# In-Wall FM/DAB Display



**eis**sound

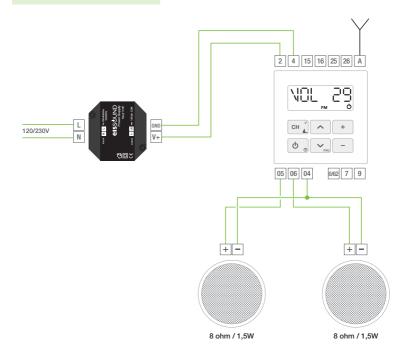
Electrónica Integral de Sonido S.A. declares that the equipment ref.328x1, 328x2 is in accordance with directives 2014/53/UE, 2011/65/UE, 2009/125/EC. The EU declaration of conformity can be requested through the website www.eissound.com

## 1. Description

The Control Unit with display is a stand alone In-Wall FM/DAB unit. The features of the In-Wall Control Unit includes an FM/DAB tuner and two additional stereo audio inputs. While ideal as a stand alone radio option, integrating it with our In-Wall Bluetooth Audio Receiver or other audio sources makes it the perfect audio system.

### 2. Installation

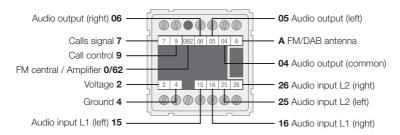
### 2.1 BASIC INSTALLATION



### **2.2 TECHNICAL SPECIFICATIONS**

328x1 / 328x2	MIN	NORMAL	MAX		COMMENTS
		45x45x45,5		mm	exterior (width x height x depth)
Measurements		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	8	50,2		mA	terminals 2,4
Consumption demand 328x2	20	60		mA	terminals 2,4
		2,75		Vrms	terminals 15, 16, 25, 26, NORMAL mode
Input signal		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
input impedance		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
External amplifier activation signal			5	Vdc	terminals 05 (DC component)
External ampliner activation signal			15	Vdc	terminal 0/62
Call reception signal		2,75		Vrms	terminal 7
Passband	20		22000	Hz	
Distortion		0,1	1	%	
F	87,5		108	MHz	FM
Frequency range	174		240	MHZ	DAB
Automortion de de la constant de la		75		ohms	FM
Antenna impedance		50		ohms	DAB
Antenna sensitivity		3,5	10	uV	
Tuner distortion			1	%	
Number of memories FM			10		
Number of memories DAB			10		

### **TERMINALS**



### 2.3 INSTALLATION MENU

When accessing the Installation menu please take note that the FM/DAB DISPLAY Control Unit must be in OFF mode.

To activate the installation menu press the  $\mathbf{V}$  and  $\mathbf{+}$  keys simultaneously for 6".

- **1.** Use the  $\mathbf{V}$  and  $\mathbf{\Lambda}$  key to scroll through the menu.
- 2. Use + and keys to scroll up and down through the options.
- ${\bf 3.}$  Only use the  ${\bf CH}$  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).

Installation Menu	1	N	S	Ţ		
	Ε	N	5			
	Ε	5	Ρ			
	۶	R	R			
Language	5	Ε	R			
	R	U	Ţ		0	N
Auto On / Off	R	U	Ţ	0	F	F
	S	Ţ	Ε	R	Ε	0
Mono / Stereo	Λ	0	N	0		
	8			0	Н	n
	1	б		0	Н	n
	L	1	N	Ε		
	R	n	Р	1		
Audio Output	R	Π	Р	2		

<b>BALANCE:</b> 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 kev.

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.

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 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).

	8	8	L	-	1	5
Balance	8	R	L	+	1	 5
	n	R	Χ		0	0
Volume limit	n	R	X		9	9
	L	0		K	_	
Menu Lock	U	N	L	0		K
		1		_		77
L1 Enable		1		0		
		5		_		77
L2 Enable	L	5		0	۶	F
	_					N
FM Enable	F			0	υ Ε	N F
I W LITABLE				_	_	
L1 Mono/Stereo	L L	1 1 1		6	0 5 1	N T X
L2 Mono/Stereo	L	5 5 5		n	0 5	17 T X



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 shown 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 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.

		_	_	_	_	
	N	-	R		R	L
			0			
L1 Input Level	0	Ţ	Н	Ε	R	
	N	Ω	p	n	R	
		R			"	_
L2 Input Level		T	-	Έ	R	
Lz Iliput Level	_	_		_		
	L	-		N T	i	
			8			
L1 Label	_	_		V	_	
Li Labei	۶	n	-	Ε	Ε	N
	L		1	N	5	
	L	-	B		C	
			_	ı لا		
L2 Label	F	n		r	Ε	N
LE Luboi	۲	ii	-	Ĺ	E	N
	L	-	1	N	1	
FM Central	L	-	1	N	2	
	ε	Ε	N	Ţ	R	L
Terminal 0	R	n	Р			
Factory Reset	R	Ε	S	Ε	Ţ	
Version	IJ	Ε	R	S		



### 3. User Menu

When accessing the user menu, please take note that the FM/DAB DISPLAY Control Unit must be in OFF mode.



