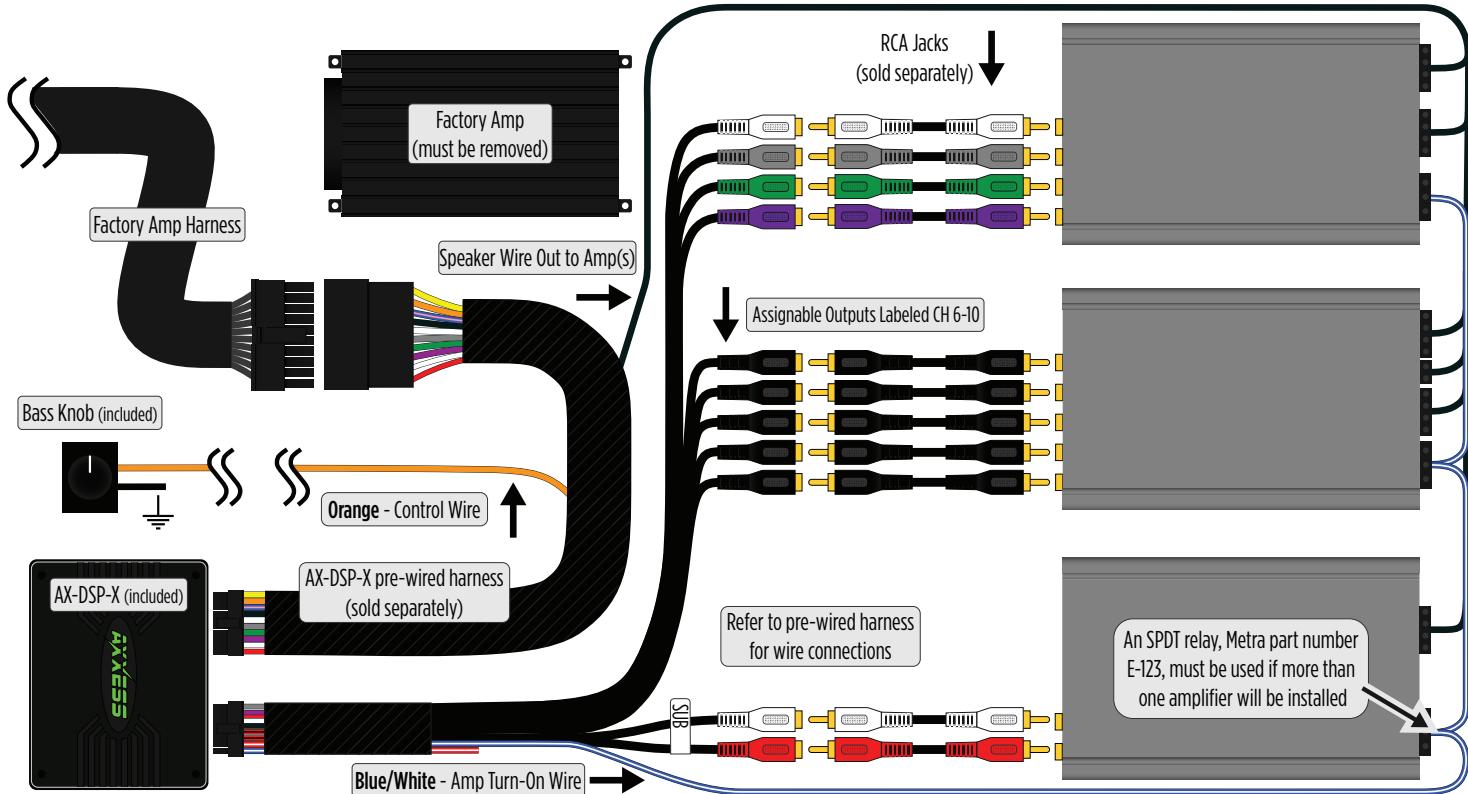
ADDING A SUBWOOFER TO AN OEM SYSTEM



OEM SYSTEM WITHOUT AMP



OEM SYSTEM WITH AMP BYPASS HARNESS



Setup Instructions

Not Connected

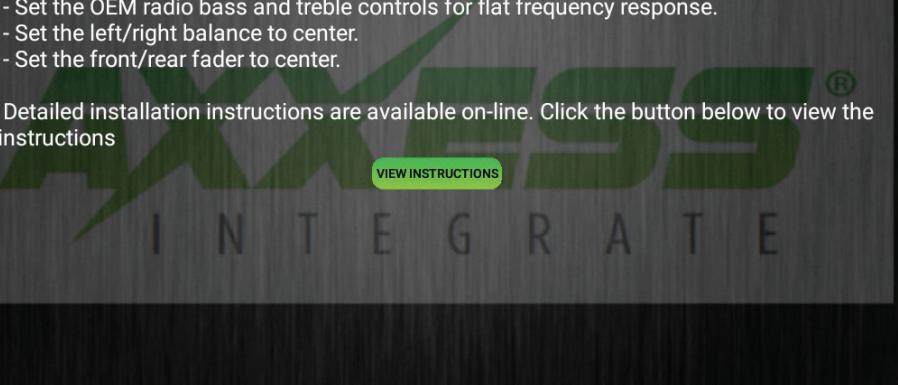
SETUP INSTRUCTIONS	BLUETOOTH CONNECTION	CONFIGURATION	OUTPUTS
CROSSOVER ADJUST	EQUALIZER ADJUST	DELAY ADJUST	LEVELS

Using the vehicle specific harness, install the AX-DSP. The high level outputs from the OEM radio go to the inputs of the AX-DSP. The AX-DSP outputs are low level and should be connected to the amplifier inputs.

- Power on the system, and verify audio to the front (left and right), rear (left and right), and Subwoofer.
- Set the OEM radio bass and treble controls for flat frequency response.
- Set the left/right balance to center.
- Set the front/rear fader to center.

Detailed installation instructions are available on-line. Click the button below to view the instructions

[VIEW INSTRUCTIONS](#)



