13. K-FRAMEWORK

13.1 System requirements

SYSTEM REQUIREMENTS:

Operating System: Windows Xp / Vista / 7

CPU: Intel Pentium 2 GHz

Memory: 1 Gb

REQUIRED COMPONENTS:

.NET Framework 4

http://www.microsoft.com/downloads/en/details.aspx?FamilyID=0a391abd-25c1-4fc0-919f-b21f31ab88b7

Microsoft Visual C++ 2010 Redistributable Package (x86)

http://www.microsoft.com/download/en/details.aspx?id=5555

Microsoft Visual C++ 2010 Redistributable Package (x64)

http://www.microsoft.com/download/en/details.aspx?id=14632

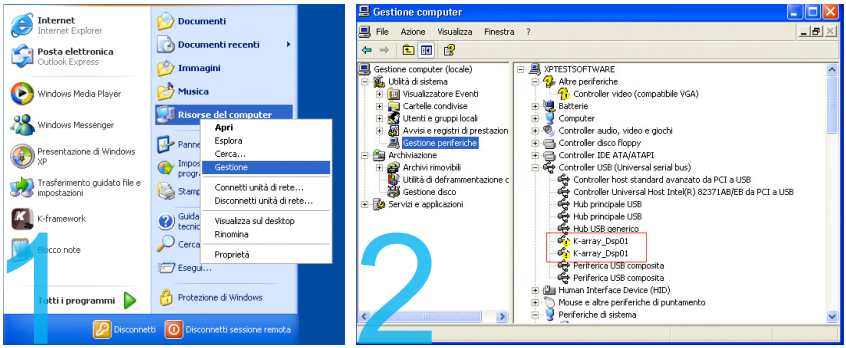
13.2 Installation and set up

To download your free K-Framework license, please go to the “Software Download” page of the Blueline website (http://www.kblueline.com).

Once the .zip file is decompressed, it will show a folder containing the file “K-Framework.setup”.

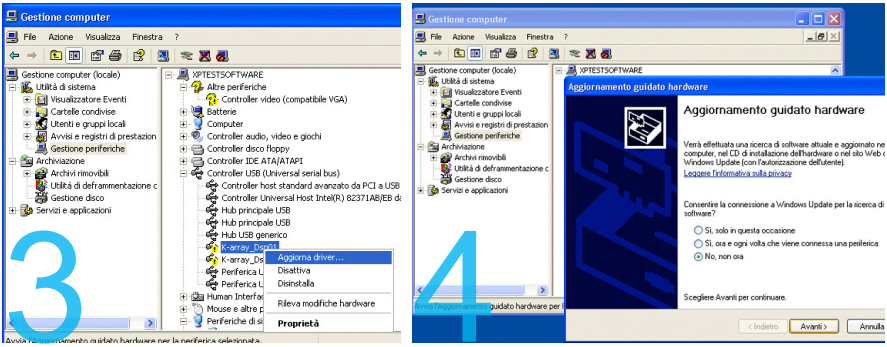
-Users of Windows Vista and 7 can install the software by simply opening the K-Framework.setup file.

-Users of Windows XP are required to follow the following simple procedure to install the necessary drivers, once the K-Framework software has been installed:



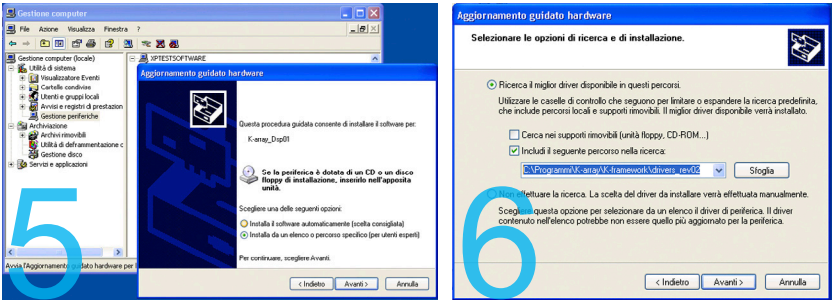
1) Recall the “Manage” window from “Start Menu/My Computer”.

2) Select “Device Manager” from the menu on the left and expand the “USB controllers” sub-menu.



