

USER'S MANUAL – Part 1



Configurator

VERSION: **0.2.2.1**

CONTENT

PART 1

1. INTRODUCTION	3
1.1. Installation	3
1.2. Login.....	4
2. OVERVIEW AND PREFERENCES	5
2.1. User Interface Description	5
2.1.1. "Project" menu	6
2.1.2. "View" menu	7
2.1.3. "Tools" menu	8
2.1.4. "Help" menu.....	9
2.2. Preferences	10
2.2.1. Language preferences.....	10
2.2.2. Time & Date preferences.....	11
2.2.3. Users preferences	12
2.2.4. Contact info preferences.....	13
3. PROJECT SETUP.....	15
3.1. New project.....	15
3.2. Add devices	15
3.2.1. Controller.....	16
3.2.2. PA Microphones	16
3.2.3. E Microphones.....	18
3.2.4. PA Zone Controllers	20
3.3. Assign devices.....	22
3.3.1. Assign the system controller	23
3.3.2. Assign PA or E microphones	25
3.4. Link System	26
3.4.1. Import System	26
3.4.2. Export System	26
3.4.3. Unlink system	27
3.5. Update devices firmware	27

4. SYSTEM CONFIGURATION.....	29
4.1. System Devices View	31
4.1.1. Root.....	31
4.1.2. Microphones.....	33
4.1.3. Controllers.....	33
4.1.4. Extensions.....	41
4.1.5. Accessories.....	41
4.2. Public Address System View	43
4.2.1. Root.....	43
4.2.2. Sources	44
4.2.3. Matrix	47
4.2.4. Zones	48
4.3. Voice Alarm System View.....	52
4.3.1. Root.....	52
4.3.2. Sources	53
4.3.3. Matrix	56
4.3.4. Zones	57

PART 2

5. EVENTS.....	
5.1. Triggers	
5.2. Conditions	
5.3. Actions	
5.4. Event creation	
5.5. Examples	
5.5.1. Sequence of evacuation: alternating EVAC and ALERT	
5.5.2. Integration with a Fire Alarm Panel.....	
5.5.3. Scheduled announcements	
5.5.4. Route sources and play messages from MPS-8Z.....	

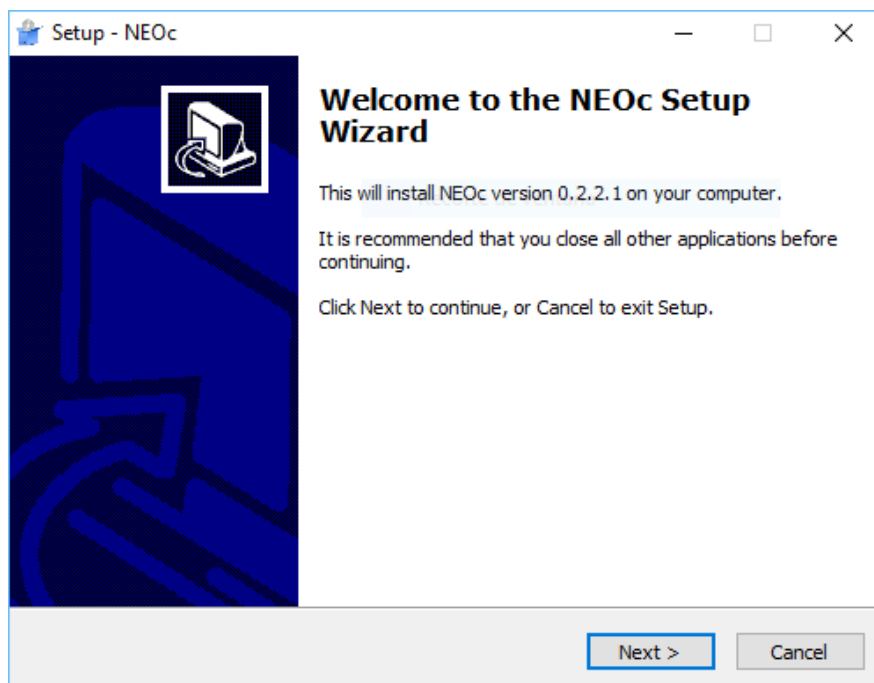
1. INTRODUCTION

NEO Configurator is a simple and intuitive computer interface that allows to configure the most advanced and powerful parameters of NEO system. NEO Configurator is intended mainly for installers and distributors, however, thanks to the possibility of configure different user profiles, it is also a good tool for basic operation of the system from remote computers.

The instructions and screenshots included in this user's manual correspond to NEO Configurator version 0.2.2.1.

1.1. Installation

LDA Audio Tech provides the installer for NEO Configurator in an executable file. Simply follow the instruction of the setup wizard to install the software in the computer.



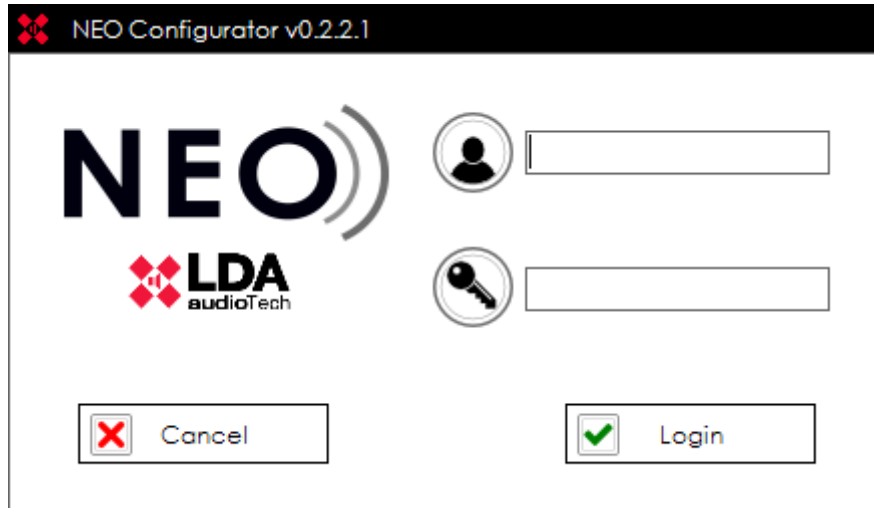
Compatible operating systems:

- Windows XP
- Windows Vista
- Windows 7
- Windows 8
- Windows 8.1
- Windows 10

NOTE: It is recommended to run NEO Configurator always as *Administrator*.

1.2. Login

Every time NEO Configurator runs, a login screen will appear:



Introduce your user name and password and then click "Login".

NOTE: The default user after a clean installation is:

User: default

Password: 1234

The profile for this default user is *Installer* (see **2.2.3. Users preferences**).

2. OVERVIEW AND PREFERENCES

2.1. User Interface Description

After NEO Configurator is opened, you get a blank window with no project loaded as shown below:



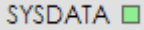
The **menu bar** at the top contains 4 menus: *Project*, *View*, *Tools* and *Help*. They are all described in the sections 2.1.1 to 2.1.4.

At the top right hand corner is shown the **user name** and **user profile**:







The **status bar** at the bottom includes the following status indicators:

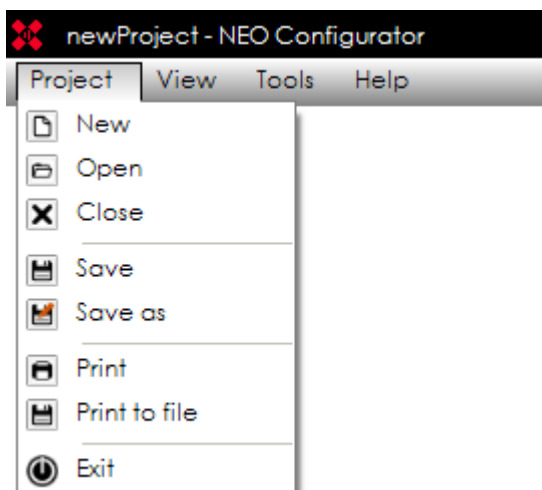
- **SYSCTRL:** This status has 3 indicators:
 - **Indicator 1:** SYSCTRL The system (project in NEO Configurator) has a Controller.
 - **Indicator 2:** SYSCTRL The Controller in NEO Configurator is assigned to a physical controller.
 - **Indicator 3:** SYSCTRL NEO Configurator can “see” the assigned physical controller in the network (so it is possible to *live link* to the device).
- **SYSLINK:** SYSLINK The system (NEO Configurator) is *live linked* with the physical system. Every change made in NEO Configurator is updated instantly in the physical system and vice versa.

- **SYSDATA:**  The project in NEO Configurator is synchronized with the physical system, so all the parameters are the same in NEO Configurator and the device. NEO Configurator must be live linked (SYSLINK on) in order to check the sync status. After a change is made in either side, the indicator will turn black briefly until the change is updated in both ends (NEO Configurator and the physical device).

NOTE: Some short blinking of SYSDATA may happen during normal operation.

- **EMG:**  It reports NEO is in emergency state.
- **FLT:**  It reports NEO is reporting any fault.
- **DIS:**  It reports one or many zones in NEO are disarmed.
- **UPDATING:**  It indicates when NEO Configurator is sending data to the physical device when exporting a project (see **3.4. Link System**).

2.1.1. "Project" menu



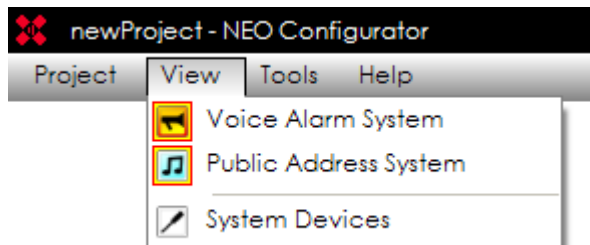
- **NEW:** Creates a new Project with its corresponding views (see **3.1. New project**). The default name for the new project is "*newProject.neo*".
- **OPEN:** Opens an existing project. If the project already had added devices, they will appear in the "Devices view".
- **CLOSE:** Closes the current project.
- **SAVE:** Saves the complete project with the current name and location. For new projects the "SAVE AS" window will appear instead.
- **SAVE AS:** Saves the complete project with a name and location chosen by the user.

NOTE: You can only save a project if your user profile is *Installer* (see **2.2.3. Users preferences**).

- **PRINT:** Automatically generates a system report with all the configurations and parameters of the system and prompt you to print it with a system printer. The detail level of this report will depend on the user profile (see **2.2.3. Users preferences**).
- **PRINT TO FILE:** Automatically generates a system report with all the configurations and parameters of the system and prompt you to save it as PDF in the computer. The detail level of this report will depend on the user profile (see **2.2.3. Users preferences**).
- **EXIT:** Exits the software.

NOTE: *Adobe Acrobat Reader* is required to ensure the proper operation of the *PRINT* function.

2.1.2. "View" menu



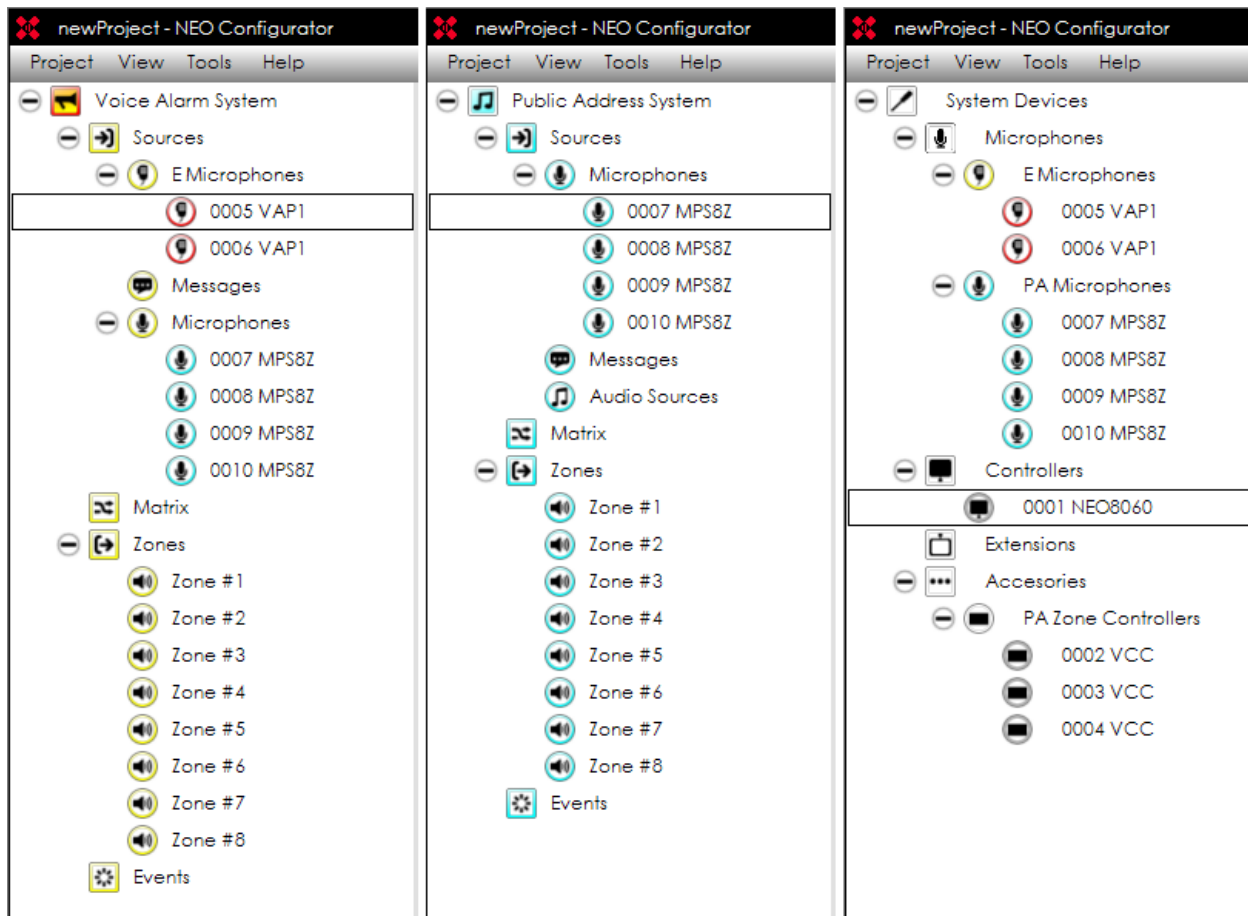
From this menu, you can select any of the 3 *System Views*:

- Voice Alarm System
- Public Address System
- System Devices

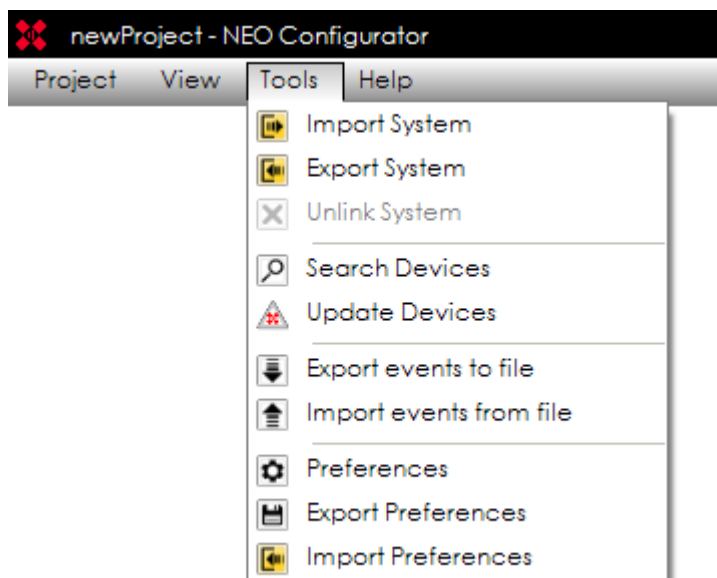
The *System Views* allows configuring and setting up all the parameters of the system. It is the main functional area of NEO Configurator. Each one of these views are shown in the left panel of the main window (see screenshots below).

A detailed description of every System View is explained in chapter **4. SYSTEM CONFIGURATION**.

NOTE: *View* menu is only active when there is an open project.



2.1.3. "Tools" menu

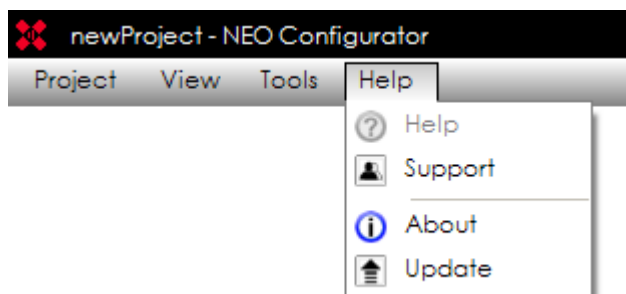


- **IMPORT / EXPORT / UNLINK SYSTEM:** These tools are used to *live link* and unlink NEO Configurator to the physical system (see **3.4. Link System**).