- General information tab for installing the AX-DSP-X.

Continued on the next page

Bluetooth Connection

Not Connected

SETUP INSTRUCTIONS	BLUETOOTH CONNECTION	CONFIGURATION	OUTPUTS
CROSSOVER ADJUST	EQUALIZER ADJUST	DELAY ADJUST	LEVELS

SCAN

DISCONNECT

Available Devices

To connect to the AX-DSP make sure the ignition is in the on position and the AX-DSP is powered up.

Hit the SCAN Button and select the AX-DSP from the available devices.

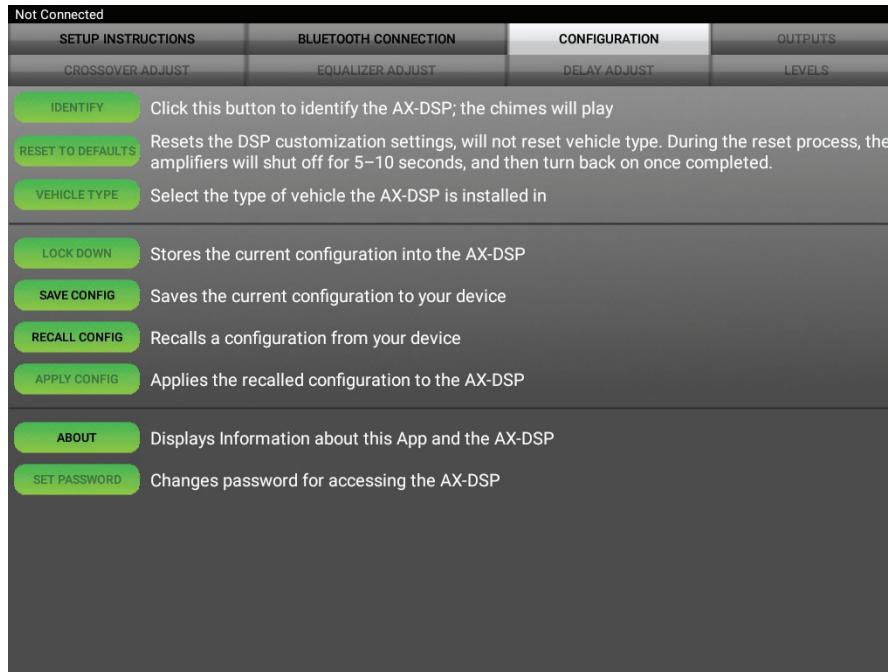
Confirmation that you are connected to the DSP will show in the top left corner of the screen.

To disconnect from the AX-DSP hit the Disconnect button.

- **Scan** - Press this button to start the Bluetooth pairing process, then select the AX-DSP-X from the mobile device. The AX-DSP-X must be powered during this process. Confirmation that you are connected will show in the top left corner of the app.
- **Disconnect** - Disconnects the AX-DSP-X from the app.

