

SPECIFICATIONS

MODEL:	V 400.4	V 600.4
Channels:	4	4
Power @ 13.8V Stereo 2 Ohms:	4 x 103 Watts RMS	4x150 Watts RMS
Power @ 13.8V Stereo 4 Ohms:	4 x 60 Watts RMS	4x120 Watts RMS
Power @ 13.8V Bridge 4 Ohms:	2 x 206 Watts RMS	2x300 Watts RMS
Minimum Output Impedance:	2 Ohm	2 Ohm
Minimum Input Sensitivity:	0,2V	0,2V
Total Harmonic Distortion:	< 0,9 % THD	< 0,9 % THD
Signal to Noise:	> 90 dB	> 90 dB
Crossover HIGH PASS:	90 Hz	70Hz to 700Hz
Crossover LOW PASS:	90 Hz	40 Hz to 700Hz
Frequency Response (-3dB) @ 2 Ohms:	20 Hz to 22 KHz	20 Hz to 22 KHz
Power Tension:	9 to 15V	9 to 15V
Consumption Sinal Musical (12,6 V):	19A	40A
Consumption Sinal BASS (12,6 V):	38A	70A
Dimensions (A x L x C):	40x240x207 mm	40x240x230 mm
Weight:	1,5 Kg	1,8 Kg

HOW TO ACT IN CASE OF PROBLEMS

NOT TURN ON:

- The cables are not correctly connected (terminals BAT, GND and REM). Make sure that all connections has mechanical and electrical contact.
- Fuses/circuit breakers (external) are defective or burned. Take care about the correct value of the new fuse!
- Output remote/electric antenna of CD-player/MP3-player with problem (burn).

NO SOUND:

- The cables of speakers or plugs RCA are not connected correctly.
- Check if the LEVEL control is not in the minimum.

NO SOUND / RED LED (PROTECTION) ILLUMINATED:

- Speakers or cables (damaged), so, check speakers, cables and connections.
- Check the battery charge.

BAD SOUND QUALITY (DISTORTION):

- The speakers are overloaded, so, decrease the level and redo the gain adjustment (see item 2/general description).

WEAK BASS:

- Cables of speakers (+) and (-) are changed, speakers out of phase (see item 5/general description).

MOTOR NOISE, HORN, SIGNAL LIGHT, ETC:

- Use suppressive cables in ignition candles.
- Use capacitors in the alternator, horn, ignition.
- Pass the shielded RCA cable away from any other cable, because it is more sensitive to interference.
- Connect to power (+12V) separate for the sound system. Use a fuse to 30 cm from the battery for protection.
- Make a good grounding of the amplifier. To do this, remove the paint from the chassis of the vehicle at the desired point. Screw the cable using a ground terminal. To protect from oxidation, insulate with paint.
- Do not loop the ground wire. Avoid using several ground wires. Prefer a star connection, with all the ground wires aside from a single point.



V 400.4
V 600.4

FULL
BRIDGE

USER'S GUIDE

STETSOM

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INTRODUCTION:

The V400.4 / V400.4 Amplifier was designed according to the most modern technology so it can provide the highest sound power combined with the most clear Hi-Fi sound. It offers a very high power with very low battery consumption due to the output system in Class D. Through this technology it was possible to have this equipment in such a small size.

It has low pass and high pass electronic crossovers in all 4 channels with adjustable frequency control, which enables an excellent adjustment for woofers, subwoofers, mid-ranges, and tweeters.

It's internal source has a toroidal transformer, with nucleus of high inductance factor, that enables high power transference to the amplifying stage when it is required.

BEFORE INSTALLING:

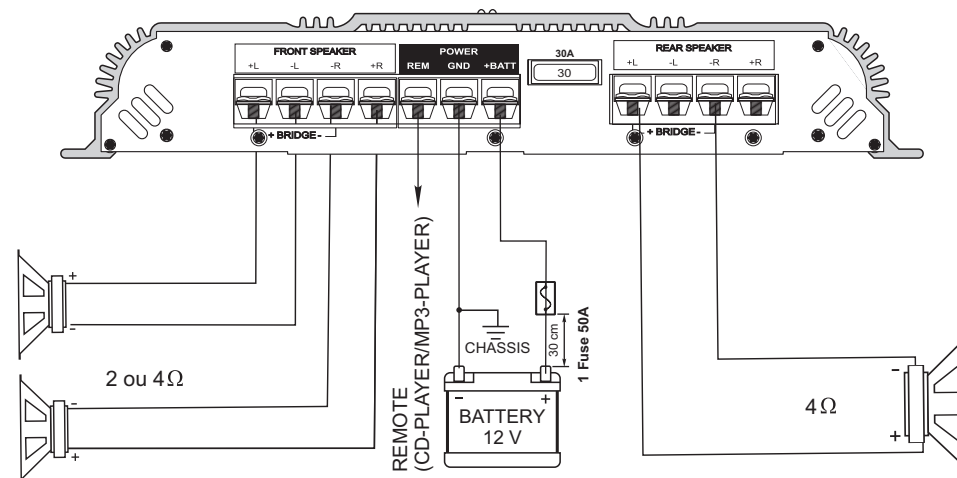
Read this manual carefully before installing the equipment. The assembly instructions and connections must be precisely followed. If necessary, consult us.