- **SEARCH DEVICES:** Loads the NEO Discovery tool that allows assigning a NEO Configurator project to a physical system (see **3.3. Assign devices**).
- **UPDATE DEVICES:** Loads a tool to update the firmware of NEO devices (see **3.5. Update devices**).
- **EXPORT / IMPORT EVENTS FROM / TO FILE:** Saves into a computer file all the events created in the system (see chapter **5. EVENTS** to know more about events).
- **PREFERENCES:** Edit the general preferences of NEO Configurator software (see **2.2. Preferences**). These preferences are common to all the projects opened from the same computer.
- **EXPORT / IMPORT PREFERENCES:** Saves into a computer file all the preferences of NEO Configurator software.

NOTE: Some tools may be restricted depending on your user profile (see **2.2.3. Users preferences**).

2.1.4. "Help" menu



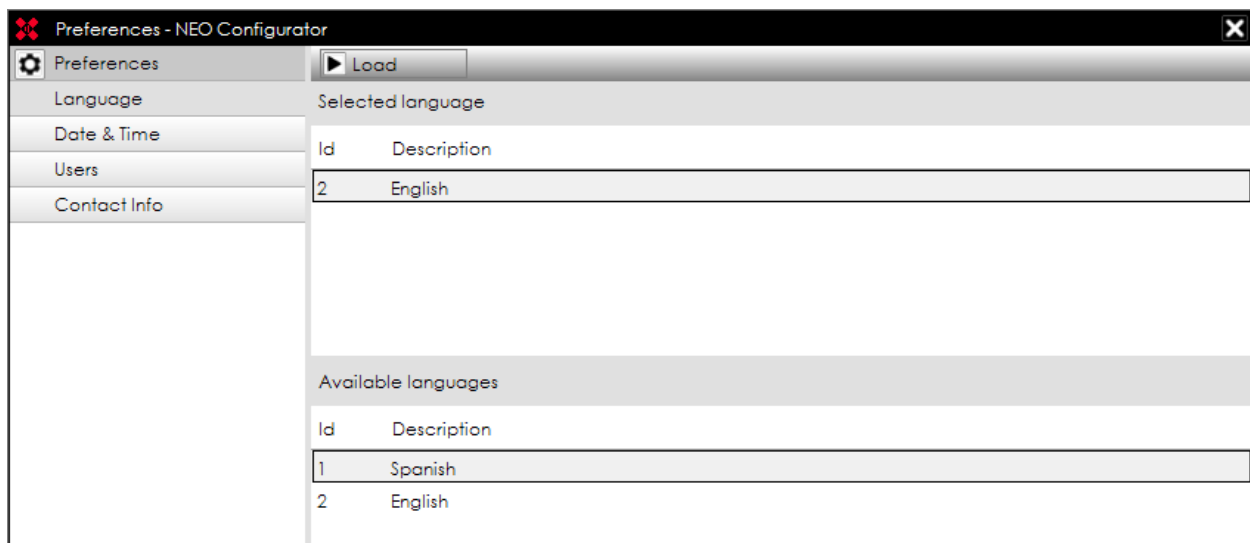
- **HELP:** Displays the help documents of the project. This option is not yet implemented in this version.
- **SUPPORT:** Displays contact information for the user. Additional support information can be added in this window from *Contact info preferences* (see **2.2.4**). Only the *Installer* can edit this information (see **2.2.3**).
- **ABOUT:** Displays version number and manufacturer information.
- **UPDATE:** Check with LDA Audio Tech servers if a new version of NEO Configurator is available. This option is not implemented yet in this version.

2.2. Preferences

From the *Tools* menu you can open the *Preferences* window to configure NEO Configurator software. This window contains 4 tabs: Language, Date & Time, Users, Contact Info.

NOTE: You can only access to *Preferences* if your user profile is *Installer* or *Maintainer* (see 2.2.3. *Users preferences*).

2.2.1. Language preferences



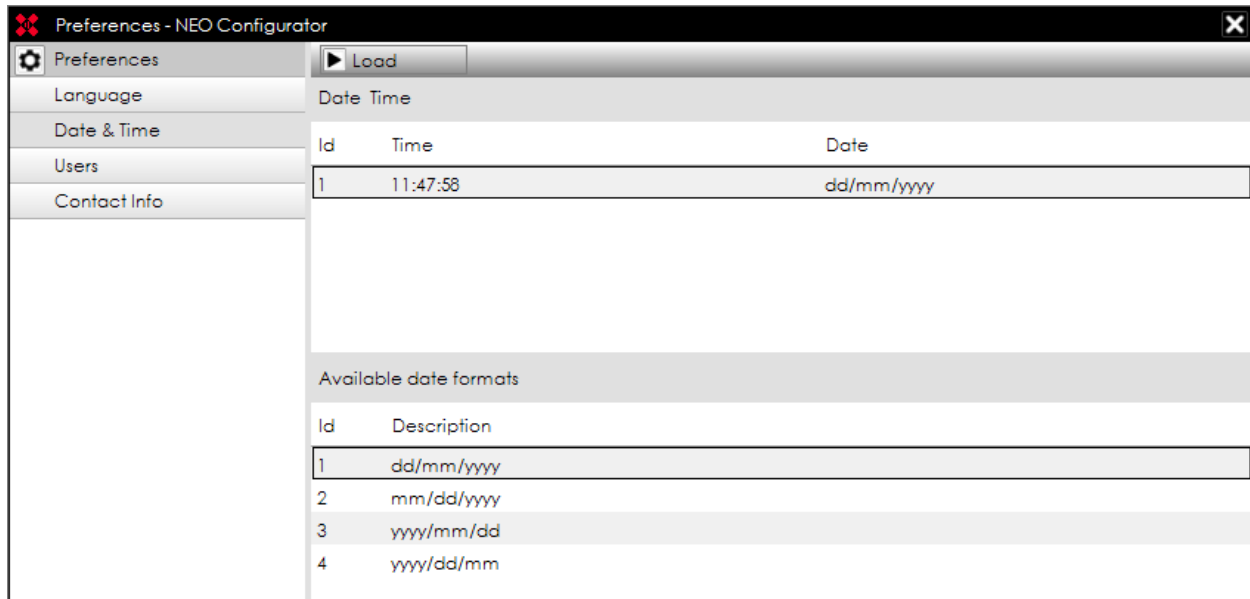
From this tab, you can change the **user interface language** of NEO Configurator:

1. Select the language from the panel "Available languages".
2. Click on "Load".
3. NEO Configurator will prompt if you want to restart the application in order to apply the new language. Click "Yes".

NOTE: All unsaved changes in the project will be lost.

4. NEO Configurator will be closed.
5. Open again NEO Configurator. The new language will be applied.

2.2.2. Time & Date preferences



In this tab, you can check the **time** that is using both NEO Configurator and the physical system.

NOTE: NEO Configurator's time and date is taken directly from the computer's clock and it is automatically synced to the physical system every time the system is live linked with NEO Configurator.

You can also change the **date format** displayed within NEO Configurator:

1. Select the desired date format from the panel "Available date formats".
2. Click on "Load".
3. NEO Configurator will prompt if you want to restart the application in order to apply the new date format. Click "Yes".

NOTE: All unsaved changes in the project will be lost.

4. NEO Configurator will be closed.
5. Open again NEO Configurator. The new date format will be applied.

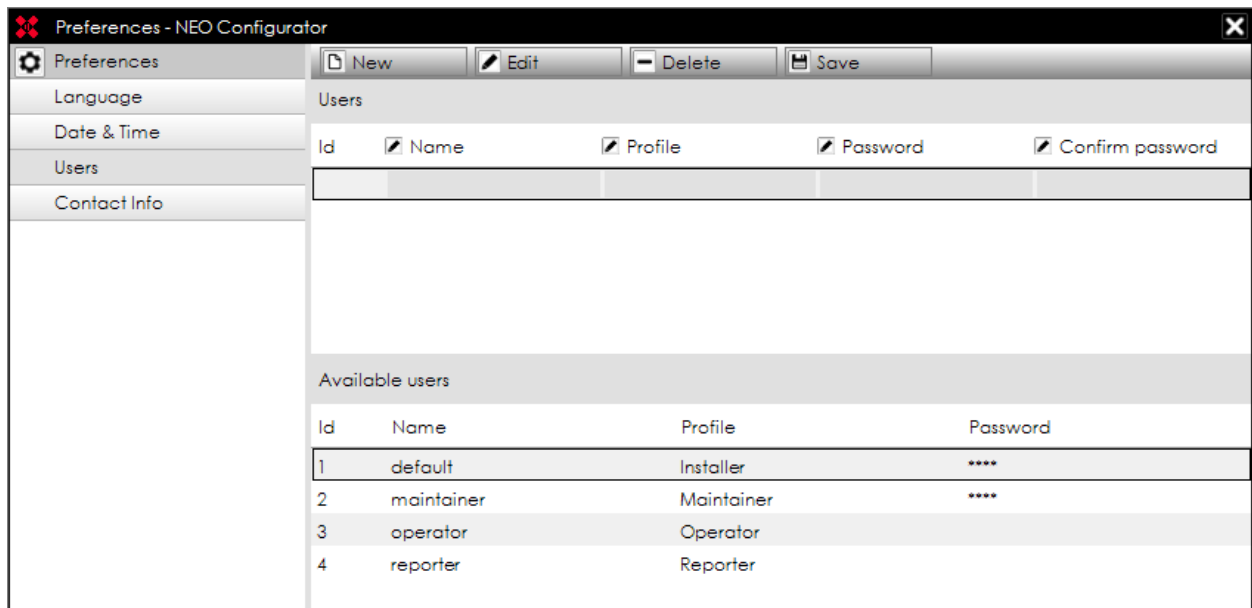
2.2.3. Users preferences

In this tab, you can add or edit many different users for NEO Configurator. Every user can optionally have a password.

Each user will have a **profile** assigned: *Reporter*, *Operator*, *Maintainer* or *Installer*. Every profile has different permissions for the *System Views* and for some *NEO Configurator Tools*:

		REPORTER	OPERATOR	MAINTAINER	INSTALLER
SYSTEM VIEWS	Voice Alarm	Only view	Only view	Only view	Configuration
	Public Address	Only view	Configuration	Configuration	Configuration
	Devices	Only view	Only view	Configuration	Configuration
NEO Configurator Tools	Save Project	Disabled	Disabled	Disabled	Enabled
	Preferences	Disabled	Disabled	Enabled *	Enabled
	Export / Import Preferences	Disabled	Disabled	Enabled	Enabled
	Export System	Disabled	Disabled	Enabled	Enabled

* *Maintainer* cannot create new users with *Installer* profile.



The lower panel “Available users” indicate all the users that are currently configured in NEO Configurator.

The upper panel “Users” is used to create a new user or to edit an existing user.

CREATE A NEW USER

1. Click "New" to clean the "Users" panel.
2. Edit every field in the "Users" panel. Both "Name" and "Profile" are mandatory fields.
3. Click on "Save".
4. The new user will appear in the "Available technicians" panel.

EDIT AN EXISTING USER

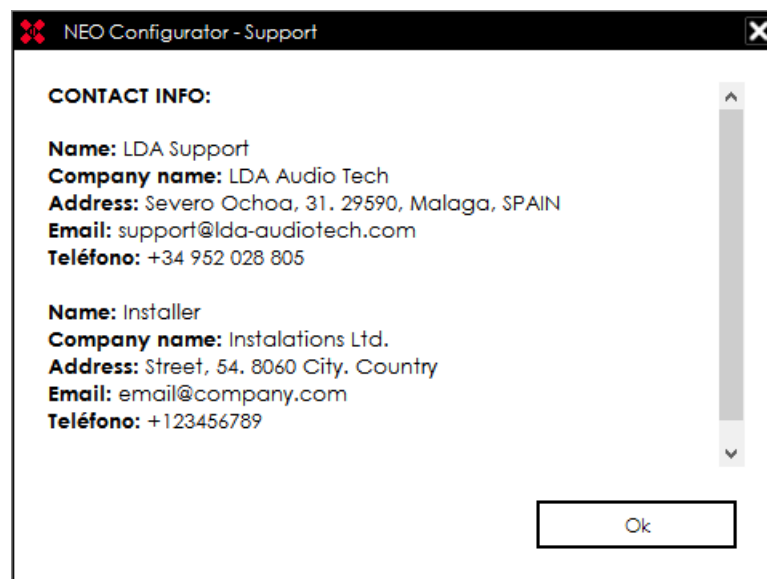
1. Select the existing user from the "Available users" panel.
2. Click on "Edit". The user details will appear in the "Users" panel.
3. Modify the corresponding fields in "Users" panel.
4. Click on "Save".

DELETE AN EXISTING USER

1. Select the existing user from the "Available users" panel.
2. Click on "Delete".

2.2.4. Contact info preferences

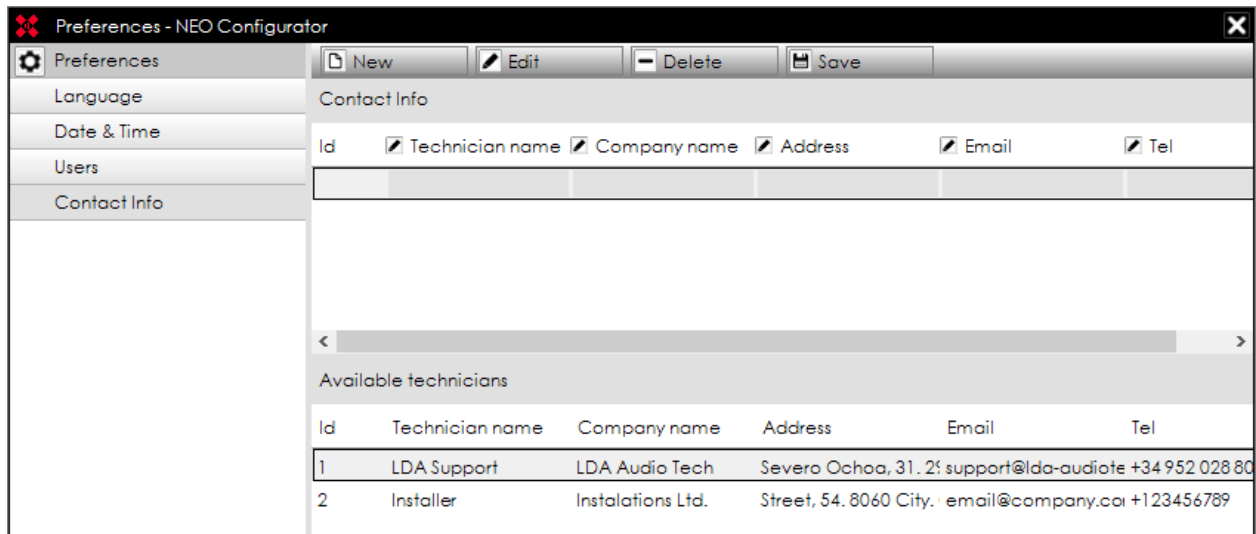
This tab is intended to edit support information that will appear in the "Support" window (see 2.1.4. "Help" menu):



The screenshot shows a window titled "NEO Configurator - Support". Inside, there are two sections of contact information. The first section, labeled "CONTACT INFO:", contains details for "LDA Support": Name: LDA Support, Company name: LDA Audio Tech, Address: Severo Ochoa, 31. 29590, Malaga, SPAIN, Email: support@lda-audiotech.com, and Teléfono: +34 952 028 805. The second section contains details for "Installer": Name: Installer, Company name: Instalations Ltd., Address: Street, 54. 8060 City. Country, Email: email@company.com, and Teléfono: +123456789. A vertical scrollbar is on the right side of the text area, and an "Ok" button is at the bottom right.

The lower panel "Available technicians" indicate all the contact details that are currently saved in NEO Configurator.

The upper panel "Contact Info" is used to create a new contact or to edit an existing contact.



CREATE A NEW CONTACT

1. Click "New" to clean the "Contact Info" panel.
2. Edit every field in the "Contact Info" panel. The only mandatory field is "Technician name".
3. Click on "Save".
4. The new contact will appear in the "Available technicians" panel.

EDIT AN EXISTING CONTACT

1. Select the existing contact from the "Available technicians" panel.
2. Click on "Edit". The contact details will appear in the "Contact Info" panel.
3. Modify the corresponding fields in "Contact Info" panel.
4. Click on "Save".

DELETE AN EXISTING CONTACT

1. Select the existing contact from the "Available technicians" panel.
2. Click on "Delete".

3. PROJECT SETUP

3.1. New project

In NEO Configurator, a project is a complete NEO system with all their parameters and events configurations.

In order to start using NEO Configurator, you should either:

- **Create a new project** (*Project -> New*).
- **Open an existing project** (*Project -> Open*).

If you have a previously installed NEO system, but you do not have the corresponding project file, you can import this system into NEO Configurator by following these steps:

1. Create a new project (*Project -> New*).
2. Search the main controller of that system (see **3.3. Assign devices**).
3. Add the controller to the NEO Configurator project (see **3.3. Assign devices**).
4. Import the system (see **3.4. Link System**).

3.2. Add devices

A NEO system is composed of at least one NEO Controller (NEO 8060). Additionally, a NEO system can contain any of the following devices:

- **Microphones:**
 - MPS-8Z paging microphones (PA Microphones)
 - VAP-1 voice alarm panels (E Microphones)
- **NEO Extensions:**
 - NEO 8120E
 - NEO 4250E
- **Accessories:**
 - VCC-64 volume and channel controller (PA Zone Controller)

NOTE: Every project can contain just 1 single controller. If you have more than 1 controller, it means you have many different systems. Each one of these systems will be a separate NEO Configurator project.

