

- 1- Audio output level adjustment 2.- MONO/STEREO selector switch 3.- STORE key for programming 4.- ON/OFF key for manual on/off 5.- MEMORY key – to go forward in memorised stations 6.- MEMORY key – to go back in memorised stations. 7.- SEARCH key – for automatic/manual tuning search 8.- SEARCH key – for automatic/manual tuning search 9.- Antenna connector 10.- Message display 11.- Reset pushbutton 12.- Alternative antenna connection.

DESCRIPTION

Digital FM stereo tuner controlled by microprocessor. Back lit liquid glass display in order to view functions. It includes a new automatic tuning search concept, using FUZZY LOGIC, thanks to which the search process is extraordinarily quick. It automatically switches over from STEREO to MONO when the signal reception level is not sufficient and when this level is recovered, it goes back to STEREO mode. It includes a small speaker for pre-tuning stations.

Modular design. Product size and presentation similar to the "Ergos/Multifunction" modules, although it is also compatible with the "Compact" series and the other modules in the "Prestige Line" range.

GENERAL CHARACTERISTICS

- 25 permanent storage memories, even with the system disconnected.
- Protection against overloads in the audio outputs.
- Telecontrol from the Audio Unit: when any of the system controls are activated, the tuner connects automatically, whilst when all the system controls are switched off the tuner enters into STANDBY state with the subsequent energy saving. It can also be connected/disconnected by hand (ON/OFF key).
- Remote scan from any PC/PM control. Programmable scan (memories/tuning)
- Programmable search sensitivity level between 15mV and 300mV.
- Output level adjustment potentiometer
- Built-in speaker for pre-tuning stations, so that the stations can be heard. It switches off automatically when the keys are no longer operated.

CONNECTION

Before proceeding to connect the unit, make sure that the system power supply unit is switched off. Insert the control in the base plate and make the connection following these directions:

TERMINALS:

2	-	Positive – Supply 16 V DC nominal
4	-	Negative - Supply and signal ground
05	-	Left channel audio output – 3 VMS max.
06	-	Right channel audio output – 3 VMS max.
5	-	Left channel audio input
6	-	Right channel audio input
R	-	Telecontrol input
01	-	SCAN input
ANT	-	Antenna
M	-	Antenna ground

NOTE: The system wiring must be installed separately from the electricity supply mains, according to regulations.

OPERATION

On/Off

The tuner will come on automatically whenever any of the system controls activate the telecontrol of the Audio Unit. When all the system controls are off, the telecontrol of the Audio Unit will automatically switch the tuner off. It can be turned on/off at any time by hand, using the ON/OFF key. Respect to the relationship of the manual on/off and the on/off by telecontrol, neither has priority action over the other, that is, the action which prevails is always the last one which has been carried out.

Output level adjustment

The output level can be adjusted with the output level potentiometer for the right characteristics of each system.

Mono/Stereo selector switch

Depress the MONO/STEREO key to force the reception of a station in MONO mode or else permit a STEREO reception.

Manual search of stations

By depressing the SEARCH +/- keys for a short period of time, the tuning goes forward/ back automatically to find the next station that has a higher signal level than that recorded with the SEARCH LEVEL programming function.

Automatic station search

By keeping the SEARCH +/- keys depressed the station automatically goes forward/backward until it finds the following station that has a higher signal level than that recorded with the SEARCH LEVEL programming function.

Memorising stations

1. Situate yourself with the MEMORY +/- keys in the memory where you wish to record a station. If no stations have been stored yet in this memory, the indication FREE will appear on the display.
2. Carry out a manual or automatic search process.
3. Choose the desired reception mode, either MONO or STEREO
4. Depress the STORE key. The memory number and the frequency of the station recorded will blink on and off on the display.

NOTE.- The built-in speaker in the P3665 tuner enables stations to be heard during the station memorising process. It is activated when the tuner is operated with the keys and automatically goes off when it is no longer activated.

Choice of memorised stations

To run forward/backward through the memorised stations depress the MEMORY +/- keys.

Remote SCAN function

The remote station search from any control of the system (which has this function) can be carried out in two different ways: a memory scan (SCAN TYPE = MEMORY) will advance through the stations recorded in the memories of the tuner, a tuning scan (SCAN TYPE = SEARCH) will carry out an automatic search, starting with the current frequency in ascending direction. To select the type of scan that the tuner will operate with, see Programming Functions.

PROGRAMMING FUNCTIONS

Memory erase (MEMORY RESET)

By keeping the PGM and MEMORY RESET keys depressed at the same time for 5", all the tuner programmes will be totally erased. This will affect the stations memorised, type scan and search level.

