

# OWNERS MANUAL

SE500.2DF SE500.2DF SE500.4DF

- We greatly appreciate your purchase of the unit.
- Be sure to take maximum advantage of all the unit has to offer, read these instructions carefully and set properly. Be sure to keep this manual for future reference, should any questions or problems arise.

## PRE INSTALLATION

**WARNING**: Playing loud music in an vehicle can hinder your ability to hear traffic and permanently damage your hearing. We recommend listening at low or moderate levels while driving. BASS HABIT accepts no liability for hearing loss, bodily injury or property damage resulting from the use/misuse of this product.

To get the very best performance from your BASS HABIT Spl Elite amplifiers, we strongly recommend that installation be entrusted to a qualified installer. Although these instructions explain how to install BASS HABIT Spl Elite amplifiers in general, they do not show specific installation methods that may be required for your particular vehicle. If you do not have the necessary tools or experience.

Do not attempt the installation yourself. If any uncertainty please ask your car audio dealer about an professional installation.

## **ADVICE AND TIPS**

Turn off the audio system and other electrical devices before you start. Disconnect the (-) negative lead from your vehicle's battery.

Check clearances on both sides of a planned mounting surface before drilling any holes or installing any screws. Remember that the screws can extend behind the surface.

At the installation sites, locate and make a note of all fuel lines, hydraulic brake lines, vacuum lines and electrical wiring. Use extreme caution when cut-ting or drilling in and around these areas.

Before drilling or cutting holes, use a utility knife to remove unwanted fabric or vinyl to keep material from snagging in a drill bit.

When routing cables, keep input-signal cables away from power cables and speaker wires.

When making connections, make certain they are secure and properly insulated.

Choose a mounting location in area where the amplifier will not be damaged.

Amplifier cooling is essential for proper amplifier operation.

If the amplifier is to be installed in an enclosed space, make sure there is sufficient air circulation for the amplifier to cool itself.

When mounting the amplifier under a seat, ensure that it is clear of all moving parts and does not affect the seat functionality.

Make sure that the amplifier is mounted securely using nuts and bolts or the supplied mounting screws.

Mount the amplifier so that it remains dry – never mount an amplifier outside the vehicle or in the engine compartment.

## THE POWER CONNECTIONS (FIG 1)

The BASS HABIT Spl Elite amplifiers are capable of delivering extremely high power levels, and require a heavy-duty and reliable connection to the vehicle's electrical system in order to perform optimal.

Carefully follow the below instructions:

## **Ground Connection (GND):**

Connect the amplifier's Ground (GND) terminal to a solid point on the vehicle's metal chassis, as close to the amplifier as possible.

Scrape away any paint from this location; use a star-type lock washer to secure the connection.

### Ground wire minimum size:

SE500.2DF min. 4 awg / 20 mm2

SE800.2DF min. 4 awg / 20 mm2

SE500.4DF min. 2 awg / 35 mm2

## Power Connection (+12V):

Connect a wire directly to the vehicle's positive battery terminal, and install an appropriate fuse and holder within 30cm/12" of the battery terminal.

Do not install the fuse at this time. Route the wire to the amplifier's location, and connect it to the amplifier's Positive (+12V) terminal. Be sure to use appropriate grommets whenever routing wires through the firewall or other sheet metal.

When you are done routing and connecting this wire, you may install the fuse at the battery.