There are 2 ways of adding devices into a system:

- **Manually as virtual devices** (see sections **3.2.1** to **3.2.4**).
- **From an existing physical system** connected to the same network as the computer (see **3.3. Assign devices**).

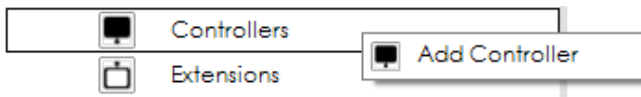
NOTE: If you add virtual devices as described below, these virtual devices can later be assigned to physical devices (see **3.3. Assign devices**) and thus export all the configurations to that system (see **3.4.2. Export System**).

3.2.1. Controller

ADD A VIRTUAL CONTROLLER

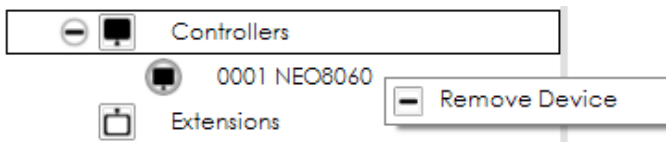
In order to add a virtual controller in a blank project, follow the steps below:

1. In *System Devices view*, right-click on “Controllers”
2. Click on “Add Controller”:



REMOVE A CONTROLLER

To remove a controller simply right-click on the added controller and then click on “Remove Device”:



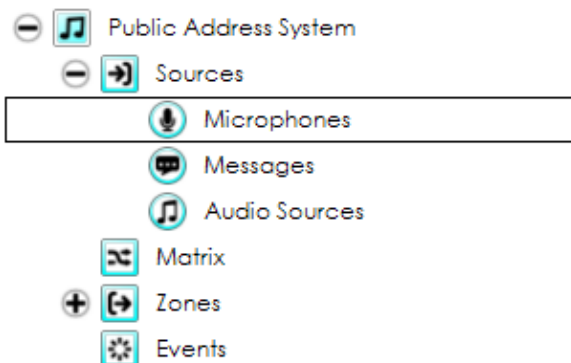
NOTE: In order to add or remove controllers your user profile must be *Installer* or *Maintainer* (see **2.2.3. Users preferences**).

3.2.2. PA Microphones

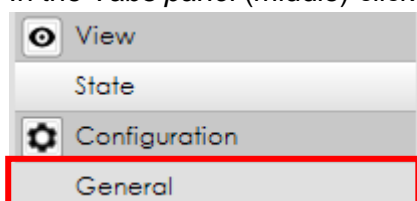
ADD A VIRTUAL PA MICROPHONE

Before adding any microphone, you need to make sure you already have a controller in your system. To add a virtual PA Microphone, follow the steps below:

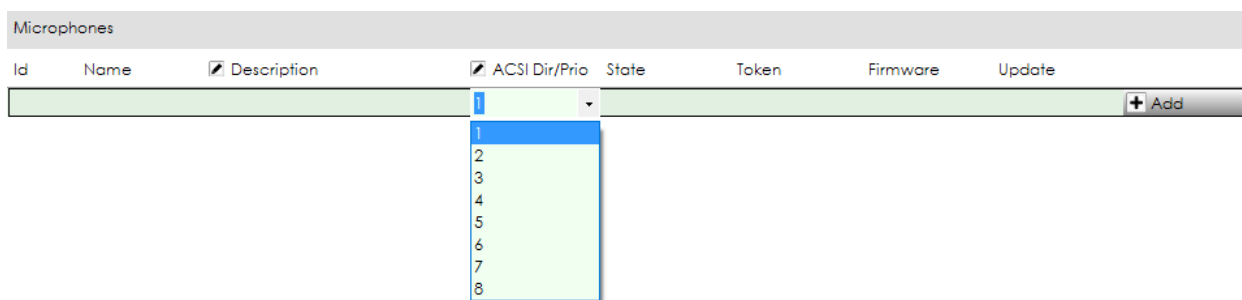
1. In *Public Address View*, click on “Microphones”:



2. In the *Tabs panel* (middle) click on “General”:



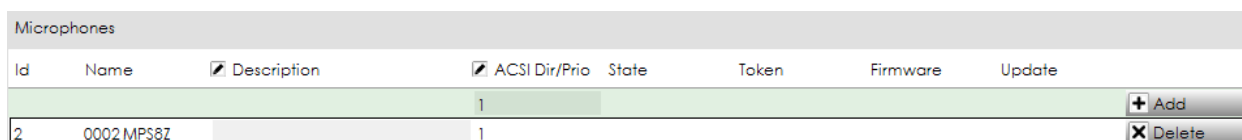
3. In the *Edition panel* (right) you can configure the ACSI Direction of the PA Microphone you want to add. Click on this field to select the desired ACSI Direction/Priority:



Id	Name	Description	ACSI Dir/Prio	State	Token	Firmware	Update
			1				+ Add

NOTE: The ACSI Direction or Priority corresponds to the priority level of the device in relation to all the ACSI devices (MPS-8Z or VAP-1) of the system. See the devices user's manuals for further information.

4. Click on "Add".
5. The new PA Microphone will appear below:



Id	Name	Description	ACSI Dir/Prio	State	Token	Firmware	Update
			1				+ Add
2	0002 MPS8Z		1				X Delete

6. Now you can optionally edit the "Description" of the PA Microphone by double clicking in the corresponding field.

REMOVE A PA MICROPHONE

To remove a PA Microphone you have 2 options:

Option 1: From *Public Address View*

1. In *Public Address View*, click on "Microphones".
2. In the *Tabs panel* (middle) click on "General".
3. In the *Edition panel* (right) click on "Delete" on the PA Microphone you want to remove.

Option 2: From *System Devices View*

1. In *System Devices View*, right-click on the PA Microphone you want to remove.
2. Click on "Remove Device".

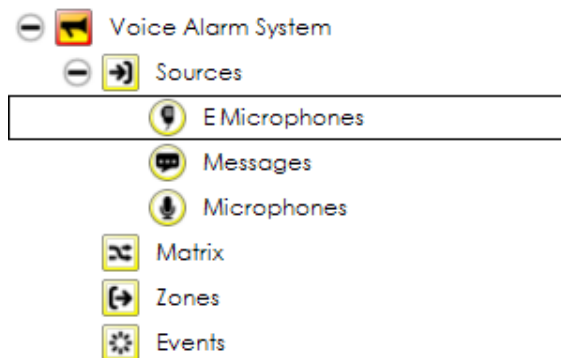
NOTE: In order to add or remove PA Microphones your user profile must be *Installer* or *Maintainer* (see **2.2.3. Users preferences**).

3.2.3. E Microphones

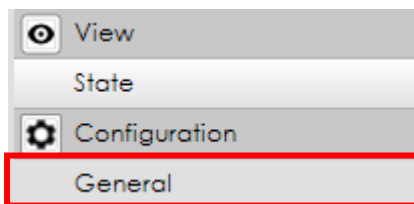
ADD A VIRTUAL EMERGENCY MICROPHONE

Before adding any emergency microphone, you need to make sure you already have a controller in your system. To add a virtual E Microphone, follow the steps below:

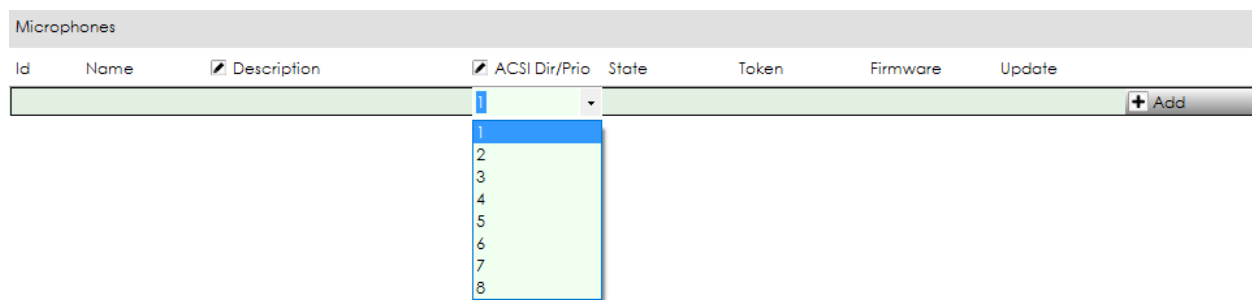
1. In *Voice Alarm View*, click on “E Microphones”:



2. In the *Tabs panel* (middle) click on “General”:

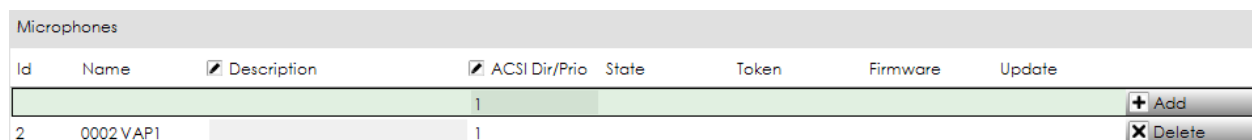


3. In the *Edition panel* (right) you can configure the ACSI Direction of the E Microphone you want to add. Click on this field to select the desired ACSI Direction/Priority:



NOTE: The ACSI Direction or Priority corresponds to the priority level of the device in relation to all the ACSI devices (MPS-8Z or VAP-1) of the system. See the devices user's manuals for further information.

4. Click on “Add”.
5. The new E Microphone will appear below:



6. Now you can optionally edit the "Description" of the E Microphone by double clicking in the corresponding field.

REMOVE AN EMERGENCY MICROPHONE

To remove an E Microphone you have 2 options:

Option 1: From *Voice Alarm View*

1. In *Voice Alarm View*, click on "E Microphones".
2. In the *Tabs panel* (middle), click on "General".
3. In the *Edition panel* (right), click on "Delete" on the E Microphone you want to remove.

Option 2: From *System Devices View*

1. In *System Devices View*, right-click on the E Microphone you want to remove.
2. Click on "Remove Device".

NOTE: In order to add or remove Emergency Microphones your user profile must be *Installer* (see **2.2.3. Users preferences**).

3.2.4. PA Zone Controllers

PA Zone Controllers are devices that manage the volume level and the source routed in a single zone. When a VCC-64 Volume and Channel Controller is connected to the system, NEO automatically detects it and adds it as a PA Zone Controller. This PA Zone Controller will appear directly in NEO Configurator if you were live linked or after importing the system.

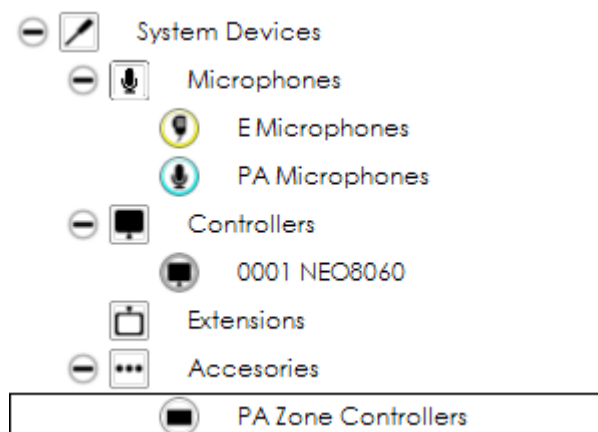
NOTE: PA Zone Controllers cannot be added from the *Search device* window as described in **3.3. Assign devices**. They are added automatically by NEO after they are connected to the system.

You can also add PA Zone Controllers manually as virtual PA Zone Controllers that will be automatically assigned to the physical VCC-64 as long as they have the same physical address.

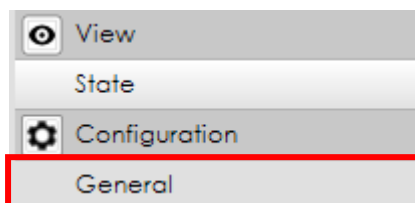
ADD A VIRTUAL PA ZONE CONTROLLER

Before adding a PA Zone Controller, you need to make sure you already have a controller in your system. To add a virtual PA Zone Controller, follow the steps below:

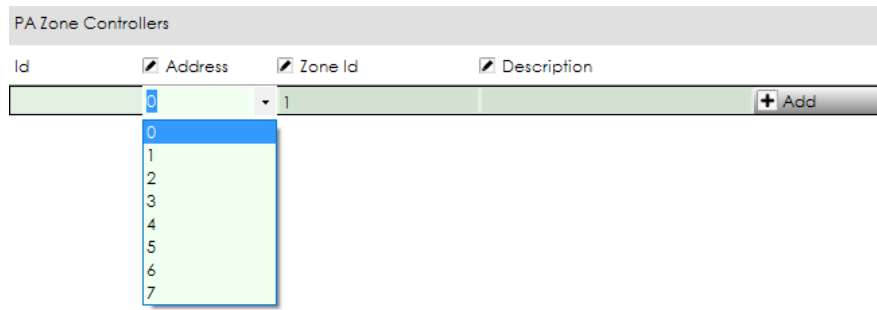
1. In *System Devices View*, click on "PA Zone Controllers":



2. In the *Tabs panel* (middle) click on "General":



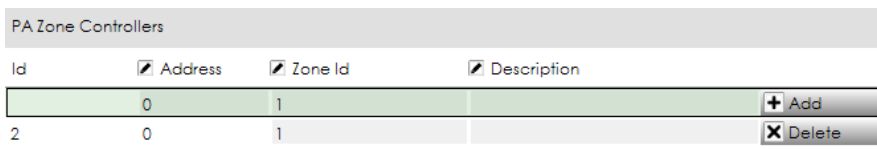
- In the *Edition panel* (right) you can configure the physical address that the PA Zone Controller will have, as well as the zone which will be assigned to that physical address. Click on these fields to select the desired values:



Id	Address	Zone Id	Description
0	0	1	

NOTE: The physical addresses 0 to 7 correspond with the 8 possible deep switch configurations you can select in the VCC-64. See *VCC-64 user's manual* for further information.

- Click on "Add".
- The new PA Zone Controller will appear below:



Id	Address	Zone Id	Description
0	0	1	
2	0	1	

- You can optionally edit the "Description" of the PA Zone Controller by double clicking in the corresponding field.

REMOVE A PA ZONE CONTROLLER

To remove a PA Zone Controller you have 2 options:

Option 1: From *Edition panel* (right)

- In *System Devices View*, click on "PA Zone Controller".
- In the *Tabs panel* (middle), click on "General".
- In the *Edition panel* (right), click on "Delete" next to the PA Zone Controller you want to remove.

Option 2: From *System Devices tree*

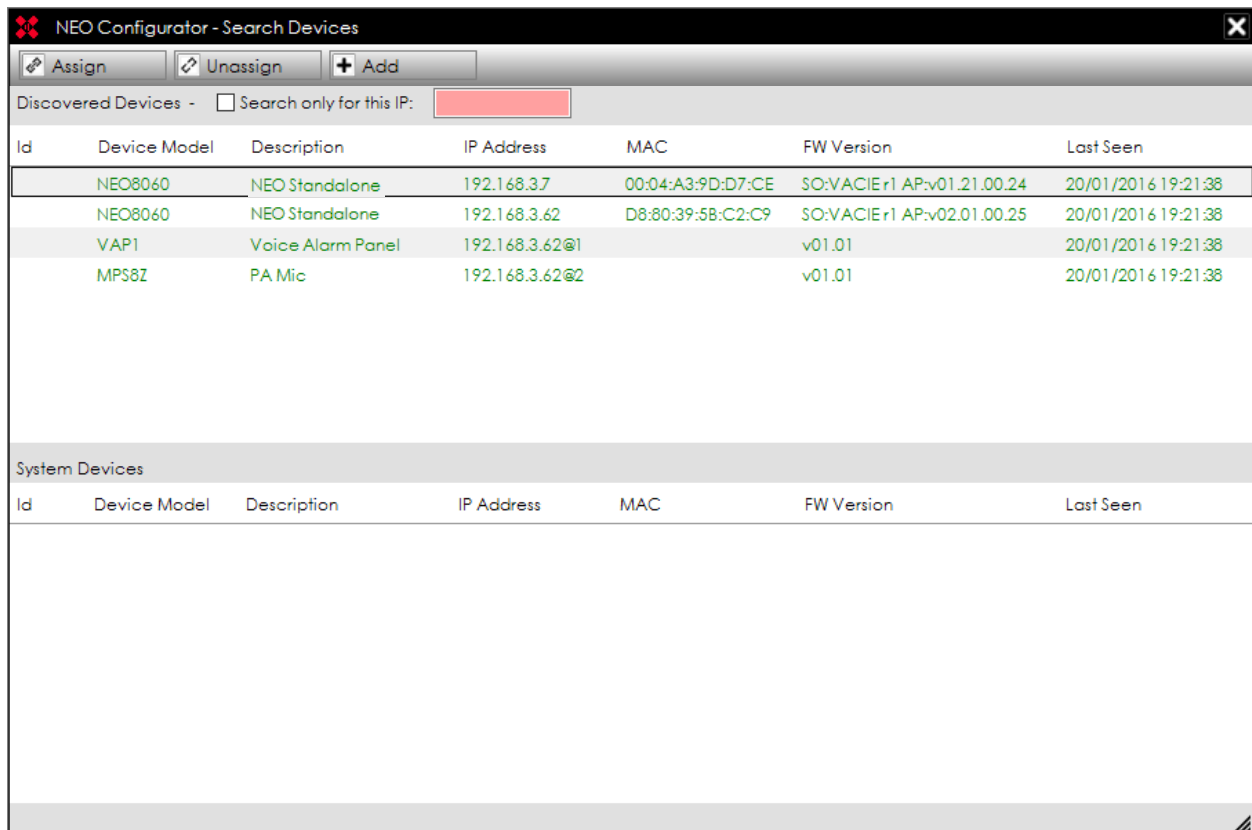
- In *System Devices View tree* (left panel), right-click on the PA Zone Controller you want to remove.
- Click on "Remove Device".

