

[Manuals.plus](#) /

› [DD Audio](#) /

› DD Audio DSI-3 6ch-12ch Digital Signal Interface & Processor Bluetooth User Manual

DD Audio DSI-3

DD Audio DSI-3 Digital Signal Processor User Manual

Model: DSI-3

INTRODUCTION

The DD Audio DSI-3 is a 6-channel to 12-channel Digital Signal Interface and Processor designed to provide precise audio tuning for vehicle sound systems. This unit features a 31-band parametric equalizer, active pre-amp signal processing, and Bluetooth 5.0 for audio streaming. It supports both PC and mobile device interfaces for comprehensive system setup and control, making it suitable for complex multi-channel audio configurations.

SETUP AND INSTALLATION

Proper installation is crucial for optimal performance and safety. Ensure the vehicle's battery is disconnected before beginning any wiring. Mount the DSI-3 in a secure, dry location away from direct heat sources and excessive vibration.

Physical Connections

The DSI-3 features various input and output connections for integration into your audio system.



Figure 1: Angled view of the DD Audio DSI-3 Digital Signal Processor, showcasing its compact design and heat sink fins.

Power Connections: Connect the +12V terminal to a fused constant 12V power source, GND to a solid chassis ground, and REM IN to a switched 12V source from your head unit or ignition. The REM OUT provides a switched 12V output for other components.



Figure 2: Front panel of the DSI-3, displaying power terminals, high-level inputs (IN1-IN6), optical input, PC control USB port, and remote port.

Audio Inputs: The DSI-3 supports both high-level and low-level (RCA) inputs. Use the 6-channel high-level inputs for direct connection to factory head units or amplifiers. Alternatively, use the 6-channel low-level RCA inputs for aftermarket head units. Input summing allows combining multiple input channels for a full-range signal.



Figure 3: Included wiring harness for connecting high-level audio inputs to the DSI-3.

Audio Outputs: The DSI-3 provides 12 low-level RCA outputs for connecting to external amplifiers. Each output channel can be independently configured.



Figure 4: Rear panel of the DSI-3, illustrating the 12 RCA output channels (CH1-CH12) and the Bluetooth antenna connection.

Software Installation

To utilize the full tuning capabilities, install the DD Audio DSI-3 PC software or the mobile application (Apple/Android). The PC software connects via the USB port on the DSI-3. The mobile app connects via Bluetooth.

OPERATING THE DSI-3

The DSI-3 offers extensive control over your audio system through its graphical user interfaces.

PC Software Interface

The PC software provides an advanced tuning suite for detailed configuration of all audio parameters.

