

Name: _____
 Involve: _____ Date: _____ Phone: _____
 Address: _____
 Shop: _____ Phone: _____

REGISTRATION DATA

Warning: Continuous exposure to sound pressure levels over 85dB may cause permanent hearing loss.

After the warranty expires, Banda Audioparts will continue to provide extensive technical assistance directly or through its network of authorized service, charging, however, the replacement services and replacement of components.

Note: Performance Technical Support
 Banda Audioparts reserves the right to change the product and its specifications at any time without prior notice.

Rua Hum, 188 - Jardim Santa Teresinha II - Paulinia - SP - Brazil - CEP: 13148-133

The defective equipment must be shipped to the factory or to an authorized service center

This warranty does not cover shipping costs.

Warranty Exclusions:
 1. Damage resulting from misuse, abuse, accident, alterations or improper installation.
 2. Damage resulting from installation in surfaces subjected to high levels of vibration.
 3. Corrective work necessitated by repairs made by anyone other than a Banda Audioparts authorized service technician.

Within the period of this warranty Banda Audioparts will repair or replace, free of charge, any part providing defective equipment in material or workmanship.

Within the period of this warranty Banda Audioparts warrants to be free of all defects in material and workmanship for a period of 12 months from the date of purchase

WARRANTY

Made in Brazil

www.bandaaudioparts.com

USER MANUAL

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TECHNICAL SPECIFICATION

• Output:

- 4 channels (4x 120Wrms 2ohms),
 - 3 channels (2x 120Wrms 2ohms + 1 240Wrms 4 ohms) or
 - 2 channels (2 x 240Wrms 4ohms).
- 12.6Vdc

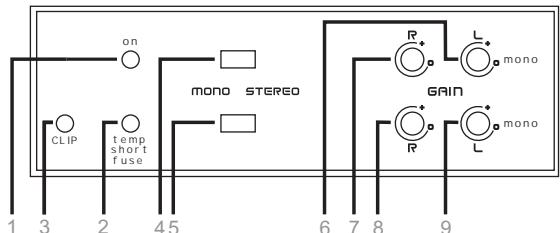
Current draw at full power (average music program): 47A*

*Equivalent to current draw with resistive load and sinusoidal signal at half power.

TECHNICAL SPECIFICATION

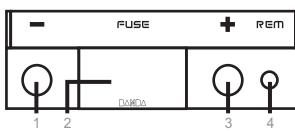
- Operation topology: Class AB
- Selectable active crossover:
- Linkwitz-Riley 12dB/octave:
 Low Pass: 16Hz a 80Hz
 High Pass: 80Hz a 45kHz
 Band Pass (flat)
- Frequency response: 16Hz a 45kHz - 3dB
- THD < 0.08%
- SNR > 90dB
- Damping Factor > 290
- Input sensitivity: 0.1 a 1Volt
- Input impedance 22kohms
- Clip indicator
- MONO/STEREO switch
- Individual gain control
- Differential input circuit
- Dimensions: 12.1" L x 2.5" H x 10.1" W
- Weight: 9.9lb

Front panel



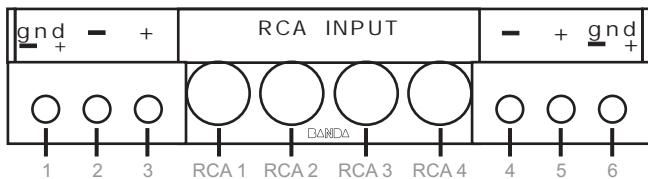
- | | |
|--|--|
| 1. Blue LED : | • On |
| 2. Red LED : | • Output clipping (distortion) |
| 3. Red LED: | • Protection -short circuit / fuse blown or missing / high temperature |
| 4. MONO/STEREO switch (channels 3 / 4) | 7. Gain control right (channel 3) |
| 5. MONO/STEREO switch (channels 1 / 2) | 8. Gain control right (channel 1) |
| 6. Gain control - left (Canal 4) | 9. Gain control left (channel 2) |
| 6. Gain control -MONO (Bridged 2) | 9. Gain control - MONO (Bridged 1) |

Power supply section



1. Negative power input (ground): connect to car chassis.
 2. Protection fuse: • 50A
 3. Remote input: connect to radio/cd remote output.
 4. Positive power input (+12Vdc): connect to battery positive terminal.
- Use Sawg power cables for both GND and +12Vdc

