MB QUART®

Operator's Guide



MB-DSP6.8

DIGITAL SIGNAL PROCESSOR

Thank you for purchasing the MB Quart MB-DSP6.8 Digital Sound Processor. Please read the entire manual to ensure proper connections and application.

CAUTION

Always consider consulting a professional audio installer before installing any audio components. Be careful and take your time. Do not let wires make contact with metal edges or hot engine components.

Features

- Bluetooth Connectivity
- 8-Channel RCA Outputs
- 6-Channel RCA Inputs
- Output Limiter LEDs
- Power connector with two remote wires 1 remote input/1 remote output
- IP67 Waterproof Design
- DSP Control Mobile Application

Mounting and Hardware

Prior to mounting, connect the wires to ensure proper operation.

MOUNTING

1. Select the desired mounting location that allows the unit to be mounted on a flat surface with room for connections.

2. Use the mounting brackets that are attached to the unit and use the provided hardware for mounting the unit. Make sure there is proper clearance for the mounting bracket screws when attaching to selected location. Use caution to ensure there are no wiring harnesses, mechanical or gas tanks under the location selected.

3. Route the power, ground and remote wires away from moving parts to prevent pinching or shorting the wires. Also keep in mind of anything that can create excessive heat to avoid wires from deteriorating.

WIRING

1. **Power Wire**: The power wire should connect to a constant or switched +12 volt source with a (2 Amp) in-line fuse. We recommend that you use the radio constant or switch +12 volt source.

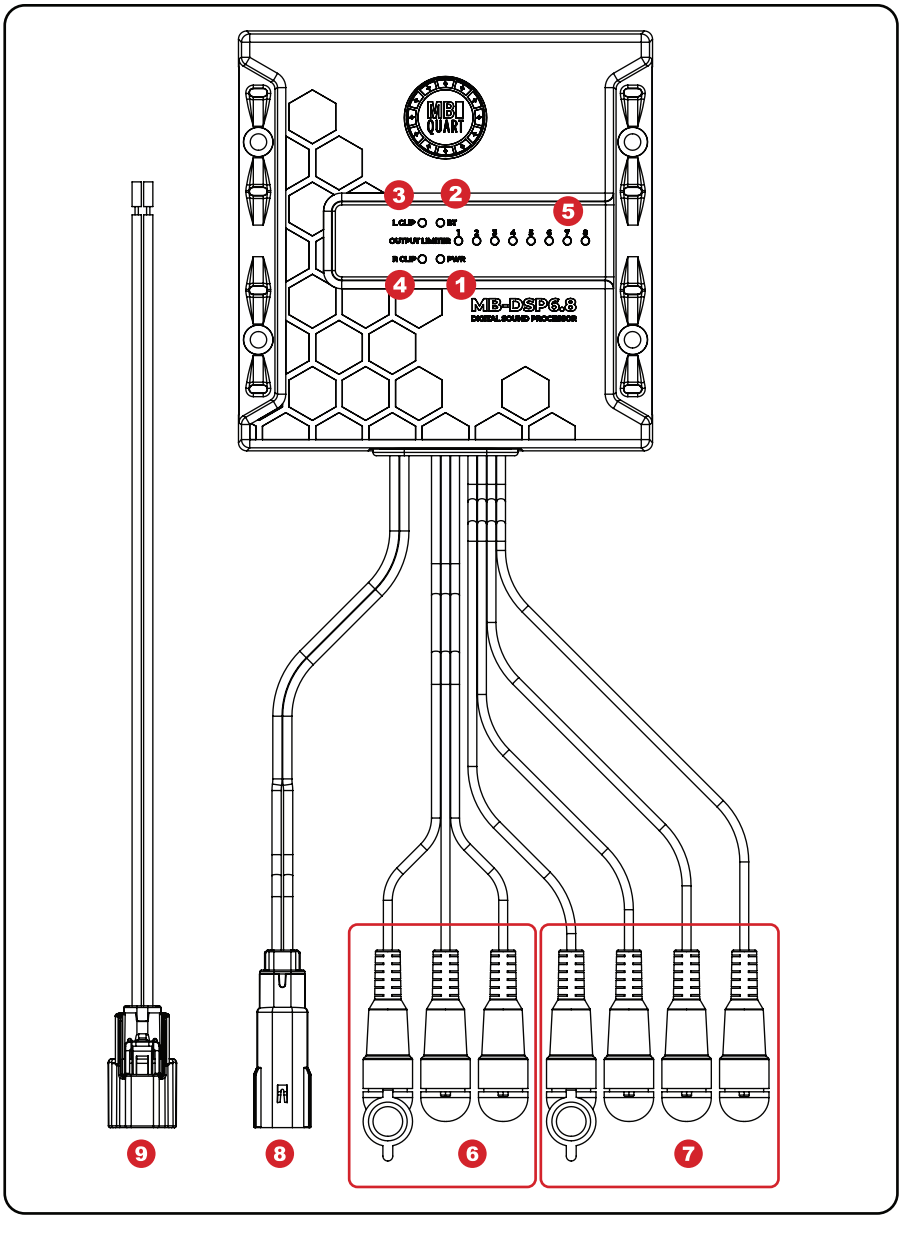
2. **Ground Wire**: Connect the ground wire to a clean chassis ground point. Be sure to remove all paint and primer to expose clean metal. Use a ring terminal and lock or star washer to secure the ground wire.