All batteries connections (power), input & output signals for speakers may be easily and safely done through screwable terminals and RCA connectors.

- 1) Keep the connection cables of appropriated gauge, shortest the possible, so the losses in power can be lessened and a high audio power can be achieved.
- 2) Place all the power and speakers cables through appropriated connectors for safety.
- 3) Do not place the cables through metallic sharp and cutting edges to avoid damage them.
- 4) Distribute all the cables the farthest the possible from the ignition cables, electronic injection modules and starting key, as it may interfere in sound.
- 5) Put a fuse in the positive power cable no farther than 30cm away from positive battery pole.
- 6) Keep the power cables the shortest the possible. It's better keep longer length of the cables of speakers.

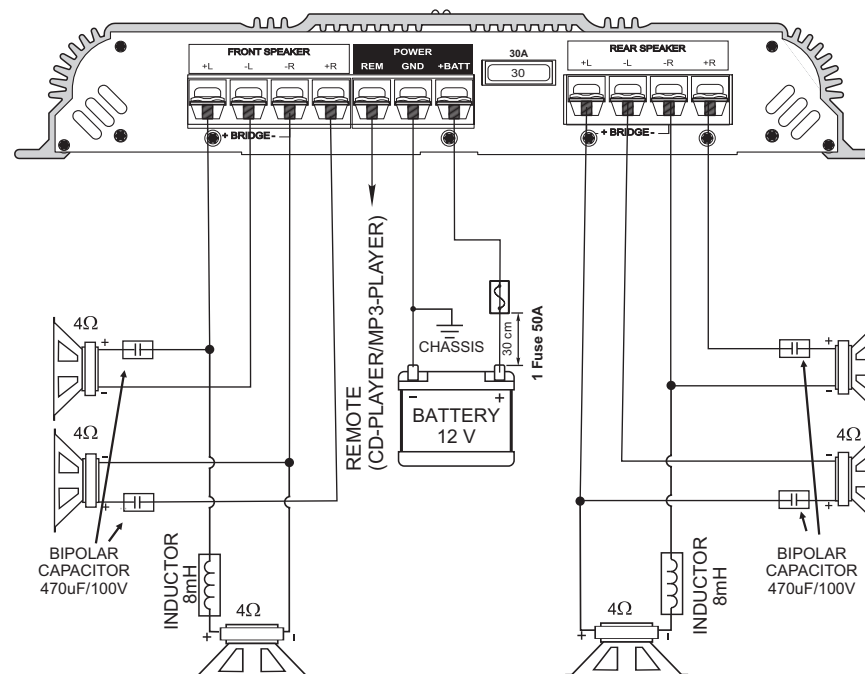
3 CHANNELS MODE (2 STEREO + 1 BRIDGE)

It is suggested when a complete system using only one amplifier is desired. The minimum impedance required for the front speakers is 2 ohms for each channel, a 4 ohms one is acceptable though. The minimum subwoofer impedance must be 4 ohms.



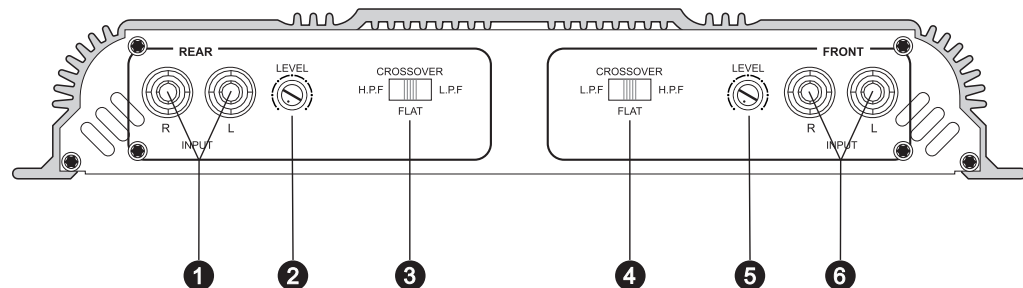
TRI MODE

The Tri Mode allows the stereo and the bridge to be ON simultaneously. This way the switches (items 3 & 10) are kept in OFF position.