#### +12V wire minimum size:

SE500.2DF min. 4 awg / 20 mm2

SE800.2DF min. 4 awg / 20 mm2

SE500.4DF min. 2 awg / 35 mm2

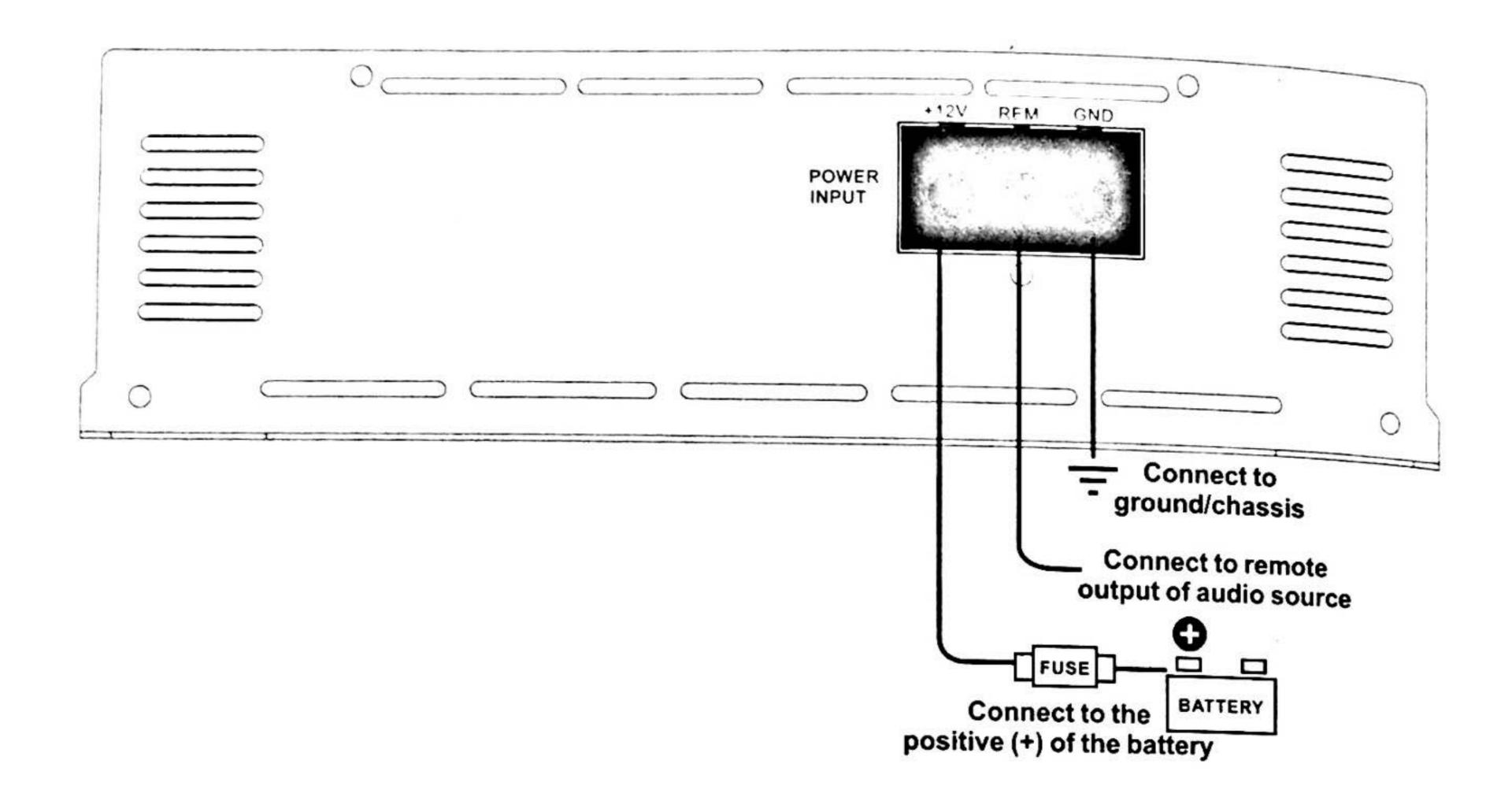
## Remote Connection (REM):

Connect the amplifier's Remote (REM) terminal to the source unit's Remote Turn-On lead using a minimum of 0,75 mm2/18-gauge wire.

If your source unit does not have a remote turn-on connection, connect the amplifier's (REM) terminal through a power switch button with +12V.

