

# In-Wall **PREMIUM BT &** In-Wall **FM/DAB** Display



## eissOUND

Electrónica Integral de Sonido S.A. declares that the equipment ref.328x1, 328x2, 527x7 and 527x6 is in accordance with directives 2014/53/UE, 2011/65/UE, 2009/125/EC. The EU declaration of conformity can be requested through the website [www.eissound.com](http://www.eissound.com)

**CC-1205ENG-04**  
**64460133**



# 1. Description

The In-Wall PREMIUM BT and the In-Wall FM/DAB Display are standalone audio modules. They allow you to enjoy four audio channels: Bluetooth Audio, FM/DAB Radio and TWO stereo or four mono audio inputs. Although the FM/DAB unit (Ref. 328x1, 328x2) is ideal as a standalone radio option, the PREMIUM BT version (Ref. 527x7, 527x6) which incorporates Bluetooth Audio makes it the perfect audio system. In addition, the PREMIUM BT can also be controlled by our KBSOUND STAR App making the unit especially attractive and versatile. Available on Apple App Store (iOS devices) and Google Play (Android devices). Please make sure it is the latest App version. Compatible for iOS 10.0, Android 8.0 and subsequent related versions.



iOS DEVICES



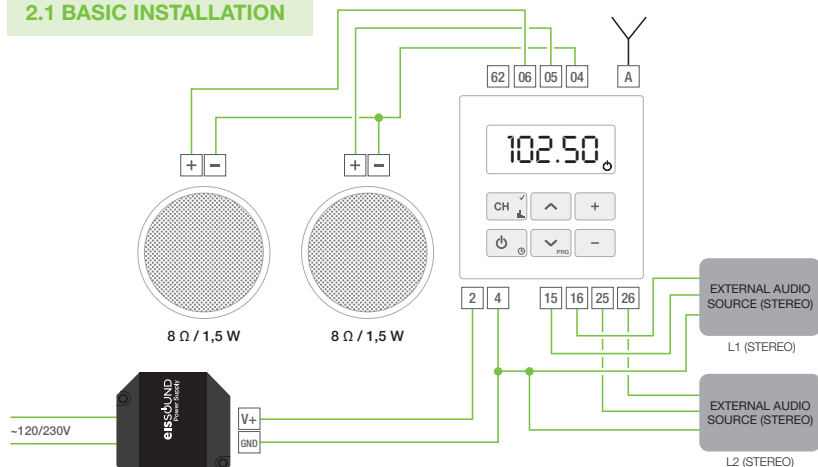
ANDROID DEVICES



Google play

## 2. Installation

### 2.1 BASIC INSTALLATION

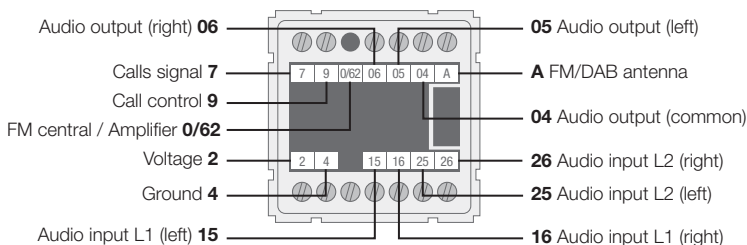


**Note:** There are two stereo channels from two external stereo audio sources.

## 2.2 TECHNICAL SPECIFICATIONS

| 328x1 / 328x2 / 527x6 / 527x7        | MIN                                                 | NORMAL     | MAX   |      | COMMENTS                              |
|--------------------------------------|-----------------------------------------------------|------------|-------|------|---------------------------------------|
| Measurements                         |                                                     | 45x45x45,5 |       | mm   | exterior (width x height x depth)     |
|                                      |                                                     | 45x45x36   |       | mm   | cavity (width x height x depth)       |
|                                      |                                                     | 45x45      |       | mm   | face cover (width x height)           |
| Voltage                              |                                                     | 15         | 15,5  | Vdc  | terminals 2,4                         |
| Consumption demand 328x1, 527x7      | 8                                                   | 50,2       |       | mA   | terminals 2,4                         |
| Consumption demand 328x2, 527x6      | 21                                                  | 61         |       | mA   | terminals 2,4                         |
| Input signal                         |                                                     | 2,75       |       | Vrms | terminals 15, 16, 25, 26, NORMAL mode |
|                                      |                                                     | 1,22       |       | Vrms | terminals 15, 16, 25, 26, PROF mode   |
|                                      |                                                     | 0,32       |       | Vrms | terminals 15, 16, 25, 26, OTHER mode  |
| Input impedance                      |                                                     | 3300       |       | ohms | terminals 15                          |
|                                      |                                                     | 33000      |       | ohms | terminals 16, 25, 26                  |
| Audio output signal                  |                                                     |            | 1,5   | W    | terminals 05, 06, 04, 8 OHM mode      |
|                                      |                                                     |            | 1     | W    | terminals 05, 06, 04, 16 OHM mode     |
|                                      |                                                     |            | 1,288 | Vrms | terminals 05, 06, 04, LINE mode       |
