



# S810

Digital Signal Processor 8-Channel  
Inputs & 10-Channel Outputs

## User Manual

CONGRATULATIONS!

Thank you for purchasing the Recoil S810. The S810 is a unique combination of a eight channel amplifier and a digital signal processor in one piece. To ensure many years of great performance from your new DSP amplifier, we highly recommend you have your new S810 installed by an authorized Recoil Audio dealer.

Please take a few moments to thoroughly read this entire manual to make sure that you fully understand all the benefits from this new addition to your audio system. If there is any question, please contact us [support@recoilaudio.com](mailto:support@recoilaudio.com).

FEATURES

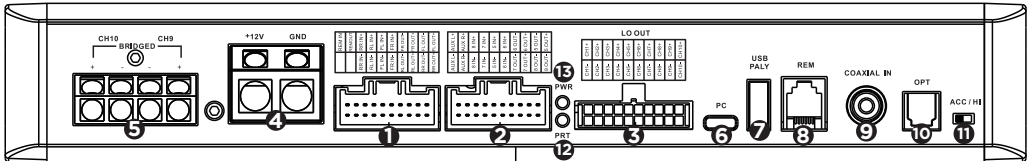
- Inputs: 8 x high level, 2 x auxiliary, 1 x optical SPDIF, 1 x coaxial
- Outputs: 10 x RCA
- Power Rating (14.4V):
  - @4Ohm: RMS 8 X 25 Watts + 2 X 100 Watts (Bridged 1 X 300 Watts)
  - @2Ohm: RMS 8 X 40 Watts + 2 X 160 Watts
- Full gain, phase & time delay control of each channel
- Multiple slope and class independent crossovers
- Six preset favorite DSP tuning effects
- AD and DA signal converters of the latest generation
- Built-in USB driver & Bluetooth® audio streaming
- Windows PC software and App tuning
- Plug & play OEM harness (sold separately)
- Dimensions: 7.48" x 11.57" x 1.8" (190mm x 294mm x 46mm)
- Optional DRC2 (sold separately)

SPECIFICATION

Model	S810
Inputs	8 x High level speaker inputs
	2 x Auxiliary Inputs
	1 x Optical SPDIF input
	1 x Coaxial input
Input Sensitivity	0.35V - 3.2V
Input Impedance	22k-Ohms
Bluetooth Streaming	Yes
Outputs	10 x RCA outputs
	10 x Speaker outputs
Power Rating	RMS 8 X 25 Watts + 2 X 100 Watts
	RMS 8 X 40 Watts + 2 X160 Watts
Output Voltage	1V RMS
Frequency Response	10 Hz -22,000 Hz
DSP Resolution	24 Bit
Sampling Rate	48 kHz

DSP type	Audio Signal Processor
DSP Tuning	Windows PC Software & APP
Signal Converters	DAC-CS4344
Signal-to-Noise Ratio	86dB
Total Harmonic Distortion (THD+D)	<0.1%
Operating Voltage	10-16 Volts
Current Idling	0.37A
Remote Turn-On	REM / DC
Max. Remote Output Current	500 mA
Fuse	15A
Dimensions	11.60" x 7.51" x 1.87"
	294.8mm x 191mm x 47.5mm

CONNECTORS



- 1 Harness Connector**  
4-channel speaker level inputs & outputs, plus remote input & output

**3 Harness Connector**  
8-channel RCA level outputs

**5 Speaker Outputs**  
2-channel speaker outputs (bridgeable)

**7 USB PLAY**  
This is the port for USB flash driver to play MP3 music

**9 Coaxial Input**  
Input for coaxial digital signal

**11 Remot Turn-On Selector**  
Select the remote turn-on mode between Hi. (DC trigger) & Acc. (Remote turn-on)

**13** This is the LED indicator for protection status.
- 2 Harness Connector**  
4-channel speaker level inputs & outputs, plus two auxiliary inputs

**4 Power Connector**  
Power & ground connectors

**6 PC USB**  
Connects the Recoil DSP S810 to your PC for tuning.

**8 Remote Controller Port**  
Plug optional digital remote controller (DRC) with this port via RJ45 cable. The DRC is sold separately.