## Fig 1 THE POWER CONNECTIONS

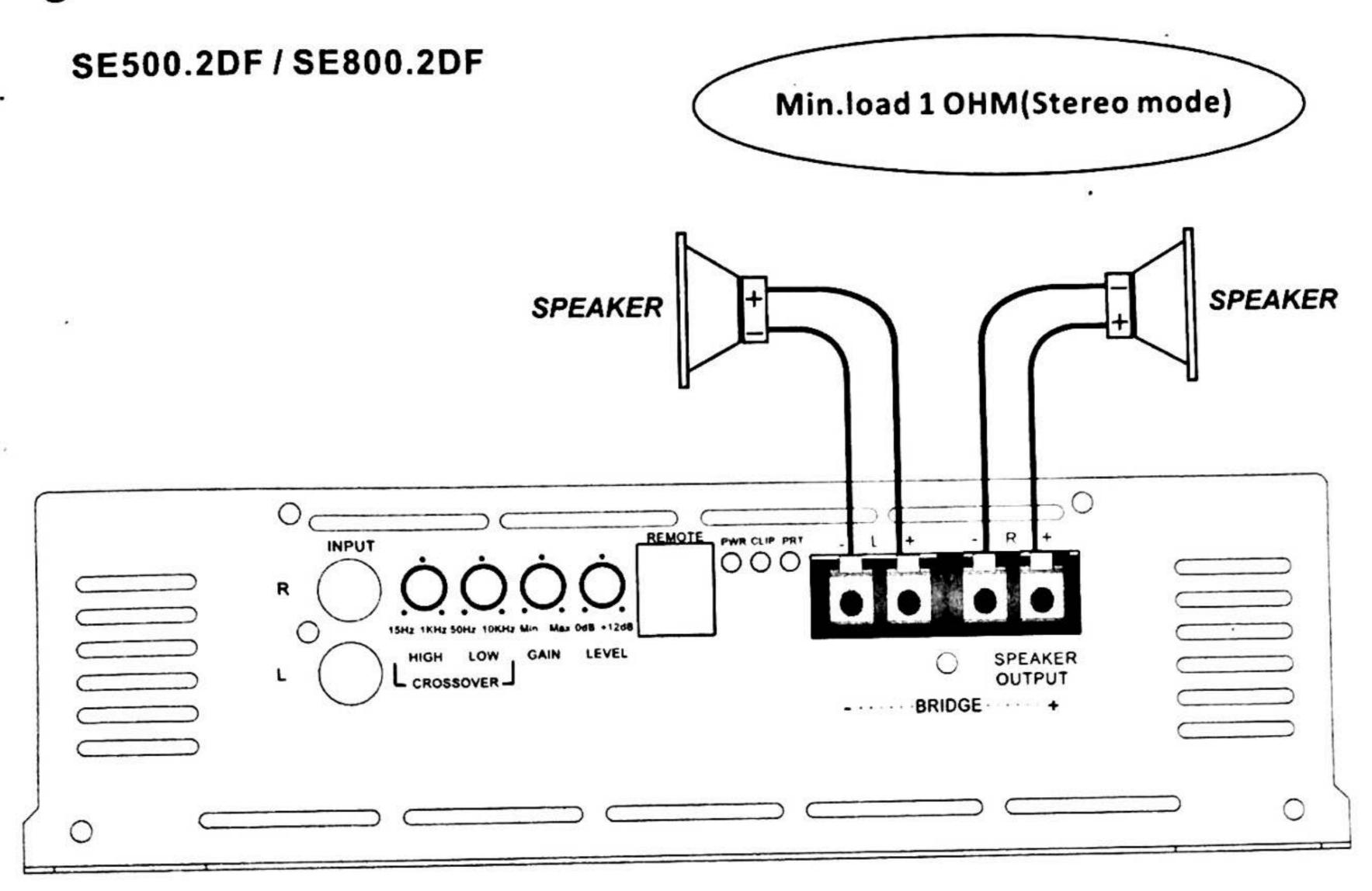
SE500.2DF/SE500.4DF

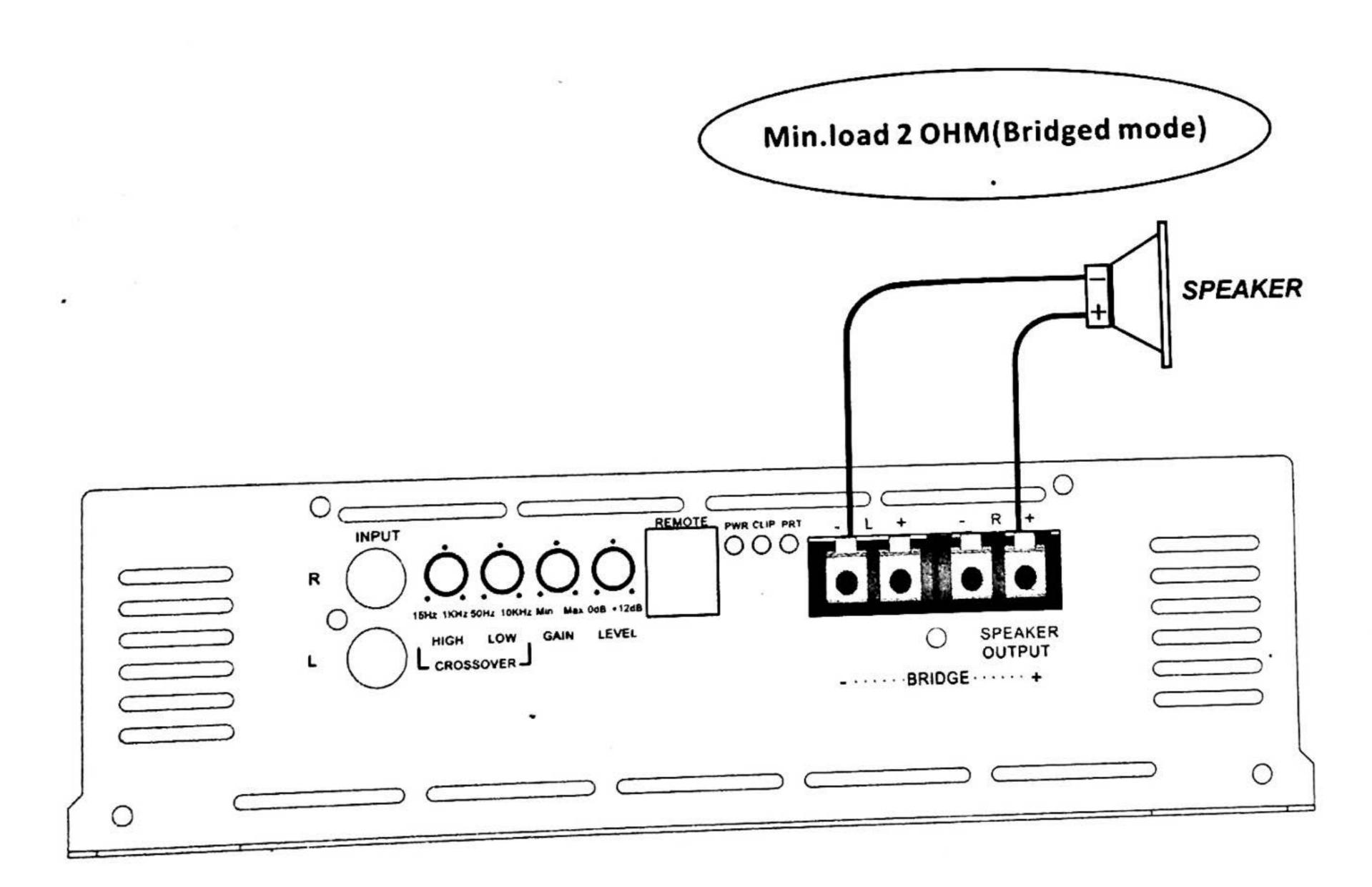