3) Right click on the upper “K-Array_Dsp01” object and select “Driver Update” to launch the “Hardware Update Wizard”

4) When asked to allow the online search select the “Not now” option and click on “Next”.

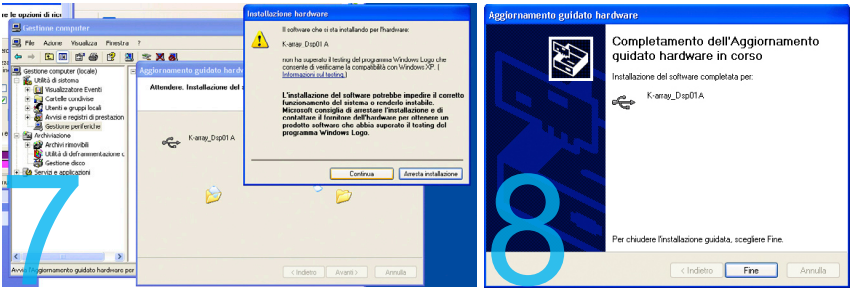


5) When asked for the drivers' location, select the "Install from a list or specific location" option.

6) In the search and installation options window, select the "Search for the best driver in this location" option and check the "Include this location in the search" checkbox, then browse for the drivers' containing folder. The path should read:

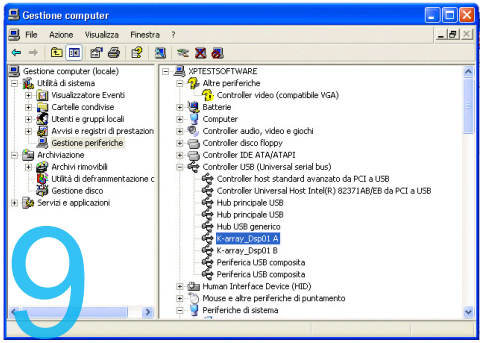
C:\ProgramFiles\K-array\K-framework\drivers_rev02

Once you have inserted the right search path, click "Next".



7) When warned about a failed "Windows Logo" test, please ignore the content of the warning and click "Next".

8) The first part of driver installation is now complete, and the "unknown" K-Array_Dsp01 port has changed its name to a univocal "K-Array_Dsp01 A". Click on "Finish" and repeat exactly the same procedure for the still unknown port.



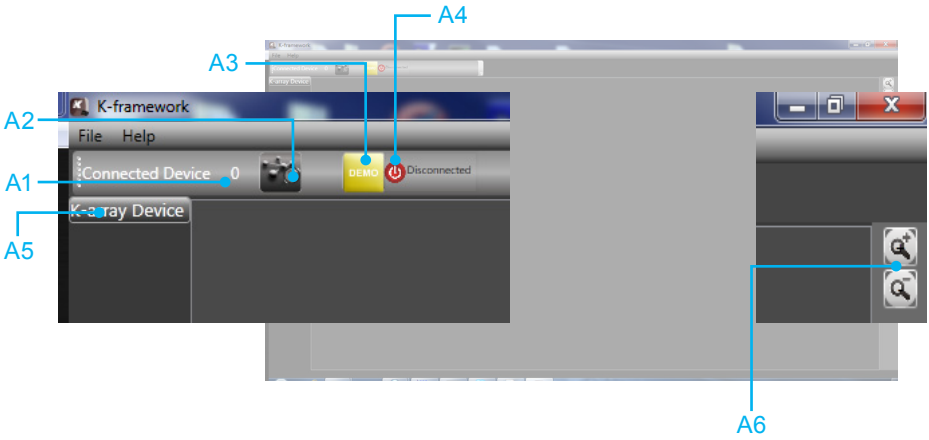
9) Now you can see that inside the Device Manager Window both devices now have a univocal name and the alert symbol is no longer associated with them. **Now you are 100% ready to get started!**

13.3 Getting started

WARNING

Please verify that your KB1 is connected to your PC via USB before running K-Framework for the first time!

At startup K-Framework will show the following window:



img. A

A1) **Connected Devices Indicator** shows the quantity of detected connected devices. N.B.: at startup, the indicator will show 0 devices even if one or more units are connected. To detect all connected devices, just click the “Go Online” button.

A2) **Go Online Button** detects connected devices.

A3) **Demo Mode Button** runs the software in Demo Mode, in order to let the user operate the software without a connected unit. In demo mode it is possible to edit settings and to save them in “.b1cp” and “.b1op”.

