

1- Central fastening for grille. 2- Screws to tighten holding clamps. 3- Holding clamps. 4- Fastening springs. 5- Amplifier module. 6- 4" woofer sensitivity adjustment. 7- Satellite sensitivity adjustment, (L left-hand channel; R right-hand channel). 8- Connecting strips. 9- Optional "J1" bridge, (See note (*)) Supply in "Connection" section). **For flush-mount installation: 145 mm. hole. Minimum depth required: 60 mm.**

DESCRIPTION

4"/8 Ohm woofer assembly with stereo amplifier (20W), 3-way (10W for the woofer, 5+5 W/4 Ohm for satellites) and crossover filter, which gives rise to a "triphonic system" with 3 or 5 sound points, for use in homes and commercial premises.

The audio signal with frequency under 450 Hz, after being amplified (10W max), is reproduced by the woofer, common for both channels. The frequency signal higher than 450 Hz (medium/treble) is amplified separately (5+5W) and is sent to the output for the satellites (I+/- and D+/-). The result is a greater quality sound with bass enhancement.

The amplifying module (5) has independent level adjustment potentiometers for the woofer "W" (6), and for the left "L" and right "R" channels (7), which allows you to regulate the bass and medium-treble levels, as you wish. It is mounted on a white-coloured plastic body, which can be fastened with springs or clamps, with the possibility of adapting different grille centres and trims.

CONNECTION

TERMINALS

- terminal 2: +16V supply
- terminal 3: Supply input +16V. See Note (*)
- terminal 4: Mass
- terminal 05 and 06: Audio input left and right
- terminals D+,D-: Output for right channel satellite (4 Ohm baffles or speakers).
- terminals I+,I-: Output for left channel satellites (4 Ohm baffles or speakers).

(* Note: Supply

This active speaker can be supplied in two ways:

A.- Directly from the control. (Default factory option, J1 not cut). It is connected to the control with wires 3,4,5,6. One active speaker at the most can be connected per control. (see example "a")

B.- Directly from the line. (Cutting bridge J1 of the active speaker circuit). In this case wires 2,3,4,5 and 6 must be taken to the control. The control only provides the control signal for the ignition of the active speaker through terminal 3, so the control can control several active speakers P6245. The limit will depend on the current capacity of the unit or power supply units of the installation. (See example "b").

INSTALLATION

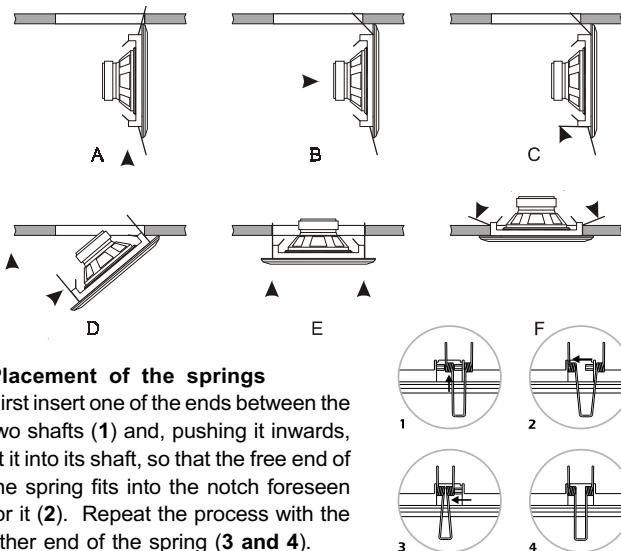
Module P6245 has a built-in woofer and **must be installed in places where the speaker has an extensive air chamber on the rear.** The recommended places are: **hollow ceilings (false ceilings) or over doors where there is a space from the false ceiling of the adjacent corridor.** **Under no circumstances must it be flush-mounted into vault ceilings or solid walls,** as without a rear air chamber the speaker cannot reproduce the bass frequencies, so the result would be disappointing.

1- WITH SPRINGS.

Fastening with springs is especially indicated for any kind of hollow ceilings (false ceiling, modular ceilings, etc...), where the false ceiling is at least 60 mm. deep.

Flush-mount hole diameter: 145 mm.

First the springs will have to be placed in their supports, as shown in the figure, connecting the active speaker or speaker to the relative wires.



Placement of the springs

First insert one of the ends between the two shafts (1) and, pushing it inwards, fit it into its shaft, so that the free end of the spring fits into the notch foreseen for it (2). Repeat the process with the other end of the spring (3 and 4).

2- WITH CLAMPS.

