



## ***Product Manual***



**SQ 1200.1D**  
[ FULL MOSFET / digital mono amplifier ]

**SQ 30.2**  
[ FULL MOSFET / 2CH amplifier ]

**SQ 60.2**  
[ FULL MOSFET / 2CH amplifier ]

**SQ 80.4**  
[ FULL MOSFET / 4CH amplifier ]

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### **MODEL:SQ1200.1D**

- Class-D Mono Block Power Amplifier
  - 1 x 550 Watts Rms @ 4 Ohms
  - 1 x 1000 Watts Rms @ 2 Ohms
  - 1 x 1500 Watts Rms @ 1 Ohm
- 1 Ohm Mono
- Regulated Power Supply
- Soft Start Circuitry
- 1 Channel Operational
- 3-Way Short Circuit Protection
- Variable Frequency LPF 40Hz to 300Hz
- Variable Frequency SubSonic 20Hz to 55Hz
- Variable Bass Boost 0dB to 18dB at 45Hz
- Remote
- Full Mosfet Circuitry
- 0.5 % T.H.D.
- S/N Ratio >110dB
- Channel Separation 65dB
- Frequency Response  $\pm 3$ dB 30Hz - 300Hz
- Fuse 40 Amp x 2
- Dimensions (W x H x L):470 x 54 x 215

### **MODEL:SQ30.2**

- 2 Channel Power Amplifier
  - 2 x 85 Watts Rms @ 4 Ohms
  - 2 x 134 Watts Rms @ 2 Ohms
  - 1 x 275 Watts Rms Bridged @ 4 Ohms
- Regulated Power Supply
- Soft Start Circuitry
- 1/2/3 Channel Operational (MIXED MONO)
- 3-Way Short Circuit Protection
- Variable Frequency LPF 40Hz to 800Hz
- Variable Frequency HPF 40Hz to 800Hz
- Variable Bass Boost 0dB to 18dB at 45Hz
- Full Mosfet Circuitry
- 0.02% T.H.D.
- S/N Ratio >100dB
- Channel Separation 65dB
- Frequency Response  $\pm 3$ dB 10Hz - 40KHz
- Damping Factor 150
- Fuse 30 Amp x 1
- Dimensions (W x H x L):322 x 54 x 215

### **MODEL:SQ60.2**

- 2 Channel Power Amplifier
  - 2 x 220 Watts Rms @ 4 Ohms
  - 2 x 380 Watts Rms @ 2 Ohms
  - 1 x 760 Watts Rms Bridged @ 4 Ohms
- Regulated Power Supply
- Soft Start Circuitry
- 1/2/3 Channel Operational (MIXED MONO)
- 3-Way Short Circuit Protection
- Variable Frequency LPF 40Hz to 800Hz
- Variable Frequency HPF 40Hz to 800Hz
- Variable Bass Boost 0dB to 18dB
- Full Mosfet Circuitry
- 0.02 % T.H.D.
- S/N Ratio >100dB
- Channel Separation 65dB
- Frequency Response  $\pm 3$ dB 10Hz - 40KHz
- Damping Factor 150
- Fuse 40 Amp x 3
- Dimensions (W x H x L):610 x 54 x 215

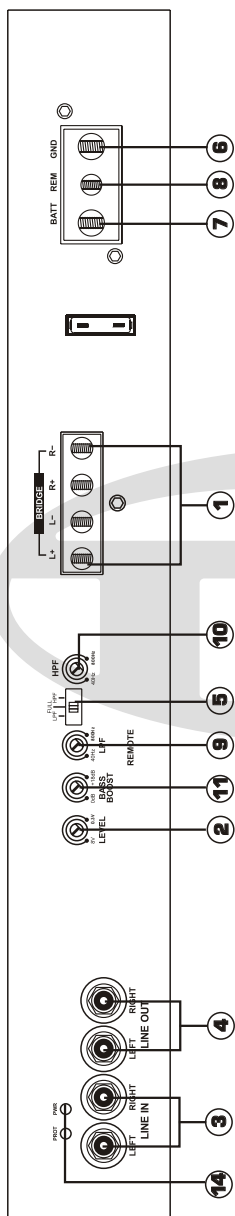
### **MODEL:SQ80.4**

- 4 Channel Power Amplifier
  - 4 x 85 Watts Rms @ 4 Ohms
  - 4 x 140 Watts Rms @ 2 Ohms
  - 2 x 280 Watts Rms Bridged @ 4 Ohms
  - 2 Ohm Mono Stable
- Regulated Power Supply
- Soft Start Circuitry
- 2/3/4 Channel Operational
- (MIXED MONO)
- 3-Way Short Circuit Protection
- Variable Frequency Band pass 25Hz to 5KHz
- Variable Frequency LPF 40Hz to 4KHz
- Variable Frequency HPF 25Hz to 5KHz
- Full Mosfet Circuitry
- 0.03 % T.H.D.
- S/N Ratio >100dB
- Channel Separation 65dB
- Frequency Response  $\pm 3$ dB 10Hz - 40KHz
- Damping Factor 150
- Fuse 25Amp x 3
- Dimensions (W x H x L):522 x 54 x 215