|                                      |                                                     |            | 2,585 | Vrms | terminals 05, 06, 04, AMP1 mode       |
|                                      |                                                     |            | 1,82  | Vrms | terminals 05, 06, 04, AMP2 mode       |
| External amplifier activation signal |                                                     |            | 5     | Vdc  | terminals 05 (DC component)           |
|                                      |                                                     |            | 14    | Vdc  | terminal 0/62                         |
| Call reception signal                |                                                     | 2,75       |       | Vrms | terminal 7                            |
| Passband                             | 20                                                  |            | 22000 | Hz   |                                       |
| Distortion                           |                                                     | 0,1        | 1     | %    |                                       |
| Frequency range                      | 87,5                                                |            | 108   | MHz  | FM                                    |
|                                      | 174                                                 |            | 240   | MHz  | DAB                                   |
| Antenna impedance                    |                                                     | 75         |       | ohms | FM                                    |
|                                      |                                                     | 50         |       | ohms | DAB                                   |
| Antenna sensitivity                  |                                                     | 3,5        | 10    | uV   |                                       |
| Tuner distortion                     |                                                     |            | 1     | %    |                                       |
| Number of memories FM                |                                                     |            | 10    |      |                                       |
| Number of memories DAB               |                                                     |            | 10    |      |                                       |
| Bluetooth spec.                      | Class2 BT4.2 dual mode<br>BLE, A2DP 1.3, AVRCP 1.6C |            |       |      | Only 527x6, 527x7 models              |
| Wireless transceiver                 |                                                     | 2,4        |       | GHz  | ISM Band, only 527x6, 527x7 models    |
| RF transmission power                |                                                     | 2          |       | dBm  | Only 527x6, 527x7 models              |
| RF antenna                           |                                                     | internal   |       |      | Only 527x6, 527x7 models              |
| Bluetooth range                      |                                                     |            | 10    | m    | Only 527x6, 527x7 models              |

## TERMINALS

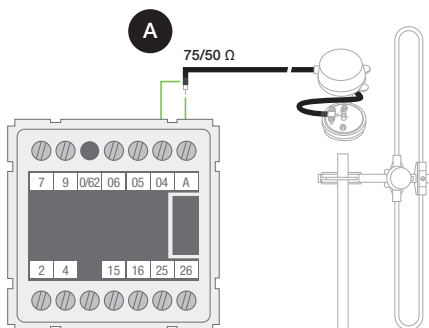


## FM / DAB ANTENNA

For FM installations connect a 75cm wire to the antenna terminal (A). For DAB installations: connect a 31cm wire to the antenna terminal (A). Be sure to locate it as far as possible from any sources of electrical noise such as halogen lamps, HVAC, fluorescent bulbs, etc. and as far as possible from the other installation wires.

To improve the FM and DAB reception it is advisable to use an amplifier 75/50 ohm antenna instead of the antenna wire.

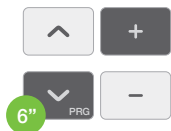
For DAB, WE STRONGLY RECOMMEND TO CONNECT A DAB AERIAL.