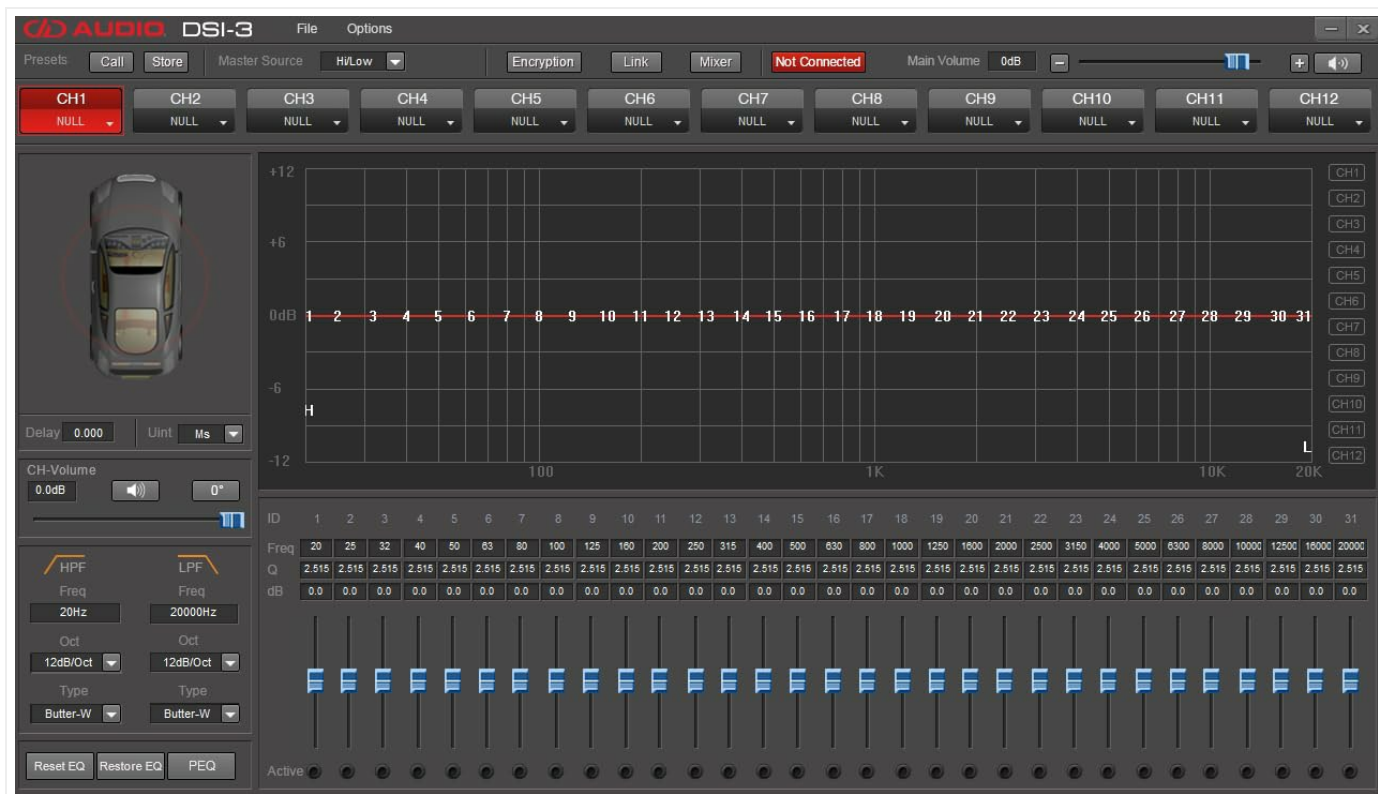


Figure 5: Screenshot of the DSI-3 PC software, showing the 31-band parametric/graphic equalizer for precise frequency adjustments.

