

APPLICATION NOTES

WEB APP FOR POWERSOFT AMPLIFIERS

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The internal properties and controls of individual Powersoft amplifiers can be accessed from any computer connected to the same network, via a dedicated Web App. This feature is available in all X Series, T Series, and Canali Series DSP+D amplifiers.

Each Powersoft amplifier connected to a network has its unique IP address, which is used for communication with ArmoníaPlus and/or third-party platforms. This same IP address can also be used to access the Web App. Type in the amplifier's IP address in the address bar of any web browser. Alternatively, in ArmoníaPlus:

- 1. Double-click the amplifier in the workspace to access its internal properties (Figure 1).
- 2. Click the 'Options' button on the window's left-hand corner.
- 3. Under the 'General' tab, a Web App direct hyperlink will be available (Figure 1).



Figure 1 – Amplifier's internal properties (left). Web App hyperlink in 'Settings' window (right).

IP addresses in Powersoft amplifiers are automatically generated by default (via DHCP), and this is also the recommended configuration for a more reliable and smoother network operation. However, static IP addresses can also be configured if necessary. It is important to note that IP configuration is a new feature of ArmoniaPlus and is not available in older versions of the software. Free download of the latest version of ArmoniaPlus is available online.

To configure static IP addresses for amplifiers, in ArmonìaPlus:

- 1. In the 'Workspace' go under Config, followed by IP.
- 2. Select one or more amplifiers.
- 3. Under 'Select Mode' switch from DHCP to Static (Figure 2).
- 4. Insert the Click 'Apply' to make the changes effective.



Figure 2 – Static IP address configuration.



Web App Overview

When opening the Web App, the user is presented with a home page which replicates the internal amplifier's scheme window (Figure 3). Just like in ArmoníaPlus, all individual blocks are selectable and will allow a series of different configurations as detailed below.

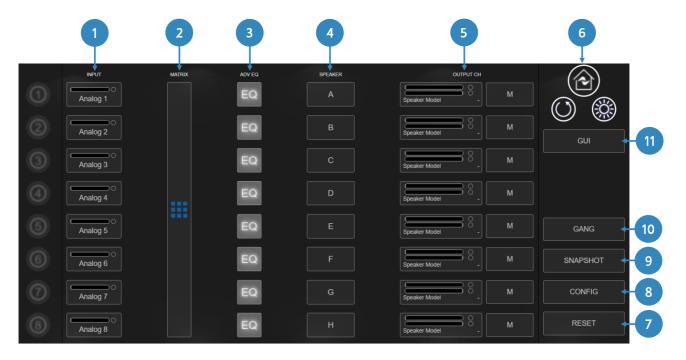


Figure 3 – Web App home page.

- 1 INPUT Displays all the amplifier's active inputs. By accessing any of the input blocks, and selecting 'Source', it is possible to activate/deactivate the <u>Backup Strategy</u> and select between analogue or Dante inputs.
- **MATRIX** Includes the amplifier's internal Matrix for all active inputs and allows easy routing of inputs and outputs. The Web App matrix also contains two additional input channels labelled L and R, by default. These are the Web App Audio Player's left and right channels and will be covered in a dedicated section of this document.
- 3 ADV EQ With the Advanced FQ, it is possible to control the gain, increase the delay, mute and change the polarity of the routed audio signal. Under 'Filters', multiple EQ filters can be enabled. Once a new filter is created, click on 'Edit' to adjust its gain and slope.
- 4 SPEAKER Contains the speaker presets loaded onto each amplifier ways output. Under Board, presets saved in the amplifier's internal memory, via the 'Preset Manager' tool in ArmoníaPlus, can be selected for loading. Under USB, presets can be selected from an external USB drive connected to the amplifier, where applicable. Multi-way speaker presets will automatically join ways outputs, however, it is also possible to manually bridge and join multiple selected outputs with the dedicated Bridge and Join buttons.



- **5 OUTPUT CH** Displays information related to the amplifier's outputs, such as gain and voltage meters; as well as overall status information such as alarms and internal temperature. In this page, it is also possible to enable and configure the <u>Active Damping Control Function</u>.
- 6 NAVIGATION The three buttons on the top-right window corner allow the user to:
 - Return to the Web App homepage;
 - Refresh the current page; and
 - Blink the LEDs on the physical amplifier.
- RESET Resets all amplifier configuration factory default.
- 8 CONFIG Displays the amplifier's serial number and firmware information. In this page, it is possible to enable latency compensation (to match that of K series amplifiers), change network configurations (DHCP and Static), and enable the Web App GUI in Canali Series amplifiers, which will be covered in a dedicated section of this document.
- 9 SNAPSHOT Contains the snapshots saved on board of the amplifier's internal memory, via the 'Preset Manager' tool in ArmoníaPlus. Snapshots can be selected and loaded to the amplifier, deleted, and new ones can be saved to the amplifier's internal memory.
- 10 GANG Configuration of four different 'ganging' between different channel parameters, such as Advanced EQ, Gain, Delay, Mute, and Polarity.
- 11 GUI Configuration of the Web App GUI, which will be covered in the next section below.