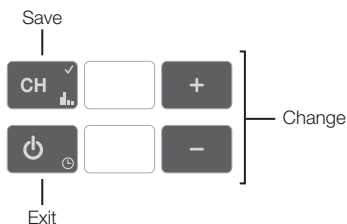
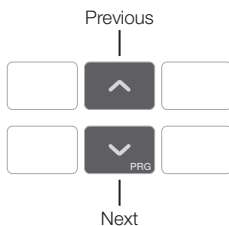
## 2.3 INSTALLATION MENU

**When accessing the Installation menu please take note that the Module Control Unit must be in OFF mode.**

To activate the installation menu press the **▼** and **+** keys simultaneously for 6".



1. Use the **▼** and **▲** key to scroll through the menu.
2. Use **+** and **-** keys to scroll up and down through the options.
3. Only use the **CH** key to validate the option selected.



**LANGUAGE:**

Select the language desired for the display.

**AUTO ON/OFF:** By default the Control Unit starts in OFF status when it is powered (2,4 terminals). Activating the AUTO ON option the Control Unit will start in ON status (IDEAL mode) when powered.

**MONO / STEREO:** Selects the Control Unit's audio output mode (terminals 04, 05, 06) between MONO or STEREO.

**AUDIO OUTPUT:** Adjusts the audio output level of the Control Unit (terminals 04, 05, 06) between 8 OHM, 16 OHM, LINE (line level), AMP1 (output for EISSOUND amplifiers ref. 13102 and 13203), and AMP2 (output for EISSOUND amplifier ref. 13204).

**BALANCE:** Adjusts the left / right balance of the audio output (terminals 04, 05, 06).

**VOL LIMIT:** Limits the maximum volume for the user.

**MENU LOCK:** Locks / unlocks access to the user menu and the FM/DAB save/delete memories' menu.

**L1 ENABLE:** Activates / deactivates the input channel L1 (terminals 15, 16). When L1 is disabled, it will not appear when selecting the audio channels with the CH key.

**L2 ENABLE:** Activates / deactivates the input channel L2 (terminals 25, 26). When L2 is disabled, it will not appear when selecting the audio channels with the CH key.

**FM ENABLE:** Activates/deactivates the FM audio channel. When FM is disabled it will not appear when selecting the audio channels with the CH key.

| INSTALLATION MENU | I N S T                                                             |
|-------------------|---------------------------------------------------------------------|
| LANGUAGE          | E N G<br>E S P<br>F R A<br>G E R                                    |
| AUTO ON / OFF     | A U T    O N<br>A U T O F F                                         |
| MONO / STEREO     | S T E R E O<br>M O N O                                              |
| AUDIO OUTPUT      | 8        O H M<br>1 6        O H M<br>L I N E<br>A M P 1<br>A M P 2 |
| BALANCE           | B A L - 1 5<br>... ..<br>B A L + 1 5                                |
| VOLUME LIMIT      | M A X    0 0<br>... ..<br>M A X    9 9                              |
| MENU LOCK         | L O C K<br>U N L O C K                                              |
| L1 ENABLE         | L 1        O N<br>L 1        O F F                                  |
| L2 ENABLE         | L 2        O N<br>L 2        O F F                                  |
| FM ENABLE         | F M        O N<br>F M        O F F                                  |

**L1 MONO / STEREO / MIX:** In STEREO mode (default mode) the terminals 15 and 16 will be a left and right STEREO input. To activate this option, press the CH key, the display will show L-IN 1 (label that can be customized with the L1 LABEL menu option).

In MONO mode the terminals 15 and 16 will be two independent MONO channel inputs. To activate these two channels press CH key, the display will show L-IN 11 (input on terminal 15) and L-IN 12 (input on terminal 16).

In MIX mode the terminals 15 and 16 will be two independent MONO channel inputs and to listen to both channels mixed press the CH key and the display will show MIX1. (See diagrams in Annex 1).

**L2 MONO / STEREO / MIX:** In STEREO mode (default mode) the terminals 25 and 26 will be a left and right STEREO input. To activate press the CH key and the display will show L-IN 2 (label that can be customized with the menu option L2 LABEL).

In MONO mode the terminals 25 and 26 will be two independent MONO channel inputs. To activate these two channels press the CH key and the display will show L-IN 21 (input on terminal 25) and L-IN 22 (input on terminal 26).