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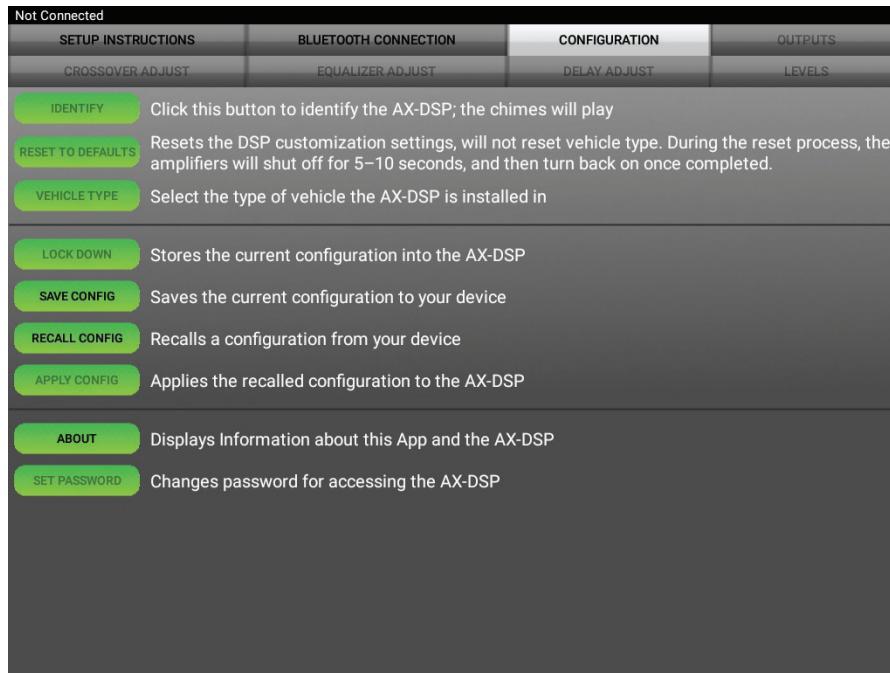
Configuration



- **Identify** - Click this button to confirm that the AX-DSP-X is connected properly. If so, a chime will be heard from the front left speaker.
 - **Reset to Defaults** - Resets the AX-DSP-X to factory settings. During the reset process the amplifiers will shut off for 5-10 seconds.
 - **Vehicle Type** - Select the vehicle type from the drop down box, select either **Without OE Amplifier** or **With OE Amplifier**, then click the apply button.
 - **Lock Down** - Click this button to save the selected settings.
- Attention!** This button must be selected before closing the app or cycling the key otherwise all settings will be lost.
- **Save Configuration** - Saves the current configuration to the mobile device.
 - **Recall Configuration** - Recalls a configuration from the mobile device.

Continued on the next page

Configuration (Cont.)



- **Apply Configuration** - Allows a recalled configuration to the AX-DSP-X. The AX-DSP-X will need to be locked down to save the recalled configuration. This process will shut the amplifier off between 5-10 seconds while the configuration is uploaded to the AX-DSP-X.
- **About** - Displays information about the app, vehicle, AX-DSP-X, and mobile device.
- **Set Password** - Assign a 4-digit password to lock the AX-DSP-X. If no password is desired, use "0000". This will clear out any currently set password. It is not necessary to lock down the AX-DSP-X when setting a password.

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

Continued on the next page

Outputs

Connected to AX-DSP-X Metra 17587A39 (-72) WARNING: Settings have changed - Make sure to 'Lock Down' before Exiting App

SETUP INSTRUCTIONS		BLUETOOTH CONNECTION	CONFIGURATION	OUTPUTS	
CROSSOVER ADJUST		EQUALIZER ADJUST	DELAY ADJUST	LEVELS	
<u>Output Channels</u>					
#	Location	Group			
1	Left Front	Left Front	<input checked="" type="checkbox"/> M	<input type="checkbox"/> Invert	<input type="checkbox"/> Mute
2	Right Front	Right Front	<input checked="" type="checkbox"/> M	<input type="checkbox"/> Invert	<input type="checkbox"/> Mute
3	Left Rear	Left Rear	<input checked="" type="checkbox"/> M	<input type="checkbox"/> Invert	<input type="checkbox"/> Mute
4	Right Rear	Right Rear	<input checked="" type="checkbox"/> M	<input type="checkbox"/> Invert	<input type="checkbox"/> Mute
5	Sub Woofer	Rear	<input checked="" type="checkbox"/> M	<input type="checkbox"/> Invert	<input type="checkbox"/> Mute
6	Left Front Tweeter	Left Front	<input checked="" type="checkbox"/> M	<input type="checkbox"/> Invert	<input type="checkbox"/> Mute
7	Right Front Tweeter	Right Front	<input checked="" type="checkbox"/> M	<input type="checkbox"/> Invert	<input type="checkbox"/> Mute
8	Not Used	None	<input type="checkbox"/> M	<input type="checkbox"/> Invert	<input type="checkbox"/> Mute
9	Not Used	None	<input type="checkbox"/> M	<input type="checkbox"/> Invert	<input type="checkbox"/> Mute
10	Not Used	None	<input type="checkbox"/> M	<input type="checkbox"/> Invert	<input type="checkbox"/> Mute
<u>Amp Turn On</u>					
<input type="radio"/> Signal Sense <input checked="" type="radio"/> Always On		Turn On Delay: 0 Sec.	0	<input max="10" min="0" type="range" value="0"/>	
The AMP ON line can be turned on whenever accessory power is on, or only when a signal is detected from the radio.					

