

Web APP

Introduction to the Web Interface embedded in all K-array devices running the OsKar Operating System

Web APP main features

- Accessible from mobile, tablet, computer and any other device running a Browser
- Quick access to signal routing, volumes, output presets configuration, equalization
- Multiple options to play music directly from the device's internal player: USB pen drive, Web radios, Bluetooth
- Dante signal management
- Multiroom Management
- Network configuration: manage the built-In WiFi with AP mode or Client mode options, set a Static IP and more
- Floating Meters for monitoring input and output signals

OsKar Version 1.8.0 Release Notes

- New User Interface
- Dante service updated
- OSC commands now available
- Input EQ accessible from web app
- Enhanced Label Propagation Across the Web App
- New firmware for faster communication with KF3
- Various bug fixes

Oskar Version 1.7.8 Release Notes

- Dante service updated (DEP 1.2.1.1)
- New K-array factory preset: KX12_Natural
- New KGEAR factory presets: GF22_Natural, GF82_Natural, GF42_Natural, GF162_Natural
- Event logs available in the web app
- Output RMS limiters accessible from web app
- Improved EQ on the webapp
- Pink noise and a demo track available in the internal player. Enable «demo mode» in the player to reproduce these tracks.

Oskar Version 1.7.3 Release Notes

- Fixed a communication issue
- Added presets for KGEAR GH4_FR, GH4, GH12, GH412, GS12, GS18 and GS218
- Added Natural Presets for KSC12P
- Added Device Preset preview
- Added BT pairing with PIN
- Some functionalities have been moved in a submenu
- GUI refreshed
- Added DNS field in Network Configuration
- Added API v2 for 3rd party control

Oskar Version 1.6.8 Release Notes

- K-REMUCTLR accessory can now control DSP volumes
- Added Natural presets for KFC 26, KU315 and RAIL
- Device presets order can be changed
- Added discovery page in the webapp
- Added clone option for similar devices

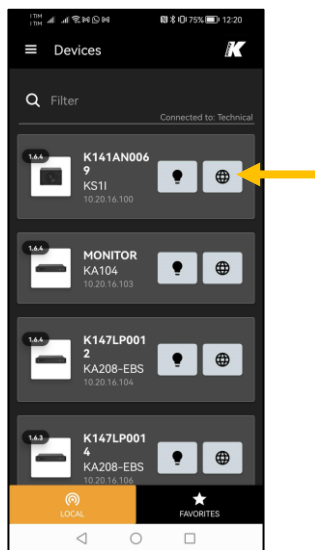
Oskar Version 1.6.4 Release Notes

- New web APP interface, version 1.7.5
- new dsp schemes (input patch and matrix)
- added global bypass on EQ
- added webradio support
- added bluetooth support (KA02 I)
- added multiroom support
- Added Natural presets for Rumble, Lyzard, Truffle, and Anakonda
- fixed a sample rate issue in the internal player
- fixed an issue on filter bypass and amplifier standby
- various bug fixes