Web App GUI

In Canali Series amplifiers, the Web App includes a Graphical User Interface (GUI), which contains its own routing matrix, and can be configured for paging and quick source-to-zone routing. The first necessary step is to enable the GUI.

To enable the GUI:

- 1. In the Web App homepage, click on CONFIG.
- 2. Once in the configurations page, select GUI.
- 3. At the top 'Status' bar, click ENABLE (Figure 4).

Note that in the configurations page, it is also possible to setup a screensaver, which will fill the web browser window with the selected image when the Web App is not in use.



Figure 4 – GUI configuration page.

Once enabled, the GUI can be accessed from the dedicated button in the Web App homepage. The main GUI page (Figure 5) contains blocks representing all active inputs and outputs for paging, including the default INTERNAL inputs, which are relate to the audio files saved on the amplifier's internal memory.



Figure 5 – GUI main page.



To configure inputs and outputs, click on **PAGING SETTINGS** (Figure 6). In this page the following configurations are available:

- ACTIVE: Adds the selected input or output to the GUI matrix.
- PAGING: Adds the selected input or output to the main GUI Paging Panel (Figure 5). This
 operation will automatically mute the select input or output, and signal will only pass if
 the channel is selected from the GUI Paging Panel.
- LINK: When linking inputs, the level faders of the given inputs in the GUI matrix will be linked. For outputs, it uses a colour scheme, where channels assigned with the same colour will be linked and displayed as a single block in the main GUI page (Figure 6).
- M1 and M2 (Outputs only): Adds the selected output to mute groups 1 and 2. These mute groups can be controlled from the dedicated buttons in the main GUI page.





Figure 6 – Paging LINK configuration.

To send a specific input to one or more outputs via the main GUI Paging Panel:

- 1. Select one of the available inputs.
- 2. Select one or more outputs.
- 3. Click on GO ON AIR.

Note that the operation above assumes that all channels have been previously routed in the main Web App or ArmoníaPlus matrix, i.e. Input 1 can only be sent to outputs 1 and 2, for example, if this routing has been previously created in the matrix.



Web App Audio Files

Audio files, such as alarm and announcement messages, can be saved to the internal memory of Canali Series amplifiers and played via the Web App GUI. This audio player is labelled INTERNAL in the main GUI page.

To save audio files to the amplifier's internal memory:

- 1. Double-click the amplifier in the Workspace to access its internal properties.
- 2. Click the 'Options' button on the window's left-hand corner.
- 3. Under the 'Management' tab, click Add, and select an audio (Figure 4).

Note that due to licensing issues, the standard audio file format supported by the Web App Audio Player is *.flac. However, in license free countries and for users who already have appropriate licensing, *.mp3 files can be uploaded and converted using an open source encoder. For more information, access the **Audio Converter** in the options panel of ArmoníaPlus (click the A+ icon followed by Options).

Once saved onboard of the amplifier, these audio files can be added to the audio player in the GUI. To add audio files to the GUI:

- 1. In the main GUI page, select PAGING SETTINGS.
- 2. Click the FILES button on the right-hand side of the page (Figure 7).
- 3. Choose an audio file from the dropdown list and click **SAV**E.

Files added to the GUI will be selectable from a list in the main GUI page (Figure 5), under the INTERNAL input, and will be available for routing to selected output channels.

In the AUDIO FILES window (Figure 7), it is possible to define how many times the audio file will play in repeat once GO ON AIR is triggered. Additionally, by selecting the PRESET option, this audio file will be added as an independent input to the main GUI panel.

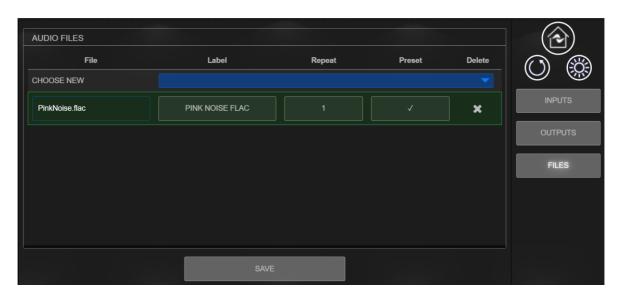


Figure 7 – Adding audio files to the GUI.



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