Output Channels

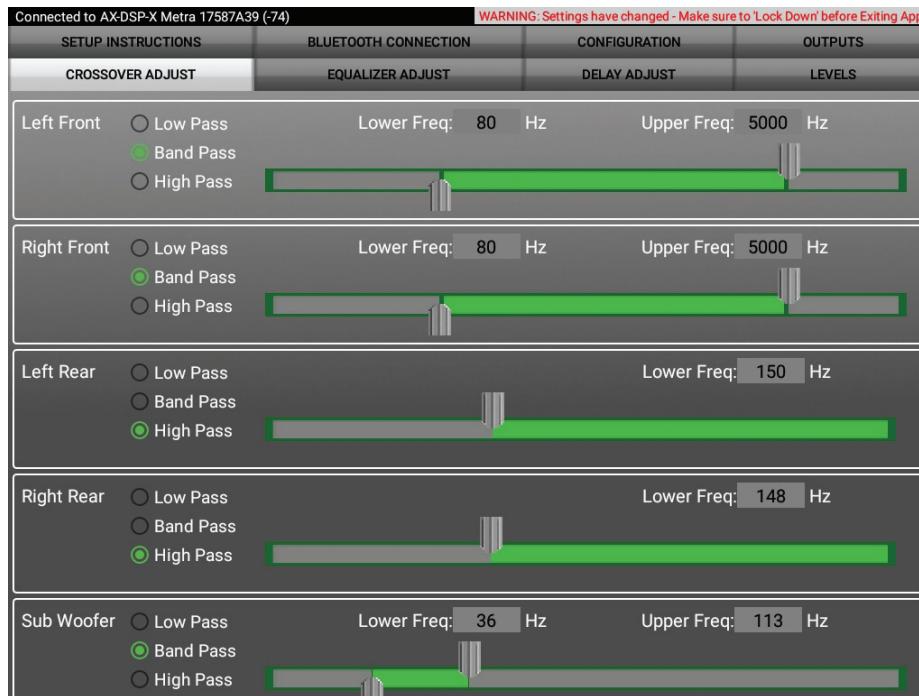
- **Location** - Location of speaker.
- **Group** - Used to join channels together. Example, left front woofer/midrange and left front tweeter will be considered simply left front to the AX-DSP-X. The letter **M** denotes the speaker assigned as the master speaker.
- **Invert** - Will invert the phase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

Amp Turn On

- **Signal Sense** - Will turn the amplifier on when an audio signal is detected, and keep on for 10 seconds past the last signal. This ensures the amplifier doesn't shut off between tracks.
- **Always On** - Will keep the amplifiers on as long as they are cycled on.
- **Turn on Delay** - Can be used to delay amp turn-on to avoid turn-on pops.