Scan type selection (SCAN TYPE)

To change the type of scan which the P3665 tuner has to work with, keep the PGM and SCAN TYPE keys depressed for 5" at the same time. A message will appear on the display indicating the type of scan which is programmed. By defect: SCAN TYPE=MEMORY.

Search level selection

The automatic search for stations is carried out using an algorithm based on FUZZY LOGIC with a search threshold or level. There are 4 levels numbered from 1 (minimum) to 4 (maximum). To select this level, keep the PGM and SEARCH LEVEL keys depressed at the same time for 5". A message will appear on the display indicating the search level that has been programmed. By defect: SEARCH LEVEL=1

NOTE: A high search level may give rise to the tuner not stopping at stations where, although they are possibly received with an acceptable acoustic quality, the signal level is not sufficient related to the noise level.

LOCAL/DX commutation

When the station reception signal is excessive, selecting the LOCAL reception mode can reduce this. To do this keep PGM and LOCAL/DX keys depressed at the same time. To return to the default mode (DX) repeat the same operation.

TECHNICAL CHARACTERISTICS

- Voltage supply (nominal): 16VDC
- Consumption on standby (maximum): 75mA
- Consumption on ON state (maximum): 245 mA
- Audio output level: 3Vms
- Antenna connector input: 75 ohm
- Reception frequency: 87.50 MHz – 108.00 MHz
- Input sensitivity: 3.5 mV
- Programmable search sensitivity: 15mV (level 1), 35mV (level 2), 75mV (level 3) and 300 mV (level 4)
- Noise/signal ratio: 68 dB (MONO) / 63dB (STEREO)
- Channel separation: 28dB
- Maximum harmonic distortion: 3%

INSTALLATION EXAMPLES

The P3665 tuner is designed for two types of installations:

1 - Connection as a centralised sound unit: In this first type of installation the P3665 tuner supplies a distributed music channel for the whole home. The simplest installation would be when combined with a P3260 power supply (diagram 1). Another possibility would be using a P3221 or P3261 1-music channel main unit, connecting an outside sound source (cd player, radio cassette player, etc.) to it. In this case, although we will continue supplying the system with one music channel, on activating the ON/OFF switch of the tuner, we can choose between the signal from the latter, or the signal from the outside sound source (diagram 2). With the same type of P3221 or P3261 1-channel main units, we can obtain 2 stereo sound channels (diagram 3). For 4 stereo channels, we will use a P3264 main unit (diagram 4)

2 - Connection as a local sound unit: This type of connection provides an exclusive tuner for one single zone (see diagram 4), thus having an additional distributed music channel to those distributed throughout the whole home. When the P3665 tuner is on "on" (using its on/off pushbutton), the signal that will be heard will be the station selected on this, whilst when it is on "off" the signal that reaches the control (PE111 in the diagram 4) will be that distributed by Sound Unit P3221.

INSTALLATION

The P3665 tuner module can be installed in two types of locations:

- 1 - using flush box 4901 and frames KM9200 used with the Multifunction modules (PM) and Ergos (PE) from the Prestige Line (see fig. 1)
- 2 - using flush box P9002 combined with base plate K9123, frame KM9210 and blank panel P9802-01 in white or P9802-02 in charcoal grey (see fig. 2)

For correct installation, after making the connection and operation tests:

- 1º.- secure the base plate onto the flush box.
- 2º.- optional) install the trims on the outer frame first inserting one of the ends into its groove and then pressing it in completely.
- 3º.- fit the outer frame, pressing it onto the base plate until it fits in.