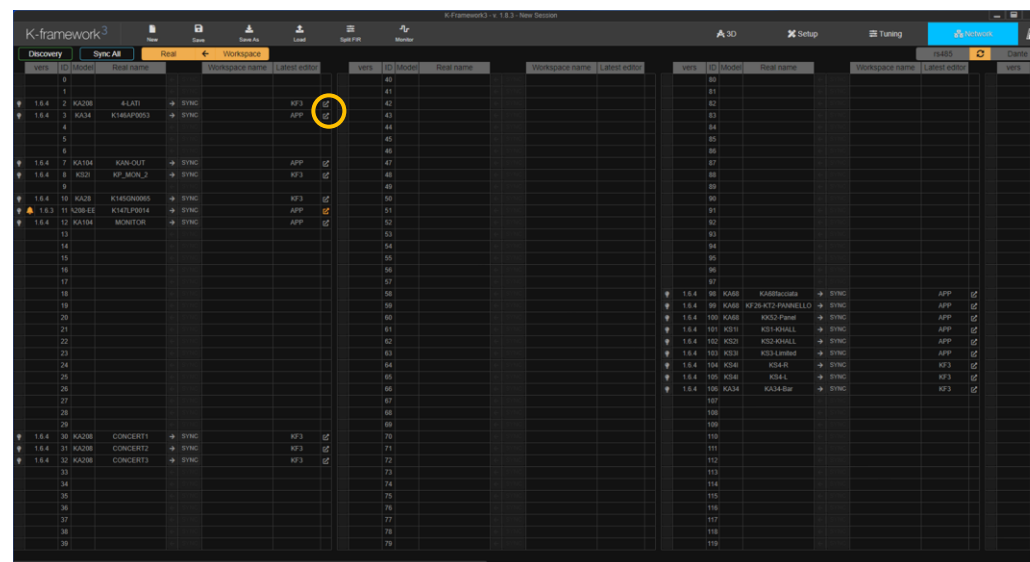
How to access the Web APP

There are several ways to access the web APP built-in a K-array device. Of course, your computer, mobile or tablet must be connected to the same network as the device you want to control.

- Using the K-Connect app for smartphone (click on the World icon next to the device name)
- Using the K-Framework 3 discovery function (click on the arrow icon at the end of the row)
- Using the K-Monitor discovery function
- Typing the IP address of the device in a browser



K-array Connect



K-framework 3

Dashboard

The screenshot displays the K-ARRAY dashboard interface. On the left is a dark sidebar with navigation options: Dashboard, Audio configuration, AUDIO TOOLS (Levels, Equalizers, Limiters), Network, Multiroom, and Advanced. The main content area is titled 'Player' and shows a 'Dante Ready' status with a 'Dante Ready' button. Below this is a 'Device preset' section with a 'NEW PRESET' button and a search bar. A list of presets is shown, including 'dstsf' and 'KA18 FACTORY DEFAULT', each with 'RECALL', 'DELETE', and 'ACTIONS' buttons. The 'Amplifier' section displays device details: Model KA18, Board ID 1, Ip address 169.254.130.161, and Serial K145AN0006. The 'Network' section shows 'WIFI Connected to ELOQ_225590 with address 192.168.1.125' and 'Wired Connected with address 169.254.130.161'. The 'Temperatures' section shows eight channels with temperature bars and values: 1 (65°), 2 (65°), 3 (65°), 4 (65°), 5 (63°), 6 (63°), 7 (63°), and 8 (63°). At the bottom left, system information is provided: K145AN0006 KA18, OS version: 1.8.0, UI version: 1.2.2, Micro version: 1.26.1, and Dsp version: 2.8.1.

The Dashboard is the landing page where you get when you access the web APP. Here you can:

- Reproduce audio files available in the USB pen drive that you have plugged inside the device
- Enable the Dante Ready streaming
- Manage Device Presets

In this section you can also find some informations:

- Device model and serial number
- FW version
- Network address and status
- Output channels status