NOTE: In order to add or remove PA Zone Controllers your user profile must be *Installer* or *Maintainer* (see **2.2.3. Users preferences**).

3.3. Assign devices

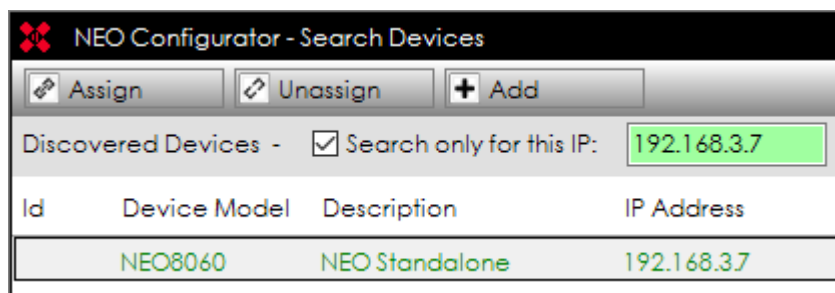
The devices within a project of NEO Configurator can be assigned to physical devices connected to the same LAN network.

The assignation of NEO Configurator devices with physical devices is always done with the tool *Search device*, located in the *Tools* menu:



Search Device can search all the devices which are connected within the same network range as the computer's IP configuration.

With the option **“Search only for this IP”** you can filter the results to show only the IP of a specific NEO device:



NOTE: You can only modify the IP address to search while the box *“Search only for this IP”* is unmarked.

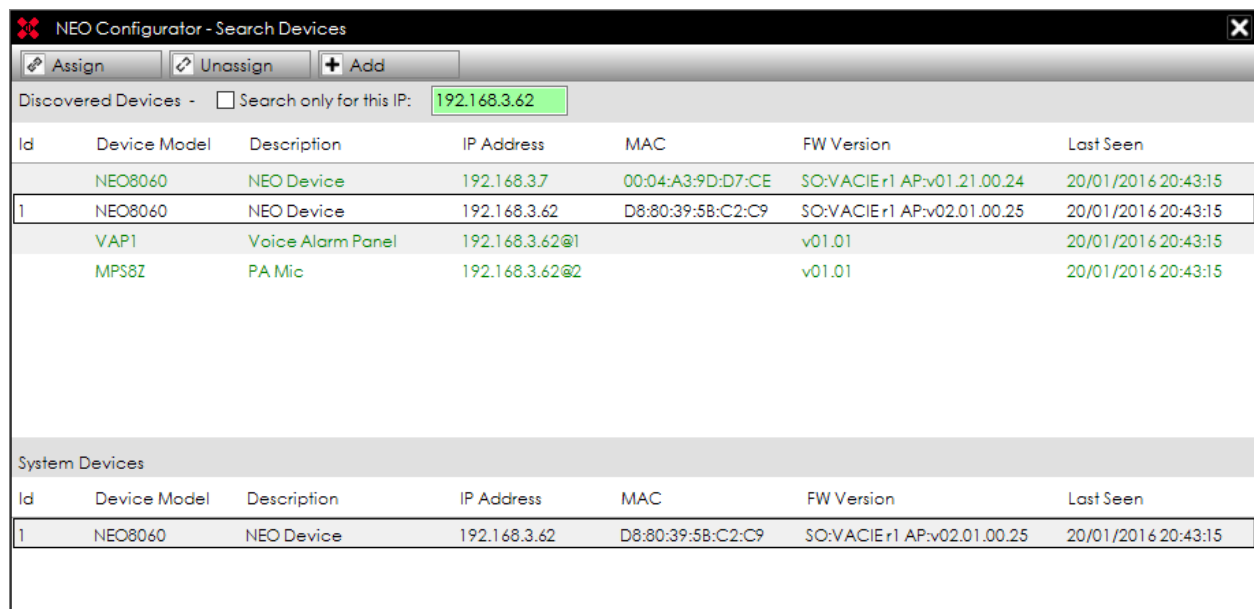
We can assign manually the system controller and the microphones. PA Zone Controllers are always assigned automatically as described in section 3.2.4.

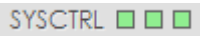
3.3.1. Assign the system controller

CASE 1: The project is blank and no controller was previously added

From the *Search Devices* tool, we can add and assign a controller in one step, so there is no need to previously add a virtual controller as described in section 3.2.1.

1. In the upper part of the window, select the controller you want to add and assign.
2. Click on “Add”.
3. The controller will appear in the lower panel “System Devices” and will automatically be assigned) to your NEO Configurator project.



The 3 indicators in **SYSCTRL** will be on: **SYSCTRL**  because NEO Configurator (1 ON) has a controller, (2 ON) has a physical device assigned to that controller and (3 ON) that physical device is visible in the LAN.

CASE 2: The project had already a controller

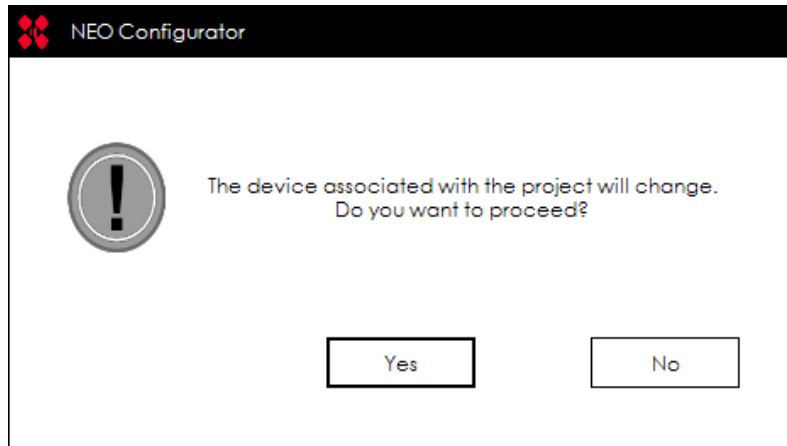
The previously added controller could be either virtual (not assigned to any device) or could have been assigned to another device (with a different MAC).

NOTE: It does not matter if the previously assigned device and the new one share the same IP address. As long as they have a different MAC, it is required to re-assign the controller to the new device.

A previously added controller (either virtual or already assigned) can be assigned to a particular physical device by following these steps:

1. In the upper part of the window, select the new physical controller you want to assign.
2. Click on “Assign”.

- The following windows will appear:



- Click **"Yes"**.
- You will have the new device assigned to the NEO Configurator project. **SYSCtrl** will be like this: **SYSCtrl** ■ ■ ■.

NOTE: There is no need to unassign the previous device before assigning the new device.

UNASSIGN A CONTROLLER

If you click on **"Unassign"**, the physical controller will be unassigned from the project and it will appear in red:

NEO Configurator - Search Devices						
<input type="button" value="Assign"/> <input type="button" value="Unassign"/> <input type="button" value="+ Add"/>						
Discovered Devices - <input type="checkbox"/> Search only for this IP: 192.168.3.62						
Id	Device Model	Description	IP Address	MAC	FW Version	Last Seen
	NEO8060	NEO Device	192.168.37	00:04:A3:9D:D7:CE	SO:VACIEr1 AP:v01.21.00.24	20/01/2016 20:44:18
	NEO8060	NEO Device	192.168.3.62	D8:80:39:58:C2:C9	SO:VACIEr1 AP:v02.01.00.25	20/01/2016 20:44:18
	VAP1	Voice Alarm Panel	192.168.3.62@1		v01.01	20/01/2016 20:44:18
	MPS8Z	PA Mic	192.168.3.62@2		v01.01	20/01/2016 20:44:18
System Devices						
Id	Device Model	Description	IP Address	MAC	FW Version	Last Seen
1	NEO8060	NEO Device	192.168.3.62			

Moreover, the 3 indicators in **SYSCtrl** will be like this: **SYSCtrl** ■ ■ ■, showing that (2 OFF) there is no physical device assigned to the controller in the current project, but (3 ON) the previously assigned device is still visible.

3.3.2. Assign PA or E microphones

Both PA microphones (MPS-8Z) and Emergency microphones (VAP-1) are ACSI devices, therefore the way they are assigned into a NEO Configurator project is the same.

ACSI microphones share the same IP address as the system controller with an additional number that indicates the ACSI address they have set. For example, `192.168.3.62@1` is a microphone connected to the NEO Controller `192.168.3.62` at the ACSI address number 1.

In any NEO system, it is only possible to have 1 microphone installed per ACSI address. The ACSI address of a physical microphone is set up from the device itself (see MPS-8Z or VAP-1 User's Manual). Likewise, in a virtual microphone the ACSI address is specified from the moment it is created (see sections [3.2.2](#) and [3.2.3](#)).

After we assign a NEO Controller (see [3.3.1](#)), we can have any of the following 3 cases:

CASE 1: A physical microphone shares the same ACSI address as a virtual microphone

In this case, the physical microphone will be automatically assigned to the virtual microphone. No further action required.

CASE 2: A physical microphone has a unique ACSI address (not in the software project)

The physical microphone will remain unadded and unassigned in the NEO Configurator project. This means that NEO Configurator will not be able to configure or operate them.

In order to add and assign it, follow the steps below:

1. In the *Tools* menu click on *Search Devices*.
2. In the upper part of the window, select the microphone you want to add and assign.
3. Click on **"Add"**.
4. The device will appear in the lower panel "System Devices" and will automatically be assigned in your NEO Configurator project.

CASE 3: A virtual microphone has a unique ACSI address (not in the physical system)

The virtual microphone will remain in the NEO Configurator project and it will be possible to configure them virtually.

If a physical microphone with that same ACSI address is connected in the future, it will be automatically assigned to the system and will adopt the configurations from this virtual microphone.

NOTE: Microphones **cannot be unassigned** from a project. They just can be added or removed from the project.

3.4. Link System

NEO Configurator can be live linked to the physical system and thus, all changes made in NEO Configurator are updated immediately in the device and vice versa.


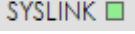
When we link the system, we have to choose what configuration we want to preserve: the current configuration in the physical device or the current configuration in *NEO Configurator* project.

3.4.1. Import System

Import System means that we will download the current configuration from the physical system to the NEO Configurator project.

1. Before importing a system, we always have to assign the controller where we want to import from (see **3.3.1. Assign the system controller**).
2. In the “Tools” menu select “Import System”.
3. A message will appear telling that all the configuration in the current project will be lost and substituted by the configuration of the physical system.
4. Click “Yes”.

NEO Configurator and the physical system will be **live linked**.

- The left panel background will turn green.
- A green spot  will appear next to all the linked devices.
- The status bar indicator  will turn green.


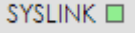
Import System can be used to **load in NEO Configurator the current parameters** of the physical device so we can simply check them or start to work with them. We can also continue working offline or unlinked as explained in **3.4.3. Unlink system**.

3.4.2. Export System

Export System means that we will upload the current configuration from the NEO Configurator project to the physical system.

1. Before exporting a system, we always have to assign the controller where we want to export (see **3.3.1. Assign the system controller**).
2. In the “Tools” menu select “Export System”.
3. A message will appear telling that all the configuration in the physical device will be lost and substituted by the configuration of the NEO Configurator Project.
4. Click “Yes”.

NEO Configurator and the physical system will be **live linked**.



- The left panel background will turn green.
- A green spot  will appear next to all the linked devices.
- The status bar indicator  will turn green.

NOTE: If NEO system is in emergency state, it is not possible to export a NEO Configurator project to the physical system.

Export System can be used to **reset a system** to the Installer's custom configuration. Simply open the project the Installer has created for the system (section 3.1), assign the physical system (section 3.3) and export the system as described above.

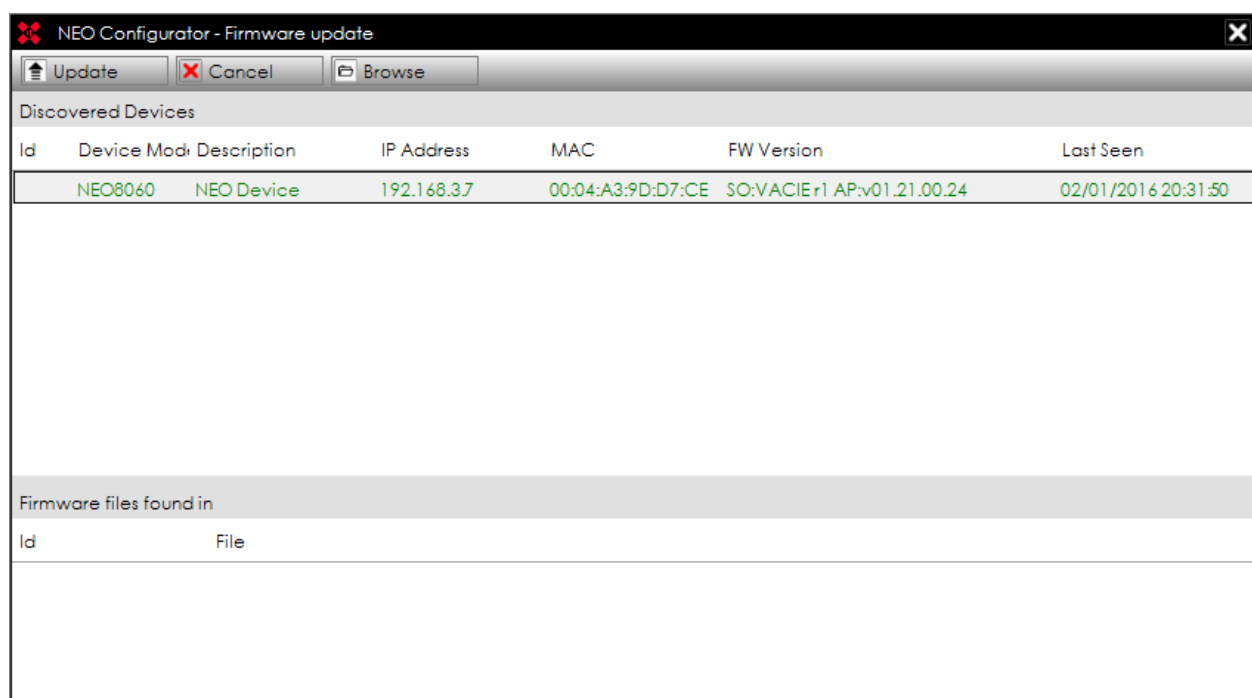
3.4.3. Unlink system

If you want to work offline after importing or exporting the system, you can simply unlink the system by clicking in **“Unlink System”** within the **“Tools”** menu.

- The left panel green background will switch off.
- The green spot  next to the linked devices will disappear.
- The status bar indicator **SYSLINK**  will turn black.

