



AEQ CAPITOL VIRTUAL

USER'S MANUAL

ED. 04/24

V. 1.1 - 28/05/2024

Software version 1.66, May 2024

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1. INSTALLING AND RUNNING THE APPLICATION.

1.1. Installation. System requirements.

"**AEQ CAPITOL VIRTUAL**" application is available in two different versions for the following operating systems:

- Windows.
- iOS.

The Windows version is provided on the auto run USB key furnished with the console (or by the AEQ dealership network), while the iOS version can be downloaded from <http://virtualmixer.aeq.es>.

Both versions feature a Demo mode: in this mode, the application operates against a dummy console, allowing for the evaluation of the product and user training. In order to work with a real console, activation of its **license** at hardware level is required by means of "Capitol Setup" or "Capitol IP Setup" application (please consult console user's manual); a temporary license can be activated at software level (see section 3.3.8 of this manual).

"AEQ CAPITOL VIRTUAL" application has been designed to be used in tactile devices, but it can be used with a mouse as well. The Windows and iOS (for iPad) versions have the same appearance -except for very small particularities- and, of course, they provide the same functionality.

Windows requirements.

"AEQ CAPITOL VIRTUAL" software for Windows must be installed on a PC running Windows 7, 8, 8.1, 10 or 11 operating system. Correct presentation can not be guaranteed with older Windows versions.

The installation process simply consists on running the provided installer and following the on-screen instructions as they come up.

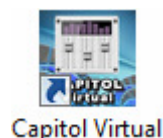
A minimum free hard disk space of 15Mb is required, and any processor supported by the above mentioned operating systems with more than 2Gb RAM is enough for correct performance. Optimal screen resolution is 1920x1080p although the program will adapt to other resolutions. In any case, it is strongly recommended that the monitor aspect ratio is 16:9.

iOS requirements.

"AEQ CAPITOL VIRTUAL" app for iOS must be installed on an iPad with iOS 5 or later operating system. Correct presentation cannot be guaranteed with older versions. A minimum free storage space for applications of 7Mb is required.

1.2. Running the application.

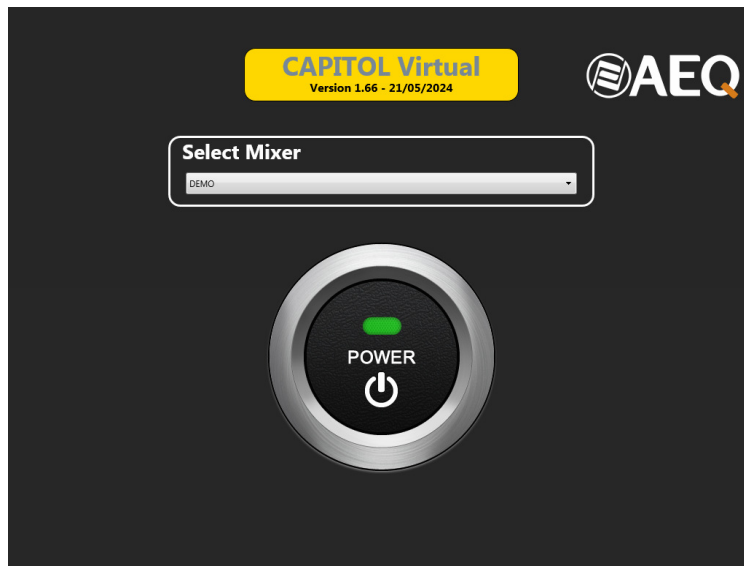
Once the "**AEQ CAPITOL VIRTUAL**" application is installed (by default, in C:\Program files\CapitolVirtual), you can start it up by double-clicking the icon displayed on the desktop:



The application will also be accessible from the Start menu.

NOTE: If you want to use the application in a unit with **touch screen**, in order to make it works properly the parameter "TOUCH=0" must be changed to "TOUCH=1" in the "CapitolVirtual.ini" file, located in the application folder.

Once the application starts, an access screen as the following one will be displayed:



This screen allows the user to select which device the application will connect to.

In order to do so, just click on the drop-down menu and select one of the available options.



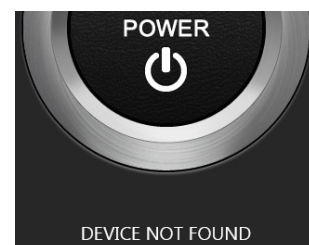
In case that the desired option is not presented in the menu, just select the "DEMO" option and the intended device will be added afterwards as a new device. The way to do so will be explained later, in chapter 3.4 of this manual.

In order to be able to connect to the console, the PC must have a compatible IP address within the same network. In most cases, if you can successfully issue a PING command to the frame, the application will be able to connect to it.

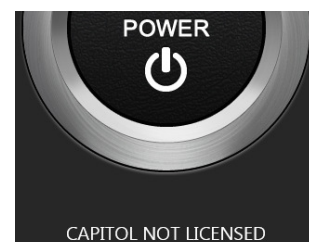
This screen also shows the application's **version**.

Once the console is selected in the drop-down menu, just press on the "**POWER**" button to connect to it.

In case it's not found, an error message will be displayed:

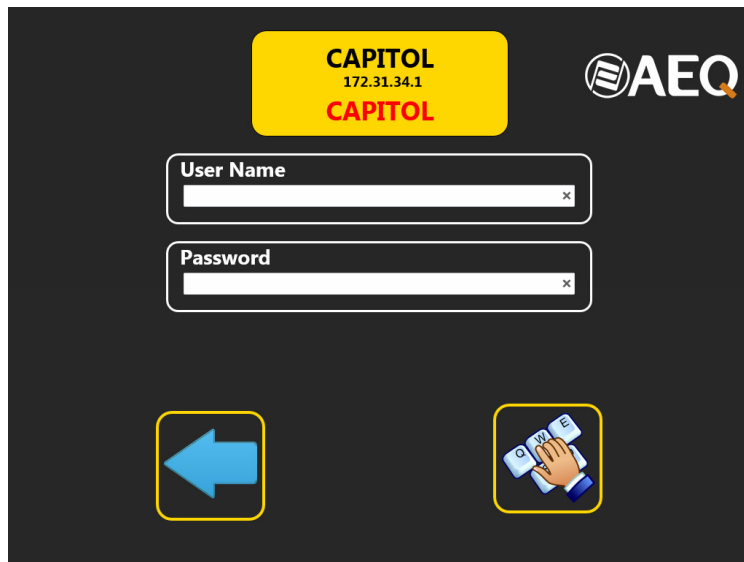


In case there's connection, but the **license** of the console is not activated, the following indication will appear:



If the console has been successfully connected, it will be checked then for a proper active license to use "AEQ CAPITOL VIRTUAL". This license resides in the console, not in the software, so the same software will work or not depending on the console it's trying to connect to.

In case there's connection and the license is activated, a "Login" screen like this will appear:



If the "Auto Login" option is configured in the devices section (for the selected device), this screen will appear only temporarily, and as soon as all the configuration data is received from the console, it will give pass to next screen. On the other hand, if that option is not activated, the user must type in a valid user and password to continue.