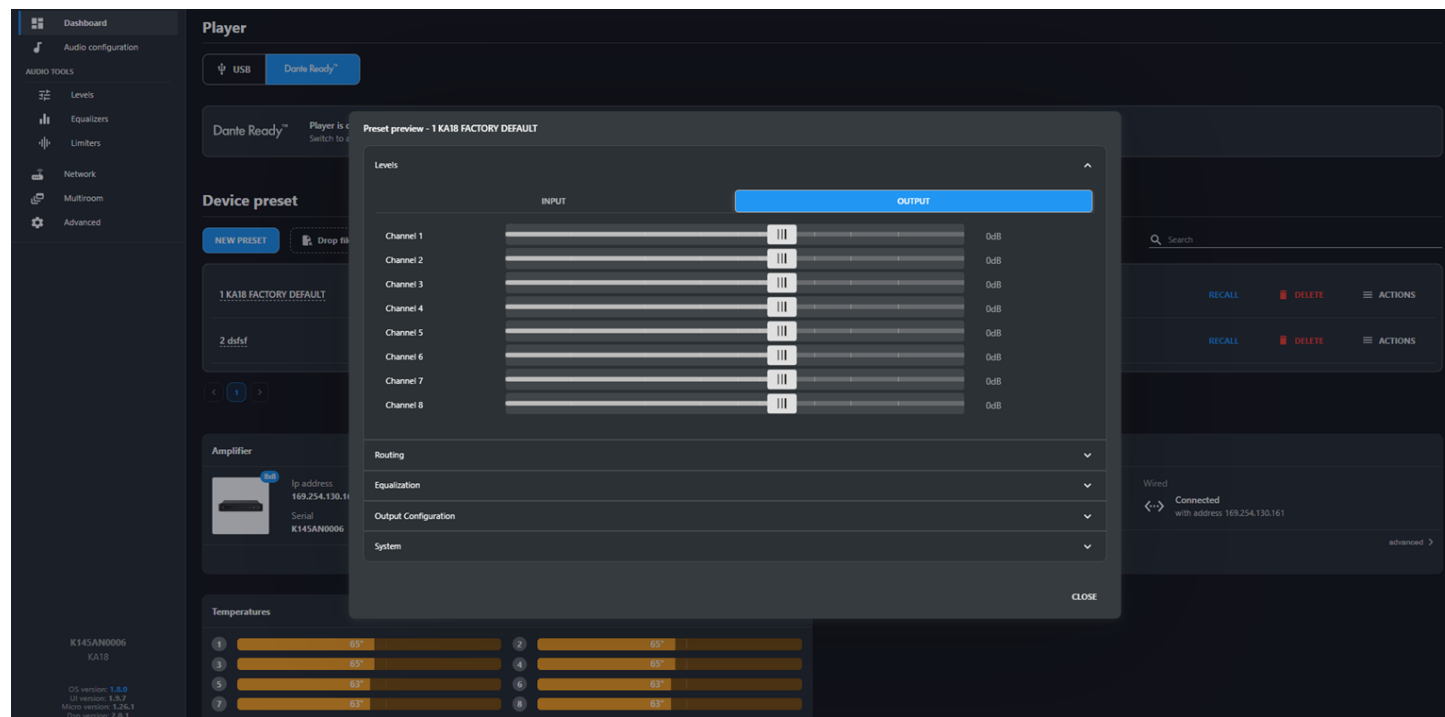
Dashboard - Device Preset

The screenshot displays the K-ARRAY dashboard interface. On the left is a sidebar with navigation options: Dashboard, Audio configuration, and AUDIO TOOLS (Levels, Equalizers, Limiters, Network, Multiroom, Advanced). The main content area is titled 'Player' and shows 'Dante Ready' status. Below this is the 'Device preset' section, which includes a 'NEW PRESET' button and a search bar. A list of presets is shown with columns for name, 'RECALL', 'DELETE', and 'ACTIONS'. The first preset is '1. KA18 FACTORY DEFAULT' and the second is '2. dsfs'. Below the presets are sections for 'Amplifier' (showing IP address 169.254.130.161, Model KA18, Serial K145AN0006) and 'Network' (showing WiFi and Wired connections). At the bottom, there is a 'Temperatures' section with eight bars showing temperature levels (e.g., 65°, 63°). The bottom left corner of the dashboard displays device information: K145AN0006, KA18, OS version 1.8.0, UI version 1.2.2, Micro version 1.26.1, and Dip version 2.8.1.

Starting from the Oskar 1.6.8 you can reorder the presets in the Device Preset section.

Just add a number in front of a preset name to place it in the desirable position.