3.5. Update devices firmware

The **“Update Devices Firmware”** tool allows to update the firmware of any NEO device connected to the network. After clicking in this tool, a *Search Device* window similar to the one described in 3.3. **Assign devices** will appear:

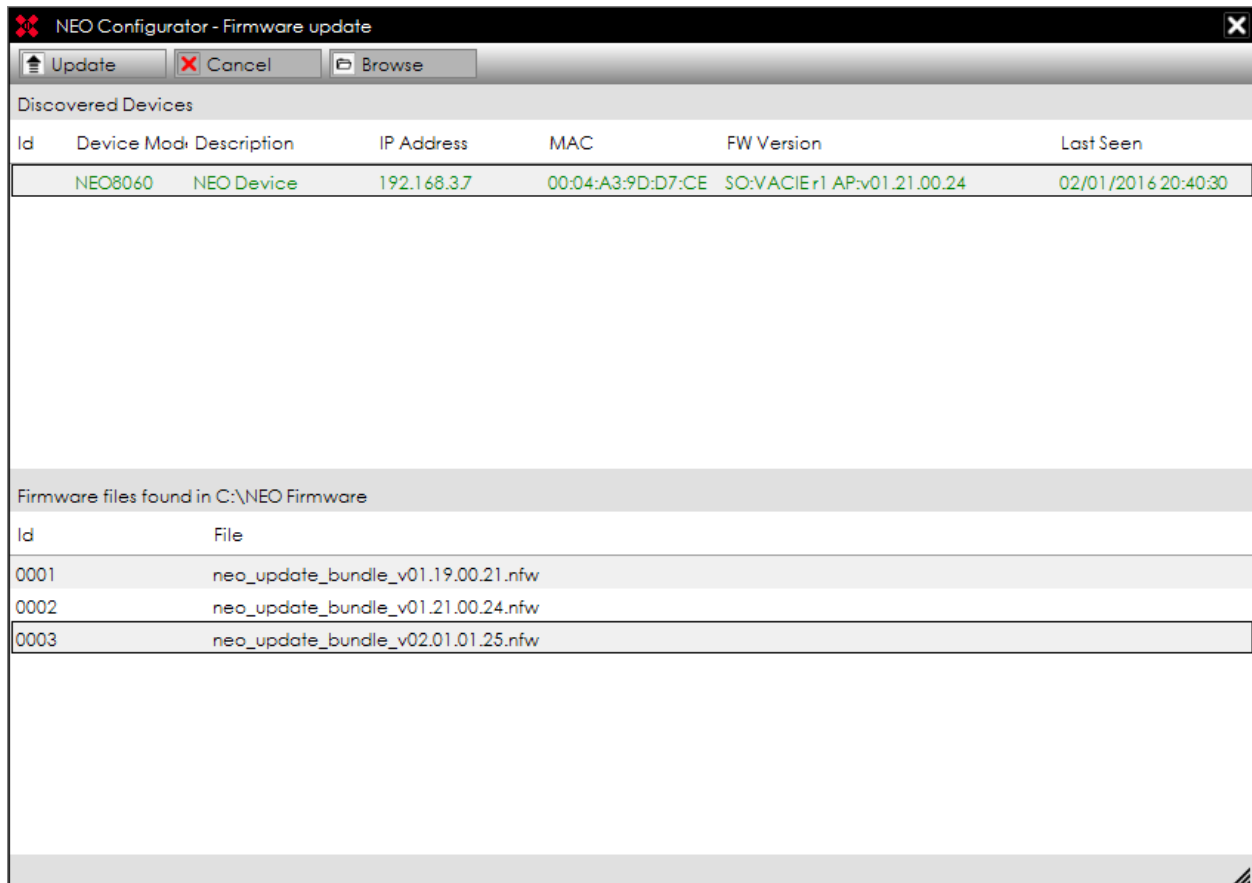


You can update any device in the same network IP ranges as your computer, even though the device belongs to a different system than the current NEO Configurator project.

NOTE: In order to use the “Update devices” tool, you must load a project first (see 3.1).

LOAD THE FILE OF FIRMWARE UPDATE INTO NEO CONFIGURATOR

1. Click "Browse" button.
2. Select the folder in your computer where the firmware update files are located.
3. The firmware update files and the file folder will appear in the lower part of the window
"Firmware files found in ...".



UPDATE THE SELECTED FIRMWARE IN THE SELECTED DEVICE

1. Click the device to update in the upper part.
2. Click the firmware file to apply in the lower part.
3. Click "Update" button.

The update file will transfer to the NEO device and when it is finished, the device will automatically restarted with the new version of the firmware.

NOTE: Make sure the devices are not disconnected or powered off while the update process is being applied.

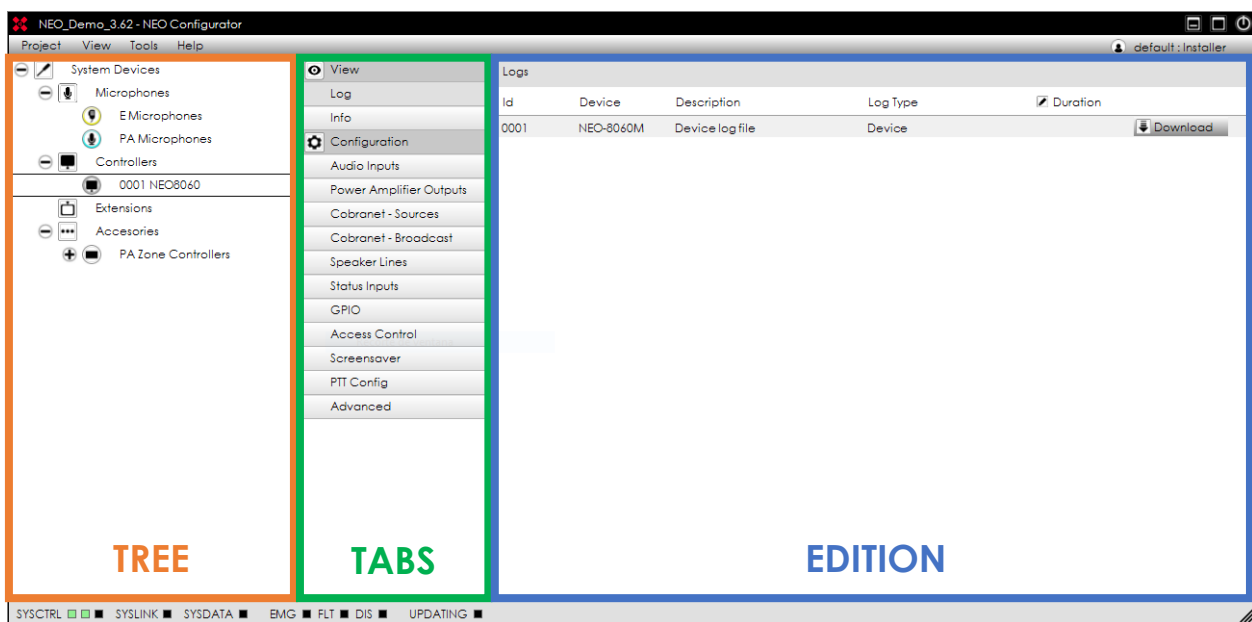
4. SYSTEM CONFIGURATION

NEO Configurator has 3 different *System Views*:

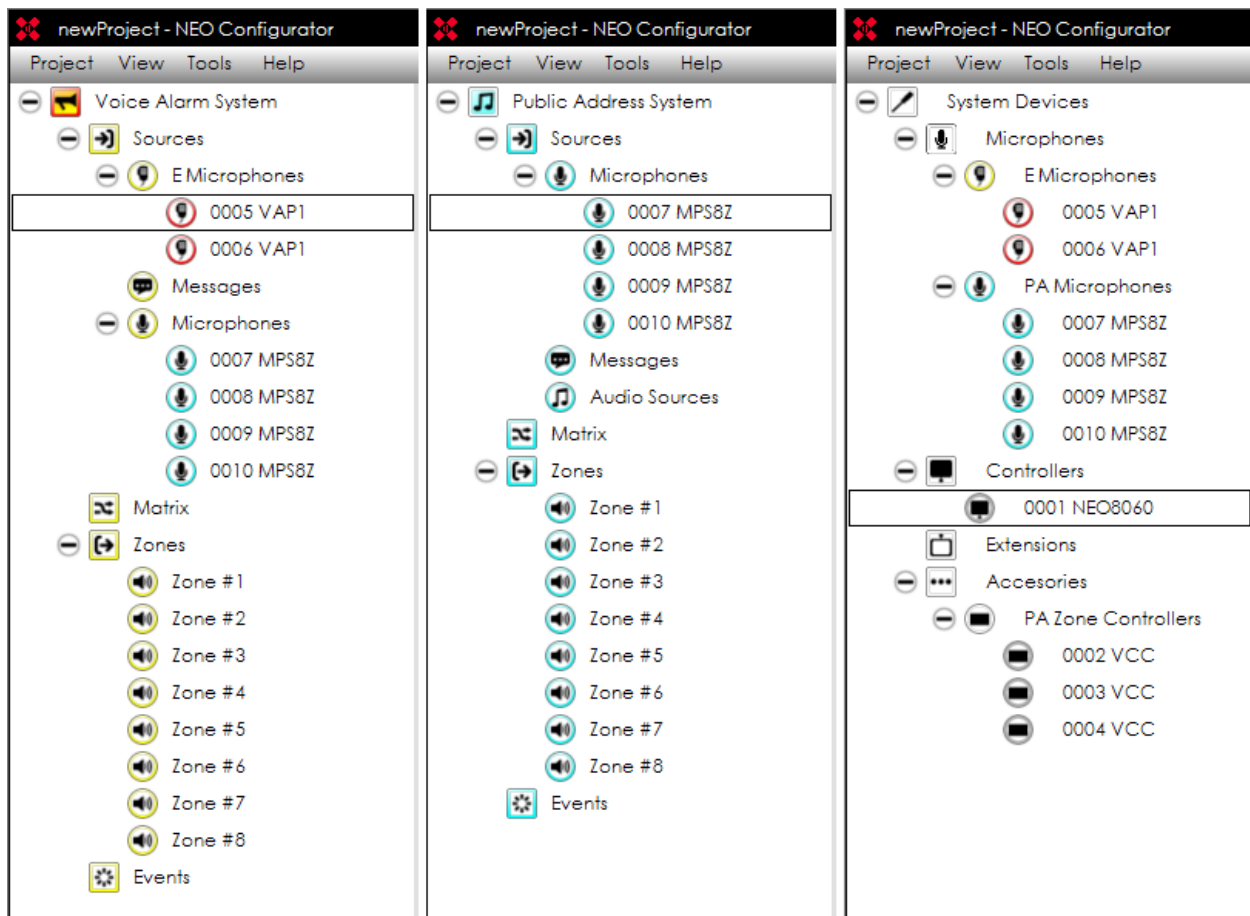
- **SYSTEM DEVICES**
- **PUBLIC ADDRESS SYSTEM**
- **VOICE ALARM SYSTEM**

These *System Views* allows configuring and setting up all the parameters of the system. It is the main functional area of NEO Configurator.





Every NEO Configurator *System View* is divided into 3 panels:



- **TREE PANEL (Left):** The tree represents all the devices in the system (for *System Devices* view) or the function families (for *PA System* and *VA System* views).
- **TABS PANEL (Middle):** This panel includes many tabs that show different parameters of the item selected in the tree panel. These tabs are divided into 2 categories:
 - **“View” filter:** These tabs allow to check and verify the current configuration and status of the selected item.
 - **“Configuration” filter:** These tabs allow to edit the configuration of the selected item. These tabs are only shown to the user profiles with the appropriate permissions (see **2.2.3. Users preferences**).
- **EDITION PANEL (Right):** In this panel you can either see the current configuration (with “View” tabs) or edit the configuration (with “Configuration” tabs). Every row represents an item and every column represents the attributes of that item. The last columns may include some buttons with more editable parameters.



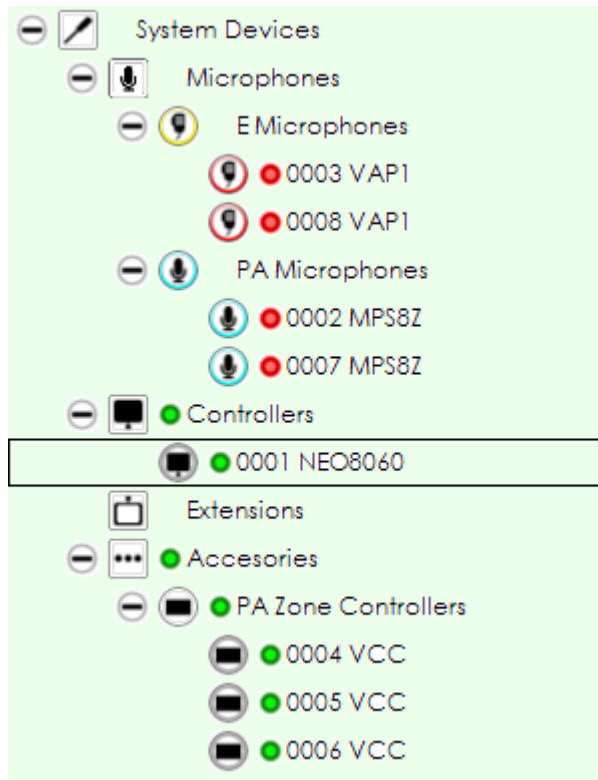
The icons appearing in the System Views are color coded as follows:

- **Grey edge** : System devices (except those with exclusive PA or VA functionality).
- **Blue edge** : PA System functions and exclusive PA devices.
- **Yellow edge** : VA System functions and exclusive VA devices.
- **Red edge** : Voice Alarm Panels.

4.1. System Devices View

The *System Devices* view shows all the devices in a system. There are 4 devices families:

- *Microphones*
- *Controllers*
- *Extensions*
- *Accesories*



When the NEO Configurator project is *live linked* to a physical system (see **3.4. Link System**), a **green spot** ● indicates all the physically connected devices in the system.





The **red spot** ● indicates the devices that are not physically connected to the system, although they are included in the NEO Configurator project.

4.1.1. Root

When you click over the root of the *System Devices* view, you get this tab:



Tab LOGS

Logs					
Id	Device	Description	Log Type	Duration	
0001	NEO-8060M	Emergency log file	Emergency	1	 View
0002	NEO-8060M	Fault log file	Fault	1	 View
0003	NEO-8060M	Disarmed logfile	Disarmed	1	 View
0004	NEO-8060M	Device log file	Device		 Download

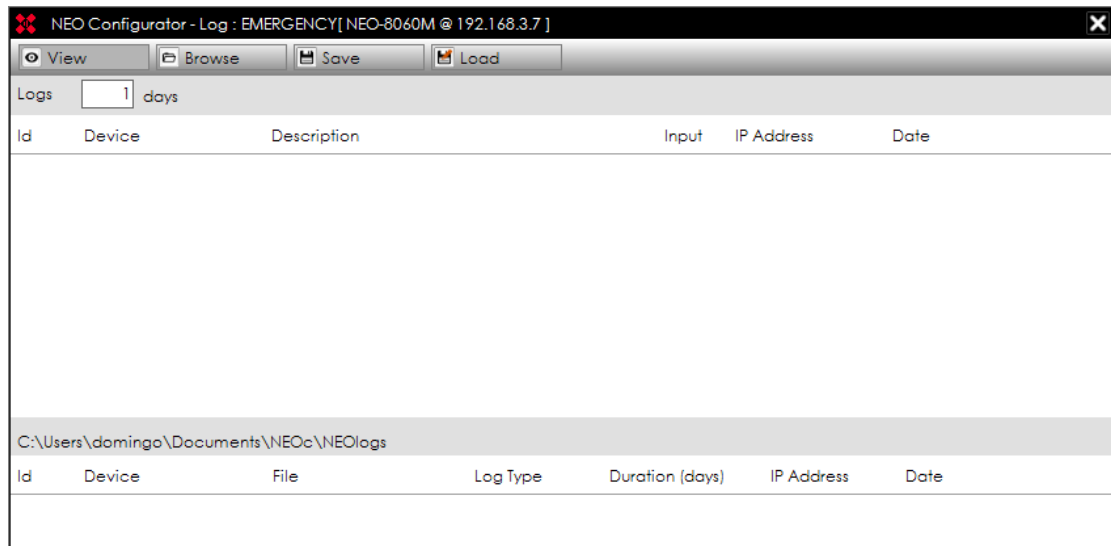
The items of this tab are the following system logs:

- *Emergency log file*
- *Fault log file*
- *Disarmed log file*
- *Device log file*

The **Device log file** cannot be viewed from NEO Configurator, but it can be downloaded as a BIN file so it can be sent to LDA Audio Tech for troubleshooting.

ATTRIBUTES AND BUTTONS

- **DURATION:** Indicates the number of log days that will be shown when clicking on "View" button.
- **VIEW button:** Shows the corresponding log in an emerging window:

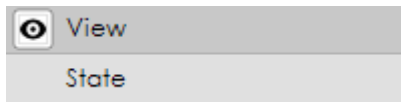


From this window you can do the following:

- **"View"** the log from the live linked system.
- **"Browse"** a folder in your computer with saved logs. After browsing the folder, all the log files will appear in the lower part of the window.
- **"Save"** the current log from the live linked system. It will save only the days specified in the field **Logs** days .
- **"Load"** will load the log file selected in the lower part of the window.

4.1.2. Microphones

Clicking on "Microphones" in the *System Devices View* will show this tab:



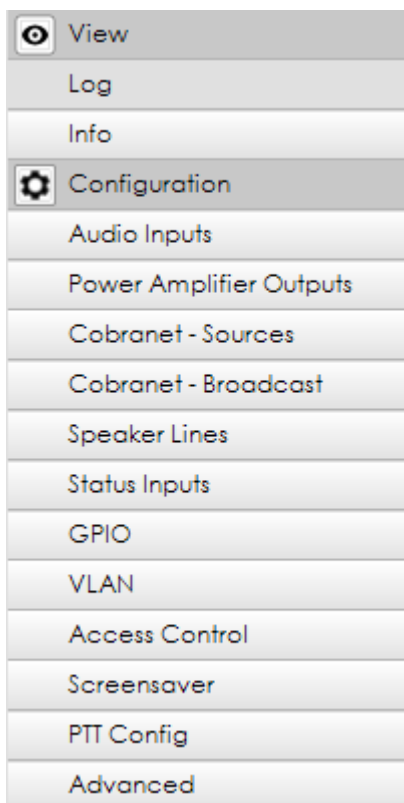
This tab shows some information about the microphones:

Microphones							
Id	Name	Description	ACSI Dir/Prio	State	Token	Firmware	Update
2	0002 MPS8Z		1				
3	0003 MPS8Z		2				
4	0004 VAP1		3				

Microphones cannot be added or edited in the *System Devices View*. Edition of Microphone is done in PA View or VA View. However, **removal** of microphones can only be done from *System Devices View* as described in sections 3.2.2 and 3.2.3.

