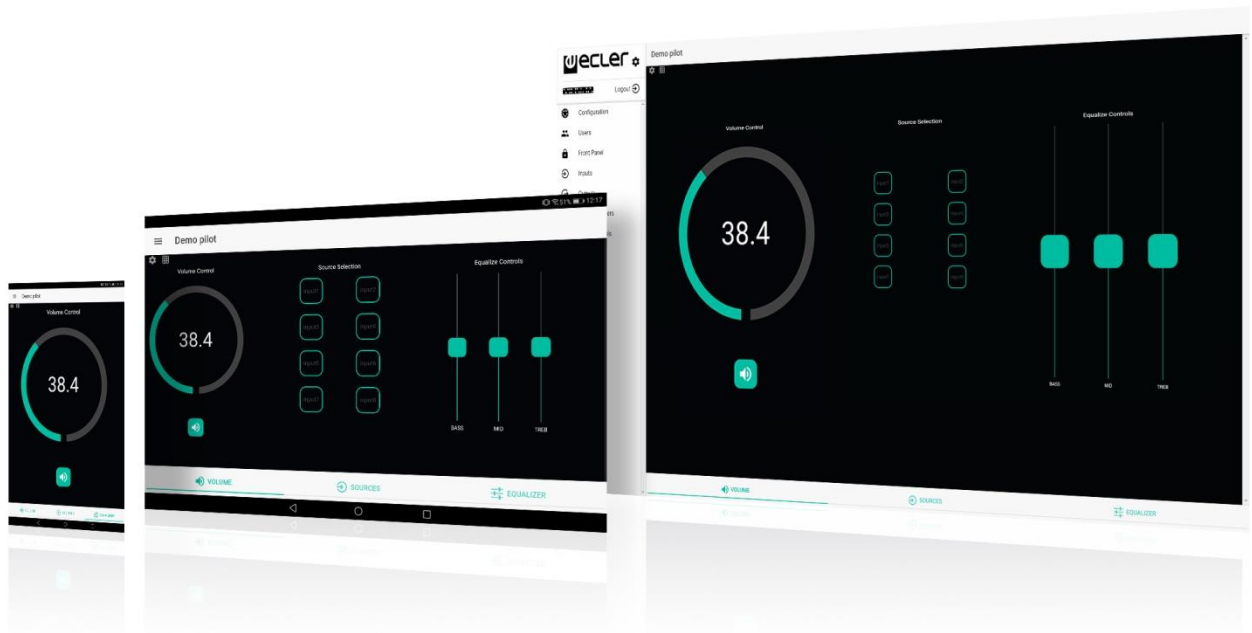


wecler
eMIMO web app

&

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eMIMO pilot app



eMIMO1616: APPLICATION WEB USER MANUAL

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1. IMPORTANT REMARK



WARNING: SHOCK HAZARD - DO NOT OPEN

AVIS: RISQUE DE CHOC ÉLECTRIQUE - NE PAS OUVRIR



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: To prevent fire or shock hazard, do not expose this equipment to rain or moisture.

WARNING: An apparatus with Class I construction shall be connected to a mains socket-outlet with a protective earthing connection.

2. IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and at the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Unplug the apparatus during lightening sorts or when unused for long periods of time.
13. Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
14. Disconnecting from mains: Switching off the POWER switch all the functions and light indicators of the amplifier will be stopped, but fully disconnecting the device from mains is done unplugging the power cord from the mains input socket. For this reason, it always shall remain readily operable.
15. Equipment is connected to a socket-outlet with earthing connection by means of a power cord.
16. The marking information is located at the bottom of apparatus.
17. The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on apparatus.

NOTE: *This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.*



WARNING: This product must not be discarded, under any circumstance, as unsorted urban waste. Take to the nearest electrical and electronic waste treatment centre.

NEEC AUDIO BARCELONA, S.L. accepts no liability for any damage that may be caused to people, animal or objects due to failure to comply with the warnings above.

3. INTRODUCTION

The set up and control on the eMIMO1616 is found on the embedded web application. This user interface can be handed from any standard web browser, running on any device, be it PC-Windows, MacOS, Tablet or even on a Smartphone.

4. FIRST STEPS

To access the web application on the eMIMO1616 from an external device (computer, Tablet, etc.) via a web browser, firstly, make sure that both are physically connected to the same local network (LAN), and set them up within the same net range. By default, the net settings for the eMIMO1616 are as follows (you can consult them on the device itself by keeping pressed the CTRL keys and the rotating encoder for a brief time, Illustration 1:

- **IP:** 192.168.0.100
- **MASK:** 255.255.0.0
- **Gateway:** 192.168.0.1



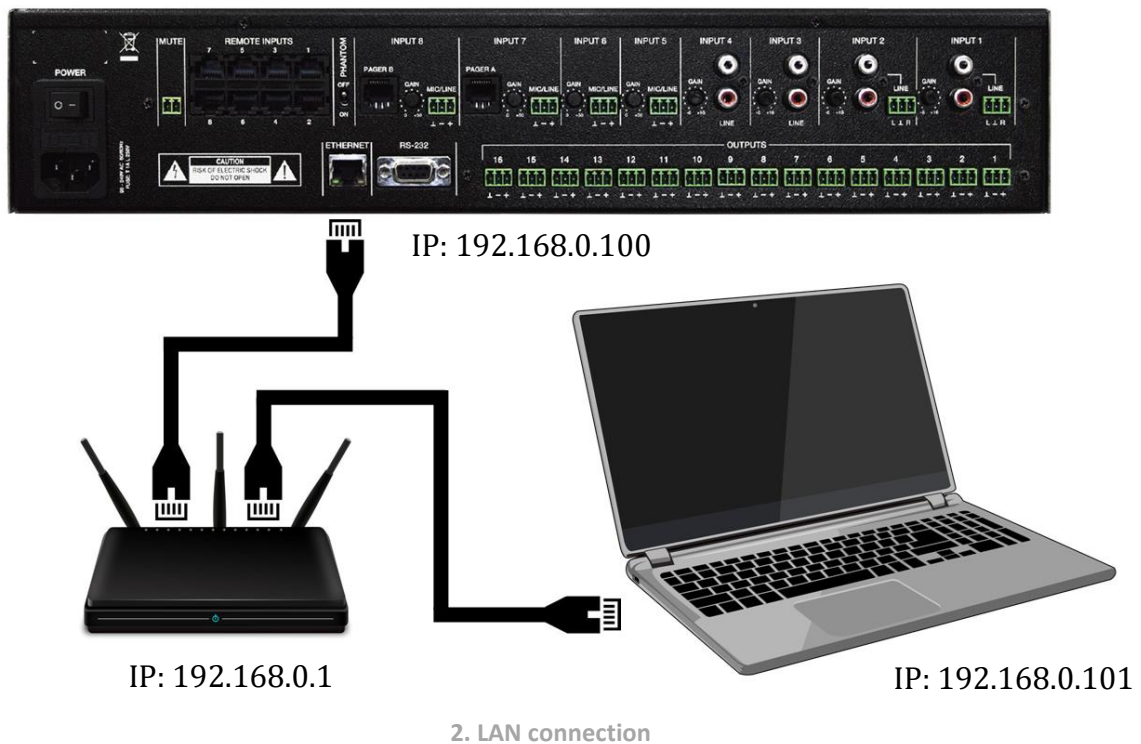
1. Set up of the eMIMO1616 network by default

If the network set up by default on the eMIMO1616 does not lie in the same IP range as that of your external device (computer, etc.), the one on the latter should be changed so that both are in the same range and able to establish connection so that, as soon as that is done, the set up of the eMIMO1616 network can be modified to include it in the IP range of your local network:

- Connect the eMIMO1616 point to point, using a CAT5 wire or higher grade type.
- Change the network set up on your computer to the network range of the eMIMO1616.
- Access the web application of the eMIMO1616 (see Chapter 3 on Accessing the web application) and change the network set up on the eMIMO1616 in line with the IP range established on your local network.
- Disconnect the eMIMO1616 from the computer and connect it to the local network.
- Connect the computer to this network.

- Make the necessary adjustments to the network on the computer so that it becomes part of the IP range compatible with your local network.
- Open the eMIMO1616 web application.

N.B.: The eMIMO1616 only supports static and not dynamic directing (or DHCP). This is the reason why the procedure explained above is essential to be able to set up its networks correctly, making them compatible with the local network and the IP range that already exist in the installation.



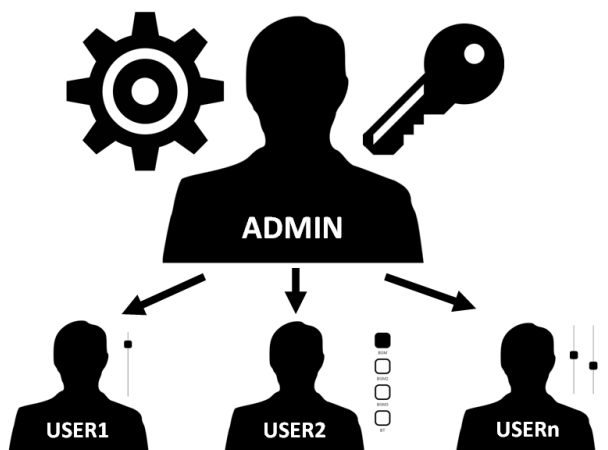
5. ACCESSING THE WEB APPLICATION

Once the 2 devices – the eMIMO1616 and computer/Tablet/Smartphone, etc. – are connected on the same local network, and set up within the same IP range, open your favourite browser on the control device (computer, etc.) and type in the IP address for the eMIMO1616 on the browser bar. By default: 182.168.100. You will now access the eMIMO1616 web application.

3. LOGIN page

There are 2 levels of access:

- **Administrator:** as administrator, you have access to all the functions on the eMIMO1616, you can set up any parameter for the matrix and its peripherals, and it is as Administrator that you can create different users and control panels for the **eMIMO** pilot application.
- **Users:** users (common or final users of the system) have a limited access. The only functions that can be accessed are for controlling (e.g., controlling the volumen of a given output) and never for setting up.



4. Adminstrator-users hierarchy

Both the access as administration and access for different users are password protected. By default, in order to access as administrator, these are the credentials:

- Name of user: admin
- Password: admin

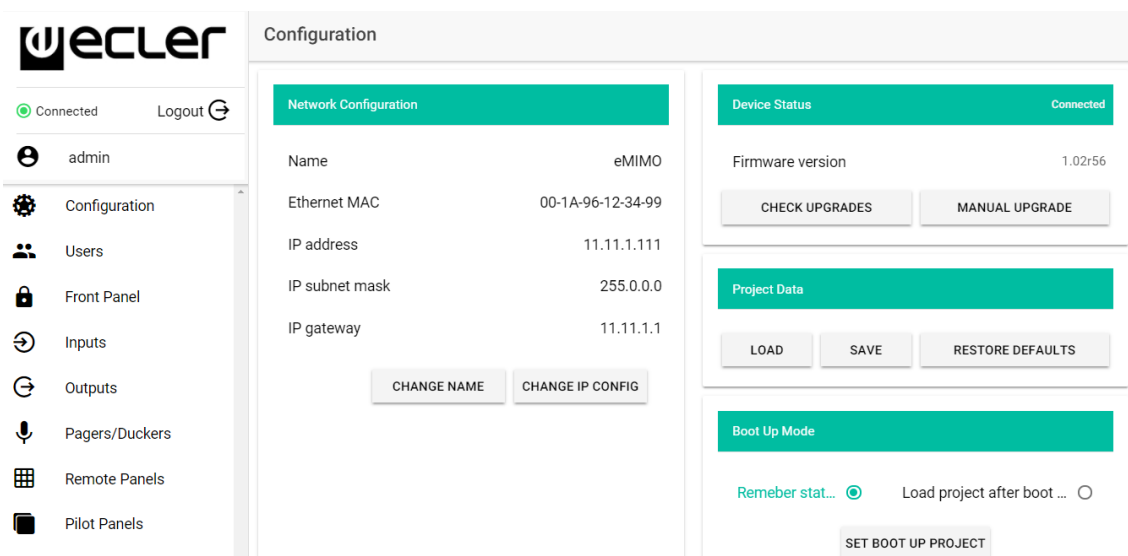
The administrator may change his/her own access password from the web application besides being able to manage users and passwords for the same.

