SONELCO
SONIDO, ELECTRONICA Y COMUNICACIONES, S.A.

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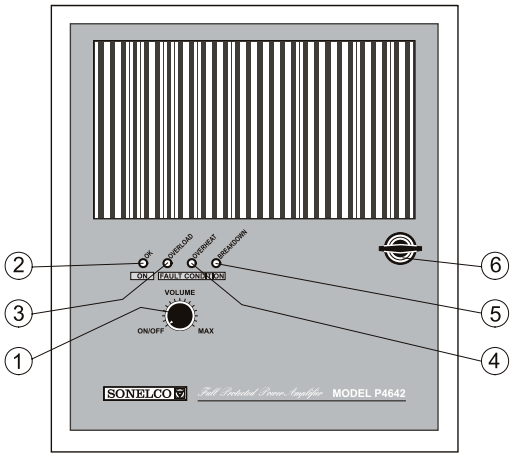
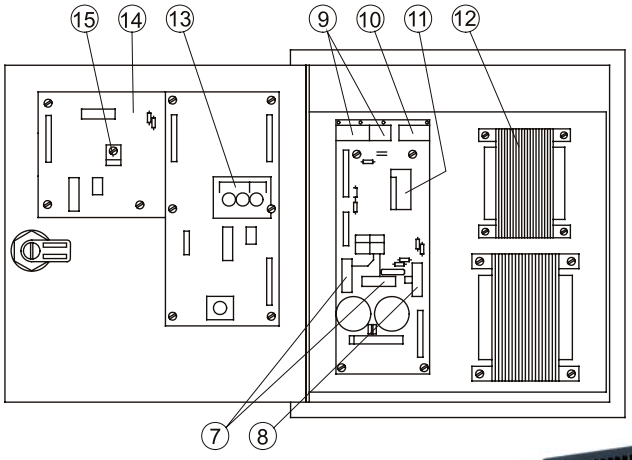
POWER AMPLIFIERS - P4642





1.-*Level adjustment, with switch.* **2.-***Operation indicator Led.* **3.-***Power peak indicator Led.* **4.-***Temperature excess indicator Led.* **5.-***Breakdown indicator Led in the unit.* **6.**-*Unit lock.* **7.-***DC protection fuses.* **8.**-*AC protection fuse.* **9.**-*Line/diffuser connection terminal strip.* **10.**-*220 V. AC connection terminal strip.* **11.-***100 V. line transformer connection.* **12.-***100 V. line transformer.* **13.-***Electronic protection Level Adjustment.* **14.-***Power circuit.* **15.**-*Temperature sensor.*

NOTE: The electronic protection adjustments (13) are factory adjusted, and must not be handled under any circumstances.

DESCRIPTION

Mono 60 W / 100 V power unit. Self-protected electronically against short-circuits, signal peaks, excess temperature and breakdown of the unit itself. 230 V AC mains supply. Automatic operation with possibility of manual disconnection. Level adjustment potentiometer. Operation and unit status light indicators. Wall fitted. Frequency response: 4 Hz - 11 Khz.

FUNCIONAMIENTO

- The unit possesses an initial connection delay of about 2 seconds to prevent the connection noise in the loudspeakers. Once this time has elapsed, if the working conditions are normal, LED 1 will light up and the unit is working normally.
- If LED 3 lights up, and the sound in the loudspeakers cuts off, this means that there are sound peaks of more than 60 W. which could damage the loudspeakers of your installation. Reduce the level with adjuster 1.
- If LED 4 lights up, and the sound in the loudspeakers cuts off, this means that the temperature of the radiator is excessive. The unit must be disconnected and some time must pass for it to cool down. This situation may be due to working at maximum level for too long a period of time, or due to having connected a loudspeaker unit with impedance less than 4 Ohm. to is outlet..
- If LED 5 lights up, the unit will not work (LED2 out) and it is likely that there is an internal breakdown. Follow the steps below:

  1- Disconnect the unit by turning adjuster (1) to the left until a click is heard.

  2- Wait at least 30 seconds.

  3- Connect the unit again with the control (1).

  4- If the problem persists, disconnect the unit again.

  5- Open the door (using key 6) and check that the three fuses which are in the printed circuit are correct. If not, substitute them for fuses of the same type and value.

  6- If the problem continues, warn the Technical Service,of the breakdown of this unit.

NOTE: During the normal operation, the radiator can reach high temperature, so it is recommended for it to be installed in a ventilated area and with free space of at least 10 cms. around it.

CONNECTION

TERMINALS

Terminal 3 - Input + 16 V. Connect to general line 2
Terminal 4 - Ground. Connect to line 4
Terminal 5 - Audio input. Connect to general line 5
Terminal A - Audio output (+). Connect to + of the load (loudspeaker-baffles) 100 V / 60 W
Terminal M - Ground. Connect to -of the 100 V line.
Terminal 03 - Control output. Connect to terminal 3 of other slave unit (public-adddress diagram 2 and 14)
Terminal AV, TP - Connect to main unit control 4052 (public-address diagrams 2 and 14)
Terminal F,N,T - Mains input 230 V 50/60 Hz.