3. **Remote Wire**: The remote wire should be connected to the source unit remote wire (amplifier turn on or accessory wire) that provides +12 volts when the source unit is “on” and 0 volts when the source unit is turned “off”. (please note that some source unit’s antenna connections will only show + 12 volts when AM/FM is selected and 0 volts when other sources are selected).

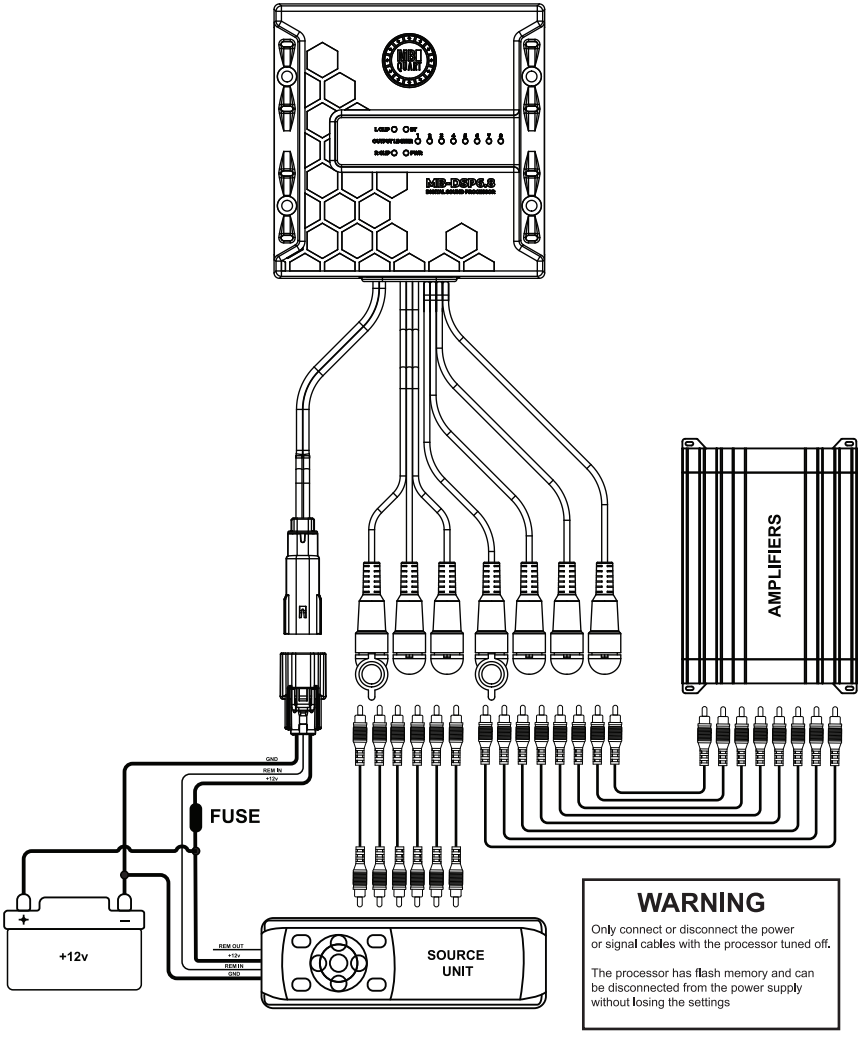
Functions & Operations

1. Power LED (When lit, it indicates the processor is turned on)
2. Bluetooth On LED (Indicates that Bluetooth is connected)
3. Clip LED of Left Inputs (A/B) (When it lights up, it shows that the audio input has reached its maximum level)
4. Clip LED of Right Inputs (C/D) (When it lights up, it shows that the audio input has reached its maximum level)
5. 8-Channel Output Limiter LED Indicator (When lit, it indicates that the audio output has reached its maximum level, and produces distortion or signal to show limiter's activity)
6. 6-Channel RCA Inputs
7. 8-Channel RCA Outputs
8. Power connector with two remote wires 1 remote input/1 remote output
9. Pigtail power connector