4.1.3. Controllers

Every NEO system allows only 1 Controller. When you click in the controller, you obtain these tabs:



NOTE: The configuration tabs of this section will only be shown if your user profile is *Installer* or *Maintainer* (see 2.2.3. *Users preferences*).

a. Tab LOG

Logs				
Id	Device	Description	Log Type	Duration
0001	NEO-8060M	Device log file	Device	Download

From this tab you can download the *Device Log File* as a BIN file so it can be sent to LDA Audio Tech for troubleshooting.

It is the same log file appearing in the System Devices root **4.1.1.** and the Voice Alarm System root **4.2.1.**

b. Tab INFO

Info								
Id	Equipment	Place	S/N	SO	AP	IP Address	MAC	Gateway
0001	NEO8060	Rack LDA	12345678	VACIER1	v01.21.00.24	192.168.3.7	00:04:A3:9D:D7:CE	192.168.0.1

It shows detailed information of the system controller.

The attribute **“Place”** can be edited.

c. Tab AUDIO INPUTS

Audio Inputs - Configuration								
Id	Type	Name	Description	Volume	Mute	Level	LSE	Eq
EMIC	Local	PTT Mic	PTT Mic	0 dB	No		Yes	No
MSG	Local	Pre-Recorded	Pre-Recorded	-10 dB	No		No	No
0001	Local	Source #1	Source #1	0 dB	No		No	No
0002	Local	Source #2	Source #2	0 dB	No		No	No
0003	Local	Source #3	Source #3	0 dB	No		No	No
0004	Local	Source #4	Source #4	0 dB	No		No	No
0005	Local	Source #5	Source #5	0 dB	No		No	No
0009	Remote	PIPo ch 1		0 dB	No			
0010	Remote	Muse XT3		0 dB	No			
0011	Remote			0 dB	No			

In this tab you can check all the currently loaded audio inputs of the system and configure their parameters. The audio inputs can be from these types:

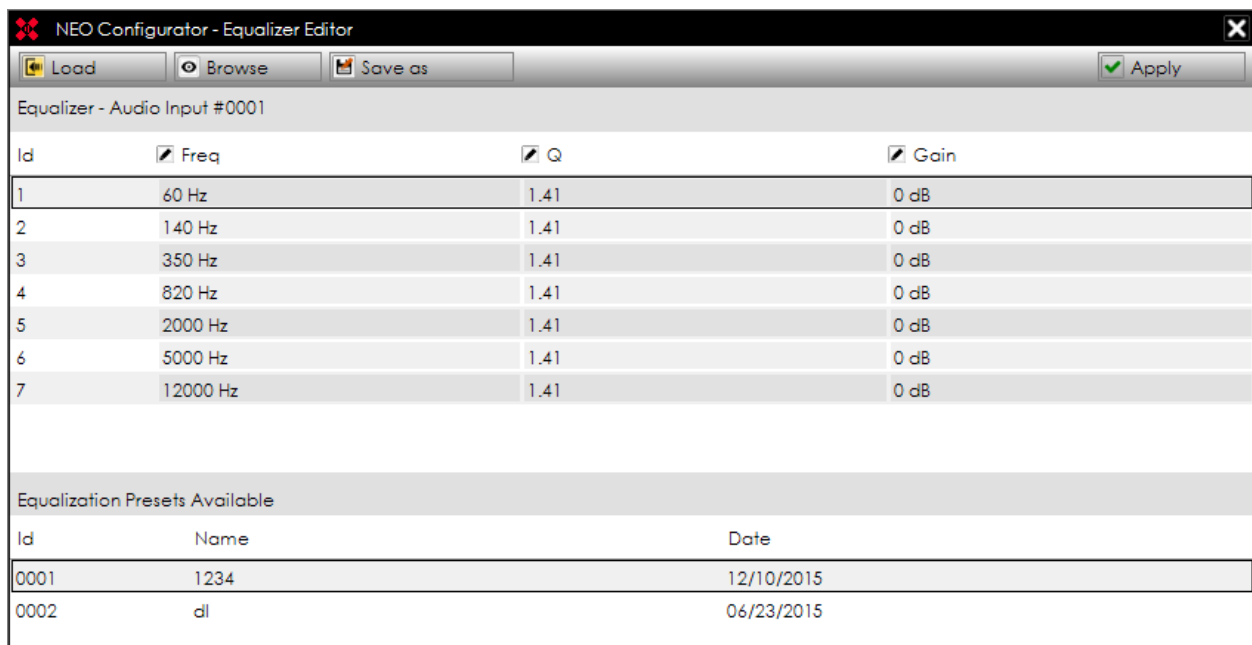
- Built-in PTT Microphone in the frontal panel of NEO (*Local*): **EMIC**.
- Internal pre-recorded messages player (*Local*): **MSG**
- Analog input sources (*Local*): **0001 to 0005**.
- Digital Cobranet sources (*Remote*): **from 0009**.

NOTE: Local Source 0005 is disabled if an ACSI device is connected to the system (a PA Microphone or an Emergency Microphone).

ATTRIBUTES AND BUTTONS

- **ID** internally assigned.
- **TYPE:** Can be local or remote.
- **NAME** and **DESCRIPTION** are editable.

- **VOLUME** level of the audio input (0dB is the maximum level).
- **MUTE**.
- **LEVEL** shows the current audio input level (0dB is the maximum level). It is shown only if the system is *live linked*.
- **LSE** stands for "LDA Sound Enhancer". LSE only applies to input sources and acts as an audio compressor that improves the relation between loud and soft sounds. This way the audio output is more uniform and with less distortion. The final effect is similar to an audio normalizer.
- **EQ** enables or disables the current equalization setting in that input.
- **EDIT EQ button** opens a window to configure the equalization setting for that input:



The equalization can be made in 7 bands. For each band, you can configure:

- **Freq:** the central frequency.
- **Q** factor.
- **Gain** level (from -10 to 10).

The equalization setting can be saved using the top buttons:

- **“Save as”** saves the equalization setting as file in your computer.
- **“Browse”** recovers all the equalization files from a computer folder and shows them in the lower part of the window “Equalization Presets Available”.
- **“Load”** will load the equalization preset selected in the lower part of the window.
- **“Apply”** will apply the new equalization setting and close the window.

d. Tab POWER AMPLIFIER OUTPUTS

Amplifier Channels - Configuration									
Id	Name	Description	Spare Channel	Volume	Mute	Level	Loudness	Eq	
0001	Output #1	Output #1	None	-25 dB	No		Yes	No	Edit Eq
0002	Output #2	Output #2	None	-25 dB	No		Yes	No	Edit Eq
0003	Output #3	Output #3	None	-20 dB	No		Yes	No	Edit Eq
0004	Output #4	Output #4	None	-20 dB	No		Yes	No	Edit Eq
0005	Output #5	Output #5	None	-30 dB	No		Yes	No	Edit Eq
0006	Output #6	Output #6	None	0 dB	No		Yes	No	Edit Eq
0007	Output #7	Output #7	None	0 dB	No		Yes	No	Edit Eq
0008	Output #8	Output #8		0 dB	No		Yes	No	Edit Eq

This tab shows all the amplifier outputs of the systems. These are not necessarily the system zones, but the physical outputs of the system. Many outputs can be grouped in a single zone as explained in section **4.2.4. Zones**.

ATTRIBUTES AND BUTTONS

The attributes of this tab are the same as the **Tab AUDIO INPUTS**. The only differences are the following attributes:

- **SPARE CHANNEL:** You can select that any of all the outputs #1 to #7 are using the 8th amplifier as a backup amplifier:

0006	Output #6	Output #6	Channel 8
0007	Output #7	Output #7	Channel 8
0008	Spare Channel		

In case of failure of the amplifier channel, NEO will automatically switch from the failed amplifier to the amplifier #8 to grant that the audio keeps broadcasting.


- **LOUDNESS:** the standard Loudness Compensation equalization. It applies to output sources and it follows the Equal-Loudness Contour in order to make the recorded music sound more natural when played at a lower sound pressure level.

e. Tab COBRANET - SOURCES

Cobranet - Sources					
Id	Name	Description	Bundle	Channel	
					+ Add
9	PiPo ch 1		51	1	X Delete
10	Muse XT3		51	2	X Delete
11			52	1	X Delete

Cobranet Sources can be manually added or deleted from this tab. You need to know beforehand the bundle and channel where each Cobranet source is being broadcasted.





f. Tab COBRANET - BROADCAST

Cobranet - Broadcast		
Id	Parameter	 Value
01	Local sources broadcast	Enabled
02	Transmission bundle	55
03	Source 1	Enabled
04	Source 2	Enabled
05	Source 3	Enabled
06	Source 4	Enabled
07	Source 5	Enabled
08	Source 6	Enabled
09	Source 7	Enabled
10	Source 8	Enabled

This tab shows the following items:

- **Local sources broadcast:** Allows to enable or disable the transmission of all the local sources from NEO to the Cobranet VLAN.
- **Transmission bundle:** We select the bundle where all the 8 local sources will be broadcasted. Each source will be broadcasted in a different channel which can be independently enabled or disabled.
- **Source 1 to Source 4:** They are the 4 analog audio sources directly connected to the NEO Controller.
- **Source 5:** It corresponds with the ACSI Bus (this is all the PA Microphones or Emergency Microphones). If there is no ACSI device connected, it will be the analog audio source #5.
- **Source 6:** It is the PTT microphone in the frontal panel of NEO Controller.
- **Source 7:** The internal pre-recorded message player.
- **Source 8:** The second channel of the pre-recorded message player (not available with current firmware).

g. Tab SPEAKER LINES

Speaker Lines								
Id	Description	Line status	Fault	 Imp. Meas.	 Nominal Impedance	Impedance	 EOL	 Amplifier Supervisor
01	Output #1	Disabled	Ok	Enabled	256 ohm	281.4643 ohm	None	Enabled
02	Output #2	Disabled		Disabled	465 ohm		None	Enabled
03	Output #3	Disabled	Ok	Enabled	138 ohm	143.6304 ohm	None	Enabled
04	Output #4	Disabled	Ok	Enabled	249 ohm	250.4375 ohm	None	Enabled
05	Output #5	Disabled	Ok	Enabled	252 ohm	255.5625 ohm	None	Enabled
06	Output #6	Fault A		Disabled	166 ohm		Line A	Enabled
07	Output #7	Fault B		Disabled	166 ohm		Line B	Enabled
08	Output #8	Fault A B		Disabled	166 ohm		Lines A & B	Enabled

This tab manages the supervision of the speaker lines and the internal amplifiers.

There are 2 modes of speaker lines supervision:

- EOL device
- Impedance Measurement

It is recommended to use only one mode of speaker line supervision.

ATTRIBUTES

- **ID** and **DESCRIPTION**: are the same as specified in the **Tab POWER AMPLIFIER OUTPUTS**. They cannot be modified in this tab.
- **LINE STATUS**: It shows the supervision status if supervised with an EOL device.
Possible values:
 - Disabled
 - Ok
 - Fault A
 - Fault B
 - Fault A B
- **FAULT**: It shows the supervision status if supervised with Impedance Measurement.
Possible values:
 - Blank (*in case Impedance Measurement supervision disabled*)
 - Ok
 - CA: *Open Circuit (measured value is above the nominal value + tolerance).*
 - CC: *Short Circuit (measured value is below the nominal value + tolerance).*
 - Invalid (*measured value is below the nominal value + tolerance*)

NOTE: Default tolerance is 15%.

- **IMP. MEAS.** Enables or disables Impedance Measurement line supervision.
- **NOMINAL IMPEDANCE**: Shows the current Nominal Impedance set as reference value.
- **IMPEDANCE**: Shows the current impedance of the line. There is an impedance checkup every 45 seconds.
- **EOL**: Selects which output lines are to be supervised with EOL devices. Every Amplifier Output has 2 output lines available. Options to choose:
 - None (*it disables EOL device line supervision*)
 - Line A
 - Line B
 - Lines A & B
- **AMPLIFIER SUPERVISOR**: Enables or disables the amplifier supervision. If the amplifier supervision is enabled, NEO will report a fault in the amplifier and will be able to switch over to the backup amplifier (if it is configured). By default this attribute is disabled. For EN54-16 certified installations it should be switched to enabled.

h. Tab STATUS INPUTS

Status Inputs				
Id	Description	Line	Fault	<input checked="" type="checkbox"/> Enabled
0001	RESET	Fault	Open	Yes
0002	EMERGENCY	Fault	Open	Yes
0003	ZONE 1			No
0004	ZONE 2			No
0005	ZONE 3			No
0006	ZONE 4			No
0007	ZONE 5			No
0008	ZONE 6			No
0009	ZONE 7			No
0010	ZONE 8			No
0011	AC fault			No
0012	Battery fault			No
0013	DC fault			No

This tab manages the supervision of the ECI dry contact ports (Fire Alarm status inputs) and the Battery Charger dry contacts, as per EN54-16 standard. Please, check NEO User's Manual for further details on connecting

ATTRIBUTES

- **ID** and **DESCRIPTION**: internally assigned.
- **LINE**: It shows the supervision status: *Ok* or *Fault*.
- **FAULT**: It indicates the type of fault: *Open*, *Short* or *Earth*.
- **ENABLED**: Enables or disables the supervision.

i. Tab GPIO

GPIO		
Id	Name	<input checked="" type="checkbox"/> Function
0001	G01	Input
0002	G02	Input
0003	G03	Input
0004	G04	Input
0005	G05	Input
0006	G06	Input
0007	G07	Input
0008	G08	Input
0009	G09	Input
0010	G10	Input
0011	G11	Input
0012	G12	Input
0013	G13	Output
0014	G14	Output

This tab manages the operation mode of GPIO dry contacts. They can be set as **Input** or **Output**.

j. Tab VLAN

Id	Parameter	Value
01	VLAN Data	1
02	VLAN Audio	2

NEO operates with 2 VLAN for transmitting Data and Audio (using Cobranet protocol). By default the address of this VLAN is set as:

- **VLAN Data: 1**
- **VLAN Audio: 2**

The VLAN addresses can be modified to adapt to the network configuration from this tab.

k. Tab ACCESS CONTROL

Access Control			
Id	Name	Access Control	Pin Number
0002	Access Level 2	Confirm	
0003	Access Level 3	Pin	1234

This tab permits to specify and modify the PIN numbers that allow access to the different levels of the menus within NEO touch screen. These access levels are described in NEO User's Manual.

By default, no PIN is requested to access every level. For EN54-16 installations a PIN should be set for every access level.

l. Tab SCREENSAVER


Screensaver		
Id	Parameter	Value
01	Enable screensaver	No
02	Higher brightness level	100 %
03	Lower brightness level	25 %

NEO touch screen can be set to be dimmed and save energy after a period of 90 seconds from the last action or message displayed in the touch screen.

In this tab, this option can be enabled and the brightness levels can be customized.



If the screensaver is disabled, the brightness level of the touch screen will always remain 100%.

m. Tab PTT CONFIG

PTT Config		
Id	Name	 Value
0001	PA ding-dong enabled	Yes
0002	VA ding-dong enabled	Yes
0003	Disable PTT mic supervision	No

By default, NEO frontal PTT microphone is supervised and don't produce any ding-dong or chime before broadcasting the voice. This is an EN54-16 requirement. Optionally, these settings can be modified from this tab.

n. Tab ADVANCED

Advanced Configuration		
Id	Parameter	 Value
1	Load system factory configuration	Reset Ethernet config  Exe

From this tab, NEO can be hard reset and load all the factory configurations. In order to do so, just click on the button **“Exe”**.

By default, this reset will apply as well to the Ethernet configuration and thus the IP address of the device will be set back to 192.168.0.3.



In order to save the Ethernet configuration (IP address) of the device, just switch the Value attribute to **“Don't reset Ethernet config”**. The IP address, Network Mask and Gateway parameters will be saved while the rest of the configuration will be reset to factory defaults.

4.1.4. Extensions

In the current version of NEO Configurator is not possible to configure NEO Extensions.

4.1.5. Accessories

In *Accessories* is where we can find **PA Zone Controllers**. Clicking on this device will show the following tabs:

	View
	State
	Configuration
	General






NOTE: The configuration tabs of this section will only be shown if your user profile is *Installer* or *Maintainer* (see **2.2.3. Users preferences**).

a. Tab STATE

PA Zone Controllers			
Id	Address	Zone Id	Description
2	7	1	VCC device on addr #7 for zone #8

This tab shows the current configuration of the PA Zone Controllers.

b. Tab GENERAL

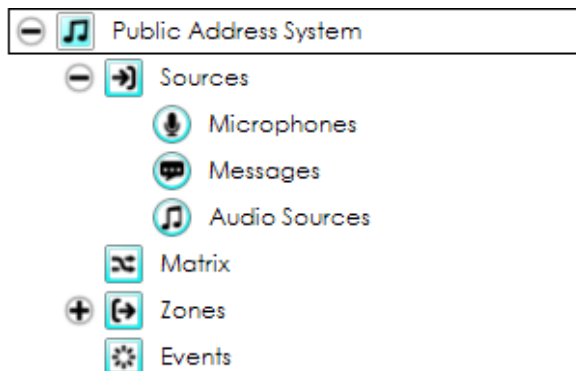
PA Zone Controllers			
Id	 Address	 Zone Id	 Description
			 Add
2	7	1	VCC device on addr #7 for zone #8  Delete

In this tab you can add new PA Zone Controllers, change the Zone Id or delete existing PA Zone Controllers. See section **3.2.4. PA Zone Controllers** for detailed instructions.