N.B.: both the user's name and the password **distinguish between capital and small letters.**

In the chapters from 4 (SET UP) to 12 (ACCESSING THE WEB APPLICATION AS A USER), both inclusive, the web application is shown and explained once having accessed as administrator. In Chapter 12 (ACCESSING THE WEB APPLICATION AS A USER) the web application is explained in the case of accessing as a user.

6. SET UP

Once the application is accessed as administrator, the first page shown is for setting up.



5. -Set up page

In the top left hand corner, you can see the connection status of the eMIMO1616:

- Connected
- Disconnected

Next to the connection status you can find the key for closing the session:

Logout

On any given session on the browser, only one user session can be kept open on the web application. So, if there is a need to change user on the same device, first close the session and access again with another user.

6.1 NETWORK SET UP

In this table, you can set up the Ethernet parameters for eMIMO1616, as well as inserting your name.

- **Name:** name of the device.
- **MAC:** read only parameter, unique and assigned by the manufacturer of any Ethernet device.
- **IP address:** IP address. By default: 192.168.0.100
- **IP subnet mask:** by default: 255.255.0.0
- **IP Gateway:** by default: 192.168.0.1

Network Configuration

Name	eMIMO
Ethernet MAC	00-1A-96-12-34-99
IP address	11.11.1.111
IP subnet mask	255.0.0.0
IP gateway	11.11.1.1

CHANGE NAME

CHANGE IP CONFIG

6. Example of net set up

6.2 DEVICE STATUS

This table shows the current version of firmware running on the eMIMO1616 unit.

- **Check Upgrades:** automatically search for new firmware version (function still not available).
- **Manual Upgrade:** click on this table to open a file explorer window. From here, you can select a valid firmware file on your computer that has been previously downloaded (e.g. eMIMO1616_v1_01r01.bin).

Device Status		Connected
Firmware version	1.02r61	
<input type="button" value="CHECK UPGRADES"/>		<input type="button" value="MANUAL UPGRADE"/>

7. Status of the eMIMO1616 device

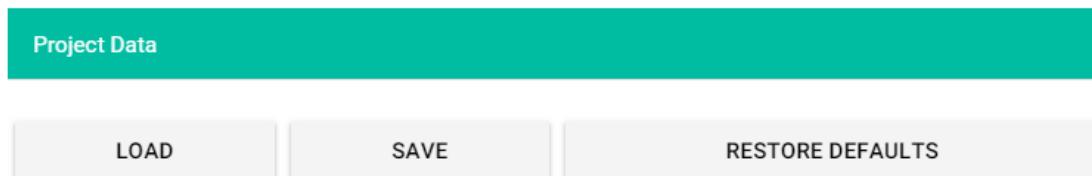
If this process is successfully completed, the previous set up of the eMIMO1616 unit must be fully kept.

IMPORTANT NOTE: the operation involving updating firmware is delicate and if not completed successfully, the set up of your eMIMO1616 may be lost. **Make sure to keep a copy of the Project before updating the device.**

At all times, try to have the latest version of firmware available installed on the eMIMO1616. Consult the latest official version on the following link: <http://www.ecler.com/products/digital-processors-matrixes/digital-matrixes/emimo1616-detail.html>

6.3 PROJECT DATA

eMIMO1616 projects (or global set up files) are managed in this table, besides making it possible to reset the device to its manufacturer's settings:

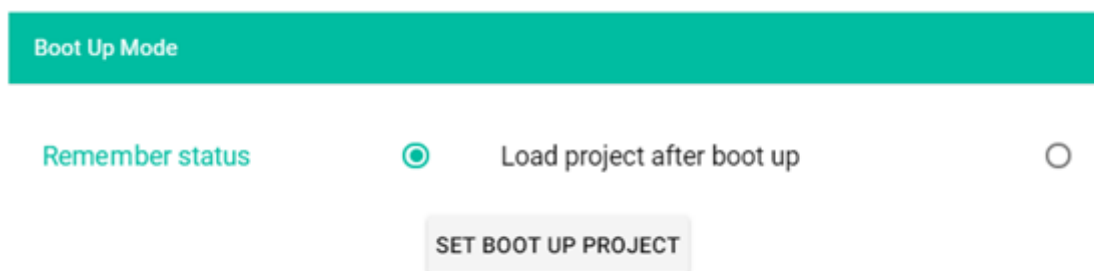


8. Project Data: management of eMIMO1616 projects

- **LOAD:** makes it possible to load a previously filed Project. eMIMO1616 projects have the extensión “.em1616”. By clicking on LOAD, a file explorer opens. Then select a valid project file on your computer, e.g., “my project.em1616”.
- **SAVE:** makes it possible to save the project with the current set up of eMIMO1616. Type in a name for the file, e.g. “my_project”. After clicking on SAVE, a file named “my_project.em1616” will start to download in the download folder set up on your computer's browser.
- **RESTORE DEFAULTS:** establishes the device with the default (or “manufacturer's” values).

6.4 BOOT UP MODE

This table manages the start up mode in the eMIMO1616:



9. Boot-up Mode: set up of start up mode

- **Remember status:** the device starts up with the set up that it had just prior to being turned off, including the status of volumes, selected sources, equalization adjustments, etc.

- Load Project after boot up:** makes it possible to load a Project as soon as it has been turned on, ignoring the set up that it had prior to being turned off. To select this Project, click on “set boot up Project”. The saved boot Project will be exactly the same set up as eMIMO1616 at that point in time. This operation overwrites the previously set up start up Project. If the option “load Project after boot up” is selected and no Project has been set up, the device will remember the last set up prior to being turned off.

7. USERS


The USERS page makes possible to create and manage the accounts of the different “client” users. Each user can access the web application or mobile application (eMIMO pilot) with the credentials assigned by the administrator: user name and password.

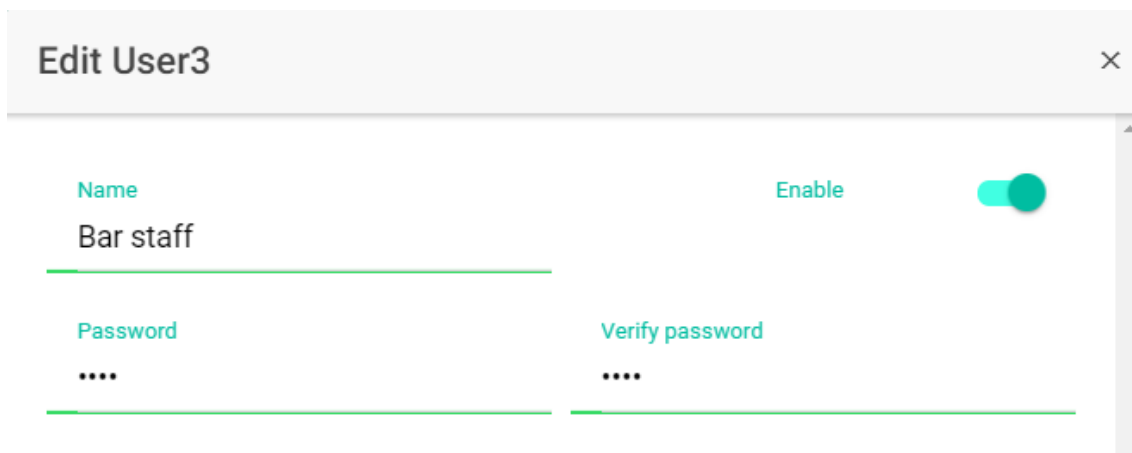
After accessing the application, a user can only display and manage the control panels and controls that the administrator has assigned for a given zone/s. There are 3 types of control: volume, selection of sources and equalizer. For further details on controls that a user can set for the matrix, turn to Chapter 11 PILOT PANELS.

User	Enable	Name	Password	Options
User1	<input checked="" type="checkbox"/>	manager	1234	
User2	<input checked="" type="checkbox"/>	staff	0000	
User3	<input type="checkbox"/>			
User4	<input type="checkbox"/>			
User5	<input type="checkbox"/>			
User6	<input type="checkbox"/>			
User7	<input type="checkbox"/>			
User8	<input type="checkbox"/>			
User9	<input type="checkbox"/>			
User10	<input type="checkbox"/>			
User11	<input type="checkbox"/>			

10. Users page

Up to 20 different users can be edited, each with its own credentials. To edit a user, click on the icon on the right hand side of the page. Insert name, password and set up if you wish to assign control panels to it (*pilot panels*, see Chapter 11 PILOT PANELS for further details). You can activate or deactivate it later at any time.

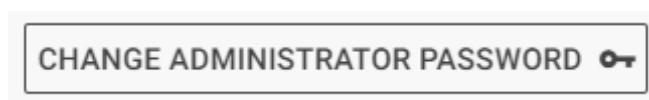
To delete user credentials, select the icon  on the right hand side.



11. Editing a user

7.1 CHANGE ADMINISTRATOR PASSWORD

On the upper-right tab, you can change the access password as administrator:



12. Change the administrator password

8. FRONT PANEL

On the FRONT PANEL page, you can set up blocking certain functions on the front panel of the eMIMO1616. This allows you to be sure that the matrix set up will not be altered by the end user, if you wish. This will avoid undue manipulation when installing audio, thus making it more robust.

Also, this page makes it possible to adjust the parameters and functions of the LCD screen on the front panel.

8.1 ALLOWED CONTROLS

Output	Volume	Source	Equalizer
OUT01: Reception	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OUT02: Corridors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OUT03: Hall ST	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OUT04: OUT4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OUT05: Restaurant	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
OUT06: Bar	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
OUT07: Pub	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
OUT08: Pool	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
OUT09: Conf. Room 1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
OUT10: Conf. Room 2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
OUT11: Conf. Room 3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
OUT12: Relax Area	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
OUT13: Sauna	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
OUT14: Offices	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
OUT15: Staff Area	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
OUT16: Parking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. FRONT PANEL page

For each zone, you can activate/block handling from the front panel for:

- **Volume:** control of the audio signal in said zone
- **Source:** select source for said zone
- **Equalizer:** control (bass-mid-treble) of the signal selected in this zone

So, as shown in the example of Figure 13, from the front panel, it is not possible to handle BAR equalization. But however, it is possible to control the volume in the zone as well as to select the audio signal.

8.2 GLOBAL PANEL LOCK

By activating the Global Panel Lock (upper right hand corner), **ALL** the handling options on the front panel are blocked, making the device into a “black box” in terms of the end user.

At any time, you can consult the information on the device by keeping the CTRL + rotating encoder keys pressed. This function is not deactivated.