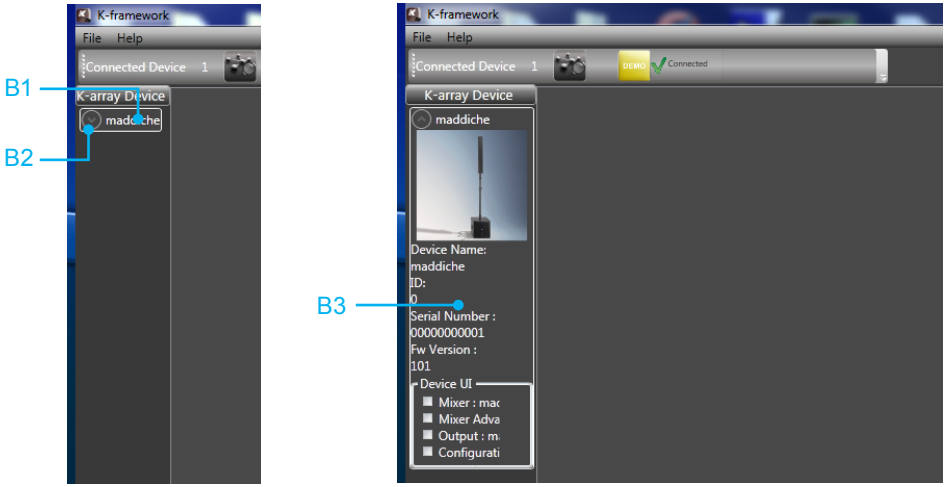
A4) **Network Status Indicator** shows the system status: Online means that K-Framework is connected to all devices in the network and the user can edit, store and retrieve parameters. Offline means that no devices are connected or, if the software has just been started up, that the network has not yet been scanned.

A5) **Device List** displays all devices presently connected to the network.

N.B.: at startup the List will look empty even if one or more units are connected. To detect all connected devices, just click the “Go Online” button.

A6) **Zoom Buttons** zoom in (+) and out (-) of the window view.

Click the **Go Online Button** to detect all presently connected devices.
Once a connected device is detected by K-Framework it will appear in the K-Array Device List as shown in the following picture:



img. B

B1) Connected Device Name.

B2) **Device Menu Button** shows and hides the device menu.

B3) **Device Menu** displays the basic information about the device and the shortcuts to open all available Editing Tabs.

13.4 KB1 Editing Tabs:

Mixer Tab

img. C

C1) Channel Preset Name Display shows the name of the preset currently loaded on the channel.

C2) Channel Preset Selector opens and closes Channel Preset Window (see img. F).

C3) Filter Gain Knobs regulate the gain (negative or positive) of Filter 1, 2 and 3.

C4) AUX Send Knob regulates the amount of pre-fader, post-EQ and post-limiter signal sent to the auxiliary output.

C5) PAN Knob locates the channel in the stereo field.

C6) Channel Volume Fader regulates the channel volume.

C7) PFL Switch Button activates and deactivates Pre Fader Listening. When PFL is ON, the Master VU Meter will show the amplitude of the signal entering the selected channel, bypassing both the EQ and Volume settings. In the same way, headphones will only output the signals entering the channels where PFL is turned on: pre-fader, post-EQ and post-compression.

C8) **Channel Note** displays an editable 8 character text.

C9) **Headphones Volume Knob** regulates the Headphones Master Volume.