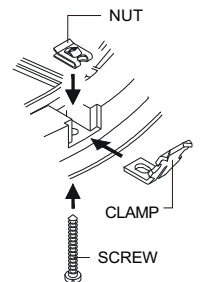
The use of clamps is indicated for hollow ceilings where springs cannot be used, normally due to the thickness of the ceiling.

Before fastening the active speaker the clamps must be mounted in their supports, and it must be connected with the relative wires.

To secure the active speaker with clamps just insert the active speaker into the hole (it may sometimes be necessary to slacken the tightening screws of the clamps slightly) and tighten the screws so that the clamps open until the active speaker is secure. It is advisable for the three screws to be equally tightened. If later it has to be removed, just slacken the screws until the active speaker comes free.

Fitting the clamps

Place the clamp in its housing, insert the screw through the grille and the clamp and screw the rectangular retaining nut into the end. Tighten the nut until it is at grille level, leaving sufficient movement in the clamp. Repeat the process with the other two clamps and pass the rubber through the tips of the three clamps, so that they are forced towards the inside of the grille, thus facilitating the fitting and extraction of the grille.



The W, L and R potentiometers are factory-set, but if you wish you can re-set them to obtain the bass/medium-treble ratio you desire. To do this, turn the control and place the audio level at the level you wish to listen at. Adjust the potentiometer of the woofer " (6) so that there are no distortions, and adjust the satellites, potentiometers L and R (7) to obtain the ratio you desire without there being any distortions.

INSTALLATION EXAMPLES

a) Installation of triphonic system 1 stereo music channel. Example of 1 active speaker P6245 with one single control. (Bridge J1 not cut). Connection to the control with four wires. (See diagram 1).

In this type of connection the whole consumption for the active speaker is obtained through the control, and it is recommended when only 1 active speaker P6245 is connected to the control.

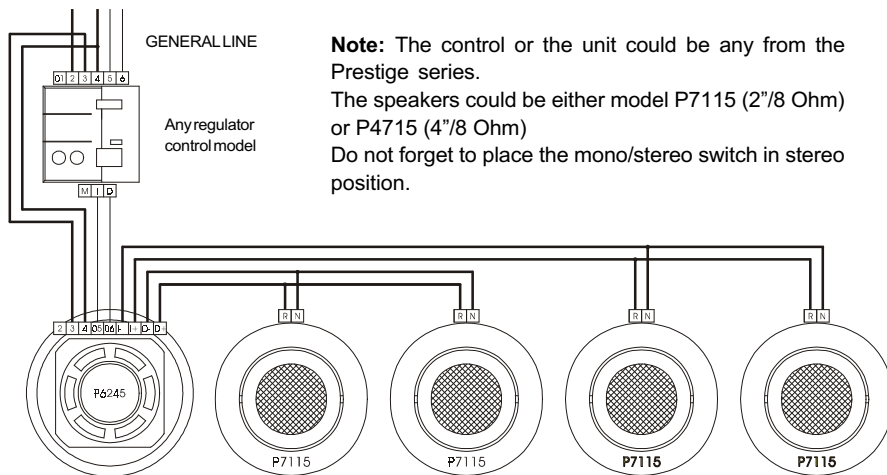
The diagram shows an installation with one active speaker P6245, which enables us to obtain 5 sound points with total power of 20W:

-1 4" woofer (10W)

-4 satellite speakers, 2 for each channel (2.5W per point). Any of the models for flush-mounting in ceiling P7115 and P7112 of 2" / 8 Ohm or the P4715 of 4" / 8 Ohm. are recommended as satellite speakers.

2 4 Ohm speakers P7140 (1 for each channel) can also be installed.

As can be seen in diagram 1, the active speakers are connected to the control with four wires connected to terminals 3, 4, 5 and 6. Comme on peut le constater sur le schéma 1, les plafonnieres sont branchées à la commande par quatre fils branchés aux bornes 3, 4, 5, et 6.



Note: The control or the unit could be any from the Prestige series.

The speakers could be either model P7115 (2" / 8 Ohm) or P4715 (4" / 8 Ohm)

Do not forget to place the mono/stereo switch in stereo position.