TECHNICAL CHARACTERISTICS

The power unit Mod. 4642 has the following characteristics:

OUTLET POWER: 60 W. (continuous)
OUTLET: 100 V. line
RESPONSE: 4 Hz - 11 KHz
DISTORTION:< 0.2%
Active protection against short-circuits.
Active protection against excess temperature.
Active protection against excessive power peaks.
Active protection against unit breakdown.
Initial connection delay: < 2 sec.

DIMENSIONS: 250X300X170mm.

WEIGHT: 9.500grs:

CONNECTION 100 V

• The difference with unit Mod. 4641 is that it has a line transformer and therefore its outlet is at a constant voltage of 100 V. In this way the connection of horn speakers is made easy when due to the amount a 4 Ohm. impedance cannot be obtained.

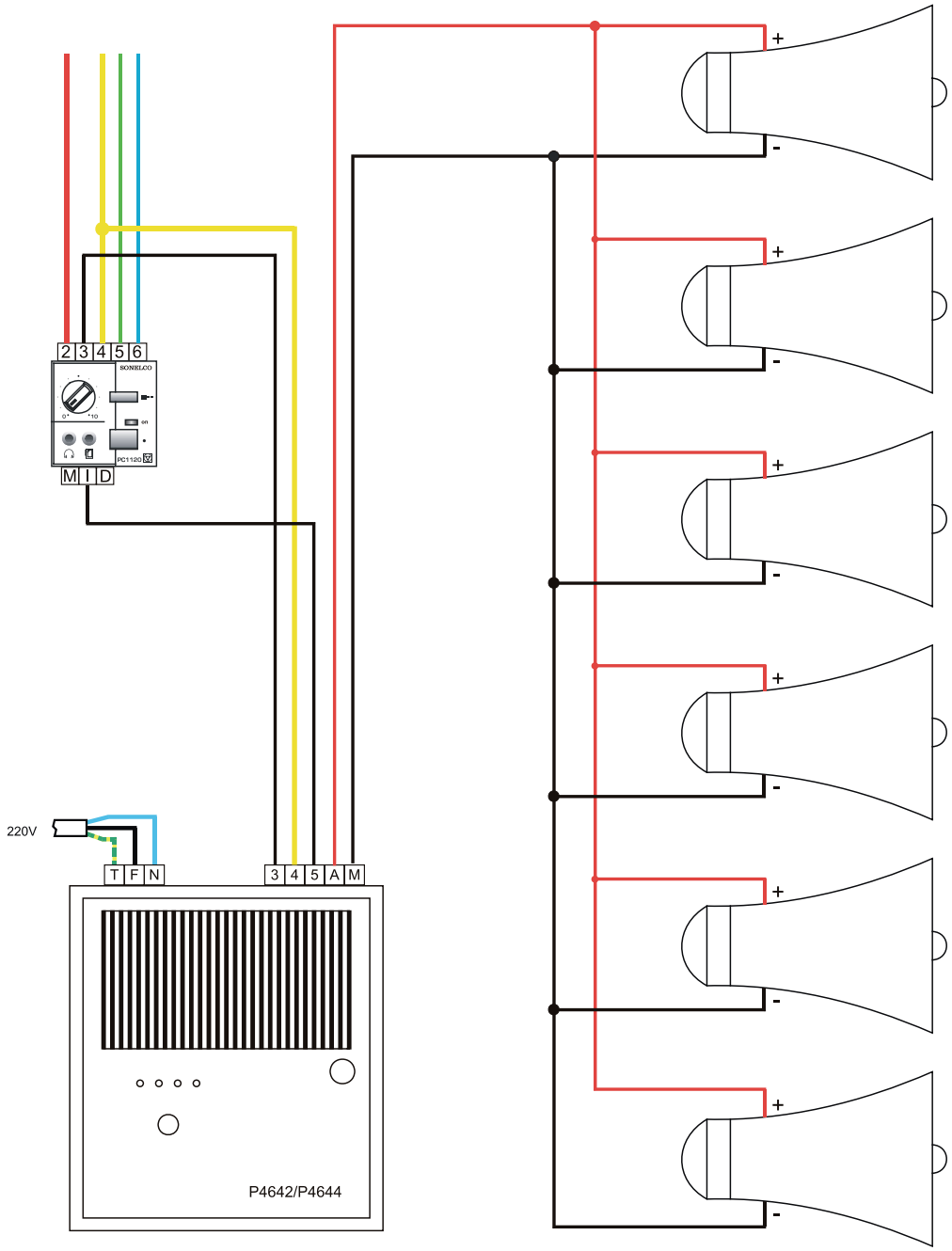
• The connection in line of 100 V is always done parallely. The power of each horn speaker is calculated by dividing the total power of the unit by the number of horn speakers we wish to connect. The horn speakers must incorporate a 100 V. line transformer, suitable for the power of the same.

• For example, the connection of 6 horn speakers to a 60 W. unit would be done:

$$\text{power per horn speaker} = \frac{60w}{6} = 10w$$

• Therefore, each horn speaker must support 10 W., and be provided with a 100 V. line transformer for 10 W.

• It is recommendable for the horn speaker to be able to support a power, at least 25 % greater, than that which they are really going to support (for example in this case we must use horn speakers of 12.5/15 W.



10w per horn speaker
6 x horn speakers