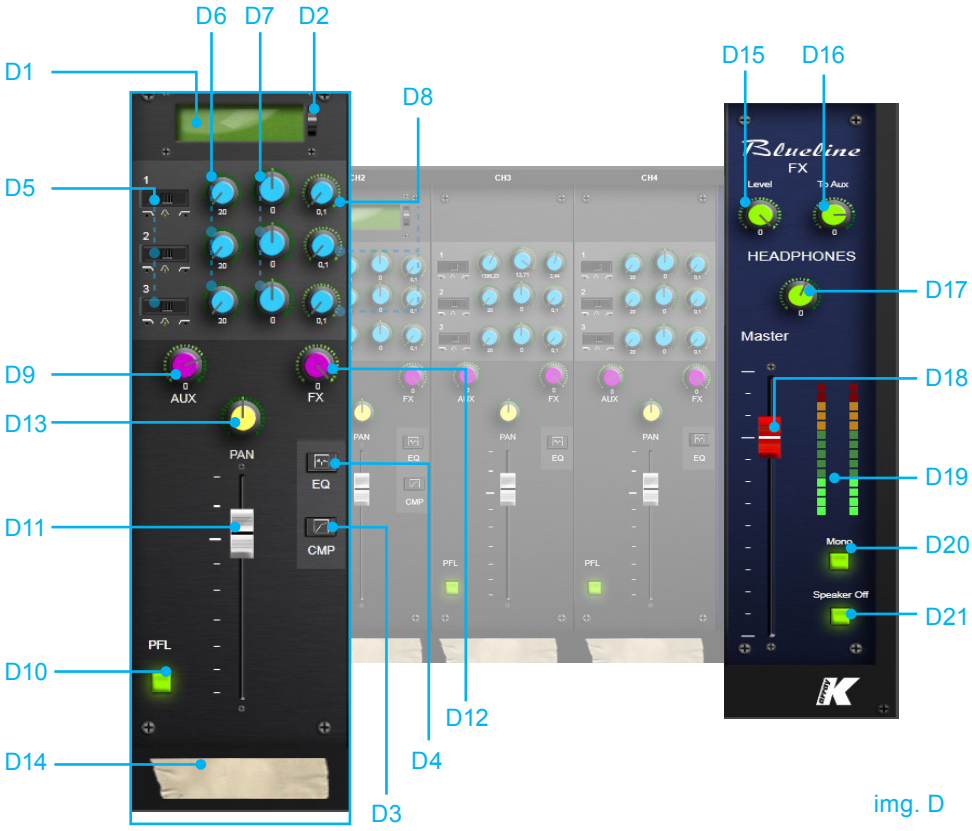
C10) **FX Mute Button** enables and disables the effects return.

C11) **Master Volume Fader** regulates the Output Master Volume.

C12) **VU Meter** displays overall amplitude of Master Output.

N.B.: When one or more channels are in PFL mode, the Master VU Meter will show the amplitude of the signal entering the selected channel, bypassing both the EQ and Volume settings.

Mixer Advanced Tab



img. D

D1)Channel Preset Name Display shows the name of the preset currently loaded on the channel.

D2) Channel Preset Selector opens and closes Channel Preset Window (see img. F).

D3) Compressor Window Button opens and closes the Channel Compressor Window (see img. E).

D4) EQ Window Button opens and closes the Channel EQ Window (see pg. 35)

D5) Filter Type Selectors select the type of filter from three options: Low Shelving, Peak/Notch and High Shelving.

D6) Filter Frequency Knobs set the central or corner frequency of the corresponding filter.

D7) Filter Gain Knobs set the gain (positive or negative) of the corresponding filter.

D8) Filter Q / Slope Knobs set the “Q” or “Slope” value of the corresponding filter.

D9) AUX Send Knob regulates the amount of pre-fader, post-EQ and post-limiter signal sent to the auxiliary output.

D10) PFL Switch Button activates and deactivates Pre Fader Listening.

N.B.: When PFL is ON, the Master VU Meter will show the amplitude of the signal entering the selected channel, bypassing both the EQ and Volume settings. In the same way, headphones will only output the signals entering the channels where PFL is turned on, pre-fader, post-EQ and post-compression.

D11) Channel Volume Fader regulates the channel volume.

D12) FX Send Knob regulates the amount of post-fader signal sent to the effects processor.

D13) PAN Knob locates the channel in the stereo field.

D14) Channel Note displays an editable 8 character text.

D15) FX Master Volume Knob regulates the overall amount of effect to be sent to the Master Output.

D16) FX to AUX Knob regulates the amount of effects on the AUX OUTPUT.

D17) Headphones Volume Knob regulates the Headphones Master Volume.

D18) Master Volume Fader regulates the Output Master Volume.

D19) **VU Meter** displays overall amplitude of Master Output.

N.B.: When one or more channels are in PFL mode, the Master VU Meter will show the amplitude of the signal entering the selected channel, bypassing both

the EQ and Volume settings.