4.2. Public Address System View

The *Public Address System* view shows the following function families:

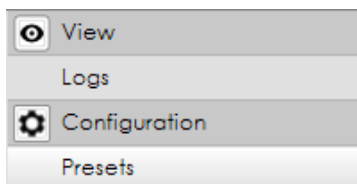
- *Sources*
 - *Microphones*
 - *Messages*
 - *Audio Sources*
- *Matrix*
- *Zones*
- *Events*



Events functions are described in **5. EVENTS**.

4.2.1. Root

When you click over the root of the *Public Address System* view, you get these tabs:



NOTE: The configuration tabs of this section will only be shown if your user profile is *Installer*, *Maintainer* or *Operator* (see **2.2.3. Users preferences**).

a. Tab LOGS

Logs				
Id	Device	Description	Log Type	Duration
0001	NEO-8060M	Public Address log file	Public Address	1
0002	NEO-8060M	Device log file	Device	

The items of this tab are the following system logs:

- *Public Address log file*
- *Device log file*

The **Device log file** cannot be viewed from NEO Configurator, but it can be downloaded as a BIN file so it can be sent to LDA Audio Tech for troubleshooting.

The operation of this tab is the same as described in *System Devices* view (see **4.1.1. Root**).

b. Tab PRESETS

Presets				
Id	Name	Description	Date	
Current Preset				+ Save
0001	Preset 1		02/02/2016 15:37	▶ Load X Delete
0002	Preset 2		02/02/2016 15:38	▶ Load X Delete
0000	Factory Default			▶ Load

The items in this tab are NEO presets. A preset includes the configuration of the following items:

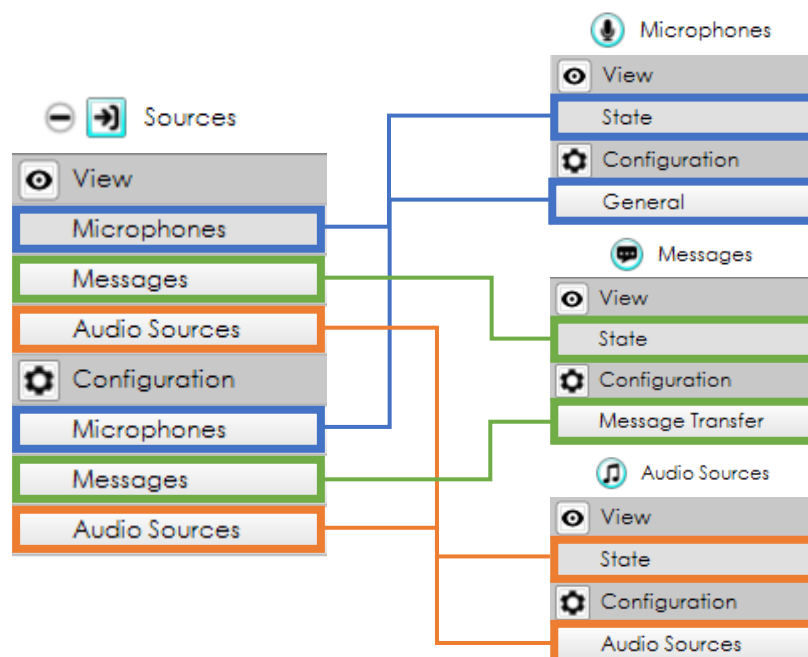
- Input sources volume levels and equalization parameters.
- Zones volume levels and equalization parameters.
- Outputs volume levels and equalization parameters.
- Routing state of zones and sources.

Presets do not save other parameters like zoning, microphone settings, messages or events.

These presets can be **loaded** either from this tab or from the physical NEO touch. You can also create (**save**) new presets from NEO Configurator or **delete** old presets.

4.2.2. Sources

The *Sources* function family is divided in 3 subfamilies: Microphones, Messages and Audio Sources. Clicking directly on **“Sources”**, will show a list of all the tabs contained within every subfamily. All these tabs are the same that are contained in every subfamily separately:



a. Tab MICROPHONES

The tab “View/Microphones” in **Sources** is the same as the tab “View/State” in **Microphones**.

The tab “Configuration/Microphones” in **Sources** is the same as the tab “Configuration/General” in **Microphones**.

The configuration tab is the same as the view tab, but with editing capabilities:

PA Microphones							
Id	Name	Description	ACSI Dir/Prio	State	Token	Firmware	Update
3	0003 MPS8Z	ACSI device on addr #2	2				

ATTRIBUTES AND BUTTONS

- **ID** and **NAME** are internally assigned.
- **DESCRIPTION** can be edited.
- **ACSI Dir/Prio**: It indicates the direction of that microphone within the ACSI bus. This direction also corresponds with the priority of this microphone. A NEO system can contain a maximum of 8 ACSI devices, each of them with a unique ACSI direction/priority.

NOTE: It is not possible to have a PA Microphone and an Emergency Microphone with the same ACSI direction/priority, because they both use the same ACSI bus.

The ACSI direction/priority within NEO Configurator must correspond to the ACSI direction/priority configured in the physical device (see *MPS-8Z User's Manual*).

NOTE: If there is a PA Microphone with an ACSI direction/priority that does not correspond to any MPS-8Z physically connected to NEO, it will appear as a disconnected PA Microphone.

- **STATE**, **TOKEN**, **FIRMWARE** and **UPDATE** show additional info from the physical PA Microphones when the system is live linked.
- **ADD** and **REMOVE buttons** are used to manually add or remove the PA Microphone from the project (see **3.2.2. PA Microphones**).

NOTE: It is not possible to change the ACSI Direction/Priority of a PA Microphone from NEO Configurator after it has been added to the project.

NOTE 2: If you manually change the ACSI Direction/Priority from a physical MPS-8Z, it will be disconnected from the NEO project: a new PA Microphone with the new ACSI direction/priority should be added to NEO Configurator and the old one (with the old ACSI direction/priority) should be removed.

b. Tab MESSAGES

The tab “View/Messages” in **Sources** is the same as the tab “View/State” in **Messages**.

The tab “Configuration/Messages” in **Sources** is the same as the tab “Configuration/Message Transfer” in **Messages**.

The configuration tab is the same as the view tab, but with editing capabilities:

Messages - Configuration						
Id	Name	Description	Size	Duration		
					+ Add	
0001			839 KB	00:08	+ Backup	X Delete
0002			287 KB	00:03	+ Backup	X Delete
0003			552 KB	00:05	+ Backup	X Delete
0004			1087 KB	00:11	+ Backup	X Delete
0005			1015 KB	00:10	+ Backup	X Delete
0006			790 KB	00:08	+ Backup	X Delete
0007			1004 KB	00:10	+ Backup	X Delete
0008			992 KB	00:10	+ Backup	X Delete
0009			678 KB	00:07	+ Backup	X Delete
0010			722 KB	00:07	+ Backup	X Delete

NOTE: The content of these tabs (i.e. the list of messages) can only be shown when the system is live linked.

ATTRIBUTES AND BUTTONS

- **ID** is internally assigned.
- **NAME** and **DESCRIPTION** can be edited.
- **SIZE** and **DURATION** show additional info from the messages.
- **ADD button:** It is used to upload a new pre-recorded message to the NEO device. It is possible to upload audio from 2 different file formats: WAV and MP3. In the case of uploading an MP3 file, NEO Configurator will first convert it into WAV and then will upload it to the NEO device.
- **BACKUP button:** It allows to download from NEO device to the computer the message selected.
- **REMOVE button:** It removes the message in the NEO device.

NEO can store a maximum of 99 pre-recorded messages. The total capacity for all the messages is 2GB (over 6 hours of audio). In the lower part of NEO Configurator window is shown the total storage capacity used and available for pre-recorded messages:



Prerecorded message storage - Total: 1996800 KB - Used: 9654 KB - Free: 1987146 KB

c. Tab AUDIO SOURCES

The tab “*View/Audio Sources*” in **Sources** is the same as the tab “*View/State*” in **Audio Sources**.

The tab “*Configuration/Audio Sources*” in **Sources** is the same as the tab “*Configuration/Audio Sources*” in **Audio Sources**.

The configuration tab is the same as the view tab, but with editing capabilities:

Audio Sources - Configuration			
Id	Type	 Name	 Description
0001	Local	MP3 Music	
0002	Local	CD/DVD Music	
0003	Local	Radio Tuner	
0004	Local	Dynamic Microphone	
0005	Local		
0009	Remote	Remote Computer	

This tab shows all the **local analog audio** sources (see **c. Tab AUDIO INPUTS**) as well as the **remote** sources (see **e. Tab COBRANET - SOURCES**).


The **name** and **description** are the same that are shown in the System Devices tabs: **c. Tab AUDIO INPUTS** and **e. Tab COBRANET - SOURCES**.

4.2.3. Matrix

The *Matrix* function family includes the following tabs:



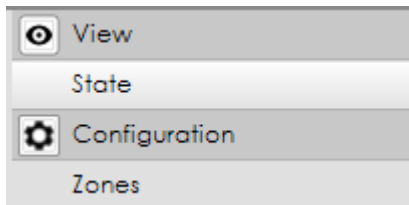
The *Configuration/Routing* tab is the same as the *View/State* tab, but with editing capabilities:

Routing - Configuration			
Id	Name	Description	 Source
0001	Zone #1	Zone #1	1:MP3 Music
0002	Zone #2	Zone #2	1:MP3 Music
0003	Zone #3	Zone #3	4:Dynamic Microphone
0004	Zone #4	Zone #4	3:Radio Tuner
0005	Zone #5	Zone #5	0:None
0006	Zone #6	Zone #6	9:Remote Computer
0007	Zone #7	Zone #7	0:None
0008	Zone #8	Zone #8	0:None

This tabs show all the system zones and the source that is routed in every zone. The source can be changed also from here. Only analogue audio sources and remote sources can be selected.

4.2.4. Zones

The *Zones* function family includes the following tabs:



The *Configuration/Zones* tab is the same as the *View/State* tab, but with editing capabilities:

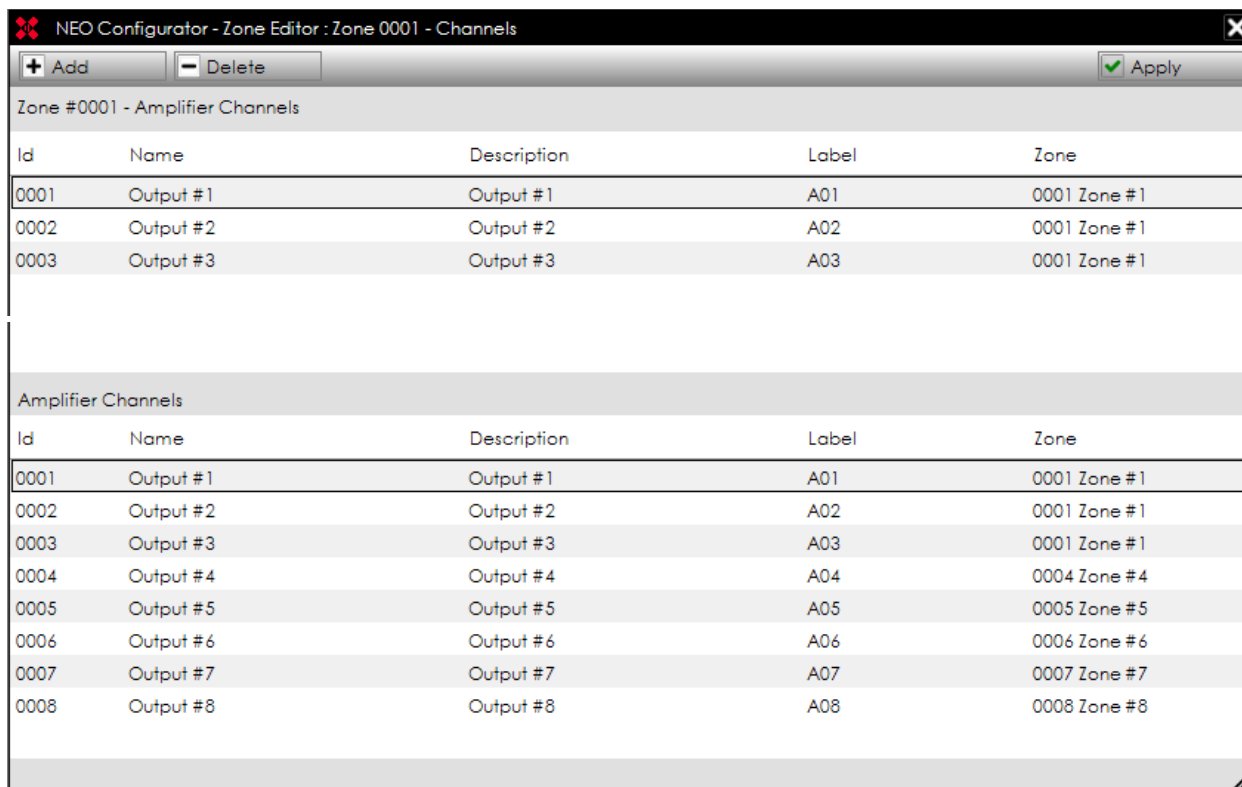
Zones - Configuration									
Id	Name	Description	Volume	Mute	Override	Source			
							+ Add		
0001	Zone #1	Zone #1	0 dB	No	No	1:MP3 Music	+ Channels	+ Override	X Delete
0002	Zone #2	Zone #2	0 dB	No	No	1:MP3 Music	+ Channels	+ Override	X Delete
0003	Zone #3	Zone #3	0 dB	No	No	4:Dynamic Microphone	+ Channels	+ Override	X Delete
0004	Zone #4	Zone #4	0 dB	No	No	3:Radio Tuner	+ Channels	+ Override	X Delete
0005	Zone #5	Zone #5	0 dB	No	No	0:None	+ Channels	+ Override	X Delete
0006	Zone #6	Zone #6	0 dB	No	No	9:Remote Computer	+ Channels	+ Override	X Delete
0007	Zone #7	Zone #7	0 dB	No	No	0:None	+ Channels	+ Override	X Delete
0008	Zone #8	Zone #8	0 dB	No	No	0:None	+ Channels	+ Override	X Delete

Every zone is a group of physical outputs. By default, 1 output = 1 zone, but this can be modified as per the project requirement within this tab.

ATTRIBUTES AND BUTTONS

- **ID** is internally assigned.
- **NAME** and **DESCRIPTION** can be edited.
- **VOLUME** and **MUTE**: These parameters are modified independently from the volume level of the outputs that belong to a zone. These adjustments affect to all the outputs within the zone as a group.
- **OVERRIDE** shows whether the override function associated to that zone is activated. Override are usually activated from an event (see chapter 5. *EVENTS*).
- **SOURCE** shows the current audio source routed to that zone. The routing state can be modified from 4.2.3. *Matrix* function family.
- **ADD** and **REMOVE buttons**: They allow to add or remove zones in the system.

- **CHANNELS** button opens a window to configure the Audio Outputs within a zone:



Several Audio Outputs can be added to one zone, so that a group of outputs will operate as a single zone. Every Audio Output can only be included in one zone; it is not possible to include the same Audio Output in many zones.

ADD AN OUTPUT TO THE ZONE:

1. Select the Audio Output from the lower “Amplifier Channels” panel.
2. Click on “Add”.
3. Click on “Apply” to save the changes.