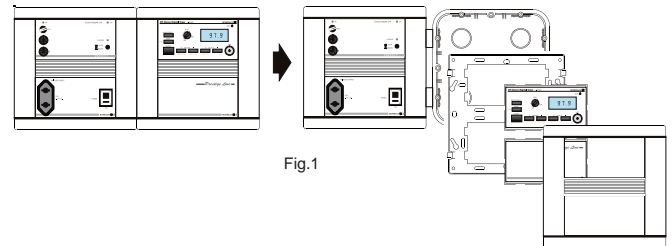


Fig.1

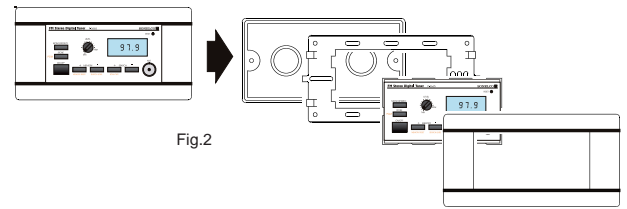


Fig.2

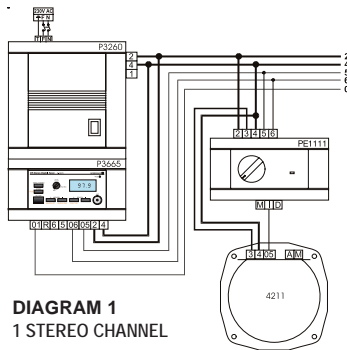


DIAGRAM 1
1 STEREO CHANNEL

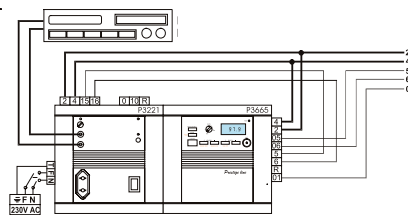


DIAGRAM 2 - 1 STEREO CHANNEL + 1*
*(1 distributed stereo channel, to be selected between the tuner and another outside sound source)
Important: In this case terminal "R" must not be connected.
NOTE: Sound diffusers and controls can be connected to the general line from the same connection as in the previous case.

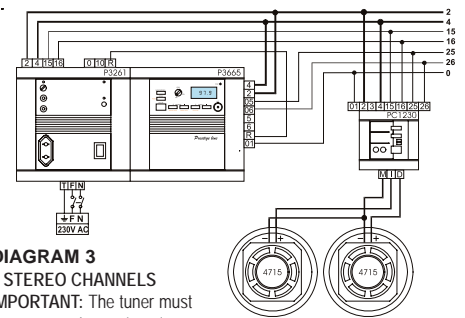


DIAGRAM 3
2 STEREO CHANNELS
IMPORTANT: The tuner must be connected to main unit's channel 2

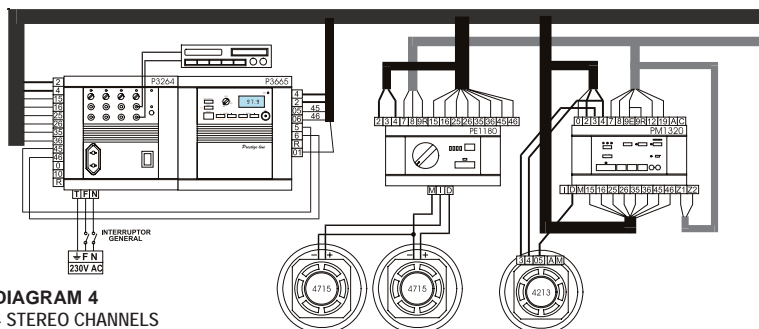


DIAGRAM 4
4 STEREO CHANNELS

SYSTEMS WITH 5 OR MORE CHANNELS:
In these cases please check with our Technical Department.

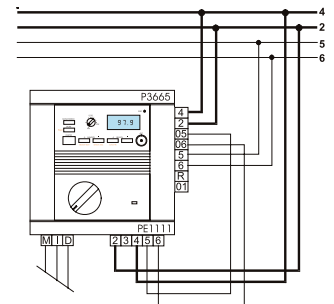


DIAGRAM 5
LOCAL CONNECTION OF TUNER

INSTALLATION RECOMMENDATIONS

- ANTENNA:** -The tuner has two antenna connections that can be used alternatively.
- The best reception will be obtained by inserting a 75-ohm antenna signal in the connection (9). If this were not possible it can be connected through the antenna intake (12).
- If a 75 ohm antenna signal is not available in the system, a 75 cm long cable can be used as an antenna (like that supplied with the tuner), preferably connecting it in (9) and if this were not possible in (12). If the signal reception is not sufficient it may be necessary to direct the cable in a certain direction.
- In any case both the tuner and the antenna must be located as far away as possible from the electricity cable as well as from any source of electromagnetic interference (household appliances, motors, fluorescent lights, halide lights, etc.)
- Do not place this product in damp places, near heat sources or potentially explosive atmospheres.
- The connection to the mains, installation, cable section and wiring will be done in accordance with the specific rules and regulations of each country. It is advisable for the electricity wires to be as far away as possible from the tuner circuits.
- Sonelco declines any responsibility that may be derived from an inadequate use of the product or system not conforming with that recommended.

These characteristics are only given as reference. The manufacturer reserves the right to introduce any amendments without prior notice in order to improve the product.