The "User Name" field must be filled in with the user name defined in the console configuration software. By default, the user is ADMIN.

The "Password" field expects a key associated to that user. The password is defined in the console configuration software. By default, the password for user ADMIN is 1234.

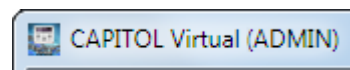


The button with the left blue arrow allows you to return to the device selection screen. The user must click on this button to leave the application (Windows version only), or when the device to be controlled needs to be changed (all versions).

Once a correct user and password have been entered, the application main idle screen is accessed by clicking on the button on the right. In case user and password are not correct, an error message will appear ("Invalid User Name or Password") and the application will remain in this screen until correct ones are entered.



NOTE 1: From that moment on, the application header will show the user who has accessed.



NOTE 2: In case that a new configuration is sent to the console (by means of "Capitol Setup" or "Capitol IP Setup" application) or that a configuration memory (or snapshot) is loaded in the console, the connection of "AEQ CAPITOL VIRTUAL" application to the console will be automatically reestablished.

2. IDLE SCREEN.

This is the application idle screen, where a representation of CAPITOL console control surface is shown:



The system can be remotely controlled from this screen.

When the console is not located in the same network, the best option is to establish a VPN connection to ease connectivity and guarantee reception of the vumeters. Otherwise their correct reception cannot be guaranteed through a network such as Internet as they are transmitted as UDP traffic.

Next, the remote control screen is described. As its format and functions are very similar to those in the physical CAPITOL control surface, please refer to the corresponding chapters of the console user's manual for more details about the functions and configuration of the surface.

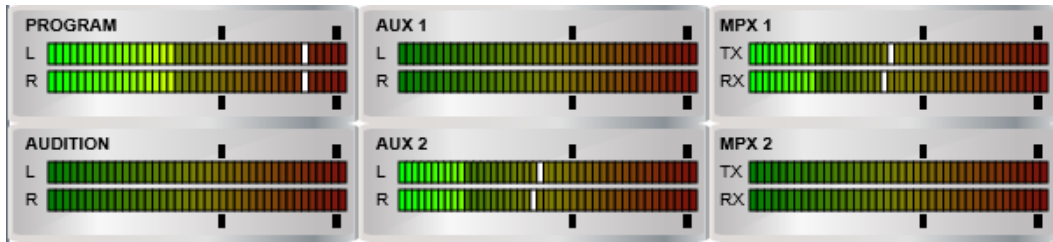
The screen is divided into 5 sections:

- 1) Faders block indication. Looks like this:



The "01-08" label indicates that the represented faders are the 8 ones that the CAPITOL console has.

2) Main vumeters. They appear on the top area of the screen.



The "PROGRAM" and "AUDITION" vumeters are always displayed, whereas the rest of them are only shown when no channel is selected by means of the button



3) Programmable Keys. The console's programmable keys are displayed, together with their function names:



If labels have been defined for some of these programmable keys from the "Capitol Setup" or "Capitol IP Setup" application (consult console user's manual), they will appear reflected in this section.

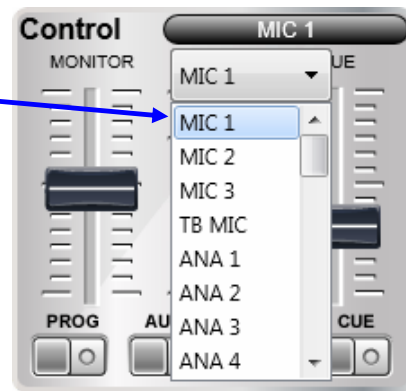
The keys operate in the same way as they do in the surface, except for the "Multiplex", "A/B Mode" and "To Mixer Bus" type keys, that operate in LATCH mode instead of PTT mode, so the "SELECT" and programmable keys don't need to be pressed at the same time. The "Orders" type keys also operate in the application in LATCH mode instead of PTT. These 4 types of programmable keys are mutually exclusive: if one of them is activated, it's not possible to activate another one until the first one is deactivated.

4) Control and Studio Monitoring Sections:



The CUE vumeter (or the control monitoring bus vumeter, when there are no channels sent to CUE), together with a button implementing the "CUE RESET" function, are displayed in the Control section. This button operates in parallel with the one programmed in the programmable keys section.

Next to the "Control" text, a button is provided that unfolds a list of available signals to monitor when the "SEL" button is selected in the monitoring.



In the Studio Monitoring section, next to the "Studio" text, the same button is presented for the signals corresponding to the Studio "SEL" button.

If a "Split CUE" type programmable key has been defined, when activated, on the channel of the Control speakers and headphones configured in the key (left or right) you will hear the signal present on the CUE bus, while on the other channel (right or left) you will hear the signal selected in the Control Monitoring section. When you deactivate the key, the Control speakers and headphones will return to initial operation. For more information, please consult section 4.3.2.13 of the console user's manual.

In both Control and Studio sections, when you click with the mouse on any of the faders that allow you to control the level, an indicator of the configured level appears:



In the Studio Monitoring section, also a Talkback section is provided and consists of four buttons and the "LEVEL" control. This section allows for direct conversation with the studio monitors, headphones, telephone hybrid 1 or telephone hybrid 2.



NOTE: There is a type of programmable key ("Remote Production") that allows you to modify the working mode of these sections (see section 4.3.2.14 of the console user's manual).

- 5) Channels section. The 8 channels of console control surface are presented simultaneously.

The channel has a very similar appearance as the surface, so its use should be quite intuitive.

Each channel includes the following controls:

- the routing buttons: "PROGRAM", "AUDITION", "AUX 1" and "AUX 2".
- the "SELECT" button: allows you to access to information regarding channel status and modify some parameters.
- the "CUE" button.
- the channel ON/OFF button.
- the graphical fader.

Each channel includes the following indicators:

- display that shows the assigned signal name and status for balance or panorama.
- active channel "ON AIR" indicator.
- LEDs that indicate activation or change of equalizer ("EQ"), balance ("BAL"), dynamics ("DYN") or gain ("GAIN").



When the snapshot loaded in the console has the "Audition Mode" configured as "Orders" from the "Capitol Setup" or "Capitol IP Setup" application (see section 4.3.5 of the console user's manual), the "AUDITION" routing buttons changes to:

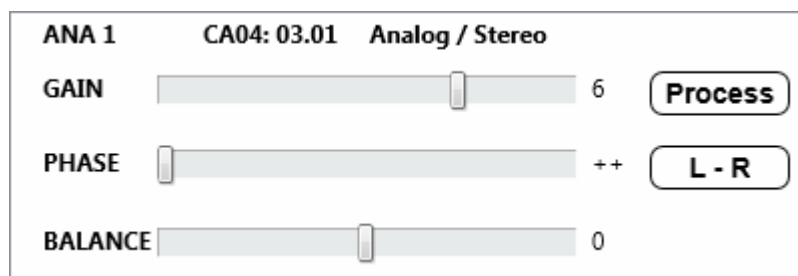


If the channel has an output channel assigned in the "Orders" field, when you press the "ORDERS" button it will turn on (see image on the right) and the orders microphone will be sent to that output. Just like on the console control surface, the operation of that button is in PTT mode.