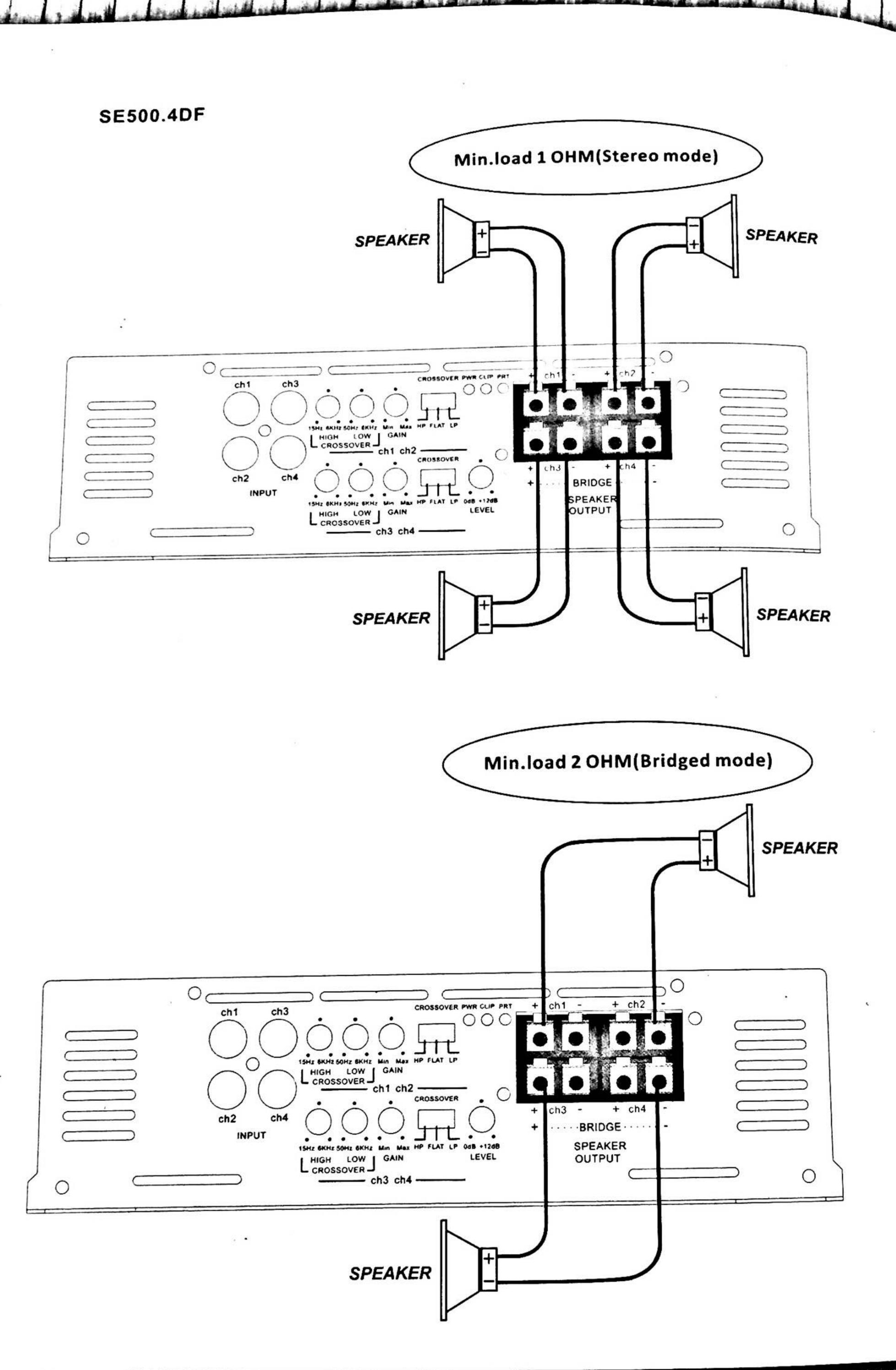
## THE SPEAKER CONNECTIONS (SPEAKER OUTPUT) (FIG2):

