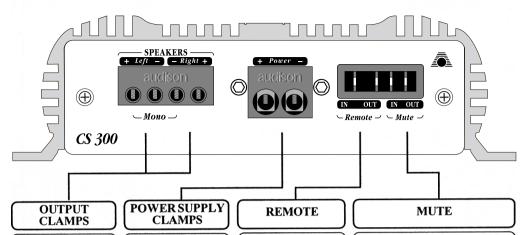
# CONFIGURATION OF CONNECTING CLAMPS



### LEFT / RIGHT

Power outputs for the amplifier Left and Right channels. Connect speakers according to the indicated

#### MONO

polarities.

Outputs for bridged mono configuration.
To be used when amplifier is set in MONO IN R mode through the mode switch put on the amplifier front panel.

# POWER

Input clamps for the amplifier power supply. Connect the battery positive and negative according to the indicated polarities.

The applied voltage must be between 10 and 15 VDC.

#### IN

Turn on control for the amplifier coming from radio/ cassette player (or from any sources provided with remote control for amplifiers).

The applied voltage must be between 3 and 16 VDC.

# OUT Output leading to

other amplifiers of the sound system. It has to be connected to the REMOTE IN of s u c c e s s i v e amplifiers to allow its turning on.

The available voltage on this output is 12 VDC with a current equal to 250 mA.

#### IN

Mute control coming from radio/cassette player (or any source provided with output for the amplifier mute).

It is especially made to be connected to the mute output of a cellular telephone in order to silence the amplifier for incoming calls; it allows to reactivate musical reproduction at the end of the phone conversation.

It can be connected to the MUTE OUT output of a preceding amplifier to allow the simultaneous silencing of all amplifiers connected in cascade.

The applied voltage must be between 3 and 16 VDC.

#### OUT

Output for the other amplifiers in the sound system.

It must be connected to the MUTE IN of the successive amplifier to allow the simultaneous silencing of all amplifiers connected in cascade.

The available voltage on this output is 12 VDC with current equal to 5 mA.



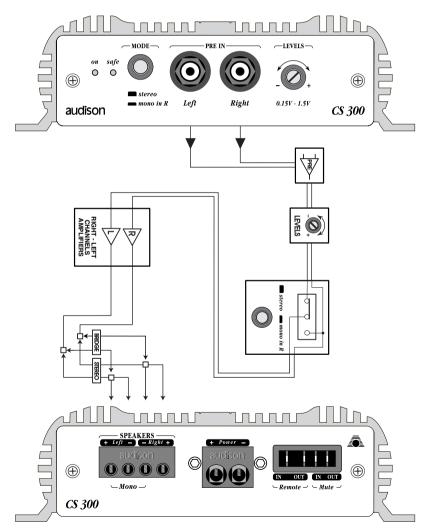
# audison

OWNER'S MANUAL

Car power amplifier

# Supercurrent

**CS 300** 



Cod. 10123600

**elettromedia** - 62018 Potenza Picena (MC) Italy • Tel. +39 0733 870.870 • Fax +39 0733 870.880 • www.audison.com

#### **FEATURES**

Supercurrent series: CS 300. Two-channels amplifier with compact dimensions and excellent musical performance.

The outstanding features of the sophisticated circuitry are: "FRONT END" stages realized with two complementary differential stages, polarized by two low Noise constant current sources. The final stage configuration is made of an inverted triplet at pure symmetry.

The power amplifier is realized by a parallel of transistors with current capacity of 15 Amperes each.

The PWM MOSFET power supply has been particularly designed to supply the amplification stages with high currents. These features allow to drive very low loads with nominal impedance of 0,5 Ohms when it is stereo connected and of 1 Ohm when it's mono connected in bridge. Of course, as it is an amplifier with very compact dimensions in relation to its performances, it is opportune to choose a well-ventilated place for the installation when it works at very low loads, or, if needed, a cooling fan can be placed near the device, in order to avoid excessive overheating.

#### **PRECAUTIONS**

- · In order for this device to function properly it's important that it is installed in a spot where the temperature doesn't fall below 0° C (32° F) or rise above 55° C (131° F).
- It must be installed in a dry and well ventilated spot.
- The power supply voltage is 12 VCC with negative to ground. Make sure that the characteristics of the vehicle electrical system are compatible.
- · For safe driving it's advised to listen to music at a volume level that won't drown out external traffic noise.