8.3 LCD SETTINGS

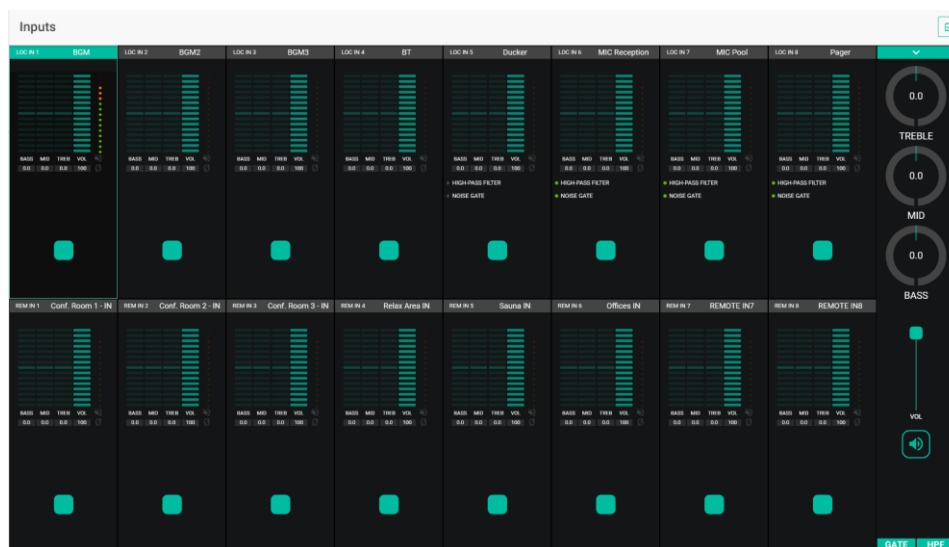
Here you can establish how the LCD screen behaves:

- **NORMAL:** The screen is always turned on.
- **DIMMED:** After 30 seconds without activity, the screen dims down the brightness. It returns to its normal status as soon as any control is handled on the front panel.
- **OFF:** after 30 seconds with no activity, the screen turns off (brightness down to a minimum). It returns to its normal status as soon as any control on the front panel is handled.

Brilliance on the screen (Backlight) and contrast in NORMAL mode can also be adjusted.

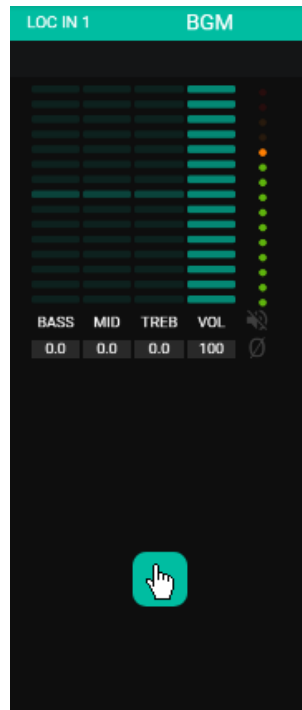
9. INPUTS

On the INPUTS page, set up the audio sources, i.e., each of the 16 audio inputs available on the eMIMO1616.




14. INPUTS page

To select an input, click on the central key for said input (see Graphic 15). Once an input is selected, it changes color, indicating that it has been selected.



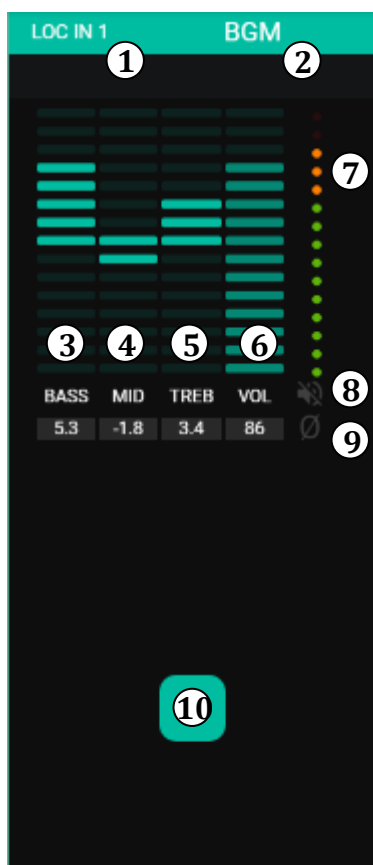
15. Selection of input

If you wish to edit several inputs at the same time, you can select several inputs by pressing the selection key for a few moments. To select all the inputs, click on the SELECT ALL icon in the upper right hand corner: 



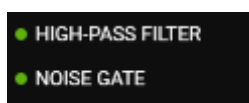
16. Selection of multiple inputs

Each input shows a summary of your current set up:



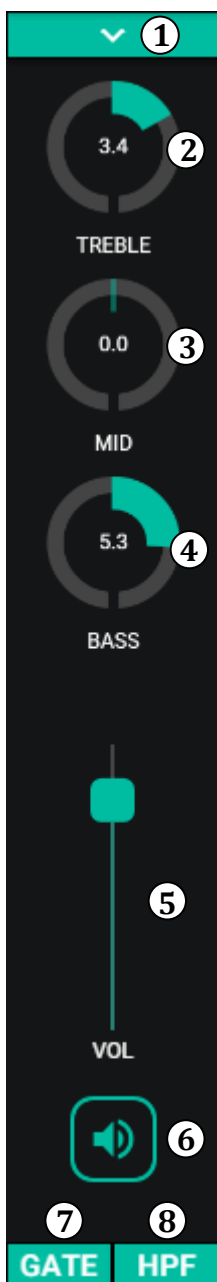
1. Indicator or local (LOC) or remote (REM) input showing the corresponding numbering.
2. Input label (editable).
3. Graphic and numerical levels of base tone control. The central position corresponds to 0: with no highlighting or attenuating.
4. Graphic and numerical levels of mid tone control. The central position corresponds to 0: with no highlighting or attenuating.
5. Graphic and numerical levels of treble tone control. The central position corresponds to 0: with no highlighting or attenuating.
6. Graphic and numerical levels of the volume control
7. Vumeter (VU) indicating the audio signal level on the input. The red LEDs indicate saturationm (CLIP) of this signal (last 12 LEDS on the VU).
8. MUTE indicator. If this is lit up, it indicates that the input has been muted.
9. Polarity indicator. If this is lit u, it indicates that ther signal has ben inverted in terms of the original.
10. Input selection button.

Also, the LOC IN5 to LOC IN8 inputs, both inclusive, incorporate active function indicators: HPF (filter-high pass) and GATE (noise port). A green LED indicates that the function is activated. For further details, turn to sections GATE / HPF in this same chapter.



18. HPF and GATE indicators

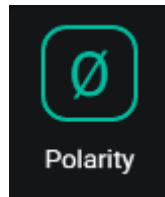
To edit these parameters, the required controls are, at all times, visible to the right of the INPUTS page:



1. Pull-down menu showing the options for changing polarity (POLARITY) and edition of the input label (LABEL).
2. Ajuste de control de tono: agudos. Una pulsación larga sobre el control lo ajusta a su posición central.
3. Adjustment of tone control: treble. One long press on the control adjusts it to its central position.
4. Adjustment of bass control: treble. One long press on the control adjusts it to its central position.
5. Volume control adjustment.
6. MUTE: mutes input signal.
7. Pull-down menu showing the set up of the noise gate (NOISE GATE). Only available for inputs from 5 to 8: microphone inputs.
8. Pull-down menu showing the set up of the high pass filter (HPF). Only available for inputs from 5 to 8: microphone inputs.

19. Controls for an input

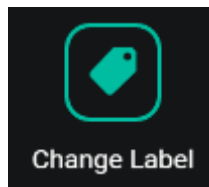
9.1 POLARITY



20. Changing polarity

Input signal polarity change: This can be useful to correct phasing problems or delays in the input signals.

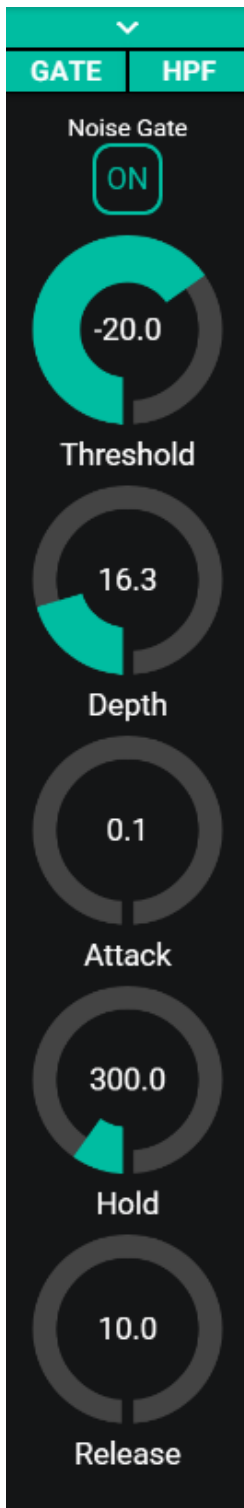
9.2 CHANGE LABEL



21. Editing an input label

This option edits the name of the input signal.

9.3 GATE

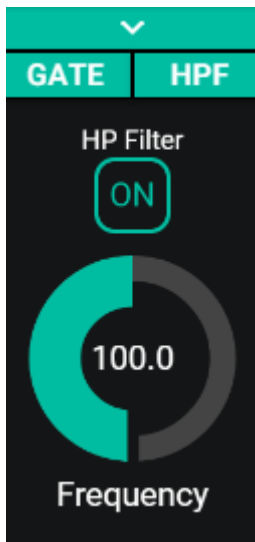


22. Set up of noise gate

Useful for attenuating or eliminating background noise picked up by the microphone (or any other source of audio especially sensitive to noise due to interference, etc.), discriminating between background noise and a valid audio signal:

- **ON/OFF:** activate/deactivate the noise gate. When in OFF mode, the other controls in this section are deactivated.
- **THRESHOLD:** detection threshold. This defines the level of input signal below which the signal would be affected by the attenuation marked by the DEPTH (closed gate). This parameter has a range from -80dB to +12dB.
- **DEPTH:** attenuation applied to the signal when it is below the detection threshold (closed gate). This parameter has a range from 0dB to -80dB.
- **ATTACK:** attack time. This determines the time taken from surpassing the threshold to cancellation of the attenuation applied to the input signal (open gate). Adjustment range from 0.1 ms to 500 ms.
- **HOLD:** maintenance time during which the gate is still open (there is no attenuation) once the signal falls again below the detection threshold. Adjustment range from 10 ms to 3 seconds.
- **RELEASE:** relaxation time. This determines the time that the gate takes to close again after the maintenance time is over. In this case, the range covers 10 ms to 1 second.