Speaker connections should be made using a minimum of 1.25mm2/16-gauge wire. Minimum allowed impedance load is 10HM(20HM bridged mode)

Fig 2 THE SPEAKER CONNECTION







## THE CROSSOVER (FIG3)

BASS HABIT Spl Elite amplifier is full-range Class D type.

It can be used for all kinds of speakers both speakers and subwoofers.

Determine your system plans and set the crossovers knobs accordingly.

Both LOW/HIGH and LOW+HIGH crossover mode is possible to use simultaneously(500.2 and 800.2).

## General information:

While listening to music, adjust the crossover for the least perceived distortion from the speakers, allowing them to reproduce as much bass as possible.

Systems using a separate subwoofer set the crossover knob to HIGH (high pass) for your full-range speakers. Adjust the crossover frequency to limit bass and provide increased system volume with less distortion.

For subwoofers, a good start is around "80HZ" this will remove vocal information from the sound of the subwoofer.

## THE INPUT SENSITIVITY:

Initially turn the I GAIN control to minimum (counter clockwise).

On the source unit, increase the volume control to 3/4 volume. Slowly increase
the GAIN control until you hear slight distortion in the music. Then reduce the GAIN slightly until
distortion is no longer heard.

#### THE REMOTE LEVEL CONTROL:

BASS HABIT Spl Elite 1-channel amplifiers have inputs for an remote level control. This will allow the amplifier's input level to be adjusted from the listening position. Connect the remote level control using the RJ (REMOTE) jack on the side of the amplifier.

Install the remote in the front of the vehicle within easy reach of the driver.