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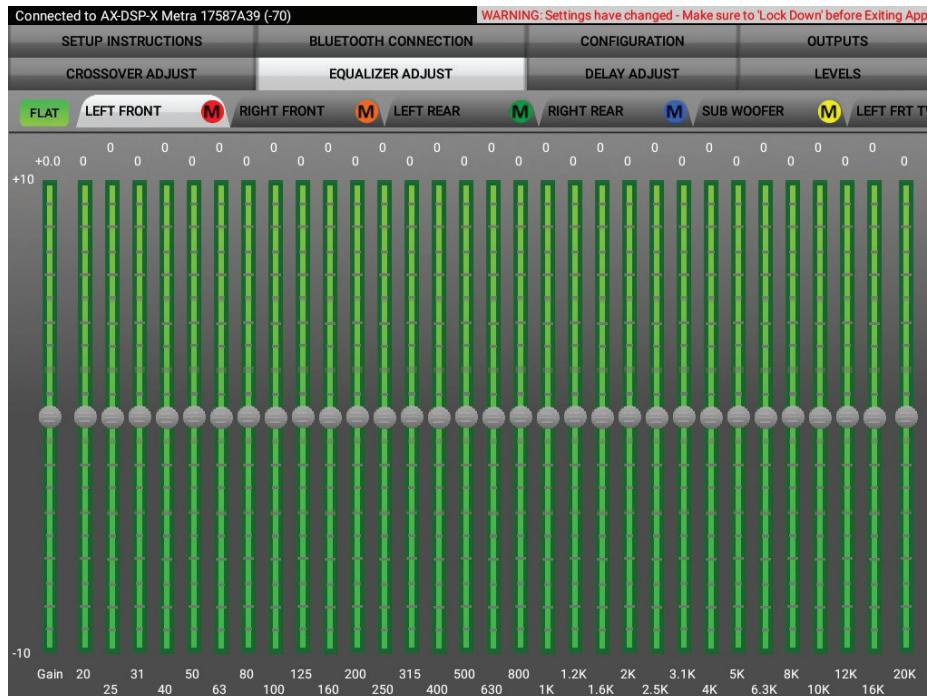
Crossover Adjust



- If installing a subwoofer, the front and rear outputs will default to a 100Hz high pass filter to keep the low frequency signals out of the full range speakers. 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 to.
- Selecting **High Pass** and **Low Pass** will provide one crossover frequency adjustment. Selecting **Band Pass** will provide two crossover frequency adjustments, one for low pass, and one for high pass.

Continued on the next page

Equalizer Adjust



- All channels can be adjusted independently within this tab with 31 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.

Continued on the next page

Delay Adjust

Connected to AX-DSP-X Metra 17587A39 (-65) **WARNING: Settings have changed - Make sure to 'Lock Down' before Exiting App**

SETUP INSTRUCTIONS	BLUETOOTH CONNECTION	CONFIGURATION	OUTPUTS
CROSSOVER ADJUST	EQUALIZER ADJUST	DELAY ADJUST	LEVELS

Distance from each speaker to 'Head' position (in inches)

Left Front	37
Right Front	54
Left Rear	27
Right Rear	46
Sub Woofer	57
Left Front Tweeter	26
Right Front Tweeter	45

Measure the distance from each speaker to the desired 'Head' position and enter those values in the corresponding boxes. Maximum distance is 99".

- Allows a delay of each channel, up to 10 milliseconds. First measure the distance (in inches) from each speaker to the listening position, then enter those values. If a delay is desired, add to the desired channel(s), up to 99 inches.

Continued on the next page

Levels

Connected to AX-DSP-X Metra 17587A39 (-78) WARNING: Settings have changed - Make sure to 'Lock Down' before Exiting App

SETUP INSTRUCTIONS	BLUETOOTH CONNECTION	CONFIGURATION	OUTPUTS
CROSSOVER ADJUST	EQUALIZER ADJUST	DELAY ADJUST	LEVELS

Trigger Level: 5 Clipping Level

Hard Clipping The AX-DSP can detect clipping of the analog audio signals (on both the inputs and the outputs of the AX-DSP) and 'turn down' the signal level for a period of time to prevent damage to the speakers.

Soft Clipping

Demo Off On

Volume: 7 Chime Volume

High The Chime Volume control is provided to prevent warning tones from being overly loud
High sets the chimes to their maximum level, Low sets them to their minimum level.

Medium

Low

- **Clipping Level** - Use this feature to protect sensitive speakers like tweeters from being driven past their capabilities. If the output signal of the AX-DSP-X 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.

- **Chime Volume** - Allows the chime volume to be adjusted up or down.

Note: In newer Ford vehicles chimes will be heard through the gauge cluster if the OEM amplifier is removed

Continued on the next page

Locking Down Data

Connected to AX-DSP Metra EQ-DD-TEST

SETUP INSTRUCTIONS	BLUETOOTH CONNECTION	CONFIGURATION	INPUTS
CROSSOVER ADJUST	EQUALIZER ADJUST	DELAY ADJUST	LEVELS

IDENTIFY Click this button to identify the AX-DSP; the chimes will play

RESET TO DEFAULTS Resets the DSP customization settings, will not reset vehicle type. During the reset process, your amplifiers will shut off for 5-10 seconds, and then turn back on once completed.