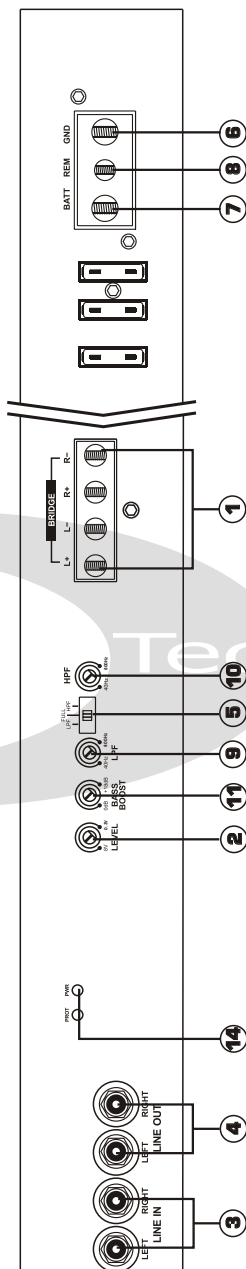


## CONTROL & CONNECTION LOCATION

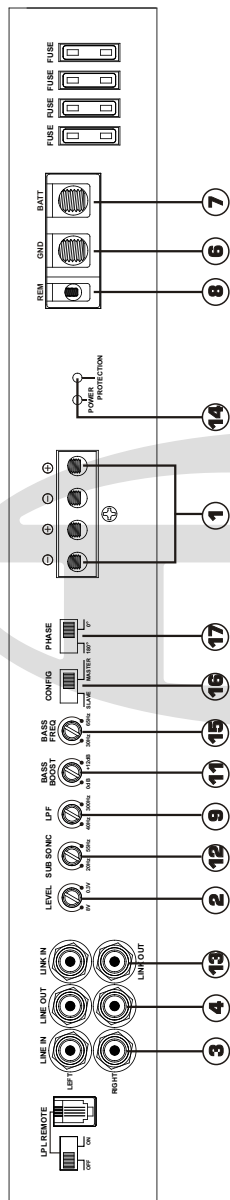
**MODEL: SQ30.2**



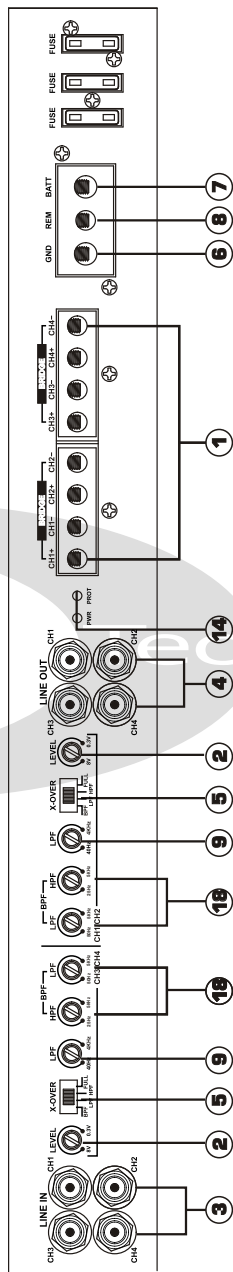
**MODEL: SQ60.2**



# MODEL:SQ1200.1D



# MODEL:SQ80.4





### 1. Speaker Terminals

### 2. Input Sensitivity Adjustment:

This control adjusts the amplifier's input sensitivity. Input sensitivity is variable from 300 Millivolts to 8 Volts. Turn the control clockwise to increase sensitivity. Turning the control counter-clockwise will decrease sensitivity. This control is not a volume control for the amplifier. The amplifier can be driven to full power with a wide range of signal levels. A low level signal will require increased sensitivity for full power. A high level signal will require decreased sensitivity.

### 3. Low Level RCA Inputs: These inputs are for signal cables from a source unit. Always use high quality shielded RCA cables.