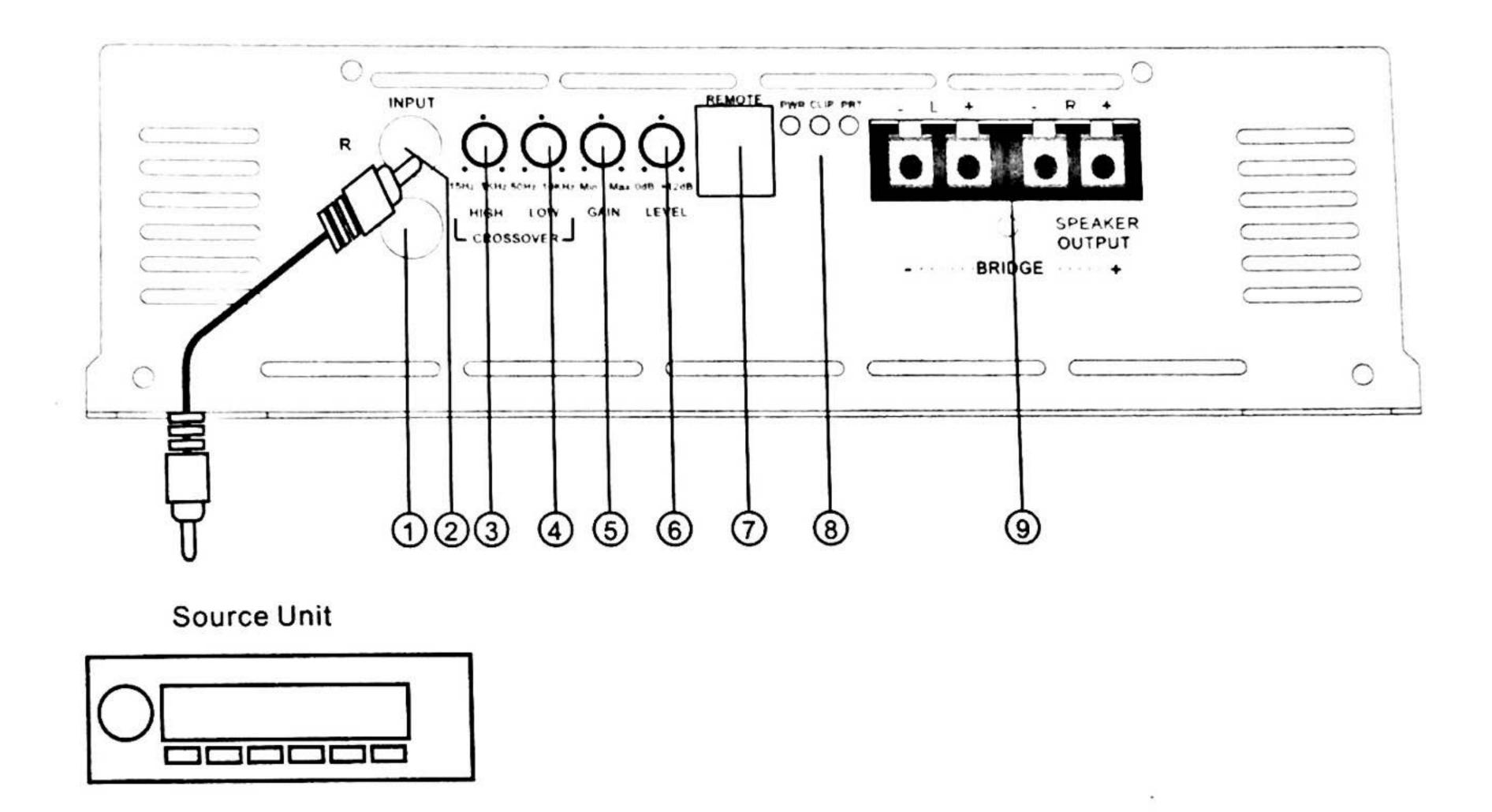
#### THE BASS BOOST:

The BASS HABIT Spl Elite amplifiers are all equipped with a Bass Boost control. This allows you to adjust the bass output of your system at 50 Hz up to 12dB and enhance low frequency.

Please use the Bass Boost knobs with care, excessive use can damage your system!

