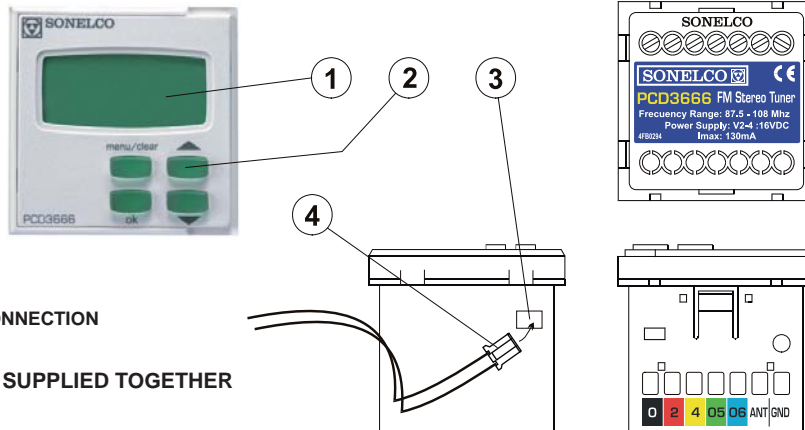


## DIGITAL FM STEREO PCD3666



- 1 – DISPLAY
- 2 – KEYPAD
- 3 – COMMUNICATION BUS CONNECTION
- 4 – CONNECTION

A 1M. ANTENNA CABLE IS SUPPLIED TOGETHER WITH THE CONTROL

### DESCRIPTION

Microprocessor-controlled digital FM Stereo Tuner  
Backlit liquid crystal display to view functions  
Automatic tuningsearch, using FUZZY LOGIC thanks to which the search process is extraordinarily quick. Remote scan. "Compact" series size and presentation.

### GENERAL CHARACTERISTICS

- Menu can be selected in Spanish or English.
- 25 permanent storage memories
- Remote scan from any PC/PM control.
- Programmable type of scan (memories/tuning); in the first case, the scan will only act upon the prerecorded memories.
- Protection against overloads in audio outputs.
- 4 search sensitivity levels, programmable between 15 mV and 300 mV
- Programmable mono/stereo
- Rear connection by screw strip for FM antenna input.

### CONNECTION

Before making the connection make sure that the power supply unit of the installation is off. Insert the module into the metal base plate and make the connection according to the following indications:

#### TERMINALS:

- 2- Positive – 16 nominal Vdc supply
- 4- Negative – Power supply and signal ground
- 05- Left channel audio output
- 06- Right channel audio output
- 01- SCAN input
- ANT- Antenna (see installation recommendations on page 2)
- M- Antenna ground

#### Communication bus 2-way connector

COM+(White)/COM-(Grey)- To connect to Installation Bus.

If you wish to connect the tuner to the installation bus connect the 2-way connection into the module. Connect the White/COM+ and Grey/COM- cable into the installation bus, taking special care not to make a mistake in the order of the cables. This connection by Bus will enable you to access certain remote mode functions, from controls that incorporate this function.

**Note:** To be able to correctly tune the stations, a good antenna signal is required. The tuner incorporates two strips (ANT, M) for later connection of the outside antenna for FM. (cable coming from the RF distribution). The wiring of the system must be mounted separately from the electricity supply mains.

#### MENU FUNCTIONS

##### SEARCH

To tune stations.

It enables us to choose between two types of search:

**MEMORY:** To search for a previously tuned station and stored in one of the 25 memory possible positions.

**DIRECT:** To tune a station and memorise it if we wish.

##### LEVELS

It permits establishing the minimum signal level that the stations, which we wish to automatically tune in, must have. With this mode we will be able to choose between four levels. When we make the automatic search, the tuner will stop at the stations that receive a signal of the same or higher level than the level that we have established in the tuner.