When the "SELECT" key of a channel is clicked on, the "PROGRAM" and "AUDITION" vumeters are pushed to the right, while "AUX 1", "AUX 2", "MPX 1" and "MPX 2" vumeters disappear, opening a windows where the selected channel status is presented. In order to return to the previous situation, just click on the channel "SELECT" button again.

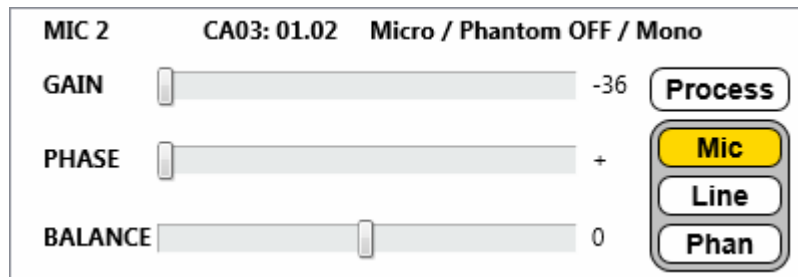


When a channel is selected, a section with the following parameters appears (all of them can be modified except the first one):

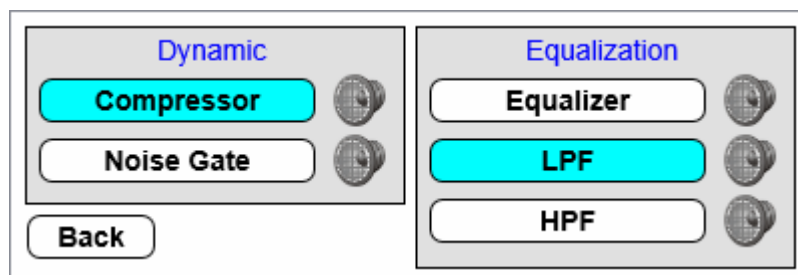


- Line name and information.
- Input gain.
- Signal phase.
- Signal balance/panorama.
- Access button to signal processes.
- Button to modify the sending mode of the stereo input signal toward the stereo outputs that is routed to. The options that appear successively when you press the button are: L-L, R-R and R-L. If you press the button once more, it returns to the normal working mode: L-R (the L input channel is sent to the L output channel and the R input channel is sent to the R output channel). This button will appear only for stereo signals.


In the case of MIC/LINE type inputs, instead of adjusting the sending mode of the stereo signal, it's possible to configure the input as microphone or line and, only when configured as microphone, activate/deactivate the Phantom power.

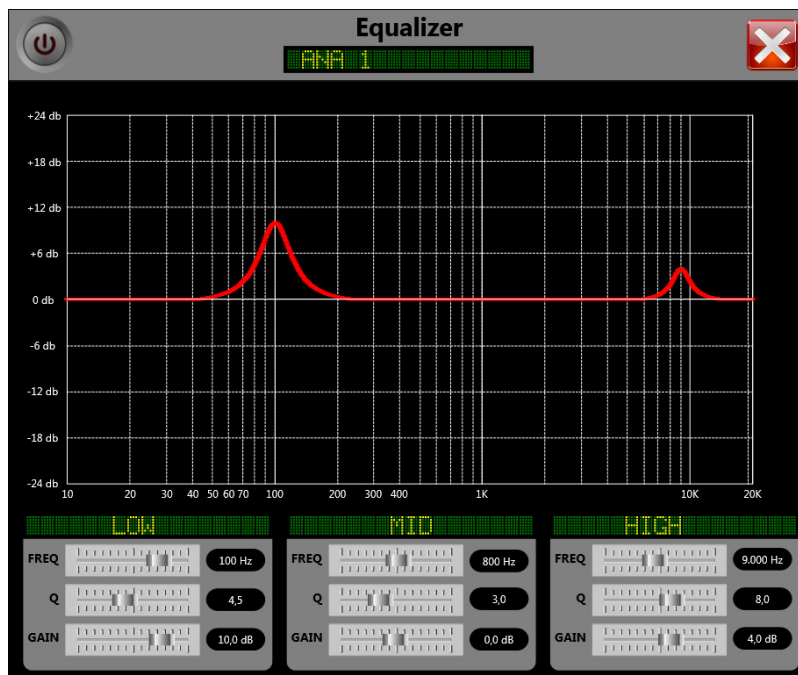




When the **Process** button is clicked on, the following screen appears:



In order to activate/deactivate a process, just click on the button with its name. When the process is active, it will appear with a blue background, otherwise the button will have white background.


If any of the process parameters needs to be changed, just click on the  button right by its side. The process configuration screen then appears:



Once inside that configuration screen (equalizer in the example), in addition to modify the process associated parameters, the **ON/OFF button**  (at the top left area) allows you to activate/deactivate the process and the  button (at the top right area) allows you to return to the previous screen (or simply by clicking on the graphical representation).

Changes are applied to the audio in real time, provided that the process is active.

Depending on the selected process, the configurable parameters and the associated graphical representation will be different. For more information, please consult the console user's manual or the "AEQ CAPITOL SCREEN" application manual.

In order to leave the idle screen and access to the configuration menu, just click on this button, located at the right top corner. The configuration available options are almost the same as the ones displayed in the main display of the Control and Monitoring module of the physical console, although now they are presented in a much more accessible than from the console itself. 

When you access to the application with a user with less permissions that ADMIN user, the remote control screen looks different, blurring those controls the user doesn't have permissions for.

In next example, the user has only permissions to control the routing buttons, the programable keys, the Control speakers and headphones level (and the associated selection buttons) and the "TALKBACK" section buttons:

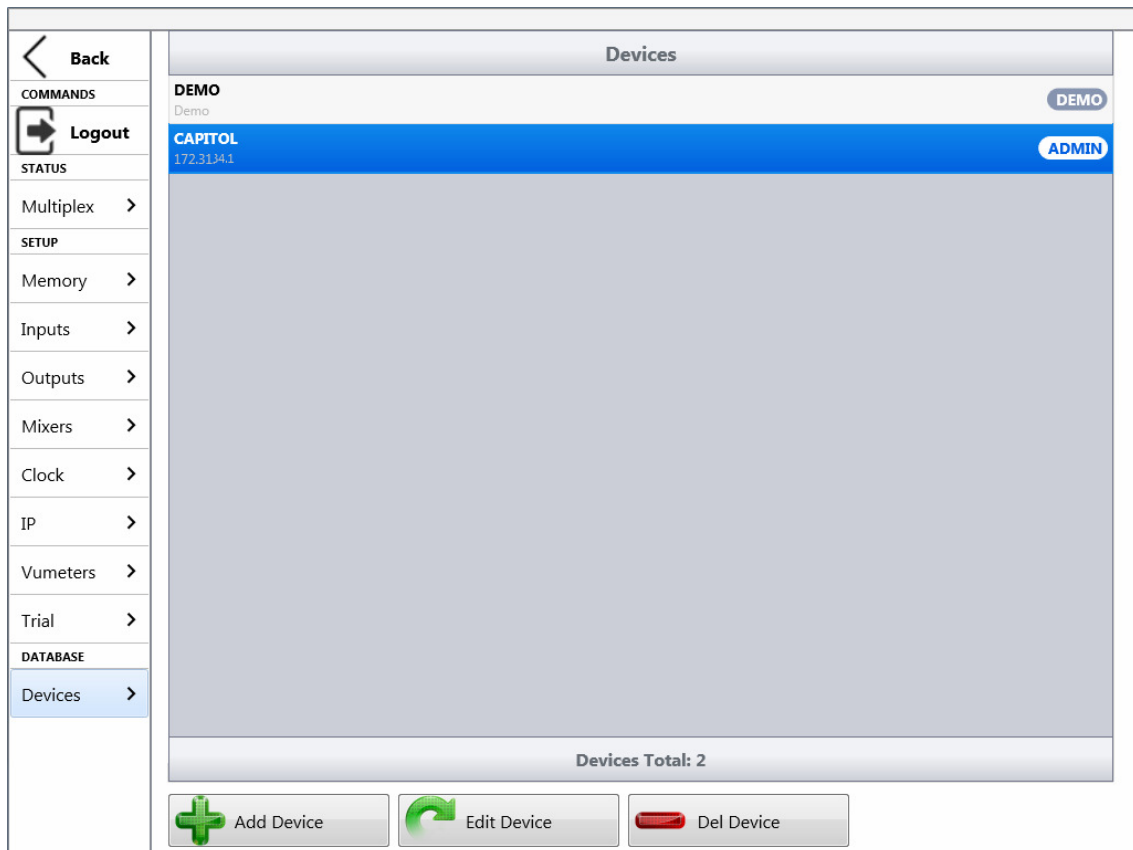


3. CONFIGURATION MENU.

By clicking on the configuration menu button from the idle screen, the application and console configuration options are accessed.



A screen like this is presented:



The "**Back**" option (top left) allows you to return to the idle screen.

3.1. COMMANDS.

The "**Logout**" option allows you to return to the "Login" screen. From that screen you can change the user, return to the access screen in order to change the console to be controlled, or simply to exit the application (Windows version only, as in iOS the device has a dedicated physical button to leave any application).

3.2. STATUS.

The "**Multiplex**" option presents the current status of the system multiplex buses. More or less signals will be represented depending on the number of console configured channels and the number of multiplex buses configured by means of the configuration software.

When a signal is routed to a multiplex bus, the cross point will appear in red. When the signal is not connected, it will appear in white.

NOTE: For firmware versions 1.73 of CPU and 1.31 of DSP Router or higher, the routing toward MPX internal summing buses is saved on console configuration and it will appear in the "Routing Configuration" submenu of "Capitol Setup" or "Capitol IP Setup" application when the active configuration is read.

The multiplex option has an appearance like this:

It shows all the system available memories (or snapshots) for the user. They can also be loaded or stored from this screen (if the user has permissions).

The **"Load"** button allows you to load in the console the configuration previously stored in the selected memory position. When it's clicked on, a dialogue will show up asking for confirmation.

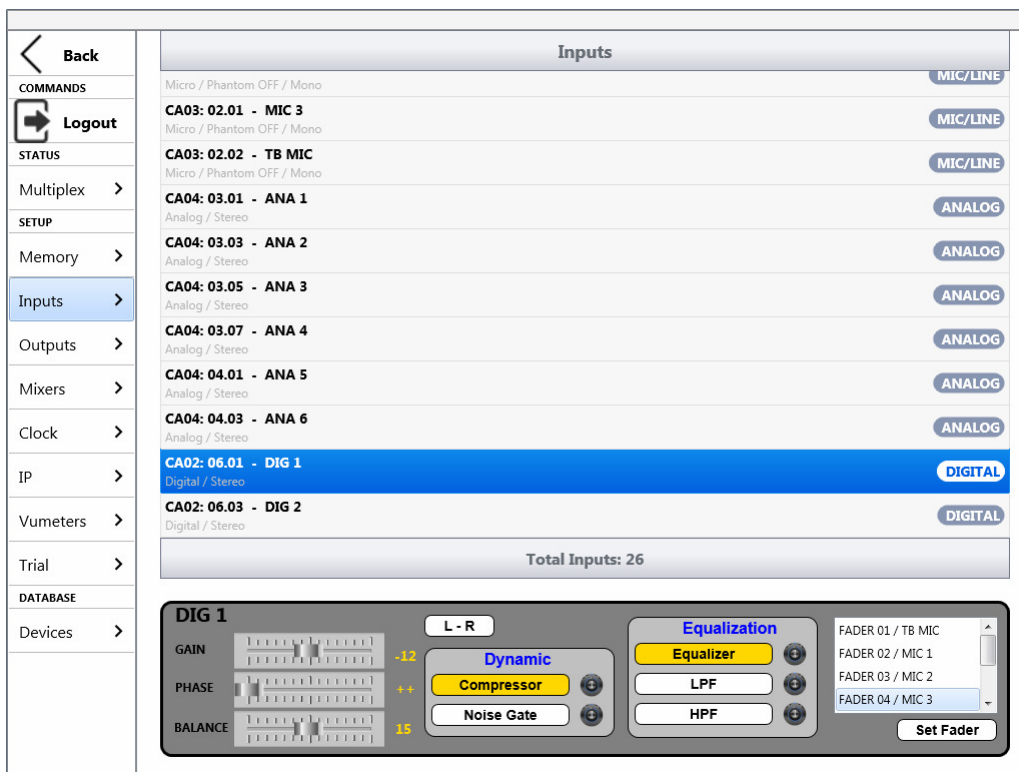
IMPORTANT NOTE: For firmware versions 1.73 of CPU and 1.31 of DSP Router or higher, when a new configuration memory or snapshot is loaded, the audio of the activated channel or channels (ON AIR) will not be interrupted (and the associated routing will remain) provided that in the new memory the activated channel or channels are placed in the same fader positions. The routing toward MPX internal summing buses of any signal will also remain (whether the signal is ON AIR or not).



The **"Save"** button allows you to store in the selected memory position the configuration of the console at that moment. A confirmation dialogue will also appear, as that action will overwrite that memory position. It is recommended to create a backup memory and never overwrite it, in order to always have an emergency configuration available.