In MIX mode the terminals 25 and 26 will be two independent MONO channel inputs and to listen to both channels mixed press CH key and the display will show MIX2. (See diagrams in Annex 1).

**L1 INPUT LEVEL:** Adjust the audio input level of the L1 channel (terminals 15, 16) between the options NORMAL (100 series), PROF (professional) or OTHER (Euroconnector level).

**L2 INPUT LEVEL:** Adjust the audio input level of the L2 channel (terminals 25, 26) between the options NORMAL (100 series), PROF (professional) or OTHER (Euroconnector level).

|                  |             |       |
|------------------|-------------|-------|
| L1 MONO / STEREO | L 1         | M O N |
|                  | L 1         | S T   |
|                  | L 1         | M I X |
| L2 MONO / STEREO | L 2         | M O N |
|                  | L 2         | S T   |
|                  | L 2         | M I X |
| L1 INPUT LEVEL   | N O R M A L |       |
|                  | P R O F     |       |
|                  | O T H E R   |       |
| L2 INPUT LEVEL   | N O R M A L |       |
|                  | P R O F     |       |
|                  | O T H E R   |       |

**L1 LABEL:** Set the identification label of the audio source connected to the L1 channel (terminals 15, 16) between the options: L-IN 1 (default), BT (Bluetooth), TV, FM-CEN (100 series central FM tuner).

The customization of this tag is available only when the L1 channel is set up as STEREO.

**L2 LABEL:** Set the identification label of the audio source connected to the L2 channel (terminals 25, 26) between the options: L-IN 2 (default), BT (Bluetooth), TV, FM-CEN (100 series central FM tuner). The customization of this tag is available only when the L2 channel is set up as STEREO.

**FM CENTRAL:** Allows connection with our 100 series central FM tuner to the input L1 (terminals 15,16) or L2 (terminals 25,26).

**TERMINAL 0:** Allows connection with terminal 0/62 to the terminal 0 of 100 series FM tuner or to the terminal 62 of the ceiling amplifier ref. 13204.

**FACTORY RESET:** Press the CH key to activate the factory reset.

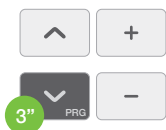
**VERSION:** Press the CH key to check the Control Unit version.

|               |                                              |
|---------------|----------------------------------------------|
| L1 LABEL      | L - I N 1<br>T V<br>F M - C E N<br>E X T B T |
| L2 LABEL      | L - I N 2<br>T V<br>F M - C E N<br>E X T B T |
| FM CENTRAL    | L - I N 1<br>L - I N 2                       |
| TERMINAL 0    | C E N T R L<br>A M P                         |
| FACTORY RESET | R E S E T                                    |
| VERSION       | V E R S                                      |

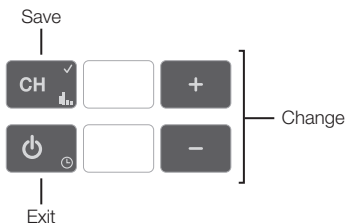
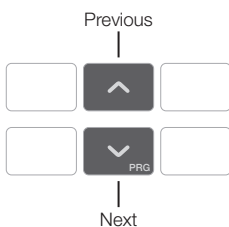
## 3. User Menu

When accessing the user menu, please take note that the **Module Control Unit must be in OFF mode.**

To activate the User Menu press the **v** key for 3".



1. Use the **v** and **^** key to scroll through the menu.
2. Use **+** and **-** keys to scroll up and down through the options.
3. Only use the **CH** key to validate the option selected.



**FM MEMORY DELETE:** Delete all FM favorites stored in the memory.

**FM FORCED MONO:** Activates / deactivates FM reception in MONO. Recommended when the reception is weak.

**FM SENSITIVITY:** Option to adjust the automatic station seek sensitivity for the Control Unit.

**DO NOT DISTURB:** In use only when connected to our 100 series audio system. Activates the “do not disturb” mode to avoid receiving calls. The NO CALL symbol appears on the display.

**CALL VOL:** In use only when connected to our 100 series audio system. Adjusts the volume level of the call message reception.