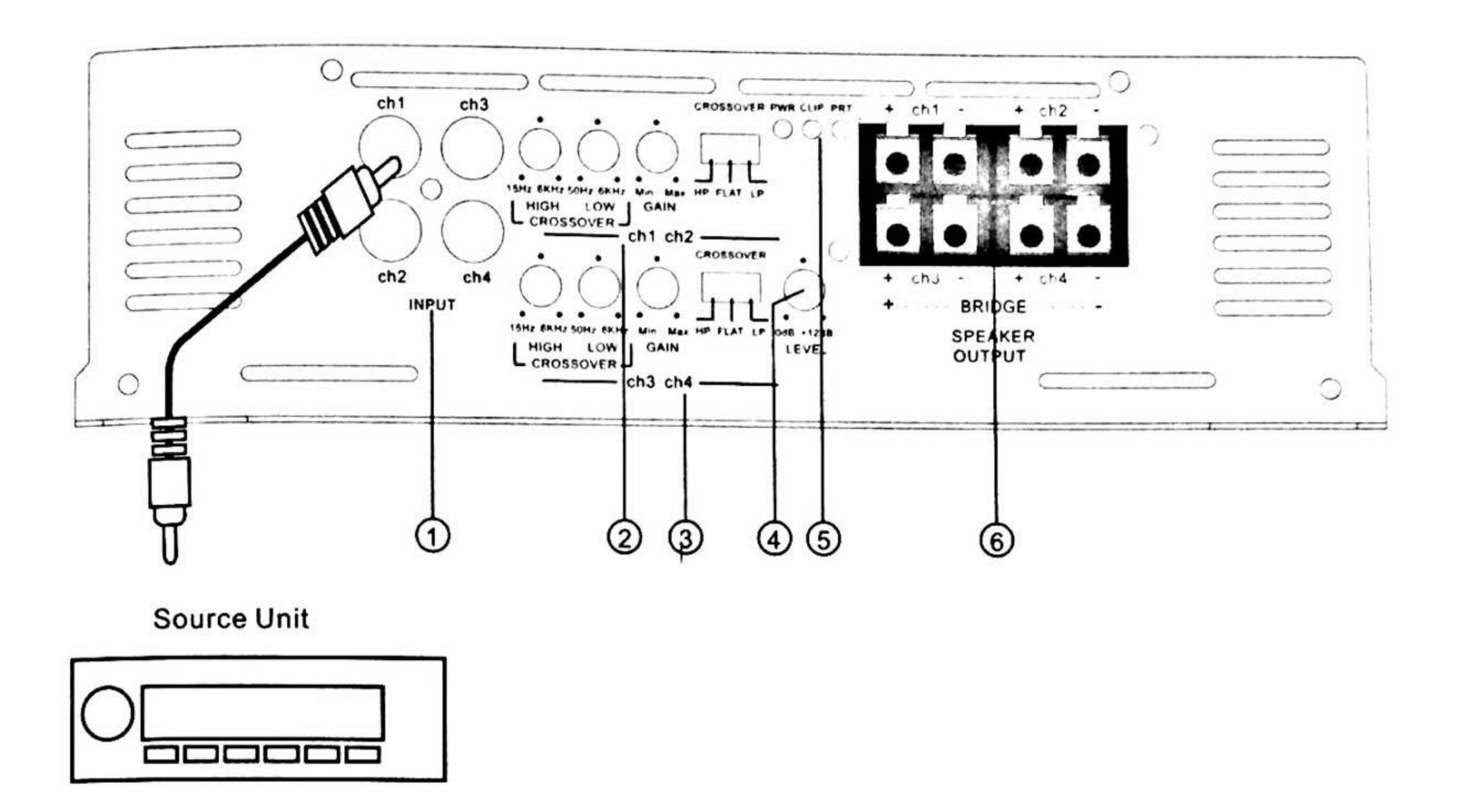
## Fig 3 FRONT PANEL CONNECTOR

## SE500.2DF / SE800.2DF



1	RCA signal input L	To connect the RCA signal wire from the audio source/ head unit
2	RCA signal input R	To connect the RCA signal wire from the audio source/ head unit
3	High pass filter (HPF)	To adjust the High pass filter's crossover point (15Hz -1KHz)
4	Low pass filter (LPF)	To adjust the Low pass filter's crossover point (50Hz -10KHz)
5	Gain	Input signal level adjustment 0.2V-6V
6	Bass Boost(LEVEL)	To adjust the Bass Boost level(0db-12db)
7	Remote	Input for connection of the bass remote control
8	Power status, Clipping and Protection LED	Indicating the power and clipping status and activated protection mode
9	Speaker Output	To be connected to one or more speakers

## SE500.4DF



1	RCA signal input (4 Channel)	To connect the RCA signal wire from the audio source/ head unit
2	Crossover: Channel 1 and Channel 2	HPF: 15Hz-6KHz
		LPF: 50Hz-6KHz
W		Gain: Input signal level adjustment 0.2V-6V
	Crossover: Channel 3 and Channel 4	HPF: 15Hz-6KHz
3		LPF: 50Hz-6KHz
		Gain: Input signal level adjustment 0.2V-6V
4	Bass Boost(LEVEL)	To adjust the Bass Boost Level for CH3/4(0dB-12dB)
5	Power status, Clipping and Protection LED	Indicating the power and clipping status and activated protection mode
6	Speaker Output	To be connected to one or more speakers

