



AX-DSP-XL App Instructions

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Download the AX-DSP-XL App

Android™ 9 or higher



iOS® 12.1 or higher



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Download the Interface Updater App at
axxessinterfaces.com
(or use the QR code at left)
to update any current AXXESS interface

AX-DSP-XL APP

Setup Instructions

| SETUP INSTRUCTIONS | BLUETOOTH CONNECTION | CONFIGURATION | OUTPUTS |
|--------------------|----------------------|---------------|---------------|
| CROSSOVER ADJUST | EQUALIZER ADJUST | DELAY ADJUST | INPUTS/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 interface.

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AX-DSP-XL APP

Bluetooth® Connectivity



- **Scan** - Press this button to start the Bluetooth® wireless pairing process, then select the available device 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.

AX-DSP-XL APP

Configuration

| SETUP INSTRUCTIONS | BLUETOOTH CONNECTION | CONFIGURATION | OUTPUTS |
|--------------------|--|---------------|--------------|
| CROSSOVER ADJUST | EQUALIZER ADJUST | DELAY ADJUST | INPUT/LEVELS |
| IDENTIFY | Click this button to identify the AX-DSP; the chimes will play | | |
| RESET TO DEFAULTS | Resets all of the DSP customization settings. During the reset process, the 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 | | |
| EQ TYPE | Sets the type of Equalizer - Graphic or Parametric | | |
| LOCK DOWN | Stores the current configuration into the AX-DSP | | |
| SAVE CONFIG | Saves the current configuration to your device | | |
| RECALL CONFIG | Recalls a configuration from your device | | |
| ABOUT | Displays Information about this App and the AX-DSP | | |
| SET PASSWORD | Changes password for accessing the AX-DSP | | |

- **Identify** - Click this button to confirm that the interface is connected properly. If it is, a chime will be heard from 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.
- **Equalizer (EQ) Type:** User has the option of optimizing the vehicle's sound quality with a Graphic or Parametric equalizer.
- **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".

AX-DSP-XL APP

Outputs

| SETUP INSTRUCTIONS | | BLUETOOTH CONNECTION | | CONFIGURATION | | OUTPUTS | |
|------------------------|---------------------|----------------------|----------|---------------------------------|-------------------------------|---------|--|
| CROSSOVER ADJUST | | EQUALIZER ADJUST | | DELAY ADJUST | | LEVELS | |
| <u>Output Channels</u> | | | | | | | |
| # | Location | Group | | <input type="checkbox"/> Invert | <input type="checkbox"/> Mute | | |
| 1 | Left Front | Left Front | M | <input type="checkbox"/> Invert | <input type="checkbox"/> Mute | | |
| 2 | Right Front | Right Front | M | <input type="checkbox"/> Invert | <input type="checkbox"/> Mute | | |
| 3 | Left Rear | Left Rear | M | <input type="checkbox"/> Invert | <input type="checkbox"/> Mute | | |
| 4 | Right Rear | Right Rear | M | <input type="checkbox"/> Invert | <input type="checkbox"/> Mute | | |
| 5 | Sub Woofer | Rear | M | <input type="checkbox"/> Invert | <input type="checkbox"/> Mute | | |
| 6 | Left Front Tweeter | Left Front | M | <input type="checkbox"/> Invert | <input type="checkbox"/> Mute | | |
| 7 | Right Front Tweeter | Right Front | M | <input type="checkbox"/> Invert | <input type="checkbox"/> Mute | | |
| 8 | Not Used | None | | <input type="checkbox"/> Invert | <input type="checkbox"/> Mute | | |
| 9 | Not Used | None | | <input type="checkbox"/> Invert | <input type="checkbox"/> Mute | | |
| 10 | Not Used | None | | <input type="checkbox"/> Invert | <input type="checkbox"/> Mute | | |

Amp Turn On
☐ Signal Sense ☒ Always On Turn On Delay: 0 Sec. 0 10

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 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) in order to tune individual channels.

