

SixTen DSP

INSTRUCTION MANUAL



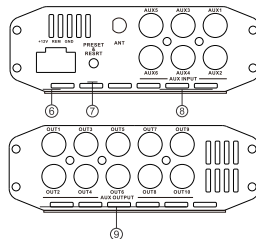
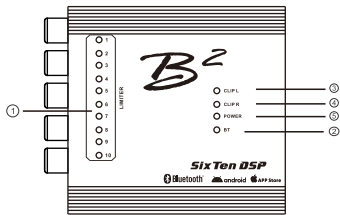
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Presentation

Congratulations, you just bought a product with Audio quality. Through engineers with years of experience, critical testing procedures and a high-tech laboratory, we have created a range of high quality products that reproduce the musical signals with the clarity and faithfulness you deserve.

To ensure the best operation of the product, please read this manual carefully before using the product. Keep the manual in a safe and accessible place for future reference.



- 1-Clip Leds and Output Limiter
- 2-Bluetooth Connection Indicator Ligth
- 3-Clip Led of Left Inputs (A/B)
- 4-Clip Led of Right Inputs (C/D)
- 5-Processor Indicator Led On

- 6-Power Connector
- 7-RESET Key
- 8-Input Connector
- 9-Output Connector

1-Clip Leds and Output Limiter

When lit, it indicates that the audio output has reached its maximum level, and produces distorgao or signal to show limer's activity. If the limiter is disabled, the limiter will be used as an output clip, and if the limiter has been triggered, it will be used as both an output clip and a limiter indicator.

2-Bluetooth Connection Indicator Ligth

Indicates that Bluetooth is connected

3&4 Clip Led of Left and Right Inputs

When it lights up, it shows that the audio input has reached its maximum level.

5-Processor Indicator Led On

When lit, it indicates that the processor is turned on

6-Power connector

Connectors responsible for supplying + 12V, REM, GND of the processor.

7-RESET Key

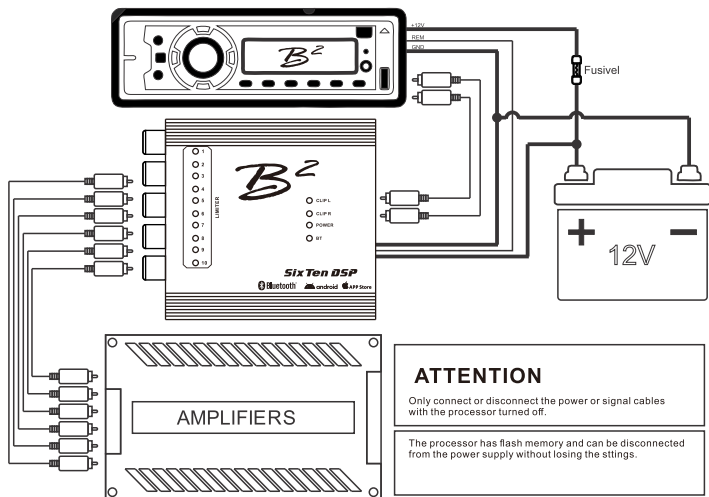
Returns all processor parameters to the manufacturer-defined parameters, which can be reset by pressing and holding the key for 5 seconds.

8-Input connector.

A high impedance signal is received from a player, mixer, mobile phone, etc.

9-Output Connector

The properly processed signal is sent to the amplifier.



1. Read the entire product manual carefully before beginning installation.
2. For safety, disconnect the negative from the battery before beginning installation.
3. Keep all RCA cables away from power cables.
4. Use high quality cables and connectors to minimize loss and noise.
5. If the equipment is grounded on the vehicle chassis, scrape all the paint off the grounding point to ensure a good connection.

Noise Problems:

1. Check that all equipment in the system is grounded at the same point, in order to avoid ground loops.
2. Check the processor output RCA cables, the shorter and better quality, the lower the noise.
3. Make a correct gain structure, making the gain of the amplifiers as small possible.
4. Use quality cables and keep away from any potential sources of noise.
5. Contact our technical support or check the tips on our social networks

Bluetooth

1-Download the app from the Google Play Store or Apple Store.

2-Activate Bluetooth on your smartphone.

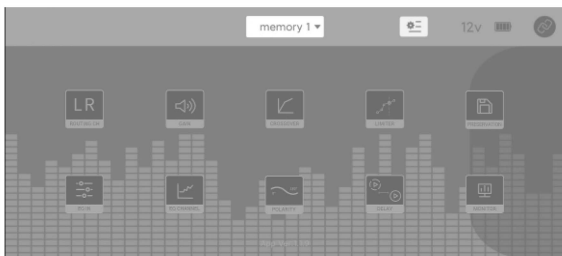
3-Activate the location of your Smartphone.

4-Open the app and it will display the following 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 forget your own password, press and hold the reset button for 15 seconds to reset the password to the factory password 000000.

6-If you want to reset your password, you need to reset the processor to all factory defaults.



7-You are connected to your processor, now with a simple and intuitive interface you can manage your sound system completely by using the following.

Routing Channel
General Gain
Channel Gain
Frequency Cuts
Limiter
Input Equalizer

Output Equalizer
Polarity Inversion
Time Alignment
Configurable Memories
Battery Monitoring
Limiter Monitoring

Compatible with android 7 or above/ios 13 or above

Processing Technical Documents

Channel Routing (routing channel)

Routing Option	A/B/C/D/A+B/A+C/B+C
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Gain

General Gain	-53 to 0db
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Channel Gain	-33 to + 9db
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Frequency Cut (crossover)

Cut-off frequency	20Hz to 20kHz
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Type of Cuts	Linkwitz-Riley/butterworth/Bessel
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Attenuations	6/12/18/24/36/48 dB/8 °
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Input Equalizer (Eq in)

Equalization Band	31 Bands
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Gain	-12 to + 12dB
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Channel	Equalizer	(eq channel)
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Equalization Bands	8 parameter per channel
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Gain	-12 to + 12dB
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Q Factor	0.6-9.9
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Time Alignment (delay)

Time	0 to 18.95 ms
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Distance	0 to 6500mm
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Limiter

Threshold	-53 to + 6dB
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Attack	1 to 200ms
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Release	1 to 988ms
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Polarity Inversion (Polarity)

Inversion	0 or 180 °
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Memory (preset)

Memories	3-100% configurable
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* These typical data may vary slightly.

Technical Specification

Input (left/right)

Inputs	8
Type	Electron symmetry
Connectors	RCA
Input level max	4.00 vrms (+ 14dbu)
Inlet Impedance	100Kohm

Output

Outputs	10
Connectors	RCA
Type	Electronically Symmetrical
Maximum Output Level	3.50 Vrms (+ 13dBu)
Output Impedance	100ohm

DSP

Frequency Response	10Hz to 24KHz (-1dB)
THD +N	<0,01%
Signal Latency	< 0.6 ms
Bit rate	32-bit
Sampling frequency	96khz

Power Supply

voltage DC	9.5 ~ 15vDC
Maximum consumption	350mA

Dimensions