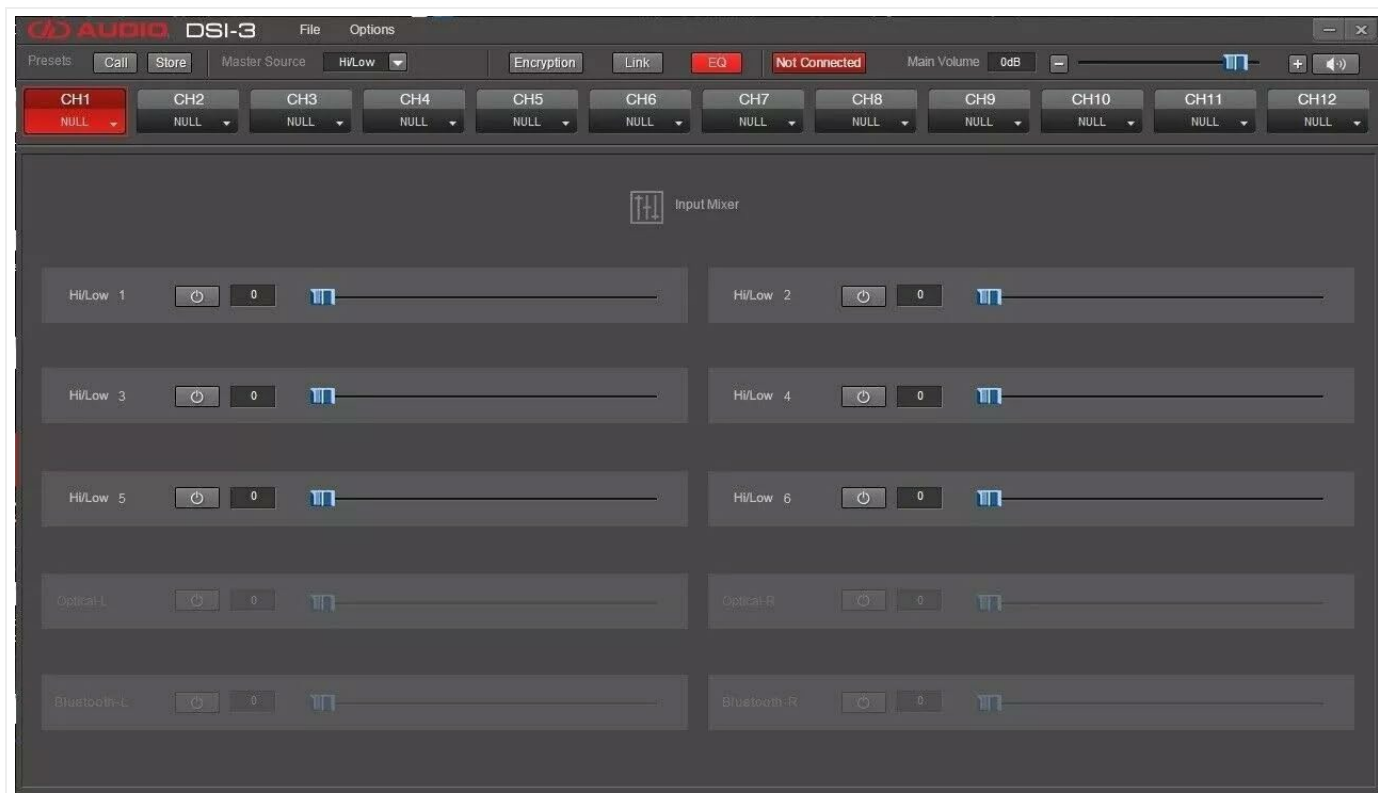


Figure 6: Screenshot of the DSI-3 PC software, illustrating the input mixer interface for combining and routing input signals to output channels.

Key features accessible via PC software include:

- **31-band Parametric / Graphic Equalizer:** Adjust the frequency response for each channel independently.
- **Crossovers:** Set high-pass, low-pass, and band-pass filters with adjustable slopes for each output channel.
- **Time Alignment:** Correct for speaker distance differences to ensure precise sound staging.
- **Input Summing:** Combine signals from multiple input channels to create a full-range signal for processing.

- **Output Routing:** Assign processed signals to any of the 12 output channels.
- **6 Customizable EQ Presets:** Save and recall different audio configurations for various listening preferences or music genres.

Mobile Application Interface

The mobile app provides convenient control and basic tuning functions on the go.

Smartphone not included



Figure 7: Multiple screenshots of the DSI-3 mobile application, showing main volume control, delay settings, output level adjustments, and equalizer interface.

Connect your smartphone to the DSI-3 via Bluetooth 5.0. The app allows for adjustments such as master volume, preset selection, basic EQ adjustments, and time alignment.

MAINTENANCE

The DD Audio DSI-3 is designed for reliable operation with minimal maintenance. Keep the unit clean and free from dust

and debris. Use a soft, dry cloth for cleaning. Do not use liquid cleaners or solvents. Ensure proper ventilation around the unit to prevent overheating. Regularly check all wiring connections for security and integrity.

TROUBLESHOOTING

If you encounter issues with your DSI-3, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No power/Unit does not turn on	Blown fuse, improper power connection, faulty remote turn-on signal.	Check the fuse on the power line. Verify +12V, GND, and REM IN connections are secure and receiving proper voltage.
No audio output	Incorrect input/output routing, muted channels, incorrect source selection, faulty RCA cables.	Verify input and output routing in the software. Ensure channels are not muted. Check source selection on your head unit. Test RCA cables.
Distorted audio	Input signal too high, gain settings too high, improper EQ settings.	Reduce input sensitivity or head unit volume. Adjust gain settings in the software. Review and reset EQ settings if necessary.
Bluetooth connection issues	DSI-3 not in pairing mode, interference, outdated app.	Ensure DSI-3 is discoverable. Move closer to the unit. Restart the app and device. Update the mobile application.

SPECIFICATIONS

The following are the technical specifications for the DD Audio DSI-3 Digital Signal Processor:

- **Operating Voltage:** 8.7 - 16.5 Volts (DC)
- **Input Channel(s):** 6 (High-level or Low-level RCA)
- **Output Channel(s):** 12 (Low-level RCA)
- **RCA Input Voltage Sensitivity:** 0.3-3.2V (CH1-CH4) / 0.6-6.4V (CH5-CH6)
- **High-Level Input Voltage Sensitivity:** 2-20V (CH1-CH4) / 4-40V (CH5-CH6)
- **RCA Output Voltage:** 0.2V - 5V
- **RCA Input Impedance:** $\geq 20k\Omega$
- **High Level Input Impedance:** 240 Ω
- **RCA Output Impedance:** $\geq 50k\Omega$
- **RCA Input S/N:** $\geq 105dBA$
- **High-Level Input S/N:** $\geq 115dBA$
- **THD:** < 0.02%
- **Parametric / Graphic EQ:** 31 bands
- **Sampling Frequency:** 192 kHz
- **Bit Depth:** 32 bit
- **Processing Speed:** 395 MHz
- **Remote Out Current:** 12V $\leq$ 500mA
- **Dimensions (Inches):** 7.5 x 4.2 x 1.5
- **Dimensions (MM):** 191 x 107 x 39

WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation provided with your purchase or visit the official DD Audio website. Keep your proof of purchase for warranty claims. If you require assistance beyond the scope of this manual, contact DD Audio customer service or an authorized dealer.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question