Crossover Adjust

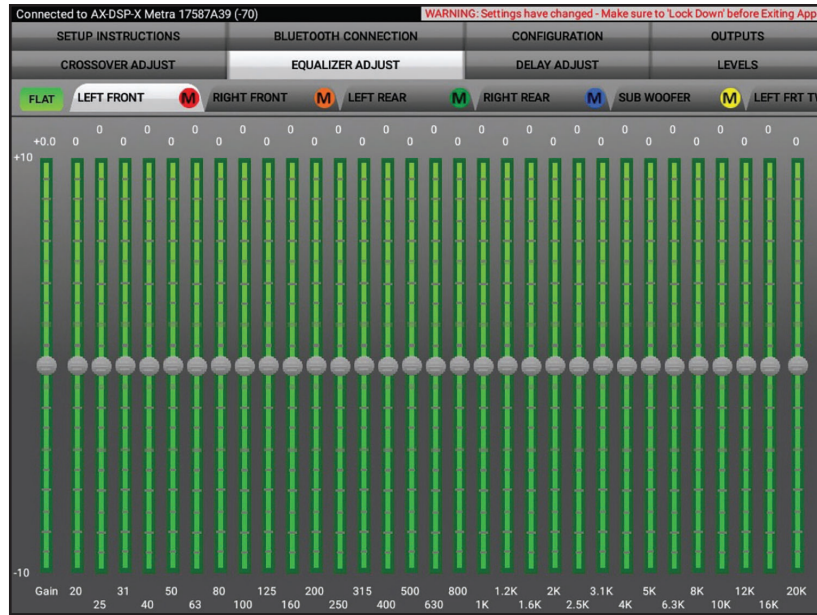
| SETUP INSTRUCTIONS | BLUETOOTH CONNECTION | CONFIGURATION | OUTPUTS |
|---|------------------------|---------------|---------------|
| CROSSOVER ADJUST | EQUALIZER ADJUST | DELAY ADJUST | INPUTS/LEVELS |
| Left Front <input type="radio"/> Low Pass <input type="radio"/> Band Pass <input checked="" type="radio"/> High Pass | Lower Freq: 100 Hz | | |
| Right Front <input type="radio"/> Low Pass <input type="radio"/> Band Pass <input checked="" type="radio"/> High Pass | Lower Freq: 100 Hz | | |
| Left Rear <input type="radio"/> Low Pass <input type="radio"/> Band Pass <input checked="" type="radio"/> High Pass | Lower Freq: 100 Hz | | |
| Right Rear <input type="radio"/> Low Pass <input type="radio"/> Band Pass <input checked="" type="radio"/> High Pass | Lower Freq: 100 Hz | | |
| Sub Woofer <input checked="" type="radio"/> Low Pass <input type="radio"/> Band Pass <input type="radio"/> High Pass | Upper Freq: 100 Hz | | |

- 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.
- 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.

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Equalizer Adjust



Graphic EQ

- 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 and will allow for channel to channel balancing.

Delay Adjust

| SETUP INSTRUCTIONS | BLUETOOTH CONNECTION | CONFIGURATION | OUTPUTS |
|--------------------|----------------------|---------------|---------------|
| CROSSOVER ADJUST | EQUALIZER ADJUST | DELAY ADJUST | INPUTS/LEVELS |

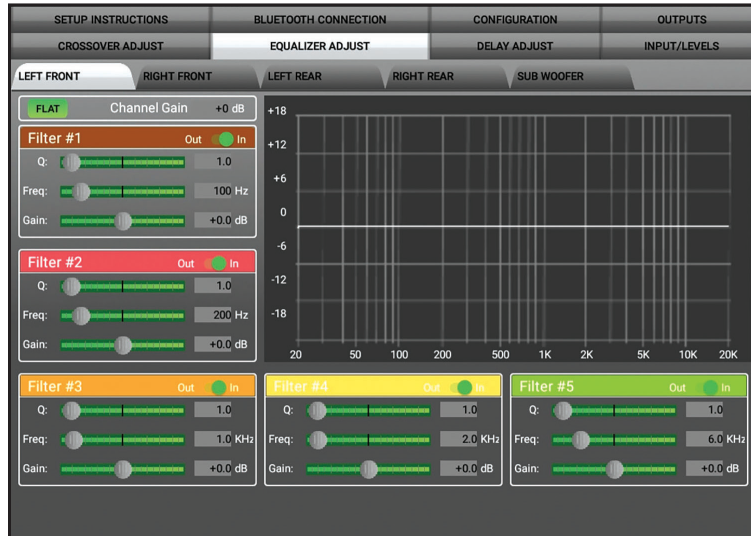
Distance from each speaker to 'Head' position (in inches)

| | |
|-------------|---|
| Left Front | 0 |
| Right Front | 0 |
| Left Rear | 0 |
| Right Rear | 0 |
| Sub Woofer | 0 |

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. 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.
- Milliseconds of delay are automatically calculated and applied. Increasing the value of the Inches entered for a speaker will add additional delay if desired.
- Only outputs that have been assigned a position will show in the Delay tab. Any output channel assigned as "Not Used" in the "Outputs" tab will not be displayed.