### 4. RCA Line Outputs: These RCA connections are used when connecting additional amplifiers.

### 5. Crossover: Adjust the crossover for your chosen installation method.

- LPF: Low pass filter-only
- FULL: No filtering for speakers. Use with full-range speakers.
- HPF: High pass filter

### 6. B- Terminal (Chassis ground): To avoid unwanted ignition noise caused by ground loops, it is essential that the amplifier be grounded to a clean, bare metal surface of the vehicle's chassis.

### 7. B+ Terminal (Battery positive) : Due to the power requirements of the Amplifier, this connection should be made directly to the positive (+) terminal of the battery. For safety measure, install an in-line fuse Holder (not included) as close to the battery positive (+) terminal as possible with an ampere rating not to exceed total value of fuses on the amplifier.

### 8. Remote Turn-On Input : To remote turn-on wire of head unit. The amplifier is turned "ON" remotely when the vehicle's head unit is turned "ON".

### 9. Variable Low-Pass Filter : For use as a dedicated subwoofer channel, set filter switch to "LPF". Adjust variable crossover frequency with control as desired. The amplifier input circuit filters out everything above 40Hz to 800Hz (dependent on the adjustment of the frequency control), so only the deepest bass notes are amplified. (SQ1200.1D : 40Hz -300Hz / SQ80.4 : 40Hz - 4KHz)

### 10. Variable High-Pass Filter : For use as a dedicated mid-range channel, set filter switch to "HPF". The circuit filters out all frequencies below 40Hz to 800Hz.

### 11. Variable Bass Boost : This control adjusts the Bass Boost Gain for the amplifier's speaker output( 0 to +18dB).

### 12. Sub-Sonic Filter: For Sub-Sonic Frequency Adjustment from 10Hz - 25Hz.



- 13. Link-IN :** Connect this RCA to Link-Out of MASTER Amplifier  
Link-OUT : Connect this RCA to Link-IN of secondary (slave) Amplifier.

**14. Power Indicator LED:**

This Blue LED will illuminate when the amplifier is turned "ON"

Protection Indicator LED:

This LED turns on if excessive current is detected in the output stages.

This can be caused by any of the following:

- Any speaker cable shorted to the vehicles chassis (ground).
- Any pair of speaker cables shorted together (zero impedance).
- Shorted speaker voice coil(zero impedance).
- Combined speaker impedance is too low.
- Turns on due to excessive heat sink temperatures.

- 15. Bass Frequency :** This is vaviable control from 30Hz to 65Hz for Bass Boost.

**16. Config (MASTER/SLAVE) Select Switch**

You must select this swtich according to Amplifier Role.

In case of MASTER AMP : Set to MASTER position.

In case of Slave (Secondary) : Set to Slave position.

- 17. Phase Switch:** Master AMP must be set "0°" position. Slave Amp (secondary) must be set "180°" position.

NOTE : When you try to link, you must set correct plase switch position :

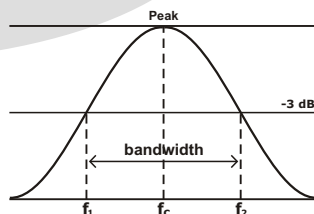
MASTER AMP : Set to "0°"

Slave AMP : Set to "180°"

**18. Band-Pass Filter(Only SQ80.4)**

To match the characteristics of the installed speaker system, you can adjust the unwanted high and low frequency sinals entering the speaker systems. By setting the Band-pass control to select the cut-off frequency (see the diagram), the speaker willoutput only bandwidth signals so you can get a clearer sound image.

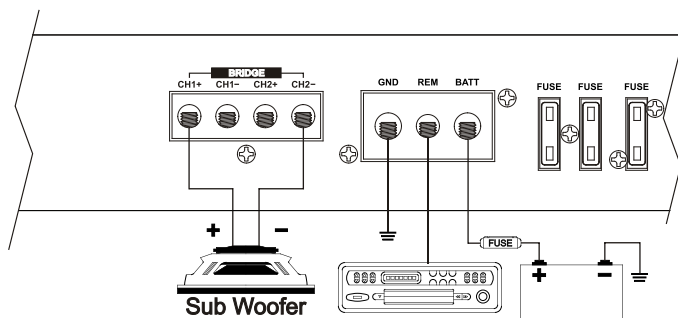
- BPF(LPF): Low pass filter-only (40Hz-4KHz)
- BPF(HPF): High pass filter-only (80Hz-8KHz)