D20) Mono Switch Button switches between stereo and mono mode. In mono mode the same signal is sent to the unit's speakers and to the Out R/D.I. Out XLR output on the Mixer Panel if Right OUT is selected in the Output Tab (if D.I. OUT is selected, there is no difference between Stereo or Mono mode).

D21) Speaker OFF Switch Button enables and disables the Master OUTPUT.

Compressor Pop Up Window

E1) Compressor Type Drop Down Menu shows all the available compressing and limiting curves available on board, so that the user can choose one.

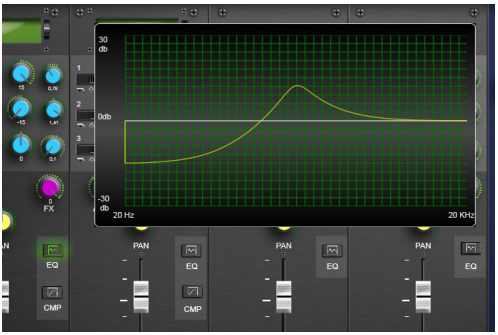
img. E

E2) Compressor RMS-TC Knob regulates the compressor attack time in the Time Constant domain expressed as dB/sec (ex: 100 dB/second = 86.86 milliseconds, 200 dB/sec = 43.43 ms, 8685.89 dB/sec = 1 ms, etc.)

E3)Compressor HOLD Knob sets how long the compression will stay on once the signal has fallen below the threshold in milliseconds.

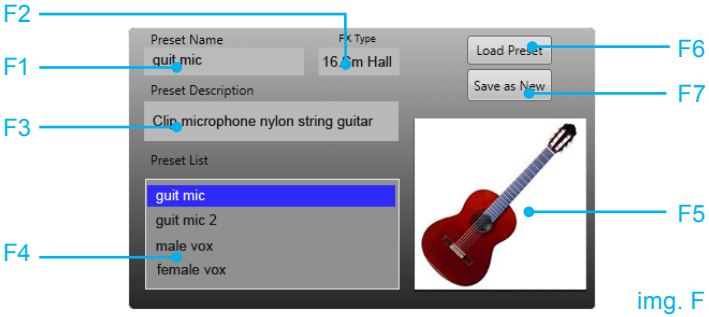
E4)Compressor DECAY Knob regulates the compressor decay time in the Time Constant domain expressed as dB/sec (ex: 100 dB/sec = 86.86 ms, 200 dB/sec = 43.43 ms, 8685.89 dB/sec = 1 ms, etc.)

EQ Pop Up Window



This windows shows a graph where the user can intuitively see the effect of the corresponding filter on the signal frequency spectrum.

Channel Preset Pop Up Window



img. F

F1) Channel Preset Name Indicator displays the name of the preset currently selected in the Channel Preset List.

F2) Channel FX Type Indicator displays the type of effect to be selected on the Mixer Panel to match the preset settings.

F3) Channel Preset Description Text describes the preset currently selected in the Channel Preset List.

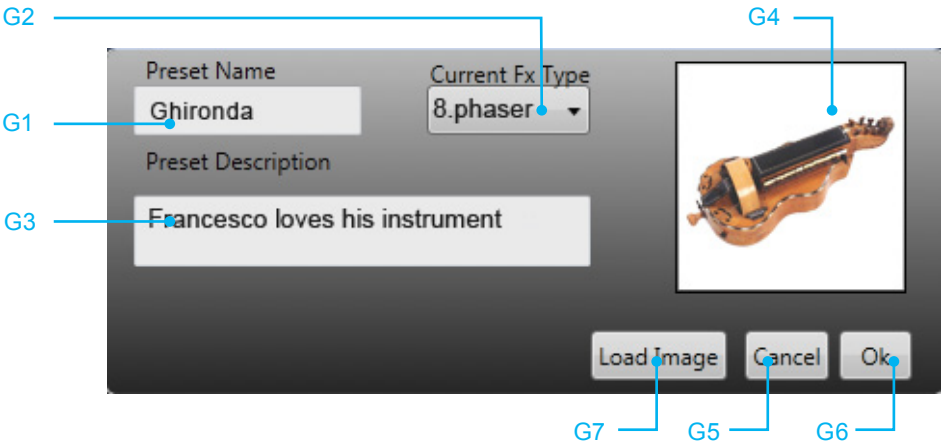
F4) Channel Preset List displays all the presets available to the system.