9.4 HPF



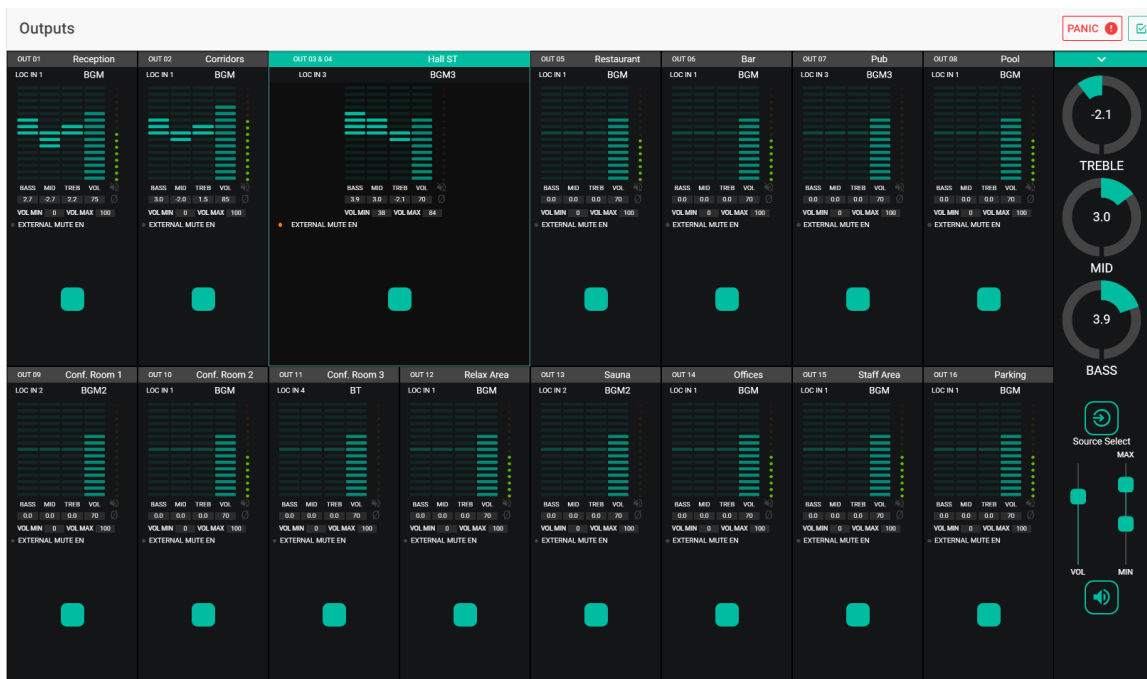
Useful for attenuating the feedback effect of a microphone (increase in low frequencies) or eliminate/attenuate background noise, handling noise, etc.:

- ON/OFF: activate/deactivate the high pass filter.
- Short filter frequency. Can be selected from 50 Hz to 150 Hz.

23. Set up of high pass filters

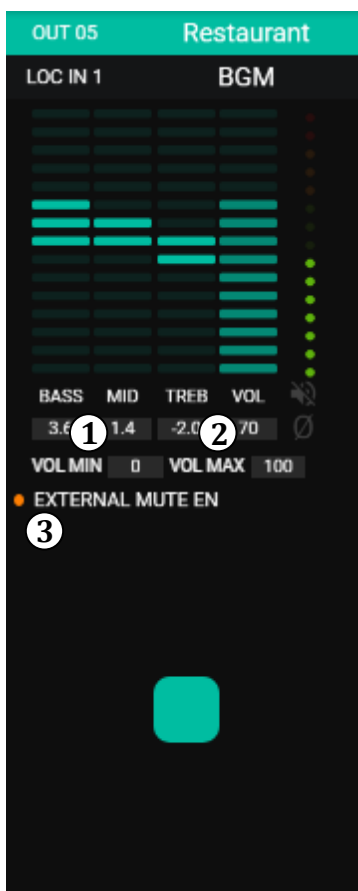
10. OUTPUTS

The OUTPUT pages make it possible to set up 16 outputs on the eMIMO1616. The graphic interface and the functioning are identical to that of the input pages, with some differences.



24. OUTPUT pages

Each output shows a summary of its current set up. Outputs have the same information as the inputs (excepting the noise gate and the high pass filters):

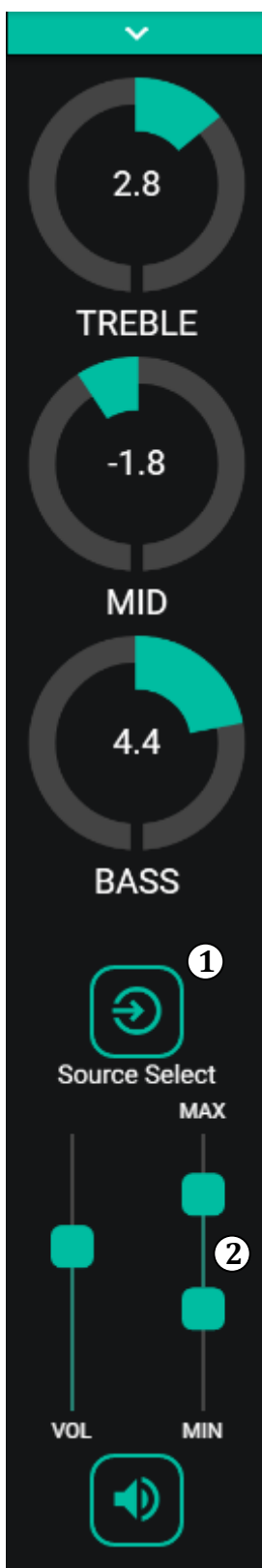


- VOL MIN: Minimum volume permitted for this (adjustable) output.
- VOL MAX: Maximum volume permitted for this (adjustable) output.
- MUTE function when closing activated/deactivated contact: an orange LED indicates that the function is activated.

N.B.: end users may only adjust the volumen in a zone (output) within the range VOL MIN. – VOL MAX.

25. Illustration of an output

To edit these parameters, at all times, you always have the required controls:

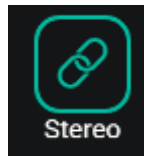


- Selecting a source: this makes it possible to select any of the 16 inputs available for the output selected.
- Minimum and maximum volume: for adjusting minimum and maximum volumes that can be reached in this zone using the corresponding volumen control.

26. Output controls

Click on the pull-down menu (as with the inputs). The options available for an output are available.

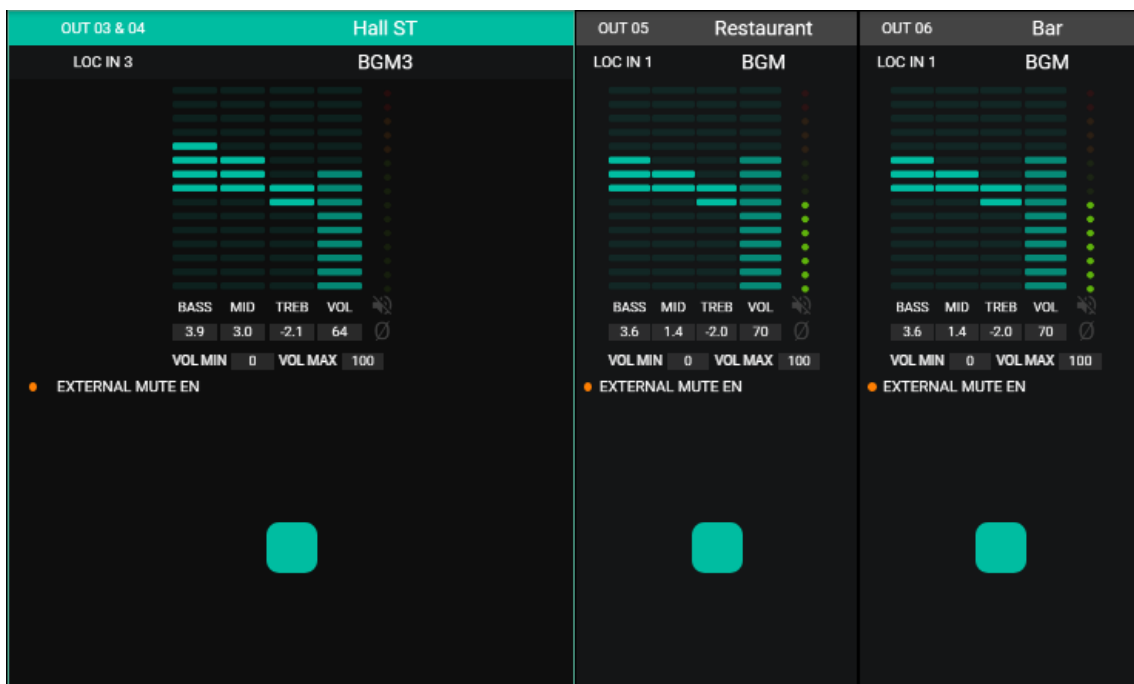
10.1 STEREO



27. Stereo pair

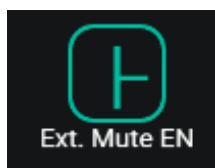
You can convert 2 mono outputs into a stereo pair (natural pairs: 1-2, 3-4, etc.) using this control. The two graphic illustrations for both mono outputs become a single one showing the information on the pair. Furthermore, automatically, a stereo signal is assigned to it as an input, the left channel is directed to the uneven output, and the right to the even pair. In the same way, any adjustment made on any of the 2 outputs (duckers, EQ, volume, etc.) will affect both.

N.B.: If a stereo input is assigned to mono output, eMIM01616 automatically converts stereo to mono (L+R).



28. Left: graphic illustration of a stereo pair.

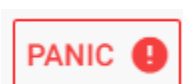
10.2 EXT. MUTE EN




29. External MUTE

Activates or deactivates muting (MUTE) in the output by closing the external dry contact, connected to the MUTE gate on the rear panel (connection to fire detecting systems, emergencies, alarms, etc.).

Finally, the outputs are fitted with a panic button (PANIC) located at the top left of the page:



30. Panic button

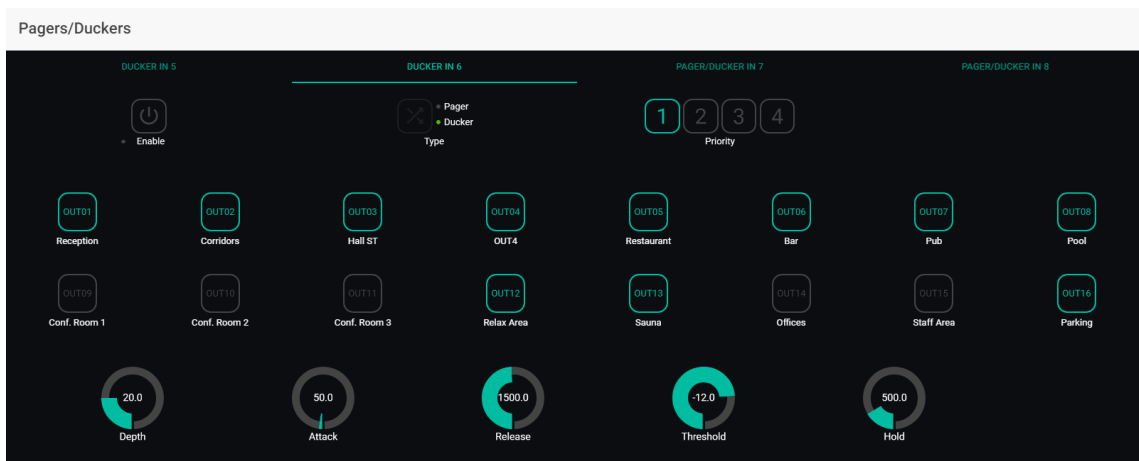
By activating this button, all output channels on the eMIMO1616 are silenced (absolute silence of the system). By deactivating this, the set up for MUTES ON or OFF are reset prior to being activated. The  icon corresponding to each output to blink after activating the PANIC button, if it has not been previously muted.

11. PAGERS/DUCKERS

On the PAGERS/DUCKERS page, up to 4 priority modules can be activated: two being only in DUCKERS mode (trigger of priority or detection of audio signal) and the other two in PAGER mode (managed by warning console, eMPAGE or DUCKER type).

11.1 DUCKERS

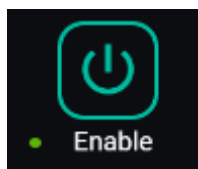
Ducker function (priority): an input can be set up with one priority over another/others, being able to attenuate and replace the audio content of certain pre-selected zones when exceeding the detection threshold. This function is essential in emergency/evacuation systems where a given alarm and/or evacuation message must be announced rather than the normal audio programme once an emergency scenario is detected.