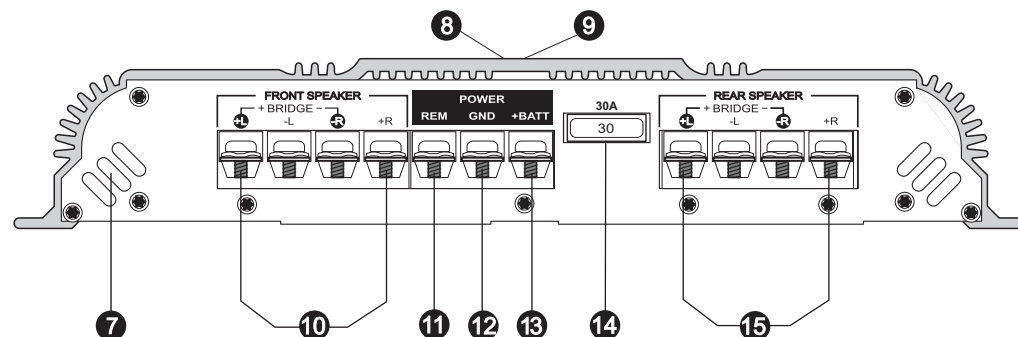
OVERVIEW

AUDIO INPUT AND CONTROLS



- 1) REAR RCA INPUT:** It must receive the signal through an RCA cable which must be connected to the CD/MP3-player output.
- 2) REAR LEVEL CONTROL:** Controls the input signal level (0 to 100%) of the REAR channels, allowing a proper adjustment for any CD/MP3-Player available in the market. First a musical signal may be placed and the CD/MP3-Player volume set in 80% of the maximum. Then, with the amplifier gain control at the minimum, turn up the level until distortion can be noticed. Finally turn back the control slightly.
- 3) CROSSOVER REAR - KEY H.P.F./L.P.F./FLAT:** This switch lets you choose which type of CROSSOVER will be used by channels REAR. If this switch is in position (L.P.F), then the active filter will be LOW-PASS by cutting the signal at 90Hz. If the switch is in position (H.P.F), then the active filter will be HIGH-PASS by cutting the signal at 90Hz. In the FLAT position, the channels REAR will be operating in FULL-RANGE (entire audio track).
IN THE OPTION (L.P.F) THE CHANNELS "R" and "L" WILL BE MIXED.
- 4) CROSSOVER FRONT - KEY H.P.F./L.P.F./FLAT:** This switch lets you choose which type of CROSSOVER will be used by channels FRONT. If this switch is in position (L.P.F), then the active filter will be LOW-PASS by cutting the signal at 90Hz. If the switch is in position (H.P.F), then the active filter will be HIGH-PASS by cutting the signal at 90Hz. In the FLAT position, the channels REAR will be operating in FULL-RANGE (entire audio track).
IN THE OPTION (L.P.F) THE CHANNELS "R" and "L" WILL BE MIXED.
- 5) FRONT LEVEL CONTROL:** Controls the input signal level (0 to 100%) of the FRONT channels, allowing a proper adjustment to any CD/MP3-Player available in the market. To adjust it, see item 2.
- 6) FRONT RCA INPUT:** This input should get the signal through an RCA cable which must be connected to the CD/MP3-Player RCA output.

OUTPUT AMPLIFIED AUDIO AND POWER INPUT.



- 7) AIR INPUT:** This area must be completely unblocked as it is the equipment main entrance for cold air.
- 8) ON INDICATOR LED (BLUE):** This led will light up when the equipment is started by an incoming CD/MP3-player remote signal.
- 9) PROTECTION INDICATOR LED (RED):** This led will light up when:
 - a) Temperature is higher than allowed.
The sound is turned off: after the cooling-off reset the CD/MP3-PLAYER and the sound will work again.
 - b) Overload or short circuit in the speakers outputs.
The sound will be turned off so the equipment won't be damaged. Check all the loudspeakers wires to solve the problem. Check the minimum acceptable impedance as well.
- 10) FRONT OUTPUT FOR SPEAKERS:** A parallel polarized cable of at least a 2,0mm² gauge must be used in this connection to the speakers.
- 11) REM – REMOTE STARTING:** Connect the REM terminal to the electric antenna output of the CD/MP3-Player. In such way, when the CD/MP3-Player is turned on/off, the amplifier will be automatically turned on/off. A 0,5mm cable is enough for it.
- 12) GND – GROUD CONNECTION:** Connect the terminal (GND) to the vehicle chassis with a cable of at least a 16mm² gauge if its length is up to 3m, and at least of a 21mm² gauge if its length is up to 6m. **To avoid noise always connect the GND(-) wire of the CD/MP3-player, or another equipments in the same grounding spot of the amplifier.**
- 13) +BATT – POSITIVE POWER SUPPLY:** Connect the terminal (+BATT) to the battery positive pole (+) with a cable of at least a 16mm² gauge if its length is up to 3m, and at least of a 21mm² gauge if its length is up to 6m. **For extra safety use a fuse at this cable, placed no farther than 30cm from the battery.**
- 14) FUSE:** The amplifier is equipped with a 40A automotive fuse which protects the vehicle from failures. Before replacing the fuse check if the power supply cables are with their correct polarity. Do not use higher amperage fuse nor short-circuit the fuse terminals or it will IRRECOVERABLY DAMAGE the equipment and the WARRANTY WILL BE VOID.
- 15) REAR SPEAKERS OUTPUT:** See item 10 (same procedure)