Power output section and signal input section



Channel 1

1. Positive speaker output
2. Negative speaker output
- RCA 1. Signal input

Channel 2

1. Negative speaker output
3. Positive speaker output
- RCA 2. Signal input

Channel 3

4. Negative speaker output
6. Positive speaker output
- RCA 3. Signal input

Channel 4

5. Positive speaker output
6. Negative speaker output
- RCA 4. Signal input

Bridged 1

2. Negative speaker output
3. Positive speaker output
- RCA 2. Signal input

Bridged 2

4. Negative speaker output
5. Positive speaker output
- RCA 3. Entrada de sinal Bridged 2

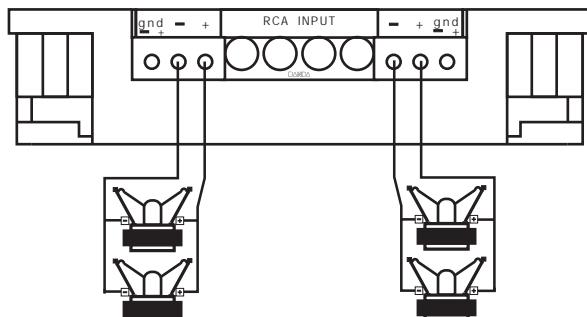
Note: For bridge connection, select MONO in MONO/STEREO switch.

CLIP INDICATOR

The red LED lights up when the amplifier output is distorting. As long as the speakers used are capable of handling the total output power this LED can eventually blink but if it holds still it means too much distortion in the output and this can damage the speakers and the amplifier. In this case, turn down the head unit volume.

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CONNECTION EXAMPLE



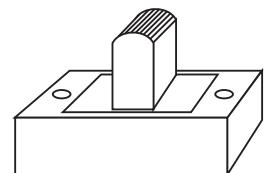
Bridge 1
8 ohms 120W woofer x 2
wired in parallel.

Bridge 1
8 ohms 120W woofer x 2
wired in parallel.

Selectable Active Crossover 12dB/octave

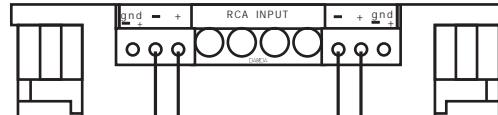
- Low Pass: 16Hz - 80Hz
- High Pass: 80Hz - 45kHz
- Band Pass - (Flat)

Note: To access the crossover switch, remove the plastic cover under the amplifier.



Channels 1/2
4 ohms 60Wrms x 4
wired in parallel

Bridge 2
2+2 ohms 240Wrms
coils wired in series.



Bridge 1 / 2
4 ohms 240Wrms woofer
per bridge.

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PROTECTION SYSTEM AND TROUBLESHOOTING

Short Circuit protection:

If short circuit is detected in output terminals, the output is disabled and the red LED lights up until the short circuit is removed. If the load impedance is lower than the amplifier specification, the equipment may trigger the short circuit protection.

High Temperature Protection:

When the amplifier is too hot the protection temperature will disable the output until the temperature drops.

Power Supply Inverted Cable Protection:

If the power supply cables are connected inverted, the internal fuse will blow.

Troubleshooting:

Protection triggered

1. Check if the internal fuse is blown. If so, replace it with a same current rate fuse (50A).
2. Check if there is short circuit in the output terminals. To do it, turn off the amplifier, disconnect all speakers and the input RCA cable and wait about 20 seconds. Turn the amplifier again and if the blue LED lights up, the amplifier is operating normally.
3. Check if any speaker is presenting short circuit or the total impedance load is lower than the amplifier specification.
4. Check if there is enough current in battery to supply the amplifier and if the cables are capable of conduct that current.

Output Noise

1. Check if there is loose connection in signal input or in the RCA cable.
2. Check if there is ground connection in the radio/cd RCA output.
3. Check if RCA cables are wired separated from the power cables.
4. Check if the +12Vdc that powers the amplifier is coming directly from the battery.
5. Check if ground cable is connected in car chassis as near as possible of the amplifier.
6. Both radio/cd and amplifier must be firmly connected to car chassis ground to avoid noises and voltage fluctuations at amplifier output.

Important Notes:

- Use 5 AWG power cables for both GND and +12Vdc.
- Do not use impedance load lower than the amplifier specification. This can damage the equipment.
- Use wire solder for tinning the cable end for better electrical contact. Loose electrical connection can cause malfunction, heating and even fire
- The GND connection must be as short as possible, using adequate wire terminal firmly connected to a clean, paint free spot at the car chassis.
- If more than one amplifier is used, provide adequate individual wiring for each one.
- If using power supply to power the amplifier, it must be capable of supply between 12.6 – 14.4Vdc with at least the amplifier maximum current value and maximum output variation (Vripple) of 10%.

Note: these are basic projects, just given as examples.

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