It permits 4 levels:

<b>Minimum:</b>	Level > 15 uV (Start option)
<b>Middle 1</b>	Level > 35 uV
<b>Middle 2</b>	Level > 75 uV
<b>Maximum</b>	Level > 300 uV

#### MODE

To select the type of audio signal

**Two options:** **Mono:** We must select this mode when our installation is Mono.  
**Stereo:** (Start option). For stereo installations.

#### LANGUAGES

To select the language of the display messages

It permits 2 languages: **Spanish. Start option**  
**English**

#### AUTO.

This mode enables us to automatically search for and memorise the stations in your area. It will search and store in memory all the stations that it detects until it completes the 25 possible memories.

**It is the simplest recommended method to search for stations.**

#### REMOTE.

This menu option enables us to configure the tuner so that we can make a station search from other controls of the installation (whenever the C+/C- bus cables or the Scan 01 wire are connected). **It gives 2 options:**

**Yes:** It permits the scan from other Controls (Start option)

**No:** It does not permit the change in stations from other controls, (it only admits local scan)

#### CHANNEL

Option to assign the address of the channel, which the tuner is connected to.

This option is useful if used in installations with PC1307 controls and the C+/C- bus is connected. The PC1307 controls will only carry out the scan on the tuner that is associated with the channel, which, at that time, is selected on the control.

**Channel 1** (Start option)

**Channel 2**

#### ERASE MEMORIES

**Warning!** It enables us to erase the whole memory programming.

This function is reached directly by keeping the MENU/CLEAR key depressed for at least 3 sec. **Options:** **Total:** Erase all the memories

**Partial:** Erase only the memory chosen.

### OPERATION

The tuner will enter into operation automatically when the system is switched on. After start-up the display will show an initialisation message for a few seconds and will present the frequency of the last station that was selected.

**Warning:** if no keys on the tuner have been used for 75 seconds, the backlighting will disconnect and it will show the last frequency tuned in. If we are in any menu option, we will quit it.

#### ACCESS TO MENU:

All the functions are controlled with the 4 keys on the front

**Menu/clear:** Enter into menu mode / Quit mode

**OK:** Accept the mode that the display presents

**Up and Down:** It goes up and down the menu options.

To access the functions of the menu press the **MENU/CLEAR** key.

The **SEARCH** indication will appear on the display (first menu option).

By pressing **UP** or **DOWN** you can go up and down the menu.

The display will show in a sequence the following options of the main menu:

**1-SEARCH, 2-LEVELS, 3-MODE, 4-LANGUAGE, 5-AUTO, 6-REMOTE, 7-CHANNEL**

Press **OK** to select the desired option from the main menu.

Once inside an option of the main menu choose one of the secondary options with **UP/DOWN** and press **OK** to enter the mode selected. If you wish to quit the function selected and return to the previous menu press **MENU/CLEAR**. There is an auxiliary function, **ERASE MEMORIES**, which can be accessed directly.

#### CONTROL CONFIGURATION:

The control leaves the factory with the following preset configuration:

**Type of SEARCH:** **DIRECT**

**LEVEL:** 15uV

**MODE:** STEREO

**LANGUAGE:** SPANISH

**REMOTE:** YES (Remote scan enabled)

**CHANNEL:** CHANNEL 1

If you wish you must change it to adapt it to your need

### 1. Selection of the Search level

To select the minimum or threshold signal level of the stations that you wish to search for, access **LEVELS** function of the menu.

Press **OK** to enter the function.

With **UP** or **DOWN** select the **MINIMUM**, **MEDIUM1**, **MEDIUM2**, OR **MAXIMUM** mode.

Press **OK** and the display will flash indicating the mode chosen.

### 2. Mode Configuration: Mono/Stereo

Press **Menu/Clear**.

With **UP/DOWN** select **MODE**.

Press **OK**, to enter the **MODE** function, and press **UP/DOWN** to select **MONO** or **STEREO**. Press **OK** to accept the option chosen. The display will flash showing the options chosen.

### 3. Language selection

Press **Menu/Clear**.

With **UP/DOWN** select **LANGUAGE**.

Press **OK** to enter the function.