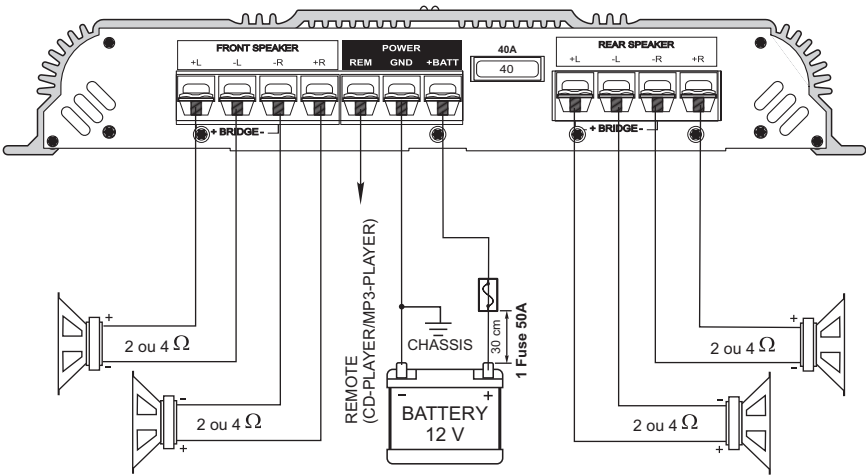
INSTALLATION OUTPUT OF SPEAKERS

The amplifier can work with 2, 3 or 4 independent channels the speaker impedance varies from 2 to 4 ohms according to the chosen mode. Be aware of the correct polarity when installing the speakers.

The speaker power must be at least the same as the power delivered by amplifier channel. Notice that the power output is stronger in 2 Ohms speakers and weaker in 4 Ohms speakers. When using the BRIDGE connection, the power will also be stronger than in stereo mode. Use 4 mm² gauge cables with up to 3m length.

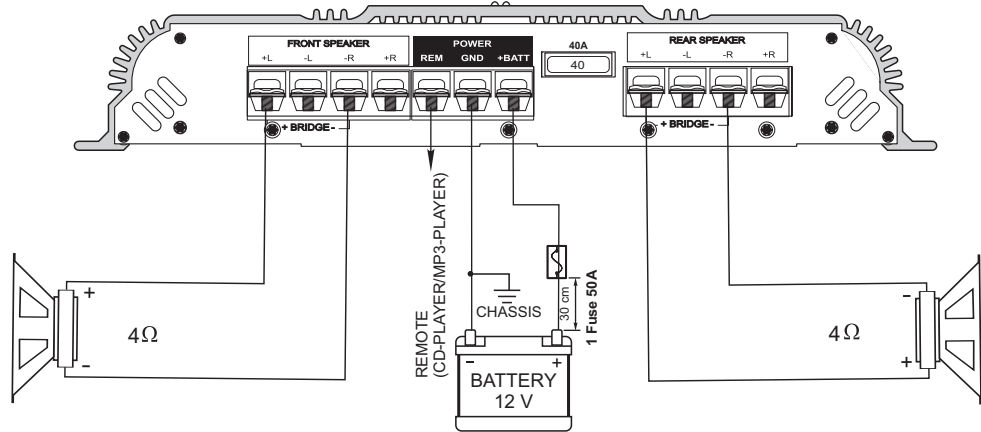
4 CHANNELS MODE

The minimum required speakers impedance is 2 Ohms for each channel; a 4 Ohms one is acceptable though. The connections in 4 channels mode are::



2 CHANNELS MODE (BRIDGE)

The amplifier can work in the bridge mode getting the power of 2 channels together in a single speaker. The minimum speaker impedance must be 4 Ohms.



FASTENING:

Choose a well vented place to assure the amplifier refrigeration. Places like the trunk or the under seat position can be used for fastening the equipment.

The installation must always be carefully and accurately done so the best equipment performance will be assured.

Before installing the equipment arrange a flat surface to place it. Put it in the selected place, check and drill, and finally tighten the screws firmly.



INSTALLING THE INPUT CABLES:

Use shielded cables with RCA connectors in the ends for the input connection. Using good quality and appropriate audio cables will avoid unwelcomed noise.

CD/MP3-PLAYERS (4 Channels)