3.3.2. Inputs.

By clicking on the **"Inputs"** option, all the system inputs will be listed. A screen with the following appearance will be displayed:



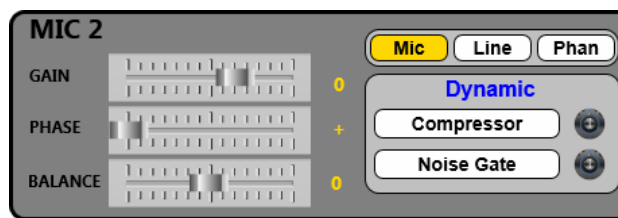
For each input, virtual module type (for example, digital CA02 or hybrid CA33), virtual slot number (for example, 06), channel number within that virtual slot (for instance, 01), input's logic name (for example, DIG 1), signal type (for example, DIGITAL) and configuration details (for example, Digital / Stereo) are displayed.

When an input is selected, its parameters (gain, phase and balance), the sending mode of the stereo input signal toward the stereo outputs that is routed to (the normal working mode is L-R) and processing status can be checked and adjusted in the lower area of the screen.

In order to activate or deactivate a process, just click on the button with each process name. When it is active, the button will appear in yellow, when it is not, it will be displayed in white. Whenever any parameter of a process needs to be changed, click on the round button just at the right of its name to enter the process configuration screen (for more information, please consult the console user's manual or the "AEQ CAPITOL SCREEN" application manual).

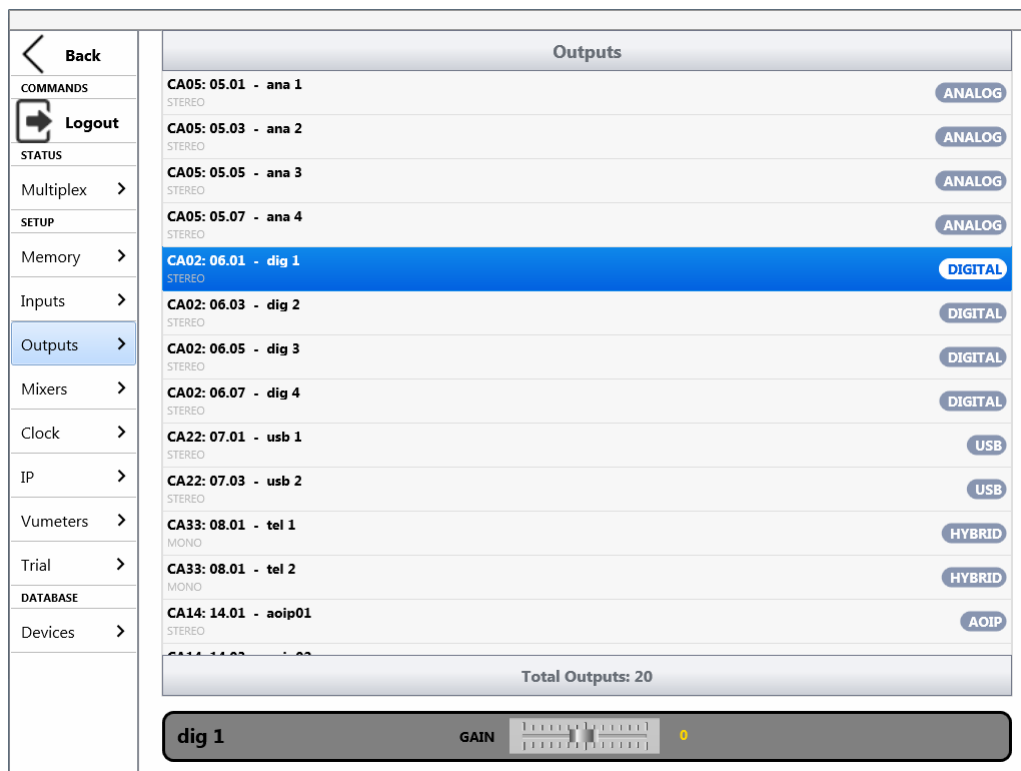
When the selected input is not assigned to a fader, a list of all the console channels and the associated inputs is also displayed at the right. By selecting one of them and clicking on the "Set Fader" button, the selected input is assigned to that fader.

In the case of MIC/LINE type inputs, instead of adjusting the sending mode of the stereo signal, it's possible to configure the input as microphone or line and, only when configured as microphone, activate/deactivate the Phantom power.



3.3.3. Outputs.

By clicking on the "Outputs" option, all the system outputs will be listed. A screen with the following appearance will be displayed:



For each output, virtual module type (for example, digital CA02 or hybrid CA33), virtual slot number (for example, 06), channel number within that virtual slot (for instance, 01), output's logic name (for example, dig 1), signal type (for example, DIGITAL) and signal channels number (for example, STEREO) are displayed.

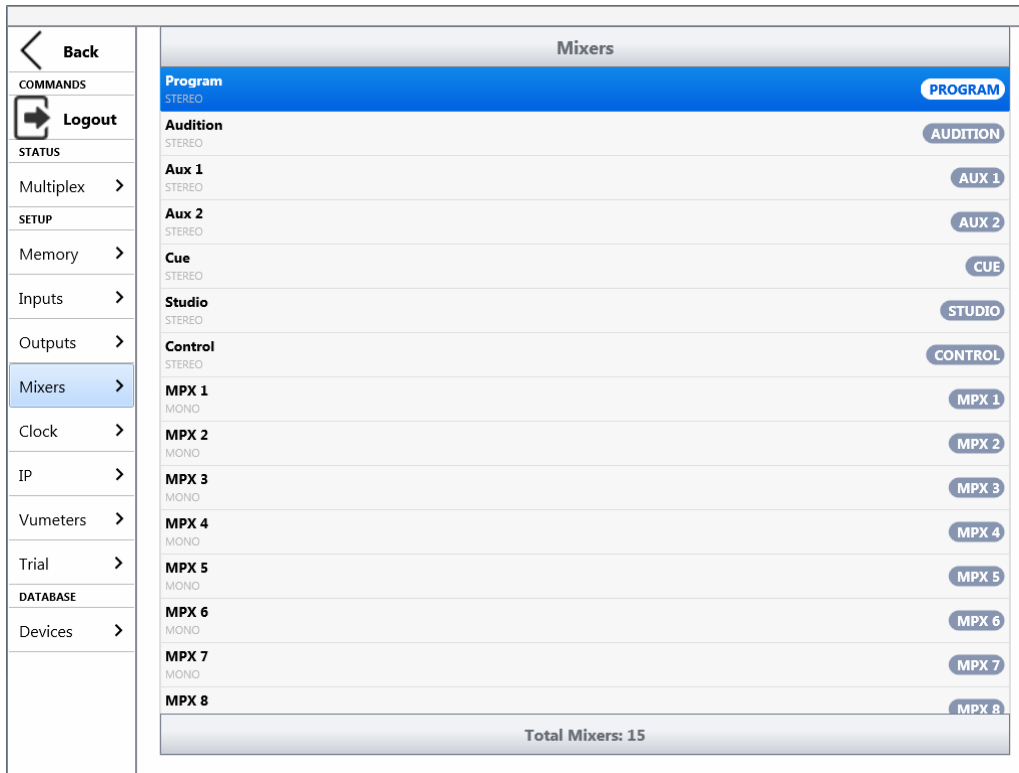
When an output is selected, the gain can be configured in the bottom area of the screen by means of the "GAIN" fader.

