# CROSSOVER AND CONTROLS

Low Level Output: (MONO Amps) Use this output connection to feed the audio signal to additional amplifiers.

Gain: The gain control is NOT a volume control. The gain control adjusts the amount of signal required to drive the amplifier to full output. With the gain at full clockwise rotation, less signal voltage is required to drive the amp to full output. With the gain at full counter clockwise rotation, more signal voltage is required to drive the amp to full output. For optimal performance, set the gain control to minimum

High Pass Filter (HPF): The high pass crossover/filter is designed to remove low frequency information from a speaker. This is generally used to protect smaller devices from trying to reproduce low frequency information that might damage them. The crossover frequency is adjustable from 120 Hz to 3KHz and uses 12 dB per octave slope. To engage the HPF simply slide the switch to the position on the marked HPF. Crossover frequency selection is made by rotating the dial: clockwise raises the frequency, counter-clockwise lowers the frequency. Most mid-bass or midrange drivers should be set between 80 and 400 Hz depending on how high the subwoofer(s) plays. For mid-range drivers that are 5 or smaller we suggest setting the HPF to 120Hz. The HPF can also be combined with passive crossovers on a separate or coaxial speaker set to provide low frequency protection to the midrange driver, or to form band-pass filter for a midrange speaker already using a passive low-pass filter.

Low Pass Filter (LPF): The Lowpass crossover/filter is designed to remove high frequency information from a speaker. This is generally used to prevent mid bass speakers or subwoofers from trying to reproduce mid and high frequency information that they are not designed to reproduce. The crossover frequency is adjustable from 50Hz to 250Hz and uses a 12dB per octave slope. To engage the LPF slide the switch to the position marked LPF. Frequency selection is made by rotating the dial: clockwise raises the frequency and counter clockwise lowers the frequency. Most subwoofers should be set between 80Hz and 100Hz depending on how low the mid-bass or midrange drivers are capable of playing.

Full Range: Sliding the selector switch to this position turns off all crossovers and allows a full range signal to pass. The full position should be selected when using outboard electronic crossovers.

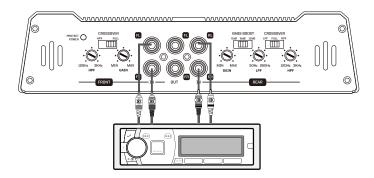


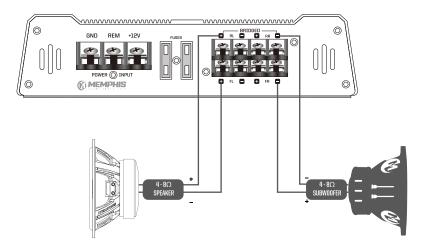






#### 2 CHANNEL BRIDGED CONNECTION









Memphis Audio has built a 50 year legacy in the audio industry by engineering the highest quality products to produce the best possible listening experience for our fans and loyal supporters. To fully appreciate our products we recommend taking the time to read and follow the instructions in this manual. As always, we recommend all installations and service be performed by an authorized Memphis Audio dealer.



For optimal performance, Memphis recommends using only Memphis Connection accessories. Outfitting your system with properly sized Memphis Connection wire and accessories will dramatically boost your listening experience and increase the durability of your Memphis Audio products.

### **FEATURES**

Extruded aluminum heatsink Variable crossovers

#### SPECIFICATIONS

	Specifications	SE1200.4V2
Ø	RMS POWER $4\Omega$	60W X 4CH
RMPLIFIERS	RMS POWER $2\Omega$	85W X 4CH
	RMS POWER BRIDGED $4\Omega$	170W X 2CH
	MAX POWER	1200W
	THD	< 0.1%
3	Frequency Response ± 1dB	10Hz - 30Khz
	SIGNAL TO NOISE RATIO	>90dB
	SENSITIVITY	0.15 - 6V
	RECOMMENDED FUSE	20A x 2
	DIMENSIONS (IN)	12.6 x 8.07 x 2

### SERVICE & RETURNS

Please consult with your local authorized dealer if you experience issues with your unit. You may also contact Memphis Audio customer service at 800-489-2300 or email tech support directly at techsupport@memphiscaraudio.com. Do not attempt to return your amplifier directly to us without first calling for a return authorization number. Units received without an accompanying return authorization number will be processed more slowly. Additionally, you must include a copy of your purchase receipt from an authorized dealer for consideration of in-warranty service, otherwise repair charges will apply. Units received without a receipt will be held for up to 30 days allowing us time to contact you and obtain a copy of the receipt. After 30 days all units will be returned to you unrepaired.