**10 Optical Input**  
Optical input for digital stereo signals (SPDIF format).

**12 Power LED**  
This is the LED indicator for DSP amplifier power on status.

WIRING DIAGRAM



INSTALLATION

1

Remove head unit from dash

2

Disconnect wiring harness from head unit

3

Install proper harness for your vehicle

4

Reconnect wiring harness

5

Locate harness for the vehicle

6

Pull through S810 wiring harness to head unit



Pull through S810 wiring harness to installation location

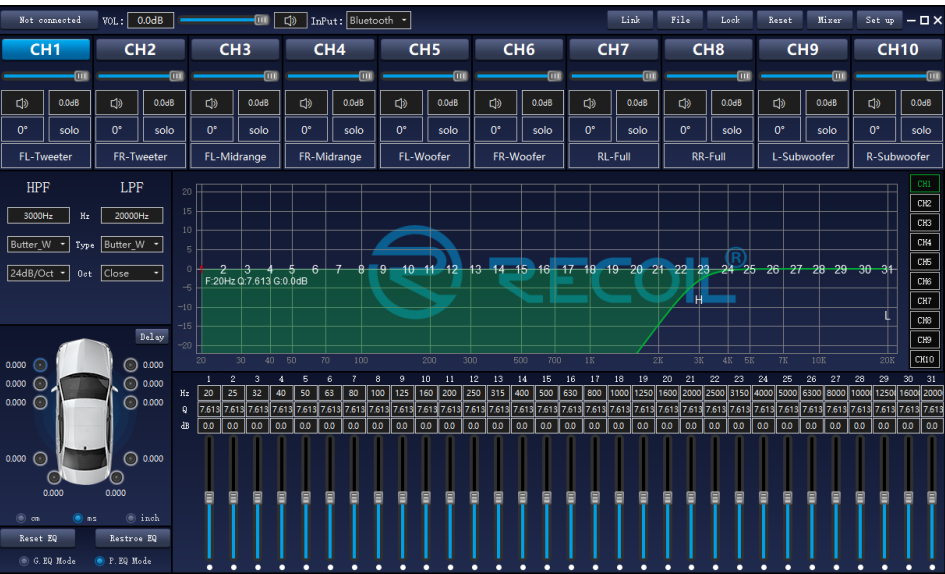


Connect S810 harness to headunit wiring harness



Perfect installation

COMPUTER TUNING INTERFACE



TUNING REFERENCE

- Increase Subwoofer Bass: +60-80Hz
- Increase Upper Bass: +125Hz
- Increase Mid-Range: +200-400Hz
- Increase High Freq.Tones: +1KHz
- Increase Upper Vocals: +3KHz
- Enhance Vocal Thickness:+4-8KHz
- Extend Audible High Freq.+12-16KHz
- Subwoofer Bass:-60-80Hz
- Upper Bass:-125Hz
- Mid-Range:-400-500Hz
- Mid to High Freq.-1250-200Hz
- Vocal Adjustment:-3KHz
- High freq.Precision: -4-8KHz
- Audible High Freq.Top end: -12-16KHz
- Reduce Mid-Bass:-160-200Hz
- Reduce Upper Mid-Bass:-200Hz
- Reduce Lower Mid-Range: -250Hz

## INSTALLATION

- Please ensure proper installation for best results. Refer to the installation visual guides in the instruction manual BEFORE installation.
- We do not recommend playing music at maximum volume when driving. You may risk hearing and equipment damage, as well as distracted driving.
- Make sure all surfaces and connection points are dry before installing your new S810.
- If your car already has an existing amplifier or after market amplifier, please consult with your Recoil Audio dealer for best installation set up.
- The S810 requires the wiring harness that is included with the S810, we do not recommend using different wiring harnesses as you risk damage to the S810.

## TROUBLE SHOOTING

The wiring plug does not match the original	The wiring harness is dedicated for special vehicles. Please confirm your model and the model of high and low matching, and inform local dealers or agents
There are murmurs in the use of the product	Please make sure that the host connection wire is properly connected and check for loose. There are still murmurs to check if there is any connection with CD or DVD. Still unable to resolve the local dealers or agents.
The work indicates that the class is not bright and has no sound	Please check whether the tail line is properly connected and check whether the original car has its own amplifier or not.
There is no electricity for the original engine and the machine	Check whether the original owner's surface power cord is connected, and whether the grounding black line is connected to the original engine housing and restore the original engine location.