3.3.4. Mixers.

By clicking on the **"Mixers"** option, all the internal summing buses of the system are listed. This screen is merely informative, as no modifications can be performed in it.

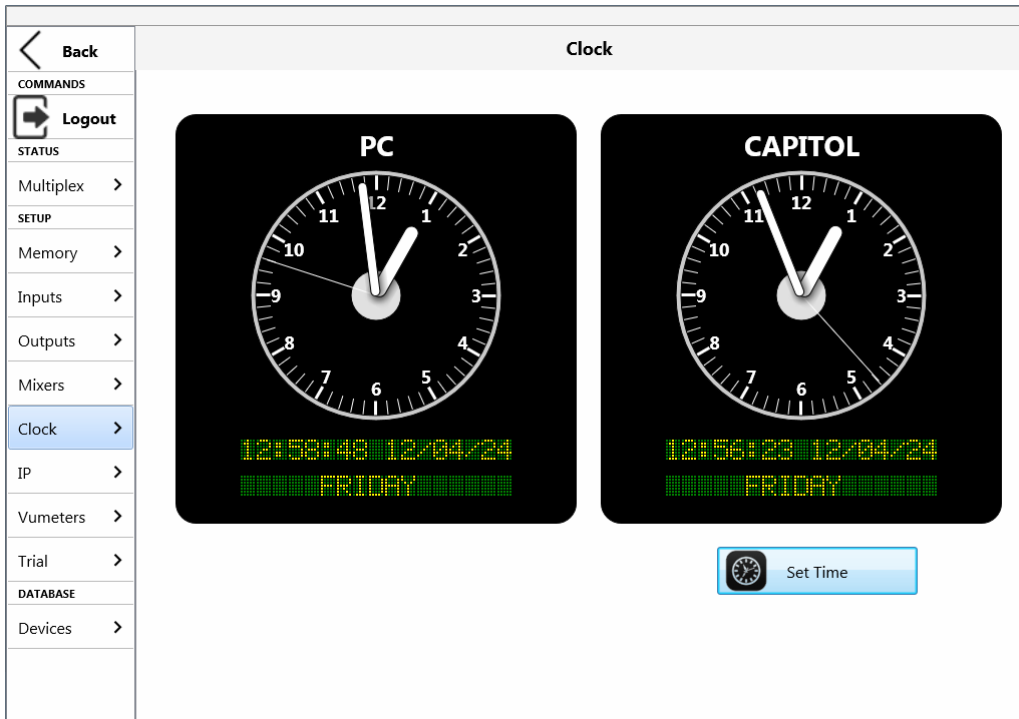
Together with the bus name, its configuration mode will appear, as well as whether it is mono or stereo.

This screen has the following appearance, depending on the configuration that has been sent from the console configuration software:



3.3.5. Clock.

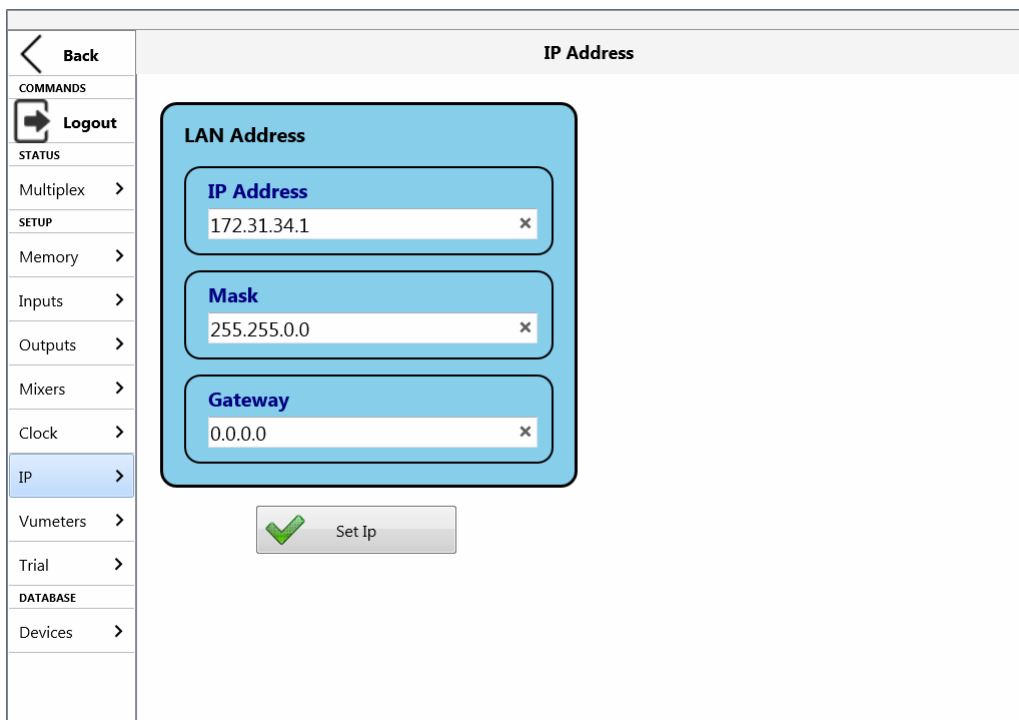
By clicking on the **"Clock"** option, the PC (or iPad) and console time and date are displayed.



By clicking on the **"Set Time"** button, console time is synchronized to the device's time. For Windows version, the leftmost clock will be labeled "PC" while for iOS versions it will say "iPad".