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

- 1. Use the **v** and **n** 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 favourites 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 status.

**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

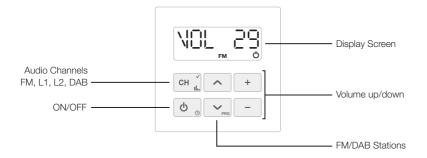
User Menu	U	5	Ε	R			
FM Mem. Delete	D	Ε	L				
	_	Ţ	_	_	_	0	
	_		_		С	U	
FM Forced MONO	n	0	17	0			
	S	٤	27	S		1	
	5	Ε	N	S		2	
FM Sensitivity	S	٤	Z	S		3	
	N	0	ε	R	L	L	
Do not Disturb	ε	Я	L	L			
	ε	R	L	L	0	0	
Call Volume	ε	R	L	L	9	9	
	L	0	N			1	
Light ON	L	0	2			5	
Dab Services Scan	D	R	8				



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.

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

## 4. Operation



### 4.1 FM MANUAL SCAN

To select the FM stations press the  ${\tt CH}$  key to select the FM audio channel. With the  ${\tt A}$  and  ${\tt v}$  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  ${\color{red} \Lambda}$  and  ${\color{red} V}$  keys make a long press to scan through the DAB stations.

### 4.3 FM/DAB MEMORY PROGRAM

Pressing simultaneously the  $\land$  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  $\land$  and  $\lor$  keys you can scroll through the memories stored.



### 4.4 FM/DAB MEMORY DELETE

Pressing simultaneously the v 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 frequences in steps from 50kHz to 50kHz.
- Maintaining a long press on the + or keys will rapidly search, without interuption, the frequency you desire.





## 5. Keybord Shortcuts



#### SET IDEAL:

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



#### **EQUALIZATION:**

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



### **FM FORCED MONO:**

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



#### 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.

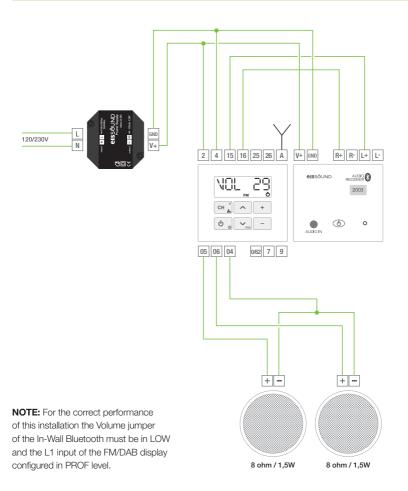


#### TIMER:

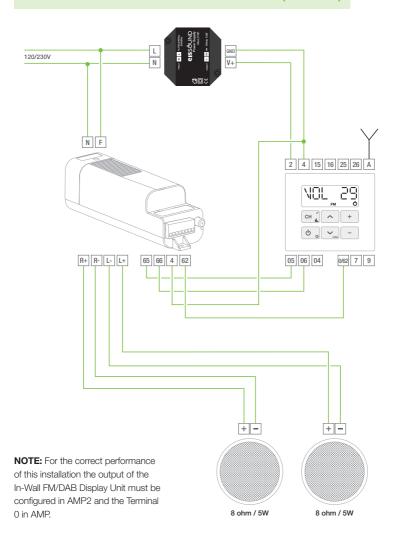
Pressing the ON / OFF key for 3 " allows you to set an elapsed time with the + and - keys by which the Control Unit will automatically switch to standby.

## 6. Wiring diagrams

### 6.1 IN-WALL FM/DAB DISPLAY UNIT + IN-WALL BLUETOOTH AUDIO RECEIVER

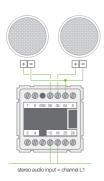


### 6.2 IN-WALL FM/DAB DISPLAY UNIT + AMPLIFIER (Ref. 13204)

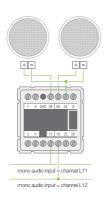


### 7. Annex 1

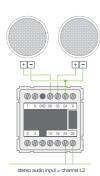
### L1 = STEREO Stereo audio input L1



L1 = MONO
Two independent audio inputs:
L11 and L12

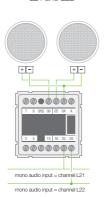


L2 = STEREO Stereo audio input L2



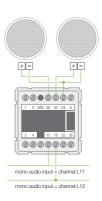
L2 = MONO

Two independent audio inputs: L21 and L22



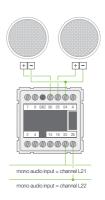
L1 = MIX

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



L2 = MIX

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



## **eis**sound

Pol. Malpica - Grupo Quejido 87-88 50016 Zaragoza - SPAIN Tel. +34 976 46 55 50 Fax +34 976 46 55 59 marketing@eissound.com

www.eissound.com

### **KB**SOUND

6550 St. Augustine rd. Av. Suite 305 Jacksonville, Florida 32217 info@kbsound.com

www.kbsound.com