Diagram 1. Triphonic system with 1 stereo channel 1 active speaker P6245 (5 sound points)

b) Installation of triphonic system 1 stereo music channel. Example with 2 or more active speakers P6245 with one single control. (Bridge J1 cut). Connection with five wires. (See diagram 2)

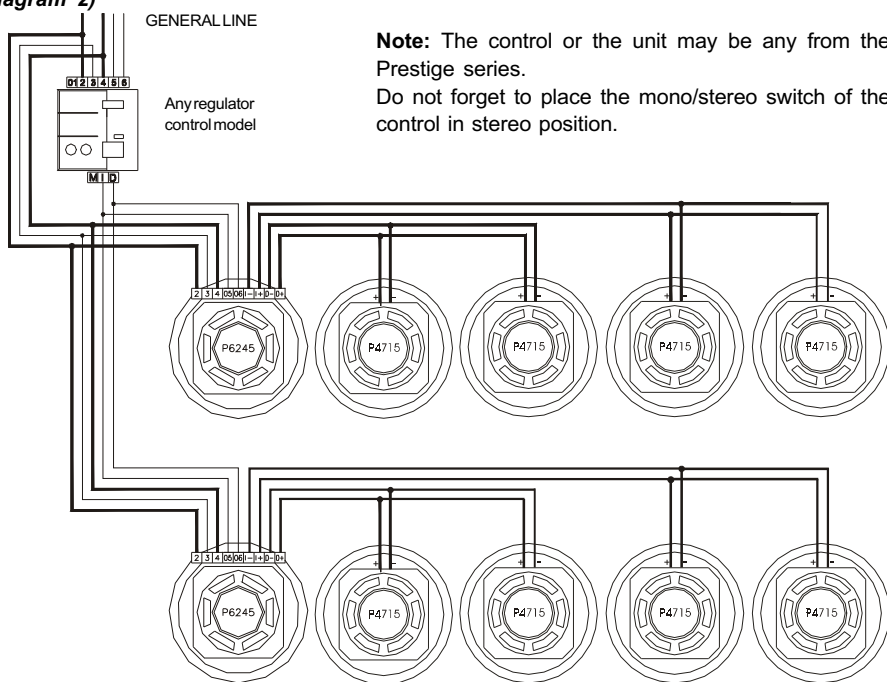
If with one single control you wish to control 2 or more active speakers, they must be connected with five wires, cutting bridge J1 in all of them, see Note (*) Supply of the "CONNECTION" section.

As can be seen in diagram 2, the active speakers are connected with five wires to terminals 2, 3, 4, 5 and 6. One more wire is used than in the previous case, but the no of active speakers you wish can be controlled with one single control, as the control provides the ignition control signal through terminal 3, but the consumption of the active speakers is made through wire 2 of the line.

Diagram 2 shows an installation with 1 stereo music channel and 2 P6245 active speakers. Speakers P4715 with 8 Ohm (2 for each channel placed in parallel) are used as satellites, with which we will obtain 5 sound points (20W per active speaker). Each 4" woofer of the active speaker will supply 10 W in low frequencies (<450Hz) and the satellites will provide 2.5 W each one (5W per channel) in the medium-high frequencies (450Hz - 20 kHz).

A greater number of active speakers per control may be fitted, the no of active speakers that can be installed only depending on the power of the unit of the installation. Depending on the number, an additional power supply unit P3260 will be required.

If you require further information about other types of installations, or a greater number of active speakers, Sonelco will provide you with diagrams and the technical guidance necessary through its Commercial Dept. and Technical Service.



Note: The control or the unit may be any from the Prestige series.

Do not forget to place the mono/stereo switch of the control in stereo position.

Diagram 2. Triphonic system with 1 stereo channel, 2 P6245 active speakers (10 sound points)

Woofer amplifier:

Power 10W / 8 Ohm; d<0.5%

Frequency response: 20-450 Hz (-3 dB)

Satellites amplifier:

Power 5+5 W/4 Ohm, d<0.5%

Frequency response: 450-20000 Hz (-3 dB)

Terminal 3 (With J1 bridge cut):

- Minimum ignition volt. (V3): >8.5V.

- Current consumption (I3): <5 mA

Sensitivity: 1.5V

"Antiplop" ignition circuit

Protection against:

Short-circuits and overloads at outputs

Supply polarity inversion

Dimensions: 174 x 69 mm.

Weight: 420 grams

ADAPTABLE GRILLE CENTRES

Two different models of grille centres are available for these 4" active speakers, which are fastened in the centre with a screw, and cap for the screw.

Mod. P4281 - Plastic

Mod. P4282 - Metal

In addition, a white metal trim ring (P4272) can be fitted, which is secured between the grille centre and the active speaker. (See price-list catalogue).

TECHNICAL CHARACTERISTICS

Rated supply volt. (V2): 16V DC

Maximum current consumption (I2): 2.2 A.

Consumption on stand-by: <10 mA (with J1 bridge cut)