VEHICLE TYPE Select the type of vehicle the AX-DSP is installed in

LOCK DOWN Stores the current configuration to the AX-DSP 

SAVE CONFIG Saves the current configuration to your device

RECALL CONFIG Recalls a configuration from your device

APPLY CONFIG Applies the recalled configuration to the AX-DSP

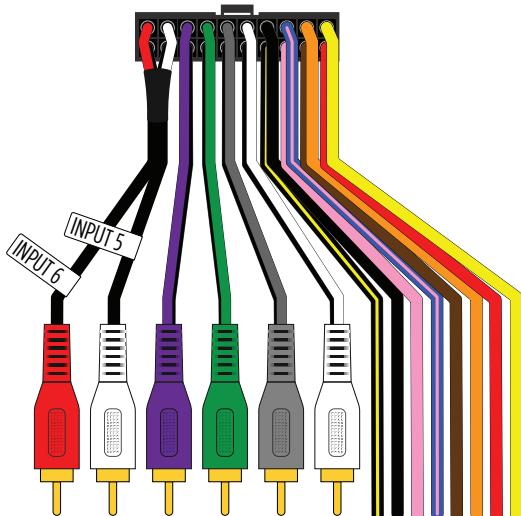
ABOUT Displays Information about this App and the AX-DSP

Last and the most important.

You must lock down your configuration!!!

PINOUT

Input Connector

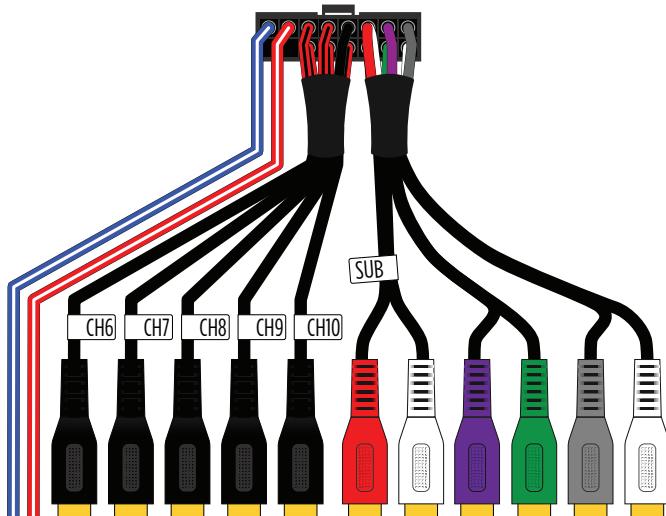


Input 6 - Subwoofer Right Input
Input 5 - Subwoofer Left Input
Purple RCA Jack - Rear Right Input *
Green RCA Jack - Rear Left Input *
Gray RCA Jack - Front Right Input *
White RCA Jack - Front Left Input *
Black/Yellow - Future Use

Black - Chassis Ground
Pink - CAN-HI
Blue/Pink - CAN-LO
Brown - Future Use
Orange - Control Wire for Bass Knob
Red - Accessory Power
Yellow - Battery Power

* Cut off RCA jack for speaker level input

Output Connector



Blue/White - Amp Turn-On
Red/White - Future Use
Channel 6-10 - User Assignable Outputs
Sub RCA Jacks - Use Assignable Outputs

Purple RCA Jack - User Assignable Output
Green RCA Jack - User Assignable Output
Gray RCA Jack - User Assignable Output
White RCA Jack - User Assignable Output

SPECIFICATIONS

Specifications

Input Impedance	1M Ohm
Input Channels	6 High/Low level Selectable
Input Options	High Level or Low Level
Input Type	Differential-Balanced
Input Voltage High Level Range	0 - 28v Peak to Peak
Input Voltage Low Level Range	0 - 4.9v Peak to Peak
Output Channels	10
Output Voltage	Up to 5v 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, Fixed
Sampling	48kHz
S/N Ratio	105dB @ 5V RMS

General

Operating Voltage	10 - 16VDC
Standby Current Draw	~7mA
Operation Current Draw	~150mA
Adjustments/Controls	Application via Bluetooth
Remote Output	12VDC, Signal Sense or with Ignition



AX-DSP-X

INSTALLATION INSTRUCTIONS

Having difficulties? We're here to help.



Contact our Tech Support line at:

1-800-253-TECH



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



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 or call 800-354-6782 for more information and take steps toward a better tomorrow.



Metra recommends MECP certified technicians