Press **UP** or **DOWN** and select the desired language.

Press **OK** to accept the option chosen.

The display will flash indicating the language chosen.

### 4. Selection of remote SCAN.

To be able to enable or disable the change in stations from a control of the system.

Press **Menu/Clear**.

With **UP/DOWN** select **REMOTE**.

Press **OK** to enter the function.

Press **UP** or **DOWN** and select **Yes** or **No**.

Press **OK** to accept the option chosen.

The display will flash showing the option chosen.

#### Remote SCAN function.

The automatic tuning/memory search is carried out physically through terminals 01 or **COM+**, **COM1** (for controls with communications bus).

This search can be made in two ways, depending on the mode that we have selected on the menu.

-A memory scan will advance through the stations recorded on the memories of the tuner.

-A tuning scan will make an automatic search based on the current frequency in upward direction.

In addition, if we connect the tuner to modules with communications bus and if these permit this, we will be able to:

-Make a remote scan through the bus. The tuner will inform the control of the frequency it is on.

-Ask which frequency the tuner is on.

### 5. Assignment of CHANNEL1/CHANNEL 2

Only when the option with communications bus is installed.

In systems with domotic controls the address of the channel the tuner occupies is associated with it, so that when a control has the tuner channel selected, it can carry out remote scan and receive information of the frequency of the station that is tuned in.

Press **Menu/Clear**.

With **UP/DOWN** select **CHANNEL**.

Press **OK** to enter the function.

Press **UP** or **DOWN** and select **CHANNEL1** or **CHANNEL2**.

Press **OK**, to accept the option chosen.

The display will flash showing the option chosen.

### TO SEARCH FOR STATIONS:

#### 1. Automatic search for stations

The simplest procedure to search for stations in the area and memorise them is to use the Automatic search method.

-Press **MENU/CLEAR** to access the menu

-Press **UP** or **DOWN** until **AUTO** appears on the display

Press **OK** to select this mode.

The tuner will start an automatic exploration of the whole FM band and will store them in its memory in a sequential fashion up to a maximum of 25 memories.

#### 2. Direct search. Memorise stations (manual)

##### Direct Search

Press **MENU/CLEAR** to access the **SEARCH** function of the menu.

Press **OK** to enter the function.

Press **UP** or **DOWN** until the display shows **DIRECT** and press **OK** to select the option. The display will flash and will show the option chosen.

Press **UP/DOWN**. One brief touch will change 50 Khz. A longer touch will make the tuner automatically search for the next or previous station.

### MEMORISE STATIONS

After selecting the desired station to memorise it press **OK**.

The display will show: **SAVE** and then the number of the memory **MXX**. With the **UP** or **DOWN** key select the memory number where you wish to save the station. If the display indicates **MXX LIBR**, the memory is free.

If it indicates **MXX** the memory is occupied.

Press **OK** to save. The display will flash several times to indicate that the station has been memorised and it will indicate the frequency again.

The tuner has **25** memories.

#### 3. Search for memorised stations

This model enables you to explore the stations that have been previously memorised by any of the previous methods.

With the keypad select the **SEARCH – MEMORY** mode.

Press **UP/DOWN** to go to the next/previous memory position that has a station stored, skipping the ones that are free.

#### 4. Delete memories

To access the delete function press **CLEAR**, until the display shows:

**DELETE?**

Press **OK**, and it will enter the delete options.

With **UP/DOWN** select the desired **TOTAL** or **PARTIAL** option.

**TOTAL:** Press **OK** to accept this option. The display will show the message, **DELETING MEMORIES** and then **WAIT** flashing on and off as long as the deleting lasts (several seconds).

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.

**PARTIAL:** Press **OK** to accept this option. **MXX** will appear.

Press **UP/DOWN** to select the memory we wish to delete from those that are already stored. At the same time we will hear its sound.

Once selected, press **OK** and we will delete the station from the memory.

This option will be repeated until we press **MENU/CLEAR** or until 12 seconds have elapsed since we have stopped operating the tuner.