31. PAGERS/DUCKERS page

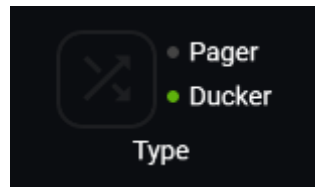
Inputs from 5 to 8 (inclusive) can be set up so that they behave like a ducker. In each ducker, the following parameters can be adjusted:

- **Enable:** activate or deactivate the ducker function for said input.



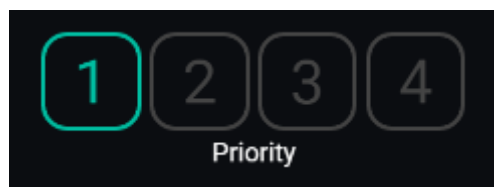
32. Enable button

- **Pager/Ducker:** in the inputs 5 and 6, this function is deactivated, and is only available for inputs 7 and 8. It communitates between the pager and ducker function, indicating the selected option with a green LED indicator.



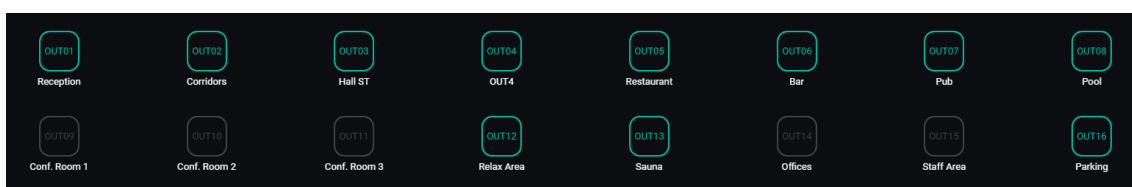
33. Pager/Ducker selector

- **Priority:** there are 4 priority levels, 1 being the máximo priority level, and 4 the minimum.
- A signal with a higher priority inhibits the others with a lower priority, whereas this keeps thje priority module active.
- A higher priority signal, if it appears another lower priority has triggered the priority module, will “expel” it from said module, taking control over it, and while keeping the priority module active.
- If two signals with the same priority coincide in time, the first to exceed the detection threshold will have priority, overlooking the others while the first keeps the module active.



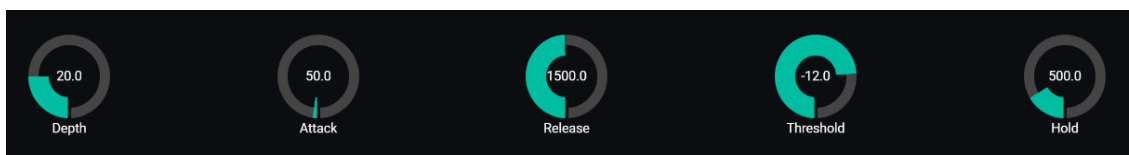
34. Selecting priority

- **Pre-selection buttons for zones:** this makes it possible to select zones to which priority messages will be sent.



35. Pre-selecting zones

- Adjusting ducker parameters:



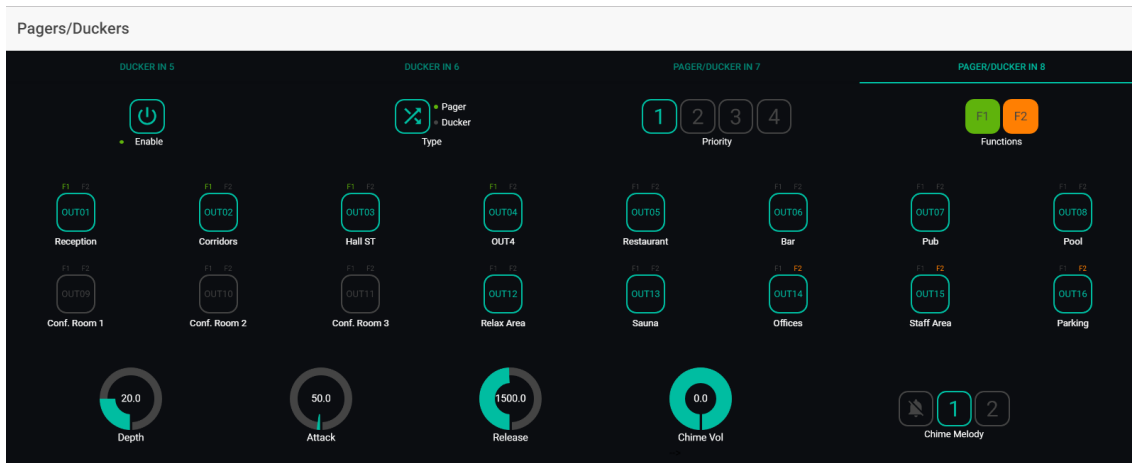
36. Adjusting ducker parameters

- **THRESHOLD:** activation threshold. When the input signal exceeds said threshold, the ducker function is activated, sending the signal to the destination zones (-80 to 12 dB).
- **DEPTH:** attenuation applied to the other signals sent to the destination zone/s during the interval in which the ducker function is active (0 to 80 dB).
- **ATTACK:** This determines the time taken from exceeding the detection threshold to the start up of the ducker (attenuation of the other signals in the destination zones is activated). The range covers from 5 ms to 2 seconds attack time.
- **HOLD:** maintenance time in which the ducker function remains active once the signal falls again below the detection threshold. Adjustment range from 10 ms to 3 seconds.
- **RELEASE:** determines the time that attenuation takes to disappear once the period determined by HOLD concludes. In this case, the range covers 50 ms to 3 seconds

11.2 PAGERS


On the same PAGERS/DUCKERS page, two priority modules can be configured in PAGER mode, A and B (managed using a paging station, like eMPAGE), assignable to audio inputs 7 and 8 of the eMIMO1616.

Pager function (priority): sends voice warning messages in real time to certain destination zones, selected by an eMPAGE type console.



37. Set up of a Pager

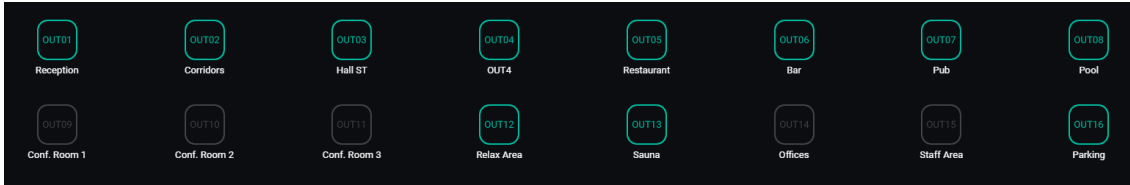
A Pager is set up in the same manner as a Ducker, with the exception of some particular characteristics:

- **Chime Vol:** reproduction volume of a chime melody (-12 to 0dB). Such a melody is mixed with the microphone signal on a PAGER input (RJ-45), leaving its volumen effective, affected by the general volumen of the input channel.
- **Selector of a chime melody:** this makes it possible to select two possible melodies (MELODY 1, MELODY 2), or none . Each time that a console starts to send a message using the PAGE key, firstly, the melody selected will be heard in the destination zones so that, following on from that, the user of the console can give leeway for the voice message.



38. Setting up the "Chime"

- **Zone enable buttons:** allow you to decide which zones a console can select as the message destination. Click on them to enable (green) or disable (gray) the corresponding zones for later selection from the front panel of the console.

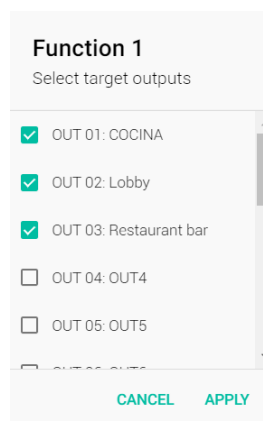


- **Special function keys F1 and F2:** makes it possible to group several zones together so that when one of these keys is selected, the warning message will reach all those that have been grouped together on said key. With two function keys.



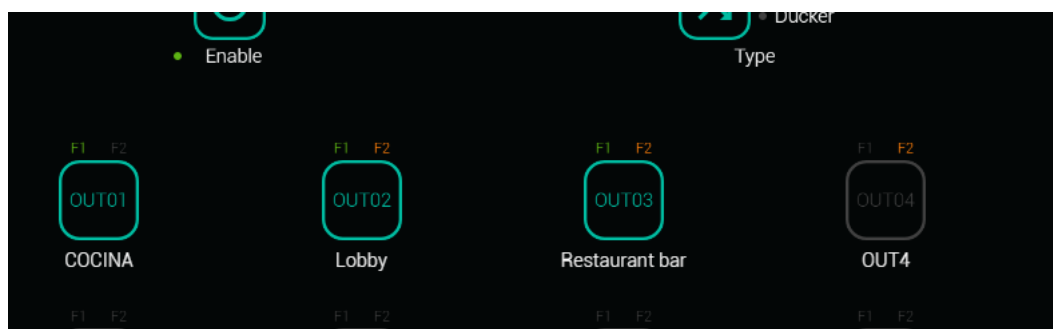
39. Function keys for grouping zones together

To select the zones grouped on the console F1 or F2 key, click on their icon in the web application and select the desired options from the drop-down menu that appears:



40. Zone grouping for the F1 key (example)

A thumbnail F1 / F2 icon will appear above each zone indicator to identify the zones grouped on these keys. In the example below, the F1 key groups the selection of zones 1, 2 and 3 and the F2 key the selection of zones 2, 3 and 4:



41. Indicators for zones grouped on F1 and F2 keys

- No HOLD setting: in the case of an eMPAGE console, the HOLD time is the time the user keeps the PAGE key pressed

12. REMOTE CONTROL PANELS

The eMCONTROL1 type remote control wall panels, connected to REMOTE ports on the rear panel of the eMIMO1616, are set up on the REMOTE PANELS page to make it possible to fully deactivate them or to activate them so that they act as a user control for an installation zone, including all or some of the following functions:

- Selection of sound source from a personalized list for each panel that includes local sources and/or the remote source itself*
- Adjust volume (with a maximum and minimum action margin) and silencing control.
- Adjustment of equalizer with 3 tone controls (BASS-MID-TREBLE).

***Remote source:** signal inputted in a WPa connection panel adjacent and complementary to an eMCONTROL1 remote control, feeding the WPa panel with a mono and balanced audio signal (line level) to the eMCONTROL1 panel. This audio signal will run from the eMCONTROL1 panel to the REMOTE port on the eMIMO1616 unit through a single CAT5 wire, along with the required control and DC power supply data.