#### INSTALLATION

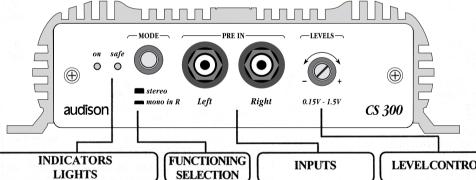
For mounting use the 4 self-threading screws and the protective plastic rings provided. For a very good result we suggest to use audison cable products to complete your installation. These include: power cables, signal cables, speaker wires, RCA connectors and all accessories needed to complete the wiring.

#### WARNING

- · INPUTS: If the radio-cassette player output GND isn't connected to car body, the braided shield of the shielded cable must be connected to the radio-cassette player chassis.
- ·OUTPUTS: Never connect the -R and -L outputs to ground or to each other. If a crossover filter is used be sure the two channels don't have a common ground.
- · REGULATIONS: If you should hear distortion phenomena at moderate volume levels it means a distorted signal is coming from the radio-cassette player. Turn radio-cassette player volume down until there's no longer any distortion. Then adjust amplifier levels until you begin to hear slight distortion phenomena.

| TECHNICAL FEATURES:                                   |                  |                             |
|---|------------------|-----------------------------|
| POWER SUPPLY VOLTAGES                                 |                  | 11 ÷ 15 VDC                 |
| IDLING CURRENT  |                  | 0,7 A                       |
| MAX ABSORPTION (2ch - 4 Ω)                            |                  | 7,5 A                       |
| CONT. NOMINAL POWER (tol. +10%; -5%)                  |                  |                             |
| 2ch - 4 Ω; 0,3% T.H.D.; 12 VDC                        |                  | 25 W (RMS)                  |
| CONTINUOUS POWER (2ch - 4 Ω; 13,8 VDC)                |                  | 27,0 W (RMS)                |
| CONTINUOUS POWER (2ch - 2Ω; 13,8 VDC)                 |                  | 50,0 W (RMS)                |
| CONTINUOUS POWER (2ch - 1 Ω; 13,8 VDC)                |                  | 90,0 W (RMS)                |
| CONTINUOUS POWER (2ch - 0,5 Ω; 13,8 VDC)              |                  | 150,0 W (RMS)               |
| CONTINUOUS POWER (1ch - 4 $\Omega$ ; 13,8 VDC) BRIDGE |                  | 100,0 W (RMS)               |
| CONTINUOUS POWER (1ch - 2 \Omega; 13,8 VDC) BRIDGE    |                  | 180,0 W (RMS)               |
| CONTINUOUS POWER (1ch - 1 $\Omega$ ; 13,8 VDC) BRIDGE |                  | 300,0 W (RMS)               |
| T.H.D. DISTORTION                                     |                  | 0.07%                       |
| BANDWIDTH   |                  | 4 ÷ 75 KHz                  |
| DAMPING FACTOR (4 $\Omega$ - 1 KHz)                   |                  | 120                         |
| RISE TIME   |                  | 4,5µS                       |
| S/N RATIO   |                  | 100 dB                      |
| REMOTE IN   |                  | 3 ÷ 12 VDC                  |
| REMOTE OUT  |                  | 12 VDC - 150 mA             |
| MUTEIN  |                  | 3 ÷ 12 VDC                  |
| MUTEOUT   |                  | 12 VDC                      |
| INPUT SENSIVITY                                       |                  | $0.15 \div 1.5 \text{ VRM}$ |
| INPUTIMPEDANCE  |                  | 15 ΚΩ                       |
| LOAD IMPEDANCE (STEREO)                               |                  | $8-4-2-1-0.5 \Omega$        |
| LOAD IMPEDANCE (MONO)                                 |                  | 8-4-2-1Ω                    |
|   | 75 x 50 x 330 mm | (6,89 x 1,97 x 13 inch.)    |

## **CONTROLS AND FUNCTIONS**



# LIGHTS

Lit when the amplifier is ON.

#### SAFE

When lit it indicates intervention of protection circuits, in case of overheating(temperature exceeding 80° C/176° F) or output anomalies (presence of continuous current short circuit, or dangerously low load impedance).

When protection circuits intervene the amplifier shuts down. Please turn the amplifier off.

When the problem is corrected, turn on the amplifier again.

# MODE

#### STEREO: inputs. They can be used to The amplifier is selected for ste-

Right input is

used.

amplify the PRE output of a signal source (radio, reo functioning. CD-DAT), an electronic MONO IN R: crossover output, or the preamplified output of The amplifier is any type of signal selected for mono processor. functioning.

PRE IN

Amplifier Left-Right

## LEVELCONTROL

### LEVELS Level adjustment for the amplifier output. Sensitivity varies from 150mV to 1.5V.