## ШARNING

For your safety, always inspect the mounting location carefully to ensure you are not drilling into any electrical, hydraulic, fuel or fluid lines. Always check your speaker load with a multi-meter before connecting the amplifier. Connecting any speaker load lower than the rated impedance of the amplifier will result in damage to the amplifier. Damage of this nature is NOT covered under warranty. Please pay close attention to what connections are made to the amplifier.



If you are uncertain or uncomfortable proceeding with your installation, please contact your local authorized Memphis Audio Dealer

### INSTALLATION INFORMATION

Memphis Audio recommends the installation of our products to be performed by an Authorized dealer. Attempting an installation project on your own or through an unauthorized source may result in damage to your products and may potentially void your warranty.

Amplifiers are generally mounted in the hatch/trunk area of your car or SUV or behind the seat of most pick up trucks. Select a location that provides adequate ventilation. Avoid mounting the amplifier with fins facing down. Amplifier should be secured using the screws provided.

# TROUBLESHOOTING

When troubleshooting your amp, speaker and speaker wires should be tested first.

#### DISTORTED OUTPUT

Check the speakers they may be blown. If the speakers are blown. Check the system with a known working pair of speakers and repair or replace as needed.

#### POOR BASS RESPONSE

Speakers may be wired wrong. The speaker polarity may be causing cancellation at low frequencies. Check the speaker polarity and repair as needed.

Crossovers may be set incorrectly. Reset the crossovers referring to the multi-cross crossover configuration section of this manual for detailed instructions.

#### BATTERY FUSE BLOWING

Impedance load to amplifier maybe too low. Check the impedance load, if below  $2\Omega$  stereo or  $4\Omega$  mono, rewire the speakers to achieve a higher impedance.

Short in power wire or incorrect power connections. Check the power and ground connections and repair as needed.

Is your fuse too smaller than recommended? Replace with proper sized fuse.

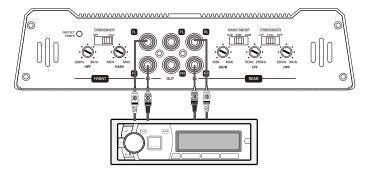
### **AMPLIFIER FUSE BLOWING**

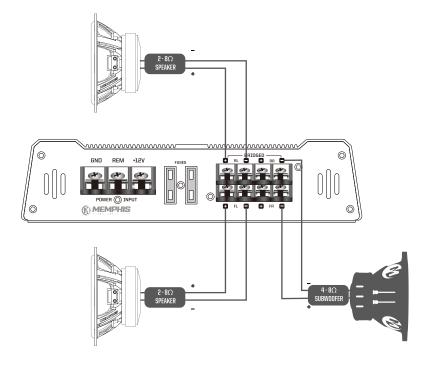
Is too much current being drawn? Check speaker impedance load, if below  $2\Omega$  stereo or  $4\Omega$  mono, rewire speakers to achieve a higher impedance

You may be experiencing a short in your power wire. Check your power and ground connections and repair as needed.

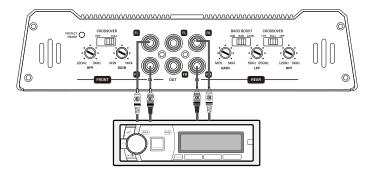
Is your fuse smaller than recommended? Replace with properly sized fuse.

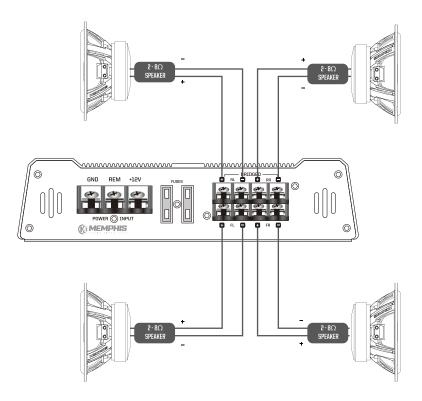
#### 3 - CHANNEL MODE





#### 4 - CHANNEL MODE





### TROUBLESHOOTING CONTINUED

### NO OUTPUT

Low or no remote turn on. Check the remote turn on voltage output at amplifier and correct as needed.

Blown fuses can cause no output. Check power wire integrity and reverse polarity. Repair as needed and replace fuses.