**NOTE:** The tuner maintains its configuration, as well as the last tuning selected, although power is cut off from the main unit.

## TECHNICAL CHARACTERISTICS

Power supply voltage (nominal): 16 VDC

Consumption on standby status (maximum): 56 mA

Consumption on ON status (maximum): 74 mA

Audio output level: Between 1.5 and 2 Vms (Depending on the station)

Antenna connector input: 75 ohm

Reception frequency: 87.50 MHz – 108.00 MHz

Input sensitivity: 3.5 mV

Programmable search sensitivity: 15 mV (minimum), 35 mV (medium1), 75 mV (medium2) and 300 mV (maximum)

Signal/noise ratio: 68 dB (MONO) / 63dB (STEREO)

Maximum harmonic distortion: 3%

## INSTALLATION EXAMPLES:

Several types of installations can be carried out with the PCD3666 tuner:

**1- Connection as centralised sound source:** In this first case, the PCD3666 tuner supplies 1 music channel to the whole system. The simplest installation would be in combination with a power supply source P3262 (diagram 1). Another possibility would consist in using a main unit P3221 or P3261 with 1 musical channel, which an outside sound source would be connected to (compact-disc, radiocassette, etc.); in this case the system will have 2 channels.

**2- Connection as local sound source:** This type of connection provides an exclusive tuner for one single zone (see diagram 2), thus having an additional background music channel to those distributed throughout the whole home.

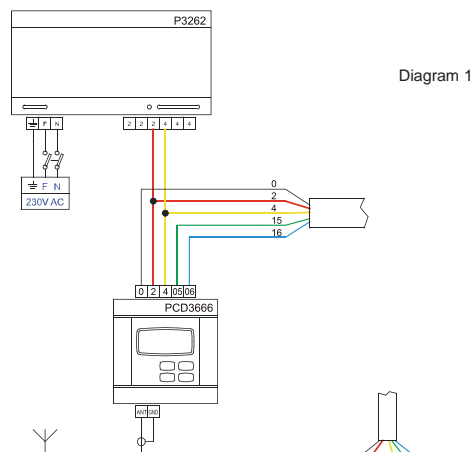


Diagram 1

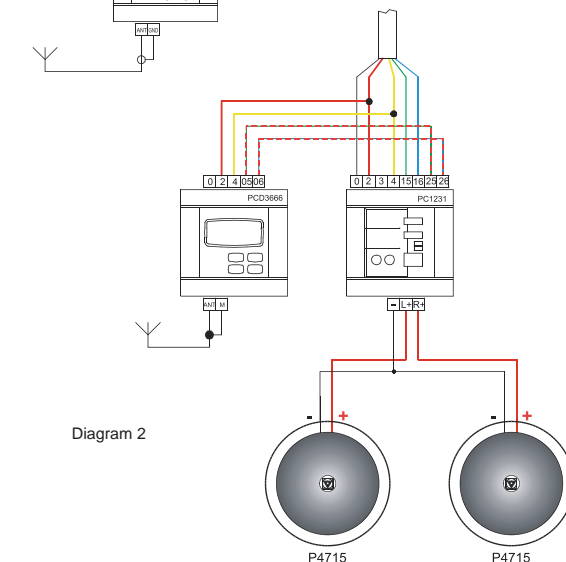


Diagram 2

## INSTALLATION RECOMMENDATIONS

**ANTENNA:** If there is no 75-ohm antenna signal available in the installation, a 75 cm long cable can be used as antenna.

In any case, both the tuner and the antenna must be located as far away as possible from the electricity supply mains cables as well as from any source of electromagnetic interferences (household appliances, motors, fluorescent lights, halide lights, etc.)

Do not place this product in damp atmospheres, close to heat sources or in potentially explosive atmospheres.

The connection to the electricity supply mains, installation, cable section and wire laying will be carried out according to the specific directives and standards of each country.

**Sonelco declines any responsibility that might be derived from the improper use of the product or installation that does not comply with the recommendations.**