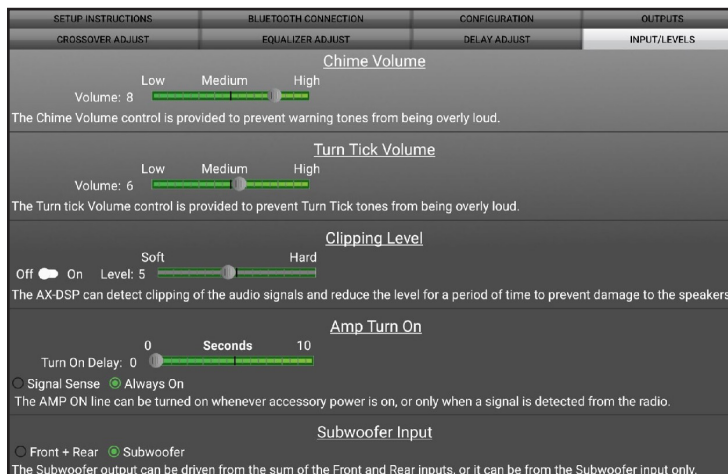
Parametric Equalizer



Parametric EQ

- Each output has a **5 Band parametric EQ** per channel. Each band will give the user the ability to adjust: Q Factor, Frequency Center, and Gain
- The **FLAT** button above **Filter #1** will reset all curves back to flat.

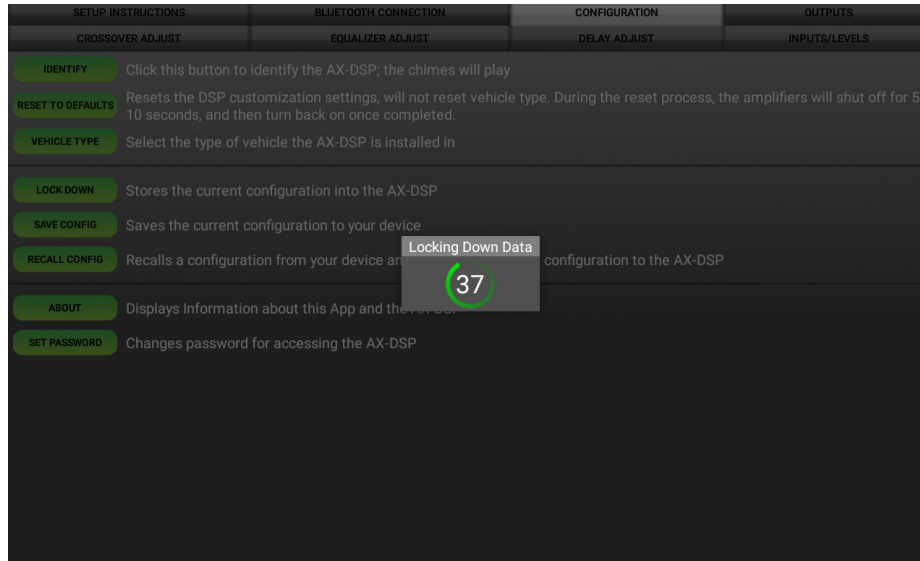
Inputs/Levels



- **Chime Volume** - Allows the chime volume to be adjusted up or down.
- **Turn Tick Volume** - Allows adjustment for gm's turn-signal click vol. (ex.) A djustment (+ or -) will take affect on the next activation.
- **Clipping Level** - Use this feature to protect sensitive speakers like tweeters from being driven past their capabilities. An adjustment (+ or -) will take effect on the next turn signal activation. 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** or **Subwoofer input** depending on preference.

AX-DSP-XL APP

Locking Down Data



**Last and the most important.
You must lock down your
configuration and cycle the key!!!**



AX-DSP-XL APP

INSTRUCTIONS

SPECIFICATIONS

Input Impedance: 1M Ohms
Signal Input: 6 Balanced Hi or Low Level
Differential RCA Inputs
Output Impedance: 50 Ohms
Frequency Response: 20Hz – 20KHz
Operating Voltage: 9 – 16 VDC
Mounting: Behind Dash
Signal Output: 10 Channels, 11 RCA Outputs
Input Voltage: High or Low Level up to 28V
P-P Differential
Output Voltage: up to 5V RMS
THD+N: <0.03% @ 5V RMS Out

Signal-to-Noise: 105 dBA (A-weighted)
Crossover Type: High-Pass
Low-Pass
Band-Pass
Class: Linkwitz-Riley
Crossover Frequency: Adjustable: 20 Hz to 20 KHz
Crossover Slope: Selectable 12/24/36/48 dB/Octave
EQ Frequency Centers: 31 Band, x 10 Channels
Delay: Up to 10ms x 10 Channels
Dimensions (H x W x D): 0.95" x 3.83" x 2.95"
(24.13 mm x 97.28 mm x 74.93 mm)

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**