40. WPaMIX-T combination with eMCONTROL1

The REMOTE PANELS page displays the status of the 8 panels that can be connected to an eMIMO1616 matrix:

ecler eMIMO web app		Remote Panels																																																																					
<p>Connected Logout</p> <p>admin</p> <ul style="list-style-type: none"> Configuration Users Front Panel Inputs Outputs Pagers/Duckers Remote Panels Pilot Panels Help 	<table border="1"> <thead> <tr> <th>Wall Panels</th> <th colspan="4">Status</th> <th>Options</th> </tr> </thead> <tbody> <tr> <td>● WP1. REMOTE 1</td> <td>EN</td> <td>VOL</td> <td>SRC</td> <td>EQ</td> <td></td> </tr> <tr> <td>● WP2. REMOTE 2</td> <td>EN</td> <td>VOL</td> <td>SRC</td> <td>EQ</td> <td></td> </tr> <tr> <td>● WP3. REMOTE 3</td> <td>EN</td> <td>VOL</td> <td>SRC</td> <td>EQ</td> <td></td> </tr> <tr> <td>● WP4. REMOTE 4</td> <td>EN</td> <td>VOL</td> <td>SRC</td> <td>EQ</td> <td></td> </tr> <tr> <td>● WP5. mmm555</td> <td>EN</td> <td>VOL</td> <td>SRC</td> <td>EQ</td> <td></td> </tr> <tr> <td>● WP6. REMOTE 6</td> <td>EN</td> <td>VOL</td> <td>SRC</td> <td>EQ</td> <td></td> </tr> <tr> <td>● WP7. REMOTE 7</td> <td>EN</td> <td>VOL</td> <td>SRC</td> <td>EQ</td> <td></td> </tr> <tr> <td>● WP8. REMOTE 8</td> <td>EN</td> <td>VOL</td> <td>SRC</td> <td>EQ</td> <td></td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Pagers</th> <th colspan="2">Status</th> <th>Options</th> </tr> </thead> <tbody> <tr> <td>● PAGERA. PAGER A</td> <td>EN</td> <td></td> <td></td> </tr> <tr> <td>● PAGERB. PAGER B</td> <td>EN</td> <td></td> <td></td> </tr> </tbody> </table>					Wall Panels	Status				Options	● WP1. REMOTE 1	EN	VOL	SRC	EQ		● WP2. REMOTE 2	EN	VOL	SRC	EQ		● WP3. REMOTE 3	EN	VOL	SRC	EQ		● WP4. REMOTE 4	EN	VOL	SRC	EQ		● WP5. mmm555	EN	VOL	SRC	EQ		● WP6. REMOTE 6	EN	VOL	SRC	EQ		● WP7. REMOTE 7	EN	VOL	SRC	EQ		● WP8. REMOTE 8	EN	VOL	SRC	EQ		Pagers	Status		Options	● PAGERA. PAGER A	EN			● PAGERB. PAGER B	EN		
Wall Panels	Status				Options																																																																		
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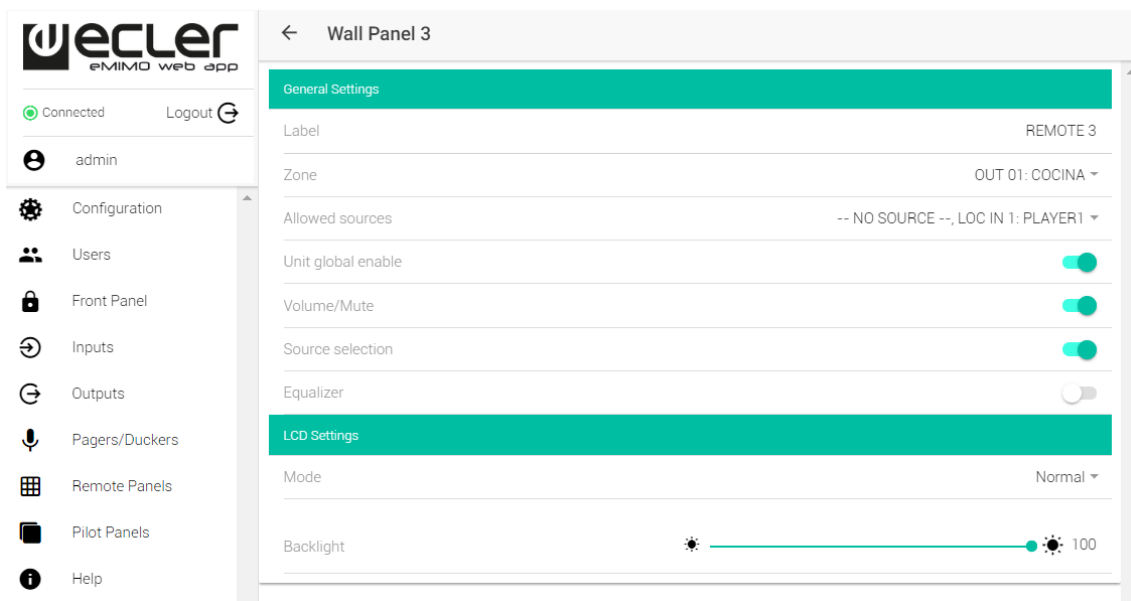
43. REMOTE PANELS page

The round indicator to the left of the remote panel indicates its status: disconnected (gray) or physically connected (green) to the eMIMO1616 unit.

For remote controls such as eMCONTROL1, the Status column has the following indicators:

- **EN:** enabled (green) or disabled (gray) – status of the unit
- **VOL:** volume adjustment function enabled (green) or disabled (gray) on the unit
- **SRC:** source selection function enabled (green) or disabled (gray) on the unit
- **EQ:** equalization adjustment, or tone control, enabled (green) or disabled (gray) on the unit

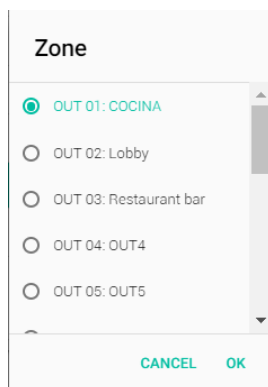
Clicking on the edit icon in the Options column takes you to the following configuration window:



41. eMCONTROL1 Adjustment parameters

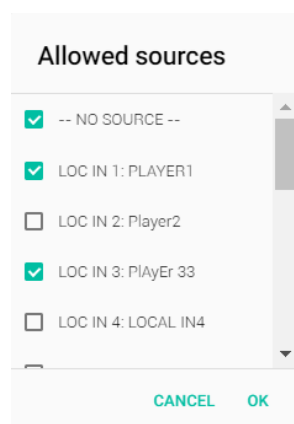
The parameters to edit / configure in this window, for each remote control panel such as eMCONTROL1, are:

- **Label:** name assigned to the panel. Editable
- **Zone:** zone (eMIMO161616 output) under control from the remote panel. Selectable from a drop-down menu:



42. Selección de zona bajo control

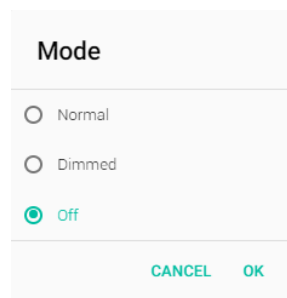
- **Allowed sources:** list of music sources (eMIMO161616 inputs) that can be selected from the remote panel to diffuse in the zone under its control. Selectable from a drop-down menu:



43. Lista de fuentes seleccionables

- **Unit global enable:** enables (green) or disables (gray) the remote panel completely. Alternate between these two states by clicking on it.
- **Volume/Mute:** enables (green) or disables (gray) the volume adjustment (encoder rotation) and Mute (long press on the encoder) functions of the remote panel for the zone under its control. Alternate between these two states by clicking on it.
- **Source selection:** enables (green) or disables (gray) the remote panel source selection function for the zone under its control. Alternate between these two states by clicking on it.

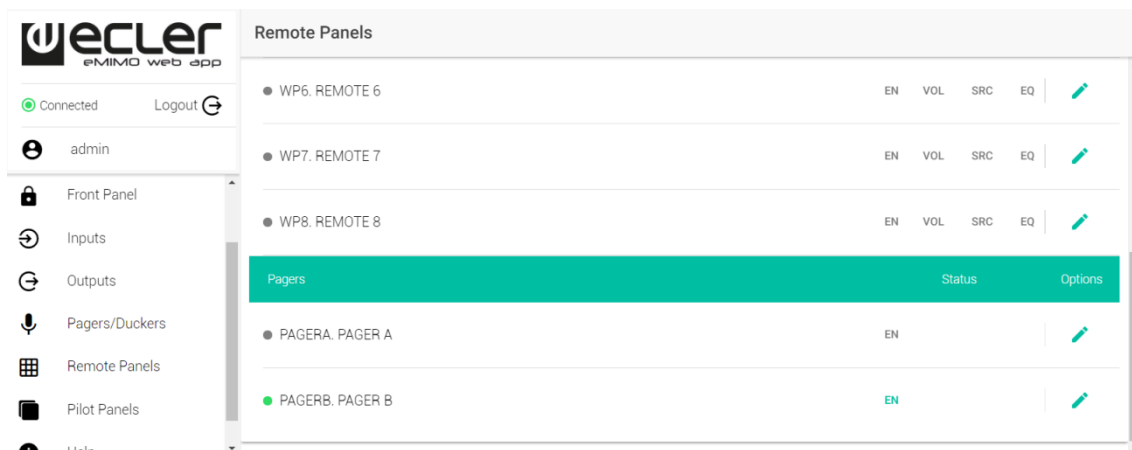
- **Equalizer:** enables (green) or disables (gray) the equalization (tone control) function of the remote panel for the zone under its control. Alternate between these two states by clicking on it.
- **LCD Settings, Mode:** remote panel backlight behavior after a 20-second period of no activity on your hardware controls. The options are: Normal (remains unchanged), Dimmed (backlight dimmed) or Off (backlight completely turned off). Selectable from a drop-down menu:



44. Retroiluminación en modo reposo

- **Backlight:** intensity of the remote panel backlight under operating conditions. Variable setting from 0 to 100.

On the same page it is possible to view the status of the eMPAGE paging stations connected (or not) to the eMIMO1616 unit:

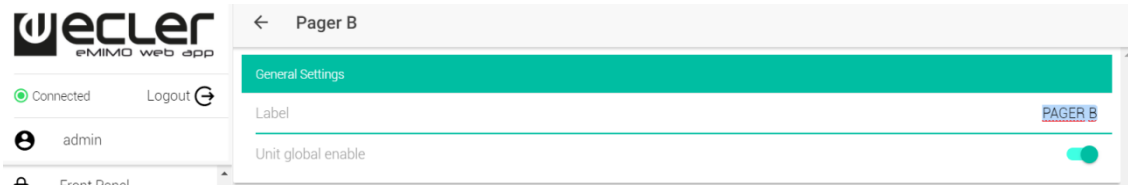


45. Estado de consolas eMPAGE

The round indicator to the left of each paging station indicates its status: disconnected (gray) or physically connected (green) to the eMIMO1616 unit.

In the Status column, the text EN (ENABLE) in green indicates that the console is enabled (available for use), and the text in gray indicates that it is disabled.

Clicking on the edit icon in the Options column takes you to the following configuration window:



46. Configuración de consolas eMPAGE

The name of each station can be edited and its enabled or disabled status can be changed.

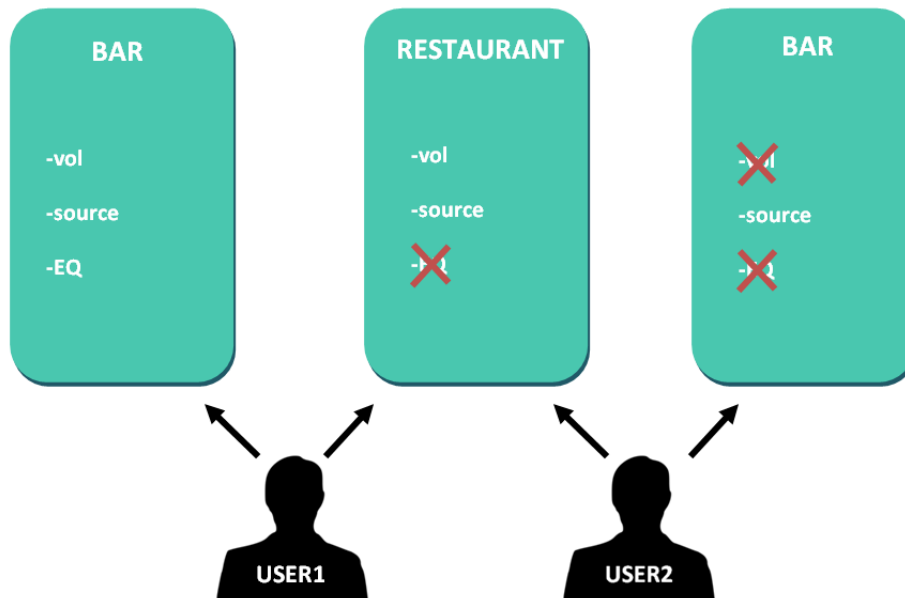
13. PILOT PANELS

On the PILOT PANELS page, the administrator sets up the control panels that the users will handle using external devices, running the *eMIMO pilot* application (consult Chapter 13 for Android and iOS APP for further details) or standard web browsers after identifying themselves with their credentials. Up to 32 pilot channels can be created, each one of which with its own set up.