**LIGHT ON:** Adjusts the brightness level of the display when the Control Unit is in the ON mode. It must be equal to or higher than the brightness level set for when the Unit is in the OFF mode.

**LIGHT OFF:** Adjust the brightness level of the display when the Control Unit is in the OFF mode. It must be equal to or lower than the brightness level set for when the Unit is in the ON mode.

These settings are available from version 1.0.6.

**DAB SERVICES SCAN:** Search and update the list of receivable DAB services.

*Note: the first time the DAB audio channel is selected with the CH key, the Unit does not have any service available so it will start the scan automatically. If no services are found, the display will show NO AVAILABLE SERVICES. The DAB SERVICES SCAN can be updated, at any time, by pressing the CH key using the User Menu option.*

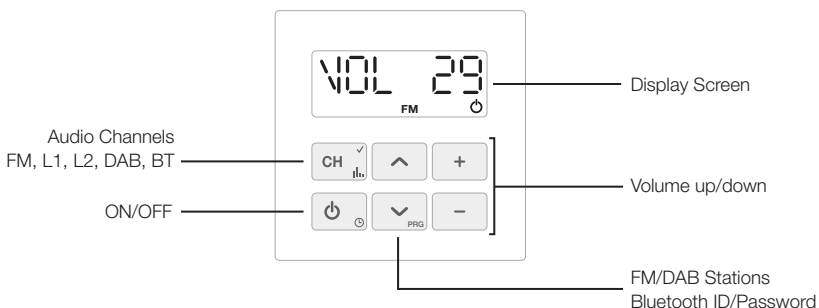
|                   |                                     |
|-------------------|-------------------------------------|
| USER MENU         | U S E R                             |
| FM MEM. DELETE    | D E L                               |
| FM FORCED MONO    | S T E R E O<br>M O N O              |
| FM SENSITIVITY    | S E N S 1<br>S E N S 2<br>S E N S 3 |
| DO NOT DISTURB    | N O C A L L<br>C A L L              |
| CALL VOLUME       | C A L L 0 0<br>...<br>C A L L 9 9   |
| LIGHT ON          | L O N 5<br>...<br>L O N 0           |
| LIGHT OFF         | L O F F 5<br>...<br>L O F F 0       |
| DAB SERVICES SCAN | D R B                               |

**DAB MEMORY DELETE:** To delete all DAB favourites stored press the CH key.

**TIME-HOUR & TIME-MINUTE:** Manually program the hour and minute. When using the App the time will be updated to the hour on the device. Note: The time-hour must be programmed when the module is powered-up. The module does not have a battery.

|                   |           |
|-------------------|-----------|
| DAB MEMORY DELETE | D E L     |
| TIME-HOUR         | H 1 2 4 9 |
| TIME-MINUTE       | 1 2 3 4 9 |

## 4. Operation



### 4.1 FM MANUAL SCAN

To select the FM stations press the **CH** key to select the FM audio channel. With the **▲** and **▼** keys make a long press to scan through the FM stations (See also “Fine Tuning”).

## 4.2 DAB SERVICES

When choosing the DAB channel the DAB option will scan automatically all DAB stations available.

With the **▲** and **▼** keys make a long press to scan through the DAB stations.

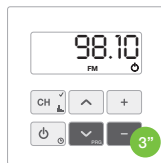
## 4.3 FM/DAB MEMORY PROGRAM

Pressing simultaneously the **▲** and **+** keys for 3" the FM/DAB station selected is stored into the favourite memory list (max 10 memories). With a short press on the **▲** and **▼** keys you can scroll through the memories stored.



## 4.4 FM/DAB MEMORY DELETE

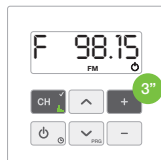
Pressing simultaneously the **▼** and **-** keys for 3" deletes from the favourite memory list the FM/DAB station selected.



## 4.5 FM FINE TUNING

Pressing the **CH** and **+** keys simultaneously for 3" set up the fine tuning options. The fine tuning options are as follows:

1. Short presses on **+** or **-** keys will search radio frequencies in steps from 50kHz to 50kHz.
2. Maintaining a long press on the **+** or **-** keys will rapidly search, without interruption, the frequency you desire.