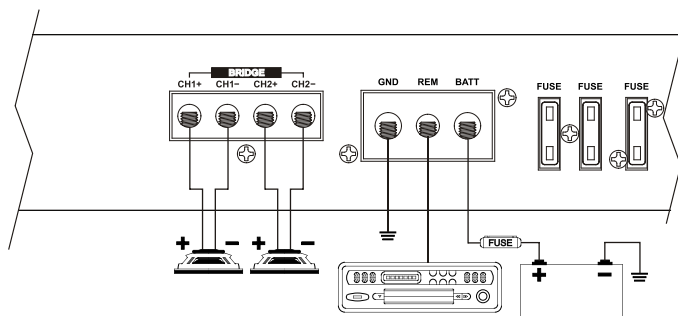


## WIRING DIAGRAM

### SQ30.2/SQ60.2 MONO MODE



### SQ30.2/SQ60.2 STEREO MODE

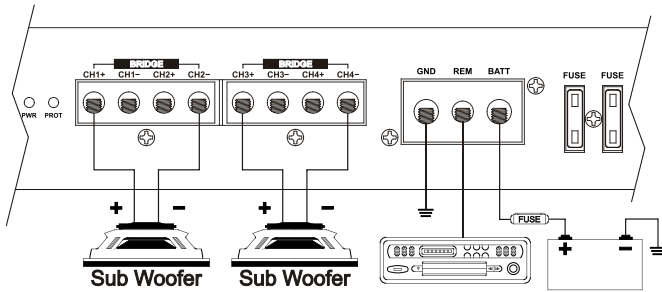




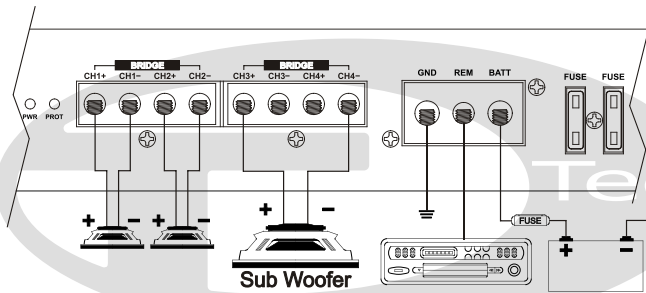


## WIRING DIAGRAM

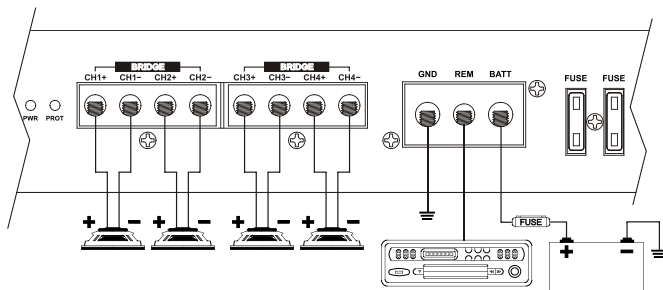
### SQ80.4 2CH MODE



### SQ80.4 3CH MODE



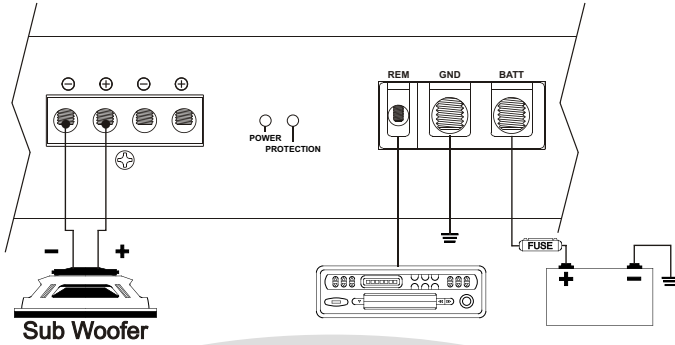
### SQ80.4 4CH MODE



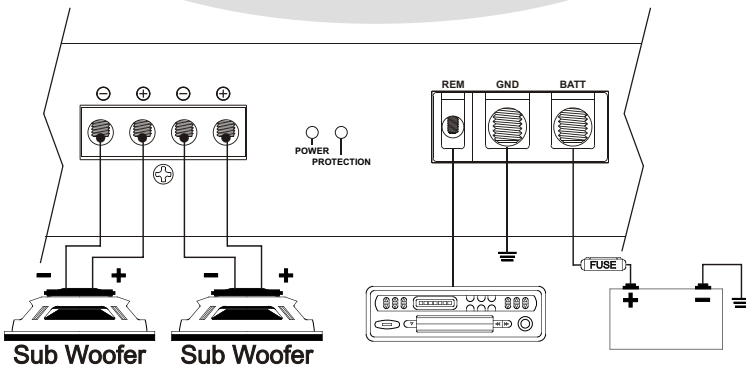


## WIRING DIAGRAM

### SQ1200.1D System Example MODE



### SQ1200.1D System Example MODE



## SQ1200.1D Linkable Connection MODE