3.3.6. IP.

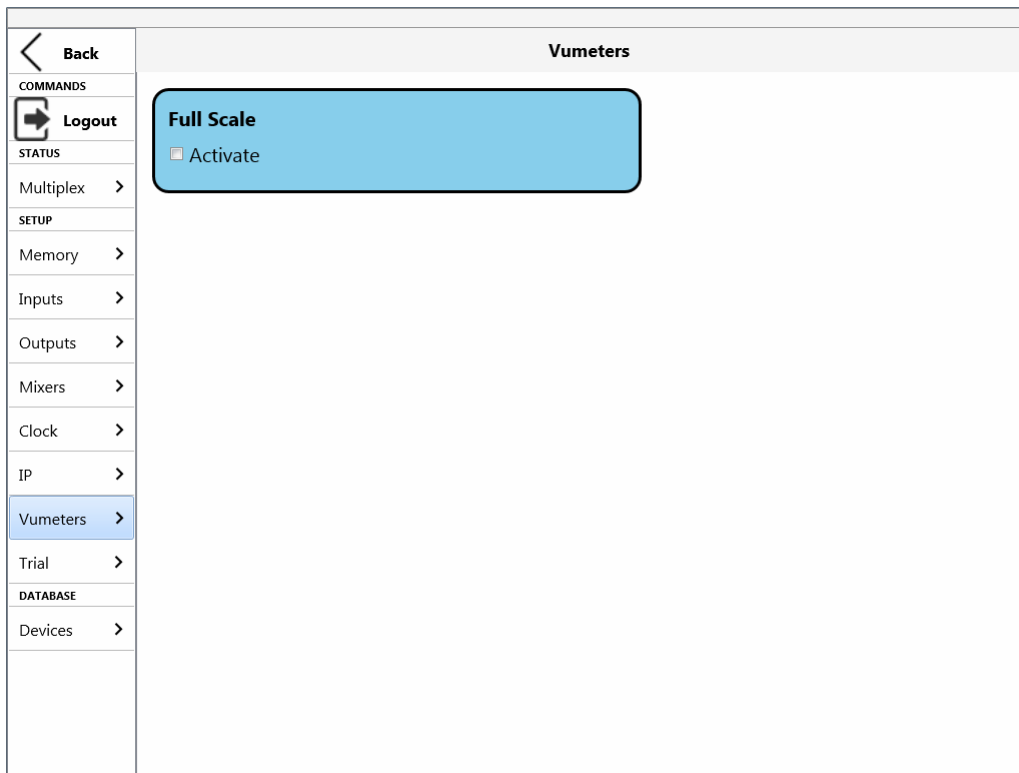
By clicking on the **"IP"** option, the parameters associated to console Ethernet port are shown and can be modified: IP address, subnet Mask and Gateway.



The configured parameters are sent to the console by clicking on the **"Set Ip"** button. A message indicates that these changes will not be active until you turn off and on the console.

3.3.7. Vumeters.

When clicking on the "Vumeters" option, a screen like this will appear:

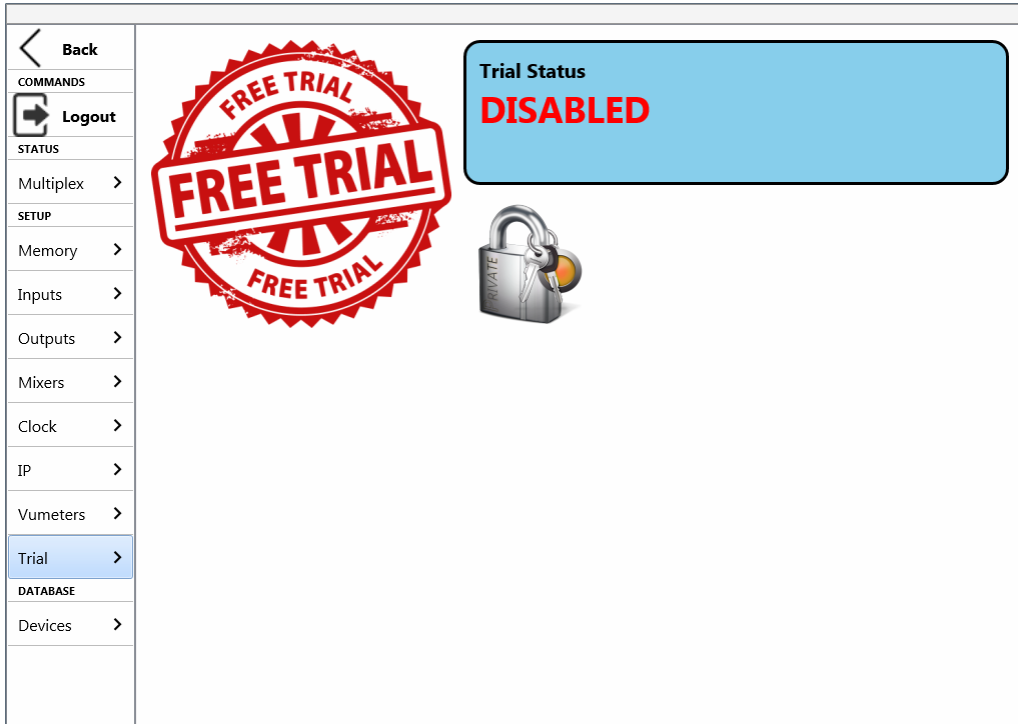


The "Full Scale" option allows you to activate the vumeters display in **dBfs** (0dBfs = +24dBu).



3.3.8. Trial.

When clicking on the "Trial" option, a screen like this will appear:



This option allows you to activate a **temporary license** at software level.

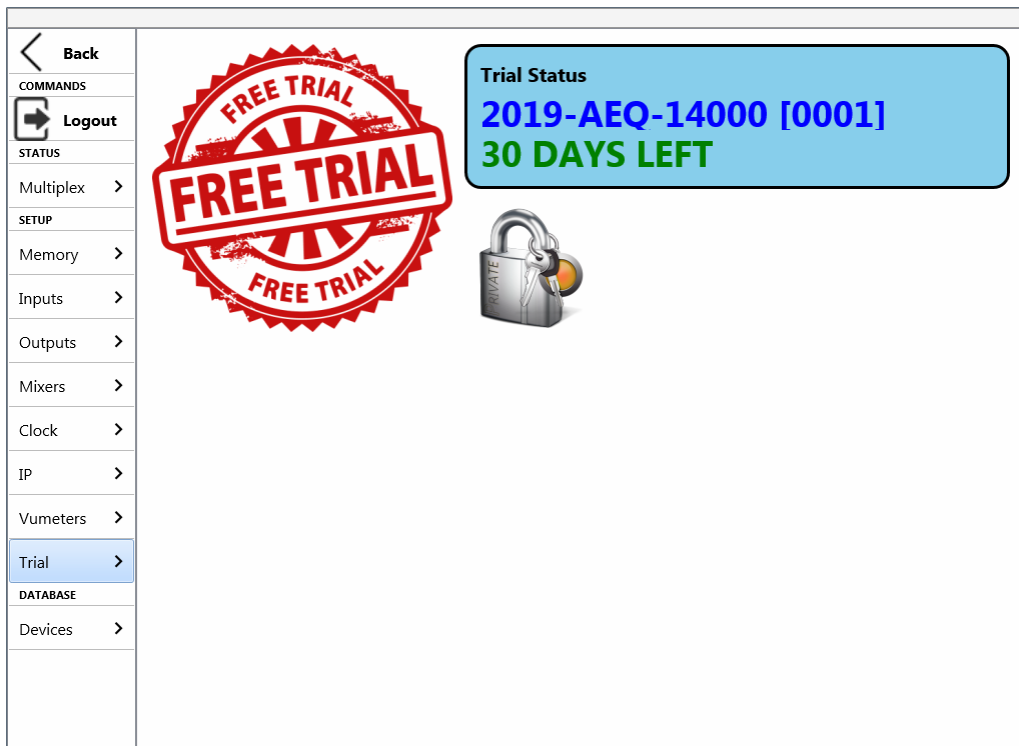
If you need to activate a **permanent license**, it should be done at hardware level, by means of "Capitol Setup" or "Capitol IP Setup" application. For more information, please consult section 4.1.1 of the console user's manual.