F5) Channel Preset Image displays the picture file associated with the preset that is currently selected in the Channel Preset List.

F6) Load Preset Button loads the preset currently selected in the Channel Preset List to the selected channel.

F7) Save as New Button opens the New Channel Preset Pop Up Window

New Channel Preset Popup Window



img. G

G1) New Channel Preset Name Textbox can be edited to assign a name to a new preset.

G2) Current Fx Type Drop Down Menu displays all the currently available effect types. The one that is selected when the new preset is saved will show up in the Channel FX Type Indicator once the new preset is selected in the Preset List.

G3) New Channel Preset Description Textbox can be edited to assign a short description to the new preset.

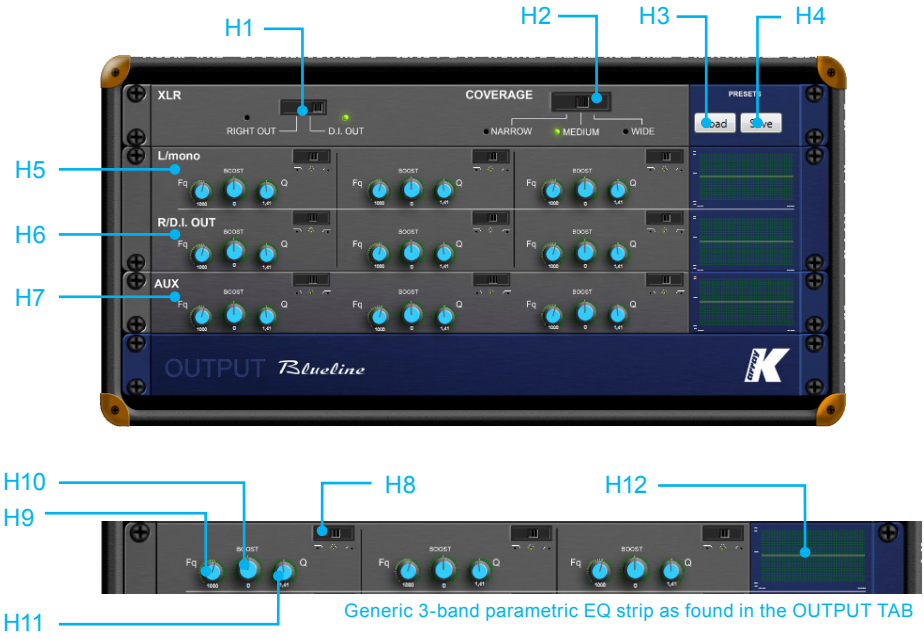
G4) New Channel Preset Image Box shows the picture currently associated with the new preset.

G5) Cancel Button closes the New Channel Preset Pop Up Window without saving the current settings in a new preset file.

G6) Ok Confirmation Button saves all the current settings of the selected channel, the New Preset Name, FX type, Description and Image into a new preset file to be uploaded, further edited and shared with the community of users.

G7) Load Image Button opens a dialog window to select an image file to link to the new preset.

Output Tab



Generic 3-band parametric EQ strip as found in the OUTPUT TAB

img. H

H1) Out R/D.I. Out Mode Selector assigns the Right Stereo channel or the pre-fader Direct Output of Channel 1 to the Out R/D.I. Out XLR output on the Mixer Panel.

H2) COVERAGE Selector sets the vertical coverage width of the system. (10°-60°)

H3) Output Preset Load Button opens a dialog window to select the Output Preset to load onto the system.

H4) Output Preset Save Button opens a dialog window to save the current output settings into a re-loadable preset file.

H5) L/mono 3-band Parametric Equalizer allows you to equalize the speaker frequency response.

H6) R/D.I. OUTPUT 3-band Parametric Equalizer allows you to equalize the frequency response of R/D.I. OUTPUT.

H7) AUX OUTPUT 3-band Parametric Equalizer allows you to equalize the frequency response of AUX OUTPUT.

H8) L/mono Filter Type Selectors select the type of filter on the Left Stereo Output from three options: Low Shelving, Peak/Notch and High Shelving.

H9) Filter Frequency Knobs set the central or corner frequency of the corresponding filter on the Left Stereo Output.