Pilot Panels									
Pilot	Status					Options			
Reception	EN	PUB	VOL	SRC	EQ				
Corridors	EN	PUB	VOL	SRC	EQ				
Hall	EN	PUB	VOL	SRC	EQ				
Restaurant	EN	PUB	VOL	SRC	EQ				
Staff Area	EN	PUB	VOL	SRC	EQ				
Pub	EN	PUB	VOL	SRC	EQ				

47. PILOT PANELS page

A *pilot panel* is a series of controls for a zone (or eMIMO1616 audio output) that can be handled by one or several users. The controls that can be accessed on a *pilot panel* are: volume, selection of sources and equalizing. Each of these 3 controls can be activated or deactivated on *pilot panel*.



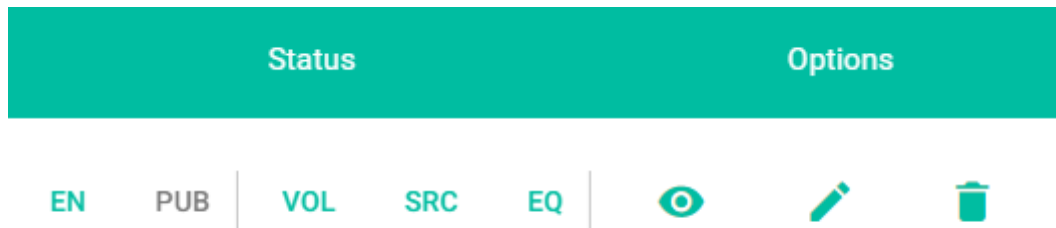
48. Example of a set up for *pilot panels*

In this manner, the same user can control different zones (or *pilot panels*), on each of them, will have control over the functions that may be allowed (volume, selection of source, EQ). Also, the same given zone can be controlled by different users, but with different permissions (two *pilot panels*): in the previous example (Graphic 42), User 1 has access to all the controls for the bar, but however, User 2 can only handle selection of source.

Each user visualizes on his/her application (website/iOS/Android) only the *pilot panels* to which he/she has access. In the same manner, he/she only visualizes the controls that are activated on said *pilot panels*.

Application for Android and iOS, to control the available *pilot panels*: **eMIMO pilot** (consult Chapter 13 for Android and iOS APP for further details).

On the PILOT PANELS page, there is a summary of the panels created (see Graphic 41). On the right of the name of the *pilot panel* appear the options available:







49. Pilot panel options

13.1 STATUS

- **EN:** Activated/deactivated. A pilot panel can be activated or deactivated by accessing the editing page for the same.
- **PUB:** If displayed green, this indicates that the pilot panel is public, i.e., all users have access to the pilot panel.
- **VOL:** If green, the volume (and MUTE) control is activated on the pilot panel.
- **SRC:** If green, source selection is activated on the pilot panel.
- **EQ:** If green, equalization is activated on the pilot panel.

13.2 OPTIONS

To create a new pilot panel, click on the button  in the lower right hand corner. On the set up page for a *pilot panel*, the following options are available:

-  : Preview of the pilot panel.
-  : Editing page for the pilot panel.
-  : Delete the pilot panel.

13.3 GENERAL

General	
Enable	<input checked="" type="checkbox"/> Public <input type="checkbox"/>
Label	Pilot7
Users	manager , staff ▾
Zone	Corridors ▾

50. Pilot panel editing: General

- **Enable:** activate/deactivate the *pilot panel*
- **Public:** determines if it is public or otherwise. If deselected, users should select with access to this *pilot panel*.
- **Label:** a name can be given to this *pilot panel*, e.g. the name of the zone under control.
- **Users:** selection of users with access to the *pilot panel*.
- **Zone:** zone (audio output) under control.

13.4 VOLUME CONTROL

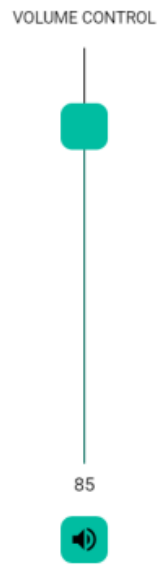
Volume Control	
Enable	<input checked="" type="checkbox"/>
Label	VOLUME CONTROL
Style	Slider ▾

51. Editing *pilot panel*: Volume Control

- **Enable:** activate/deactivate the volume control for the zone selected.
- **Label:** possible to give a name to this volume control that will be displayed on the control panel.
- **Style:** for selecting the type of control for the volume.



52. Knob

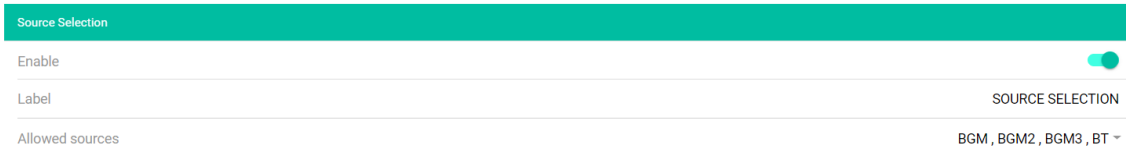


53. Slider



54. Up/Down

13.5 SOURCE SELECTION



55. Editing the *pilot panel*: Source Selection

- **Enable:** activate/deactivate the source selection for the selected zone
- **Label:** name the source selection control to be displayed on the control panel.
- **Allowed sources:** Allowed sources. Select the audio sources that will be available for your selection in this zone. You can limit the number of sources available in a zone or leave them all accessible. The application will automatically draw the zone selection control.

N.B.: the end user will only be able to select a source from the previous list simultaneously.

SOURCE SELECTION



56. Selecting a source: 4 sources available

SOURCE SELECTION



57. Selecting a source: 16 sources available

13.6 EQUALIZER

Equalizer	
Enable	<input checked="" type="checkbox"/>
Label	BASS-MID-TREBLE
Style	Slider ▾

58. Editing the *pilot panel*: Equalizer

- **Enable:** activate/deactivate the equalizer for the selected zone.
- **Label:** you can give a name to this equalizer control, which will be displayed on the control panel.
- **Style:** you can select the type of equalizer control.

BASS-MID-TREBLE



TREB



MID



BASS

59. Knob

BASS-MID-TREBLE



TREB
1.5



MID
-2



BASS
3

60. Slider

13.7 COLOUR

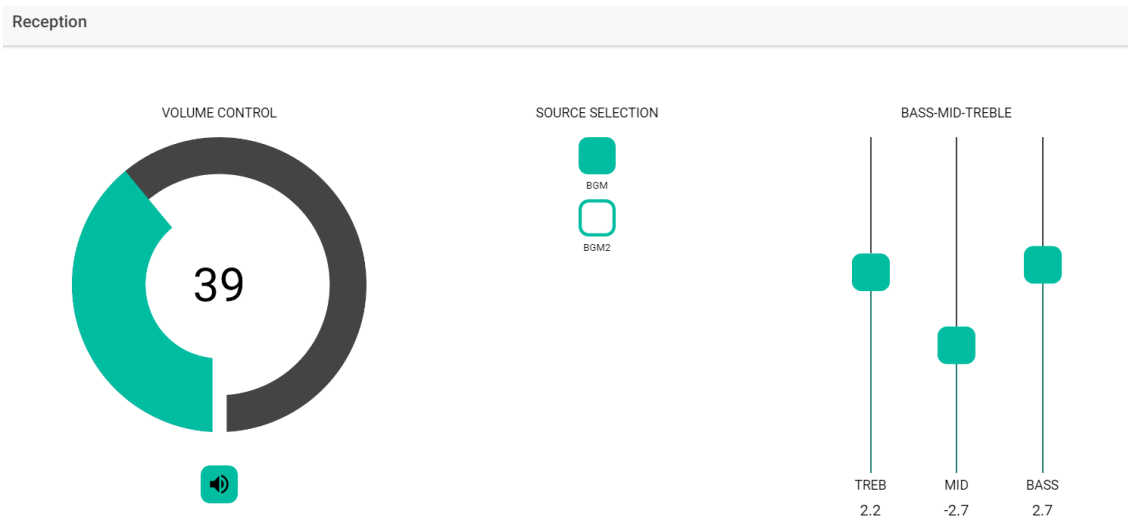
You can personalize the user controls for colour. Throughout the range of colours, you can adjust the transparency to achieve other tones.



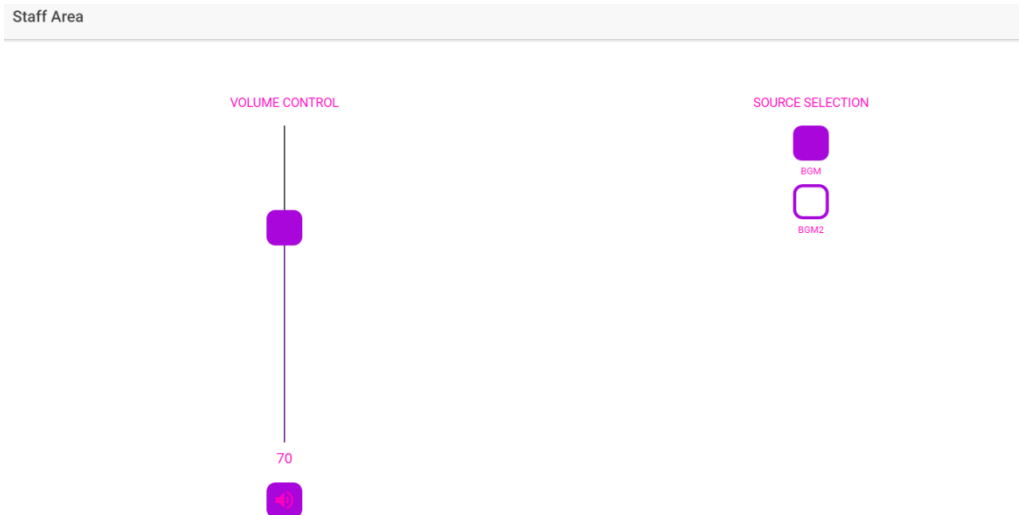
61. Colour

- **Controls:** main colour of the controls.
- **Text:** text colour.
- **Background:** background colour.