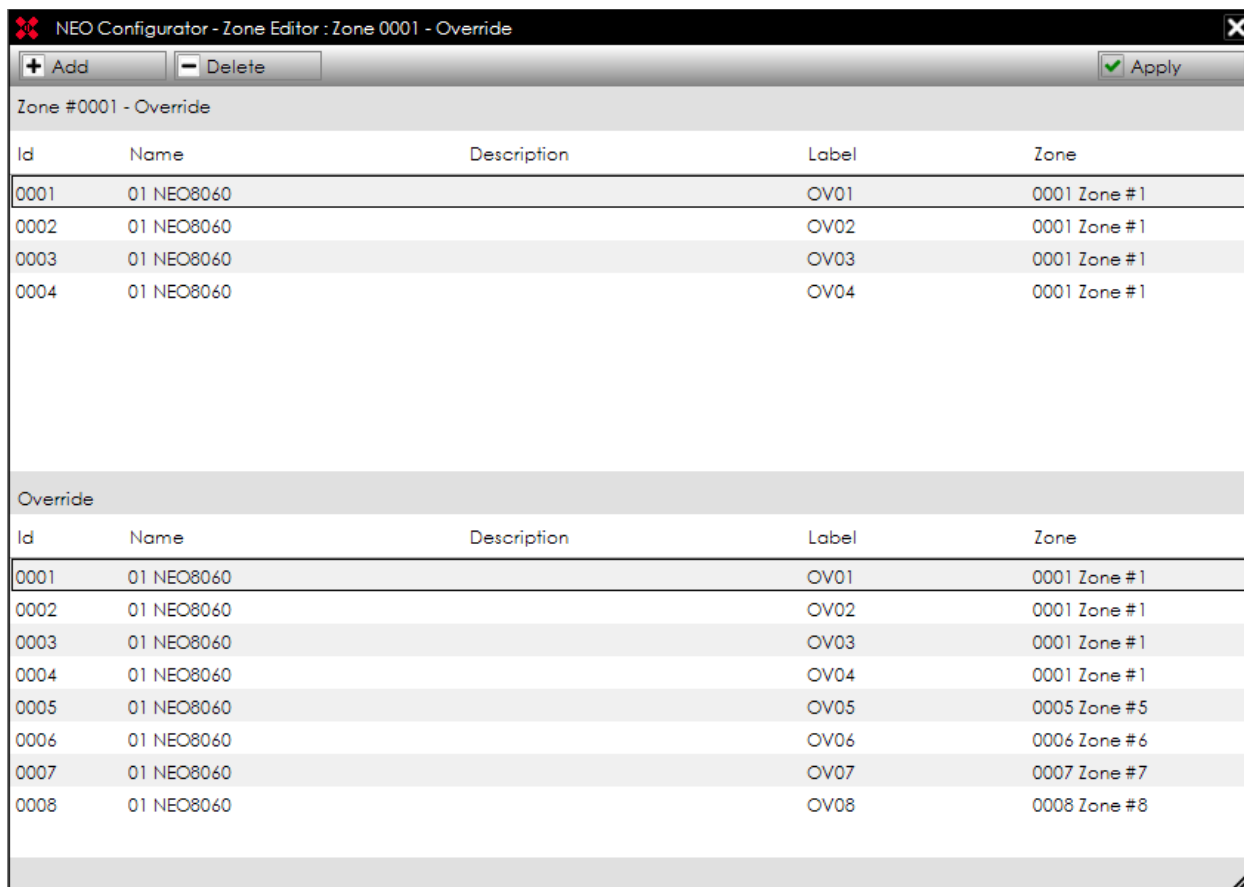
NOTE: If you add an Audio Output which was previously assigned to a different zone, that output will be removed from that zone.

REMOVE AN OUTPUT FROM THE ZONE:

1. Select the Audio Output from the upper “Zone #000X - Amplifier Channels” panel.
2. Click on “Delete”.
3. Click on “Apply” to save the changes.

NOTE: When you remove an Audio Output which was already assigned to the zone, that output will become unassigned and will not belong to any zone. In order to ensure that that audio channel can be used, make sure that the unassigned output is readded to another zone.

- **OVERRIDE button** opens a window to configure the Override Outputs within a zone:



Zone #0001 - Override				
Id	Name	Description	Label	Zone
0001	01 NEO8060		OV01	0001 Zone #1
0002	01 NEO8060		OV02	0001 Zone #1
0003	01 NEO8060		OV03	0001 Zone #1
0004	01 NEO8060		OV04	0001 Zone #1

Override				
Id	Name	Description	Label	Zone
0001	01 NEO8060		OV01	0001 Zone #1
0002	01 NEO8060		OV02	0001 Zone #1
0003	01 NEO8060		OV03	0001 Zone #1
0004	01 NEO8060		OV04	0001 Zone #1
0005	01 NEO8060		OV05	0005 Zone #5
0006	01 NEO8060		OV06	0006 Zone #6
0007	01 NEO8060		OV07	0007 Zone #7
0008	01 NEO8060		OV08	0008 Zone #8

The Override Outputs in NEO can be launched under 2 conditions:

- When NEO receives a dry contact in one of the Status Inputs for the Fire Alarm (ECI 1-8 or Z1-Z8).
- When it is launched by an event (see chapter 5. **EVENTS**).

In this button can be configured what Override Outputs are activated when NEO receives the Fire Alarm dry contact in a specific zone (case a).

The assignation of Override Outputs with a specific zone can be made independently of the Audio Outputs assigned to that same zone. For example, Zone 3 can have *Audio Outputs #3, #5 and #6* while at the same time have *Override Outputs #2, #3, #4, #5 and #6*.

It is also possible to have a zone with no Override Output or a zone *only* with Override Outputs and no Audio Output.

Every Override Output can only be included in one zone. It is not possible to include the same Override Output in many zones.

ADD AN OUTPUT TO THE ZONE:

1. Select the override output from the lower "Override" panel.
2. Click on "Add".

3. Click on "Apply" to save the changes.

NOTE: If you add an Override Output which was previously assigned to a different zone, that output will be removed from that zone.

REMOVE AN OUTPUT FROM THE ZONE:

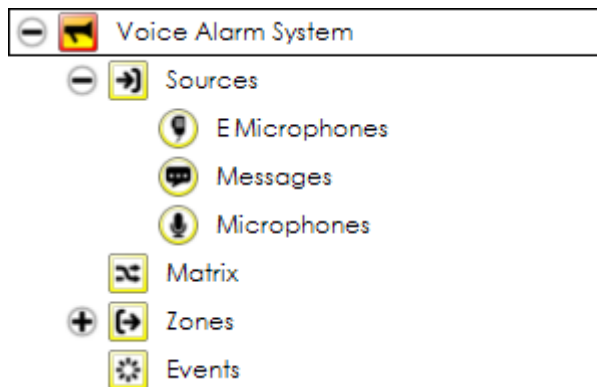
1. Select the output from the upper "Zone #000X - Override" panel.
2. Click on "Delete".
3. Click on "Apply" to save the changes.

NOTE: When you remove an Override Output which was already assigned to the zone, that Override Output will become unassigned and will not belong to any zone.

4.3. Voice Alarm System View

The *Public Address System* view shows the following function families:

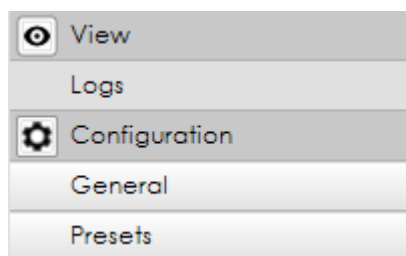
- *Sources*
 - *E Microphones*
 - *Messages*
 - *Audio Sources*
- *Matrix*
- *Zones*
- *Events*



Events functions are described in chapter 5. **EVENTS**.




4.3.1. Root

When you click over the root of the *Voice Alarm System* view, you get these tabs:



NOTE: The configuration tabs of this section will only be shown if your user profile is *Installer* (see 2.2.3. *Users preferences*).

a. Tab LOGS

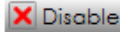
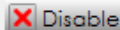
Logs					
Id	Device	Description	Log Type	Duration	
0001	NEO-8060M	Emergency log file	Emergency	1	 View
0002	NEO-8060M	Fault log file	Fault	1	 View
0003	NEO-8060M	Disarmed logfile	Disarmed	1	 View

The items of this tab are the following system logs:

- *Emergency log*
- *Fault log*
- *Disarmed log*

The operation of this tab is the same as described in *System Devices* view (see **4.1.1. Root**).

b. Tab GENERAL

General			
Id	Description	State	
0001	PA Mics can be used in VA state	Enabled	
0002	PA Zones can be used in VA state	Enabled	

This tab allows to enable or disable the following functionalities:

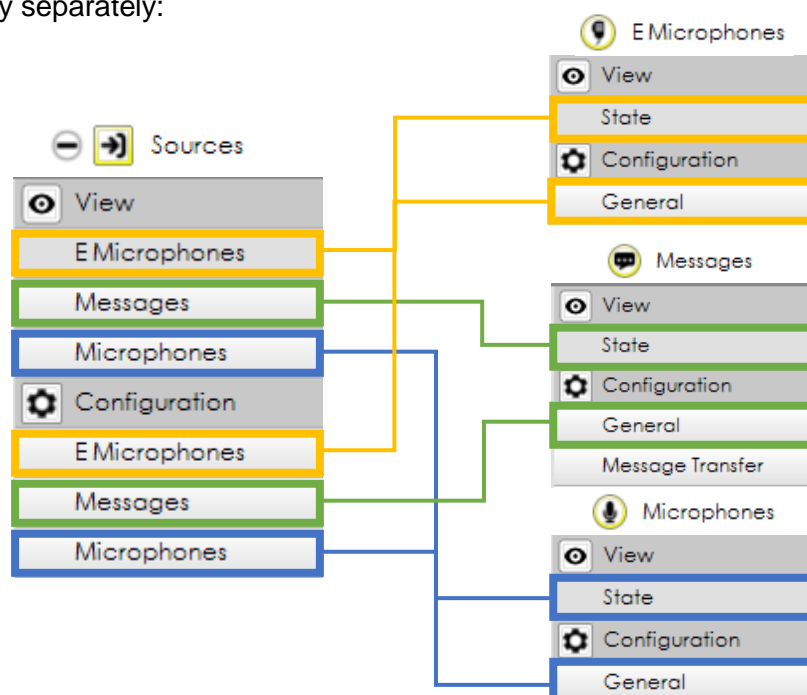
- **PA Mics can be used in VA state.**
- **PA Zones can be used in VA state:** it allows to route PA sources to the zones while the device is in VA state.

c. Tab PRESETS

This tab is exactly the same that appears in *Public Address System* view (see **b. Tab PRESETS** in **4.2.1. Root**).

4.3.2. Sources

The *Sources* function family is divided in 3 subfamilies: E Microphones, Messages and Microphones. Clicking directly on **“Sources”**, will show a list of all the tabs contained within every subfamily, except the *Message Transfer* tab.. All these tabs are the same that are contained in every subfamily separately:



a. Tab E MICROPHONES

The tab “*View/EMicrophones*” in **Sources** is the same as the tab “*View/State*” in **EMicrophones**.

The tab “*Configuration/EMicrophones*” in **Sources** is the same as the tab “*Configuration/General*” in **EMicrophones**.

The configuration tab is the same as the view tab, but with editing capabilities:

EMicrophones							
Id	Name	Description	ACSI Dir/Prio	State	Token	Firmware	Update
			1				+ Add
2	0002 VAP1	ACSI device on addr #1	1				X Delete

ATTRIBUTES AND BUTTONS

- **ID** and **NAME** are internally assigned.
- **DESCRIPTION** can be edited.
- **ACSI Dir/Prio**: It indicates the direction of that microphone within the ACSI bus. This direction also corresponds with the priority of this E Microphone. A NEO system can contain a maximum of 8 ACSI devices, each of them with a unique ACSI direction/priority.

NOTE: It is not possible to have an E Microphone and a PA Microphone with the same ACSI direction/priority, because they both use the same ACSI bus.

The ACSI direction/priority within NEO Configurator must correspond to the ACSI direction/priority configured in the physical device (see *VAP-1 User's Manual*).

NOTE: If there is an E Microphone with an ACSI direction/priority that does not correspond to any MPS-8Z physically connected to NEO, it will appear as a disconnected E Microphone.

- **STATE**, **TOKEN**, **FIRMWARE** and **UPDATE** show additional info from the physical E Microphones when the system is live linked.
- **ADD** and **REMOVE buttons** are used to manually add or remove the E Microphone from the project (see **3.2.2. PA Microphones**).

NOTE: It is not possible to change the ACSI Direction/Priority of a E Microphone from NEO Configurator after it has been added to the project.

NOTE 2: If you manually change the ACSI Direction/Priority from a physical VAP-1, it will be disconnected from the NEO project: a new E Microphone with the new ACSI direction/priority should be added to NEO Configurator and the old one (with the old ACSI direction/priority) should be removed.

b. Tab MESSAGES

The tab “View/Messages” in **Sources** is the same as the tab “View/State” in **Messages**.

The tab “Configuration/Messages” in **Sources** is the same as the tab “Configuration/General” in **Messages**.

The configuration tab is the same as the view tab, but with editing capabilities:

Messages - Configuration				
Id	Name	Description	Size	Duration
EVAC			588 KB	00:06
ALERT			1100 KB	00:11

NOTE: The content of these tabs (i.e. the list of messages) can only be shown when the system is live linked.

ATTRIBUTES AND BUTTONS

- **ID** can be either:
 - *EVAC* for the Evacuation Message.
 - *ALERT* for the Alert Message.
- **NAME** and **DESCRIPTION** can be edited.
- **SIZE** and **DURATION** show additional info from the messages.
- **BACKUP button:** It allows to download from NEO device to the computer the message selected.
- **EDIT button** opens the following window:

Messages - State				
Id	Name	Description	Size	Duration
EVAC			588 KB	
Messages - State				
Id	Name	Description	Size	Duration
0001			839 KB	00:08
0002			287 KB	00:03
0003			552 KB	00:05
0004			1087 KB	00:11

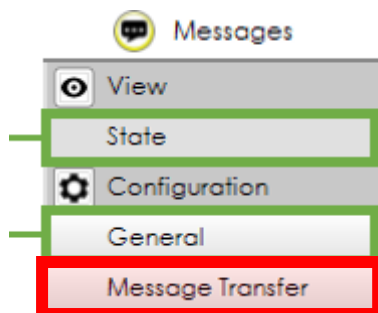
This windows allows to define the EVAC (or ALERT) message in NEO. It must be selected from one of the previously uploaded messages. In **c. Tab MESSAGE TRANSFER** is explained how to upload new messages.

- **BACKUP button:** It allows to download from NEO device to the computer the message selected.

NOTE: EVAC or ALERT messages can never be deleted because they are essential for the basic operation of NEO during an emergency. These 2 emergency message types are mandatory as per EN54-16.

c. Tab MESSAGE TRANSFER

In the **“Messages”** subfamily there is an additional tab that does not appears when clicking directly on **“Sources”**:



This tab is exactly the same that appears in the *Public Address System* view (see **b. Tab MESSAGES** in 4.2.2. Sources).

It can be used as shortcut to manage all the pre-recorded messages in NEO before or after assign them as *EVAC* or *ALERT* message in the tab **“General”**.

d. Tab MICROPHONES

This tab is exactly the same that appears in the *Public Address System* view (see **a. Tab MICROPHONES** in 4.2.2. Sources).

4.3.3. Matrix

This function family is practically the same as explained in *Public Address System* view (see 4.2.3. Matrix). The only difference is a new attribute called **“State”**:

Routing - Configuration				
Id	Name	Description	State	Source
0001	Zona #1	Zona #1	Quiescence	0:None
0002	Zona #2	Zona #2	Quiescence	0:None
0003	Zona #3	Zona #3	Quiescence	0:None
0004	Zona #4	Zona #4	Quiescence	0:None
0005	Zona #5	Zona #5	Quiescence	0:None
0006	Zona #6	Zona #6	Quiescence	0:None
0007	Zona #7	Zona #7	Quiescence	0:None
0008	Zona #8	Zona #8	Quiescence	0:None

The attribute **“State”** can have the following values:

- **Emergency:** when that zone is in emergency mode (i.e. it is broadcasting an *EVAC/ALERT* message or an Emergency Microphone).
- **Fault:** when a speaker line or amplifier within that zone reports a fault (see *g. Tab SPEAKER LINES*).
- **Disarmed:** when that zone has been manually disarmed.
- **Quiescence:** when none of the other states is active (i.e. that zone is operating normally in PA mode).

4.3.4. Zones

This function family is practically the same as explained in *Public Address System* view (see *4.2.4. Zones*). The only difference are 2 new attributes, **“Disarmed”** and **“State”**:

Id	Name	Description	Disarmed	State	Volume	Mute	Override	Source			
0001	Zona #1	Zona #1	No	Quiescence	0 dB	No	No	0:None	+ Channels	+ Override	X Delete
0002	Zona #2	Zona #2	No	Quiescence	0 dB	No	N/A	0:None	+ Channels	+ Override	X Delete
0003	Zona #3	Zona #3	No	Quiescence	0 dB	No	N/A	0:None	+ Channels	+ Override	X Delete
0004	Zona #4	Zona #4	No	Quiescence	0 dB	No	No	0:None	+ Channels	+ Override	X Delete
0005	Zona #5	Zona #5	No	Quiescence	0 dB	No	No	0:None	+ Channels	+ Override	X Delete
0006	Zona #6	Zona #6	No	Quiescence	0 dB	No	No	0:None	+ Channels	+ Override	X Delete
0007	Zona #7	Zona #7	No	Quiescence	0 dB	No	No	0:None	+ Channels	+ Override	X Delete
0008	Zona #8	Zona #8	No	Quiescence	0 dB	No	No	0:None	+ Channels	+ Override	X Delete

The attribute **“Disarmed”** is used to manually disarm or rearm a specific zone.

The attribute **“State”** can have the following values:

- **Emergency:** when that zone is in emergency mode (i.e. it is broadcasting an *EVAC/ALERT* message or an Emergency Microphone).
- **Fault:** when a speaker line or amplifier within that zone reports a fault (see *g. Tab SPEAKER LINES*).
- **Disarmed:** when that zone has been manually disarmed.
- **Quiescence:** when none of the other states is active (i.e. that zone is operating normally in PA mode).