## 4.6 BLUETOOTH

To select the Bluetooth option (PREMIUM BT references: 527x7 and 527x6), press the CH key and select the “BT” channel. **Before pairing with your Bluetooth device check the ID and password by pressing the ▲ key for 3” for the ID and the ▼ key 3” for the password.**

1. Open iOS/Android Bluetooth Settings Menu.
2. Select the ID of the PREMIUM BT with which you wish to pair (e.g. 1221 PREMIUM BT).
3. Introduce the password (e.g. 8712). Needed only when pairing, not in future connections.
4. Check that the PREMIUM BT (e.g. 1221 PREMIUM BT) is correctly connected.

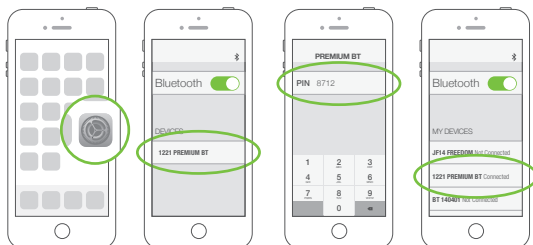
Bluetooth ID



Bluetooth password



### iOS:



### ANDROID:



## 5. Keyboard Shortcuts



### **EQUALIZATION:**

Pressing the **CH** key for 3" allows you to select with the **▲** and **▼** keys a pre-equalization mode among the 12 available.



### **TIMER:**

Pressing the **ON / OFF** key for 3" allows you to set an elapsed time with the **+** and **-** keys by which the Control Unit will automatically switch to standby.



### **SET IDEAL:**

Press simultaneously the **+** and **-** keys to activate the ideal mode previously saved.



### **SAVE IDEAL:**

Pressing simultaneously the **+** and **-** keys for 3" will save the ideal mode in memory (volume, equalization, audio channel and station, if the channel is FM) selected previously.



AUDIO CHANNEL = BLUETOOTH

**BLUETOOTH ID:**

Press the **▲** key for 3" to search for the PREMIUM BT ID.



AUDIO CHANNEL = BLUETOOTH

**BLUETOOTH PASSWORD:**

Press the **▼** key for 3" to search for the PREMIUM BT password.



AUDIO CHANNEL = FM

**FM FINE TUNING:**

Pressing the **CH** and **+** keys simultaneously for 3" you can set up the fine tuning options.



AUDIO CHANNEL = FM

**FM FORCED MONO:**

Pressing the **CH** and **▲** keys simultaneously for 3" allows you to activate/deactivate the MONO mode.



AUDIO CHANNEL = FM/DAB

**FM/DAB FAVORITES PROGRAM:**

Pressing the **▲** and **+** keys simultaneously for 3" allows you to save the selected station in favorites.



AUDIO CHANNEL = FM/DAB

**FM/DAB FAVORITES DELETE:**

Pressing the **▼** and **-** keys simultaneously for 3" allows you to delete the selected station from favorites.



CONTROL UNIT = OFF

**USER MENU:**

With the Module in OFF mode press the **✓** key for 3" to access to the user menu.



CONTROL UNIT = OFF

**INSTALLATION MENU:**

With the module in OFF mode press the **✓** key and **+** simultaneously for 6" to access to the installation menu.



CONTROL UNIT: ON/CH/BT

**BT/A2DP DISCONNECT:**

With the Module in BT channel mode press the **▲** and **✓** for 3" to disconnct the BT/A2DP.