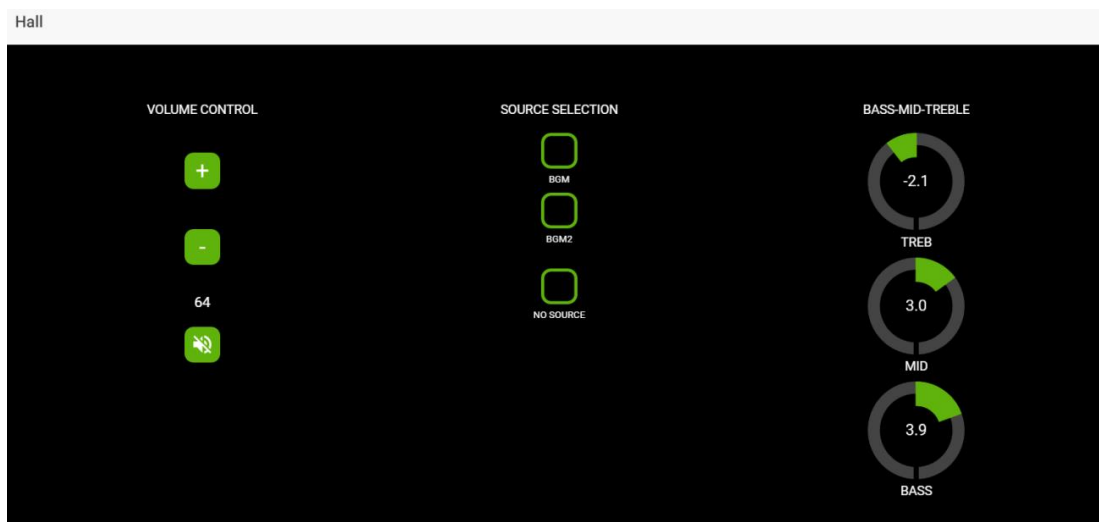
See below for some examples of *pilot panels*.



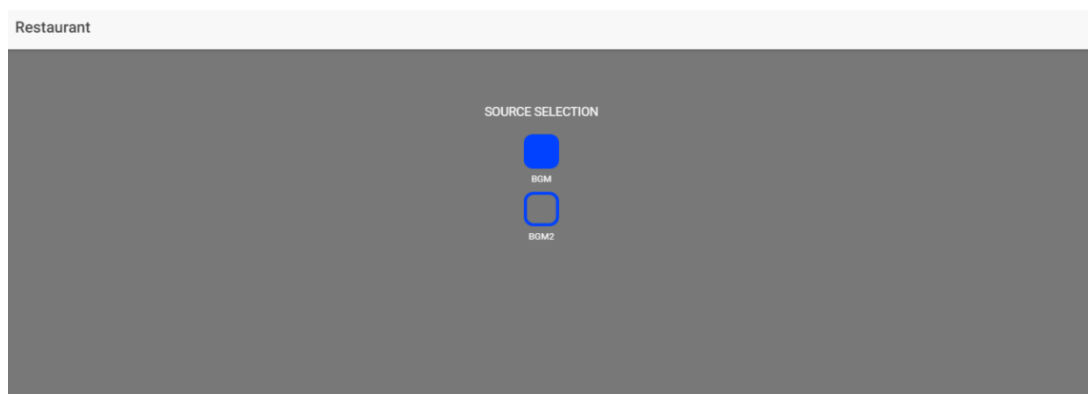
62. Example of a *pilot panel*: Reception



63. Example of a *pilot panel*: Staff Area



64. Example of a *pilot panel*: Hall



65. Example of *pilot panel*: Restaurant

14. ACCESSING THE WEB APPLICATION AS A USER

A user can control his/her pilot panels from a smart device by previously installing the eMIMO pilot application available on Google Store and Apple Store (see Chapter 13 for Android and iOS APP). But, it is also possible to access these *pilot panels* from any web browser. In this latter case, quite simply open your browser, type in the IP on the browser unit of the **eMIMO1616** unit that you wish to control, and type in your credentials for access (this is provided by the administrator).

N.B. the client device (computer, tablet, Smartphone, etc.) executing the eMIMO pilot application (or a web browser) to access *pilot panels* should be connected to the same local network that the **eMIMO1616** unit is aimed at, and that acts as a server for the pilot panels, and in the same IP range as this.

11.11.1.111



Username

manager

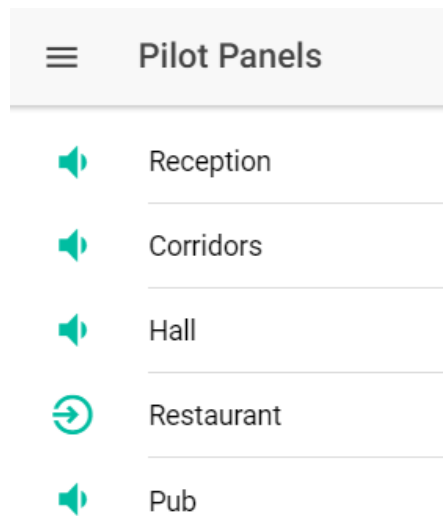
Password

....

SIGN IN

66. Access as a user

A list of panels assigned to its own user will be displayed.



67. List of panels assigned to a user

Now you can start to use your eMIM01616!

15. Android & iOS APP

eMIMO pilot is an application for end user remote control for one or more zones in an installation managed by an **eMIM01616** audio digital matrix. The application can be downloaded free of charge from outlets:



68. eMIMO pilot logo

Each user can access to the control panels through their account's credentials that have been assigned to them. The privileges of said account are previously configured by the Administrator of the unit eMIMO1616.

Once the application is opened for the first time, it must connect to an eMIMO1616 device. There are 2 ways to make this connection: automatically (autodiscovery) or manually (by entering the device's IP address).

15.1 AUTODISCOVERY

This feature automatically displays the eMIMO1616 devices available on your local network. To do this, press the "Discover devices" button at the bottom of the screen.

☰ Login

ecler
eMIMO pilot app

Username
admin

Password
.....

SIGN IN

DEMO mode

🔍 DISCOVER DEVICES

69. Discover devices, located at the bottom of the screen

Then a list of all accessible devices on your network will be displayed. If you manage different devices on different networks, all the devices you have discovered will appear here, marking with a green LED those available for connection.

Discovered Devices



● eMIMO1616
IP: 11.11.1.127

CONNECT MANUALLY

73. List of available devices

Finally, select the device you want to connect to.

The last device will be remembered by the application, so when you reopen eMIMO pilot, it will not be necessary to establish a new connection. The device will appear as connected if it is on the same network.

☰ Login



Username

admin

Password

••••

SIGN IN

Device: eMIMO1616 - 11.11.1.127

DEMO mode

🔍 DISCOVER DEVICES

70. When opening the application again, the last device is remembered

Device: eMIMO1616 - 11.11.1.127

71. Green LED indicates the device is connected

Device: eMIMO1616 - 11.11.1.127

72. IF the LED is not lit, check that both devices, eMIMO1616 and mobile device, are on the same local network

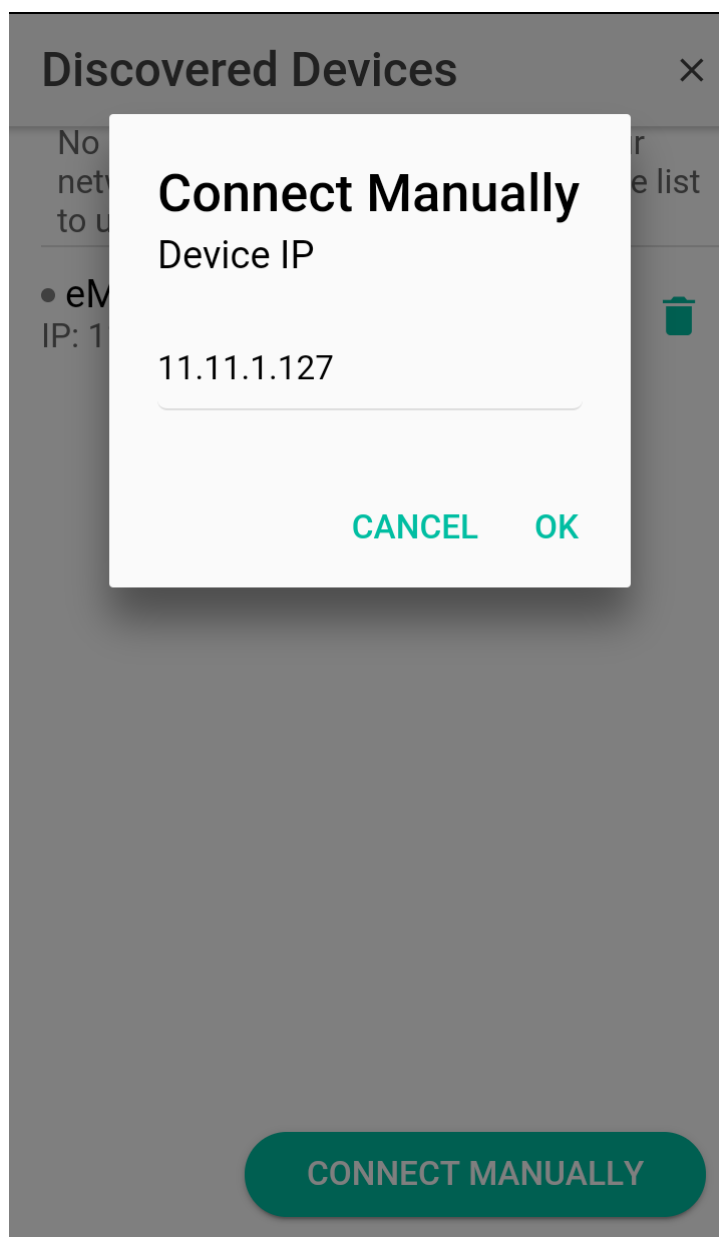
15.2. MANUAL CONNECTION

eMIMO pilot also has the option of establishing a manual connection by entering the IP address of the device. To do this, on the Discovered Devices page press the Connect Manually button, located at the bottom.



73. Connect Manually button

A new window will open where you must enter the IP address of the device to which you want to connect.



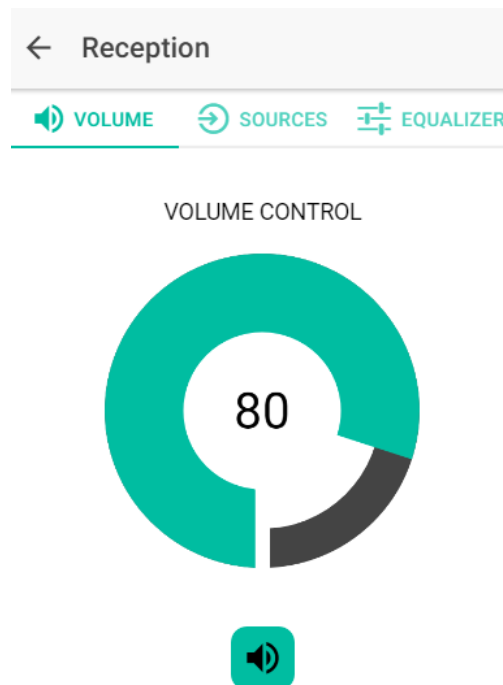
74. Manual connection

Once a first connection has been established, either automatically or manually, the user can start piloting their eMIM01616.

The user “manager” displays the pilot panels that the administrator of the eMIM01616 system has assigned to him. By clicking on any pilot panel in the list, you can modify those controls to which you have access.

☰ Pilot Panels		
🔊	Reception	→
🔊	Corridors	→
🔊	Hall	→
🔄	Restaurant	→
🔊	Pub	→

75. List of pilot panels available for the user "manager"




76. Volume control of the "Reception" zone

15.2 DEMO MODE

If you still do not have an eMIMO1616, you can start your pilot tests by using the demo mode. Just type in a user name (any), select DEMO mode and access the application. It is not essential to connect to an eMIMO1616 device when in this mode.

☰
Login



Username

Password

SIGN IN

Device: eMIMO1616 - 11.11.1.127

DEMO mode

🔍
 DISCOVER DEVICES

77. Demo mode



All product characteristics are subject to variation due to production tolerances. **NEEC AUDIO BARCELONA S.L.** reserves the right to make changes or improvements in the design or manufacturing that may affect these product specifications.

Motors, 166-168 08038 Barcelona - Spain - (+34) 932238403 information@ecler.es www.ecler.com