Functions & Operations



System Setup



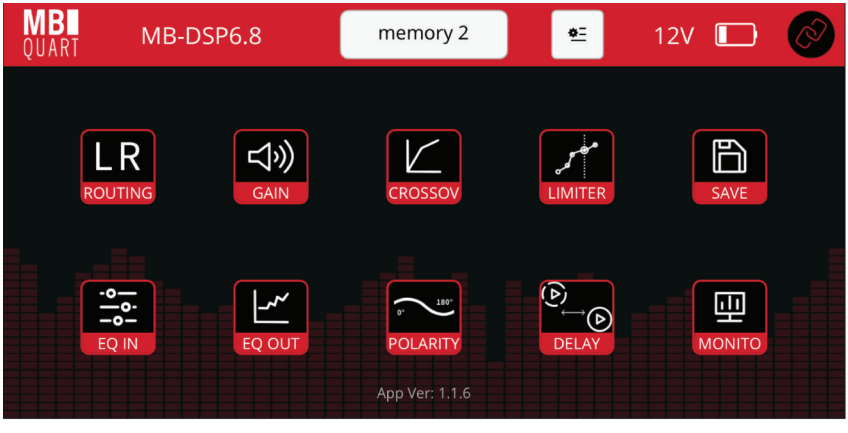
WARNING

Only connect or disconnect the power or signal cables with the processor tuned off.

The processor has flash memory and can be disconnected from the power supply without losing the settings

Bluetooth

1. Download the app from the Apple Store or Google Play Store
2. Turn Bluetooth® on your smartphone
3. Turn location on your smartphone
4. Open app and it will display the below information
5. Select the processor and enter the password, the factory password is 000000. To set a new password, just enter any password other than 000000. If you need to reset your password, press and hold the reset button for 15 seconds.



7. You're now successfully conneted to your processor, now with simple and intuitive interface you can manage your sound system completly by using the following.

Routing Channel	**Frequency Cuts**	**Output Equalizer**	**Configurable Memories**
General Gain	**Limiter**	**Polarity Inversion**	**Battery Monitoring**
Channel Gain	**Input Qualizer**	**Time Alignment**	**Limiter Monitoring**

Compatible with IOS13 and above or Android 7 and above

Apple Store

Google Play Store

Specifications

GAIN	
General Gain	-53 to 0db
Channel Gain	-33 to +9db
FREQUENCY CUT	
Cut-Off Frequency	20 Hz to 20kHz
Crossover Type	Linkwitz-Riley/Butterworth/Bessel
Attenuation dB per Octave	6/12/18/24/36/48
INPUT EQUALIZER	
Equalization Band	31 Bands
Gain	-12db to +12db
CHANNEL EQUALIZER	
Equalization Band	8 Parameter Per Channel
Gain	-12db to +12db
Q-Factor	0.6 - 9.9
TIME ALIGNMENT	
Time	0 to 18.95ms
Distance	0 to 6500mm
LIMITER	
Threshold	-53 to +6db
Attack	1 to 200ms
Release	1 to 988ms
MEMORY	
Memories	There are 6 memory presets

Specifications

INPUTS (LEFT/RIGHT)	
Inputs	6
Type	Electronically Symmetrical
Connector	RCA
Input Level Max	3.5v
Input Impedance	48k Ohms
OUTPUT	
Outputs	8
Connector	RCA
Maximim Output Level	3.5v
Output Impedance	100 Ohm
DSP	
Frequency Response	<20Hz - >20kHz
THD +N	<0.1%
Signal Latency	<0.06ms
Bit Rate	32-Bit
Sampling Frequency	96kHz
POWER SUPPLY	
Volatage DC	10 - 15v DC
Maximum Consumption	<1.5A

Noise Troubleshooting

1. Ensure that all system components are grounded at the same point to avoid ground loop noise.
2. Inspect the processor's RCA output cables. Shorter, high-quality cables will help reduce noise.
3. Establish a proper gain structure by setting amplifier gain levels as low as possible while maintaining the desired output.
4. Use high-quality cables and route them away from potential sources of electrical interference.
5. If noise persists, contact technical support or refer to additional troubleshooting tips on our social media channels.

MBQuart.com
#MUSIC DEFINED

WARRANTY

Maxxsonics, LLC. warrants this product, to the original consumer purchaser, to be free from defects in material and workmanship for a period of one (1) year from the date of purchase. Maxxsonics, LLC. will, at it's discretion, repair or replace defective products during the warranty period. Components that prove to be defective in materials and workmanship under proper installation and use must be returned to the original authorized Maxxsonics, LLC. retailer from where it was purchased. A photocopy of the original receipt must accompany the product being returned. The costs associated with removal, re-installation and freight are not the responsibility of Maxxsonics, LLC. This warranty is limited to defective parts and specifically excludes any incidental or consequential damages connected therewith. To view the full warranty, please visit the website.

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