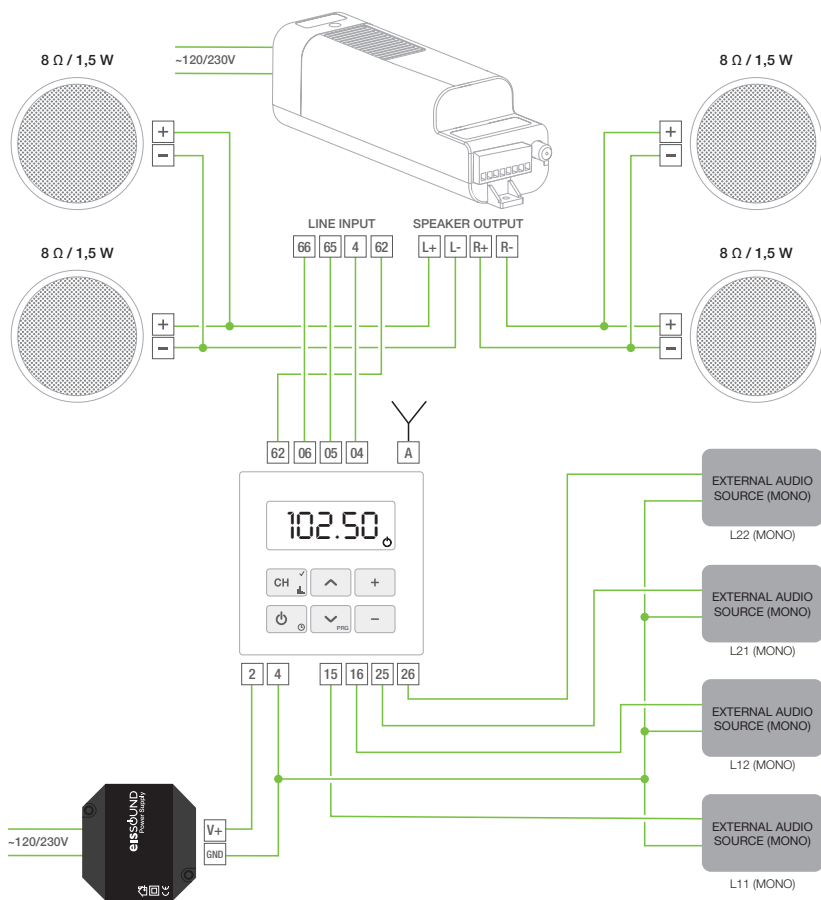
CONTROL UNIT: ON/CH/BT

**BT/BLE DISCONNECT:**

With the Module in BT channel mode press the **▲**, **⏻** and **✓** for 3" to disconnct the BT/BLE.

## 6. Wiring diagrams

### 6.1 In-Wall PREMIUM BT / In-Wall FM/DAB Display + Amplifier (Ref.13204)

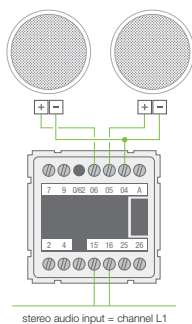


**Note:** There are four MONO channels from four external MONO audio sources.

## 7. Annex 1

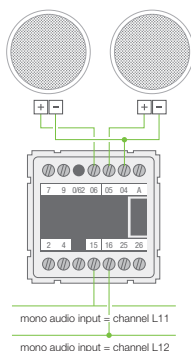
### L1 = STEREO

Stereo audio input L1



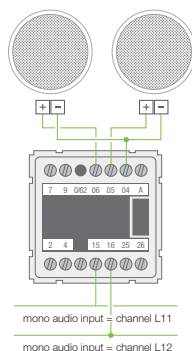
### L1 = MONO

Two independent audio inputs:  
L11 and L12



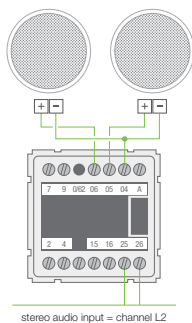
### L1 = MIX

Two independent audio inputs  
(L11 and L12) mixed at the output



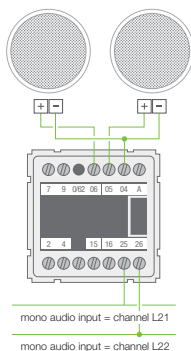
### L2 = STEREO

Stereo audio input L2



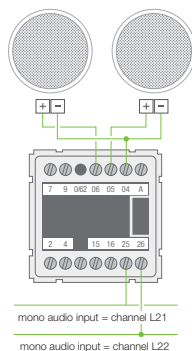
### L2 = MONO

Two independent audio inputs:  
L21 and L22



### L2 = MIX

Two independent audio inputs  
(L21 and L22) mixed at the output



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