In the order to activate the **temporary license**, the padlock icon must be pressed. Then the following fields will appear:



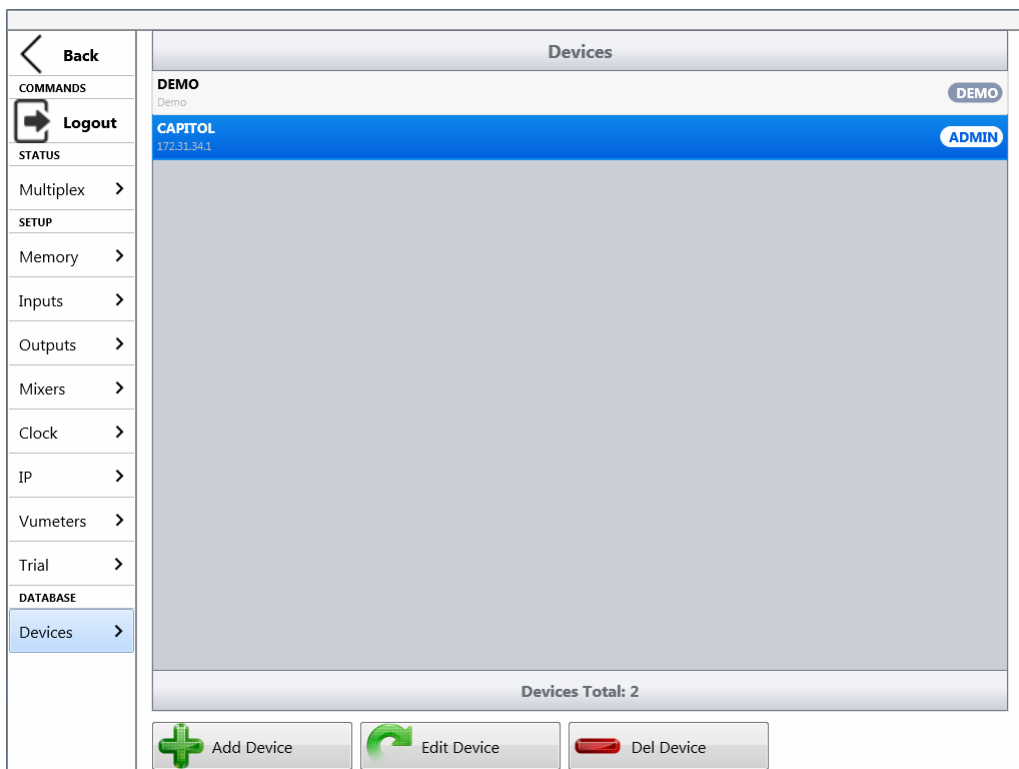
You must "Copy" the "Serial" code by means of the associated button and send it to AEQ in order to generate the associated "Key" and send it back to you (you must "Paste" it by means of the associated button).

The **"License"** button allows you to confirm the key and, when it's correct, activate the temporary license. The associated window will show then the remaining time until the license turns disabled again.



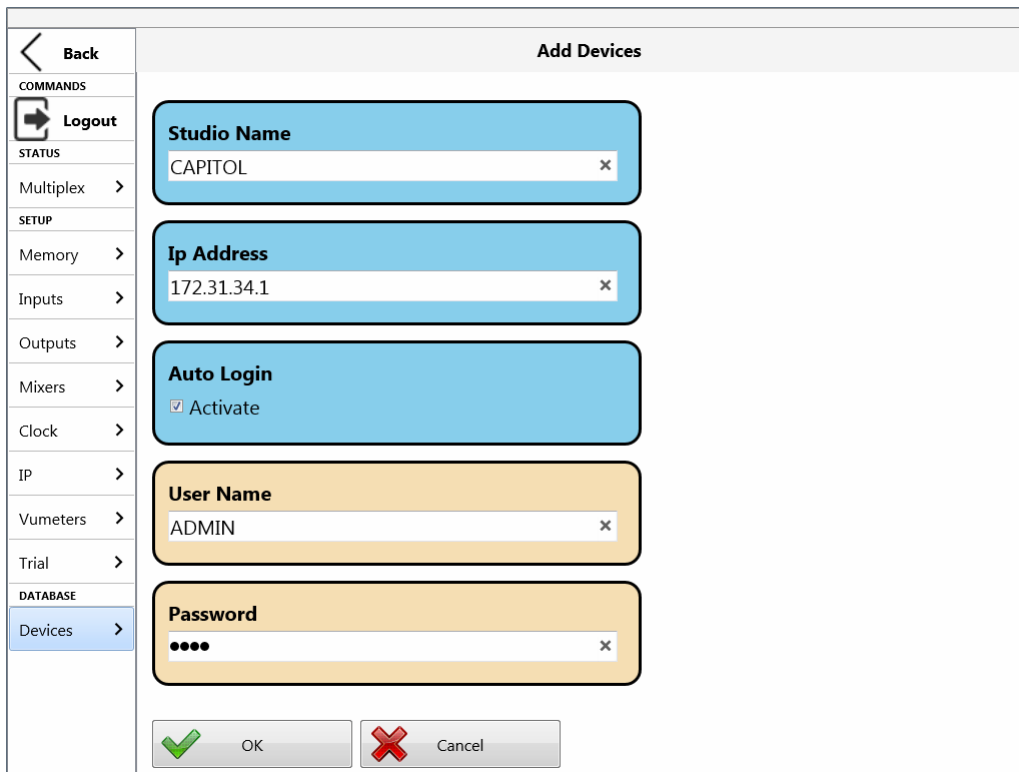
3.4. DATABASE.

By clicking on the **"Devices"** option, a list of the devices configured to be controlled by this software is presented. The screen will look like this:



A new console can be added with the **"Add Device"** button. The parameters of an existing console can be modified by means of the **"Edit Device"** button. A console can be deleted from the device list by clicking on the **"Del Device"** button. The **"DEMO"** device (that allows you to operate against a dummy console) cannot be edited or deleted.

The following screen will appear when adding or editing a console:



The parameters to be defined are the following ones:

- **"Studio Name"**: the name that identifies the console and that will appear in the device drop-down menu of the access screen.
- **"IP Address"**: the IP address of the console to be controlled.
- **"Auto Login"**: when this option is enabled, the initial "Login" screen parameters are automatically fulfilled and, if they are correct, after a few moments the application goes directly to idle screen. The next 2 parameters only appear when this option is enabled.
- **"User Name"**: the used name defined in the console configuration software (by default, the user is ADMIN).
- **"Password"**: the key associated to that user, also defined in the configuration software (by default, the password for user ADMIN is 1234).

If the "Auto Login" option is enabled and you want to work with a different user, after opening the application you should access to configuration menu and use the "Logout" option (in COMMANDS) to return to the "Login" screen and then enter manually the new user and password.

NOTE: The application header shows the user who has accessed.