Power wire may not be connected. Check the power and ground wires, repair or replace as needed.

Audio input not connected or no output from source. Check the input connections and signal integrity. Repair or replace as needed.

Are the speaker wires loose or not connected? Check the wires and repair or replace as needed.

### AUDIO CYCLES ON AND OFF

Speakers may be blown. Check the system with a working speaker and repair or replace as needed.

Thermal protection engages when amplifier heatsink exceeds 90°C (194°F). Make sure there is proper ventilation for the amplifier. Improve the ventilation or change mounting locations as needed.

Loose or poor audio inputs can cause inconsistent signal. Check the input connections and repair or replace as needed.

#### DISTORTED OUTPUT

Amplifier level sensitivity may be set too high exceeding the maximum output capability of the amplifier. Reset your gains referring to the tuning section of this manual

Impedance load to amplifier being too low can cause distortion. Check speaker impedance load. If below 2  $\Omega$  stereo or 4  $\Omega$  mono, rewire speakers to achieve higher impedance

Speaker wires need to be checked and replaced/repaired if shorts are present.

Speakers not being connected properly to the amplifier will cause distortion, check the wires and repair and replace as needed. Refer to the installation section of this manual for detailed instructions.

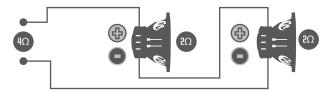
# SYSTEM PLANNING

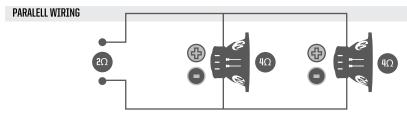
Proper system planning is the best way to maximize your amplifiers performance. By planning your installation carefully you can avoid situations where the performance and reliability of your system is compromised. Your authorized dealer has been trained to maximize you systems performance. Your dealer is valuable resource in helping you with your systems design and installation.

Each channel of your amplifier can easily drive  $4\Omega$  speaker loads when used in stereo mode. When a channel pair is bridged, the recommended minimum load impedance is  $4\Omega$ . Operation with lower impedances is not likely to cause immediate damage to the internal circuitry, but the unit will most likely overhead causing the thermal protection circuitry to shut down the amplifier. When the chassis cools down, normal operation will resume. Continued operation of the amplifier under these conditions is not recommended and will reduce the life expectancy of the amplifier.

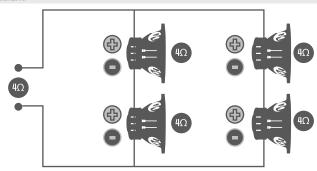
Most speakers designed for car audio operation are  $4\Omega$  impedance. Connecting two  $4\Omega$  speakers in parallel will result in  $2\Omega$  impedance load as seen by the amplifier. Some subwoofer models feature a dual  $4\Omega$  voice coil design. Connecting these voice coils in parallel will result in  $2\Omega$  nominal impedance which is not recommended for use with amplifier channels that are bridged.

#### **SERIES WIRING**

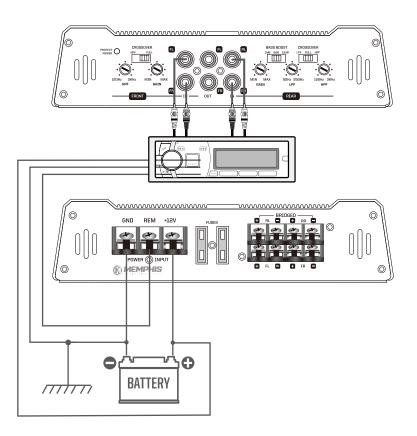




#### SERIES/PARALLEL WIRING



#### POWER CONNECTION LEADS



# NOTES ON THE POWER SUPPLY

Connect the +12V power input lead only after all other leads have been connected. Be sure to connect the ground wire of the unit securely to a metal part of the car. A loose connection may cause a malfunction of the amplifier.

Remote: The unit is turned on by applying +12V to the terminal. This terminal does not draw heavy current so a thinner copper wire is acceptable. Standard 18 AWG wire is sufficient. If the radio is equipped with a power antenna control wire, it can drive this terminal. If the power antenna wire is already in use, you can splice into it. With this method the unit will turn on automatically with the radio. Use the power supply lead with a fuse attachment with the same value as the original fuse.

Place the fuse in the power supply lead as close as possible to the car battery. During a full power operation, maximum current will run through the system. The wire connecting the +12V and GND terminals of the unit must be 10 AWG or larger.