#### SE500.2DF

- Number of channels: 2 CH
- Maximumoutput power@14.4VDC-10HM:2x500W RMS
- Maximumoutput power@14.4VDC-2OHM: 2x300W RMS
- Maximumoutput power@14.4VDC-2OHM: 2×180W RMS
- Max output power @14.4 VDC -20HM(Bridged): 1000W RMS
- Max output power @14.4 VDC -40HM(Bridged): 600W RMS
- INPUT SENSITIVITY: 200MV
- SIGNAL-TO-NOISE RATIO: 100dB
- FREQUENCY RESPONSE: 15HZ-10KHZ(-3dB)
- CROSSOVER:
- . H.P.F(HIGH-PASS FILTER): 15 to 1KHz(-12dB/8) Variable
- L.P.F(LOW-PASS FILTER): 50Hz to 10KHz(-12dB/8) Variable
- BASS BOOST: 0 to 12dB(50Hz)
- THERMAL MANAGEMENT: Smart Cooler(fan powered by temperature or audiINPUT IMPEDANCE: 56k ohms
- PROTECTION SYSTEM: Output Short/High/Low Supply Voltage/Thermal Protection
- MINIMUM SUPPLY VOLTAGE: 9VDC
- MAXIMUM SUPPLY VOLTAGE: 16VDC

#### SE800.2DF

- Number of channels: 2 CH
- Maximumoutput power@14.4VDC-10HM:2x800W RMS
- Maximumoutput power@14.4VDC-2OHM:2x450W RMS
- Maximumoutput power@14.4VDC- OHM:2x250W RMS
- Max output power @14.4 VDC -20HM(Bridged): 1600W RMS
- Max output power @14.4 VDC -40hm(Bridged): 900W RMS
- INPUT SENSITIVITY: 200MV
- SIGNAL-TO-NOISE RATIO: 100dB
- FREQUENCY RESPONSE: 15HZ-10KHZ(-3dB)
- CROSSOVER:
- . H.P.F(HIGH-PASS FILTER): 15 to 1KHz(-12dB/8) Variable
- L.P.F(LOW-PASS FILTER): 50Hz to 10KHz(-12dB/8) Variable
- BASS BOOST: 0 to 12dB(50Hz)
- THERMAL MANAGEMENT: Smart Cooler(fan powered by temperature or audio, with 3 Speeds)
- INPUT IMPEDANCE: 56k ohms
- PROTECTION SYSTEM: Output Short/High/Low Supply Voltage/Thermal Protection
- MINIMUM SUPPLY VOLTAGE: 9VDC
- MAXIMUM SUPPLY VOLTAGE: 16VDC

#### SE500.4DF

- · Number of channels: 4 CH
- Maximumoutput power@14.4VDC-10HM:4x500W RMS
- Maximumoutput power@14.4VDC-2OHM:4x250W RMS
- Maximumoutput power@14.4VDC-4OHM:4x150W RMS
- Max output power @14.4 VDC -20HM(Bridged): 2X1000W RMS

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- Max output power @14.4 VDC -4OHM(Bridged): 2X500W RMS
- INPUT SENSITIVITY: 200MV
- SIGNAL-TO-NOISE RATIO: 100dB
- FREQUENCY RESPONSE: 15HZ-6KHZ(-3dB)
- CROSSOVER:
- . H.P.F(HIGH-PASS FILTER): 15 to 6KHz(-12dB/8) Variable
- L.P.F(LOW-PASS FILTER): 50Hz to 6K(-12dB/8) Variable
- BASS BOOST: 0 to 12dB(50Hz)
- THERMAL MANAGEMENT: Smart Cooler(fan powered by temperature or audiINPUT IMPEDANCE: 56k ohms
- PROTECTION SYSTEM: Output Short/High/Low Supply Voltage/Thermal Protection
- MINIMUM SUPPLY VOLTAGE: 9VDC
- MAXIMUM SUPPLY VOLTAGE: 16VDC

## THE TROUBLESHOOTING:

**SYMPTOM** 

No audio. (Power Led not active.)

CHECK/CONTROL

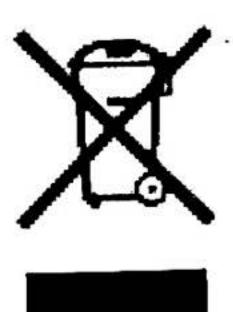
Measure voltage at +12V and REM terminals. Check GND connections.

Distorted audio

Check GAIN control, so it's properly set. Check source unit or amplifier, if defective it can cause distortion.

Music lacks bass and attack

Check speaker connections for properly polarity



The crossed-out wheelie bin symbol means that the product, literature and packaging included must be taken to separate collection at the end of their working life. Do not dispose of these products as unsorted municipal waste: take them for recycling. For info on your nearest recycling point, check with your local waste authority.

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