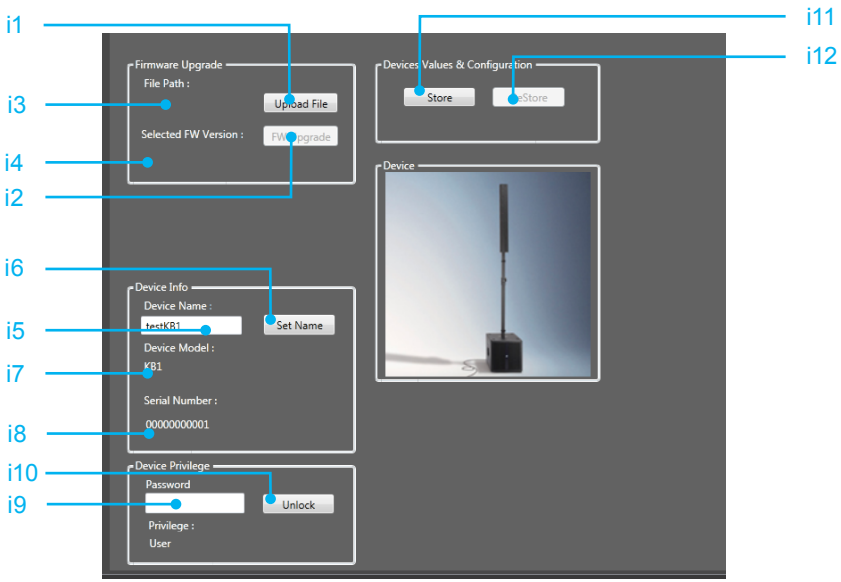
H10) Filter Gain Knobs set the gain (positive or negative) of the corresponding filter on the Left Stereo Output.

H11) Filter Q / Slope Knobs set the “Q” or “Slope” value of the corresponding filter on the Left Stereo Output.

H12) Filter Graph shows the effect of the corresponding filter on the signal frequency spectrum.

H13) AUX Filter Q / Slope Knobs set the “Q” or “Slope” value of the corresponding filter on the Left Stereo Output.

Device Configuration Tab



img. i

i1) Firmware Upload Button opens a dialog window to select the Firmware file to upload to the system.

i2) Firmware Upgrade Button uploads the selected Firmware file to the system.

i3) Firmware File Path Indicator displays the system path of the selected Firmware file.

i4) Firmware Version Indicator displays the version of the currently selected Firmware.

i5) Device Name Textbox can be edited to provide a new name for the currently selected device.

i6) Set Name Button stores the text in the Device Name Textbox on the selected device.

N.B.: the newly set device name will not be updated in the Device List on the left.

i7) Device Model Indicator displays the model name of the currently selected device.

i8) Serial Number Indicator displays the Serial Number of the currently selected device.

i9) Password Textbox can be edited to insert the system password to give the authorized user access administrator level access.

N.B.: Only the staff of K-Array or official authorized services are allowed to login with Factory Privileges.

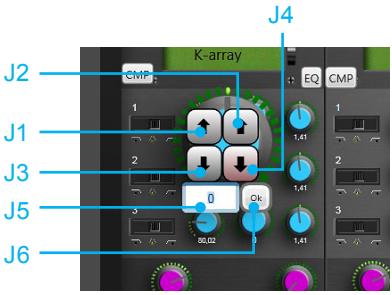
i10) Password OK Button verifies that the text in the Password Textbox matches the required password to access the factory level.

i11) Device Configuration Store Button allows the user to store all the current device settings on the device internal memory.

i12) Device Configuration Restore Button restores the device settings currently stored on the device.

Precise setting view

Double Click on the knobs to open a small interface dedicated to the precise setting of the corresponding knob value. To close the Precise Setting View click on the OK Button (6).



img. J

J1) Increment Button A for Filter Frequencies = increment by hundreds, everything else = increment by units.

J2) Increment Button B for Filter Frequencies = increment by tens, everything else = increment by tenths.

J3) Decrement Button A for Filter Frequencies = decrement by hundreds, everything else = decrement by units.

J4) Decrement Button B for Filter Frequencies = decrement by tens, everything else = decrement by tenths.

J5) Value Textbox can be edited to directly write the desidered Knob value.

J6) OK Button sets the number inside the text box as value of the parameter controlled by the corresponding knob and closes the Precise Setting View.