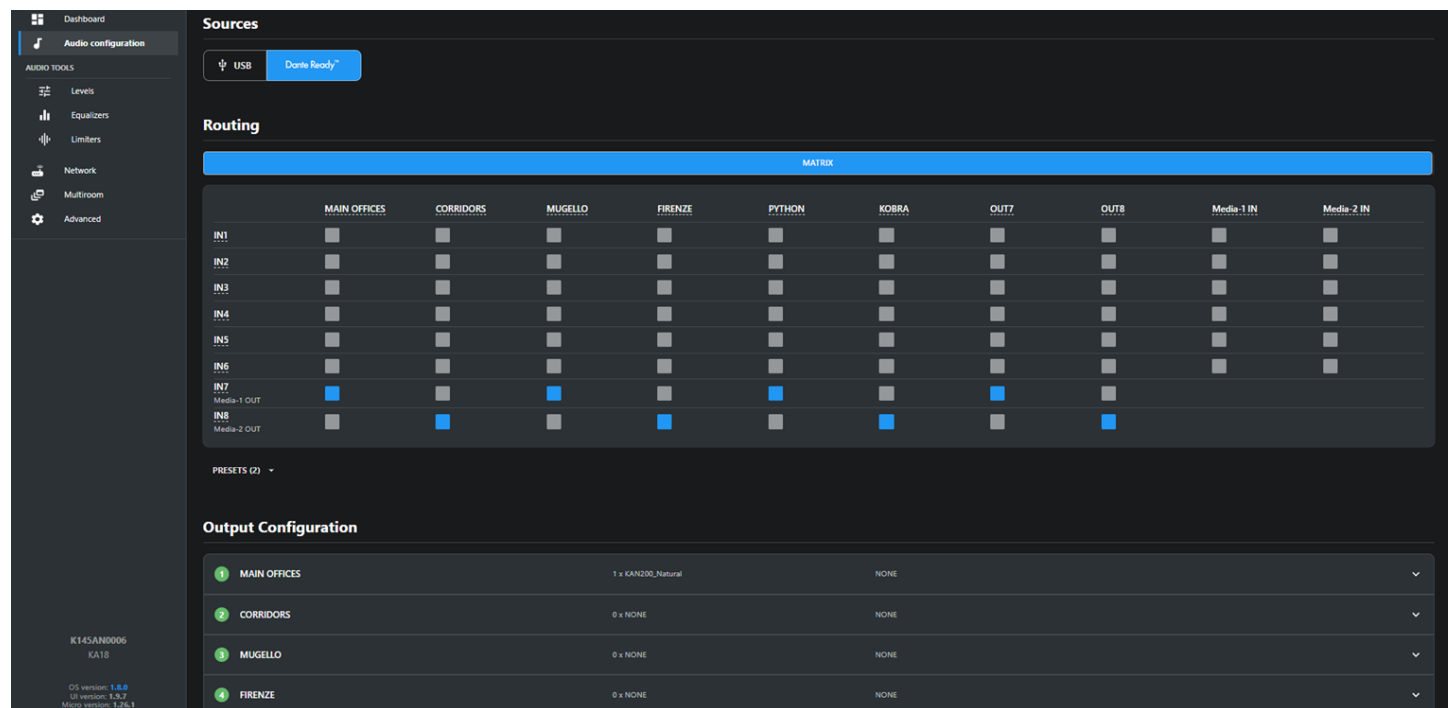
Dashboard - Device Preset Preview



With osKar 1.7.3 comes a very useful tool, that you can find in the ACTION sub-menu of each device preset.

Now you can preview all the settings of a device preset before applying it to your amplifier.

Routing



In the **Audio Configuration** Tab you'll find the **Routing** section and the **Output Configuration** section

The **Routing** section may differ from device to device, but it usually features a **Inpatch**, where the available sources can be assigned to the DSP inputs and/or to the Internal player (see the Multiroom chapter later in this document), and a **Matrix** where the available DSP inputs can be assigned to the device Outputs

Because labels are editable, the name will be spreaded across the webapp.

Output Configuration

In the Audio Configuration Tab you'll find the Output Configuration section.

For each channel, the user must select the proper factory **preset**, based on the speaker model connected that channel.

If the speaker model connected to a channel is a subwoofer, we recommend to complete the **match** column by specifying the mid-high element used together with the subwoofer. This way, the LP filter on the subwoofer channel will be automatically adjusted to match the frequency response capabilities of the mid-high element.

The screenshot displays the 'Audio configuration' interface for a K145AN0006 KA18 system. The 'Output Configuration' section is active, showing a list of channels with their respective speaker models and factory presets. The 'FIRENZE' channel is expanded to show configuration options for a subwoofer.

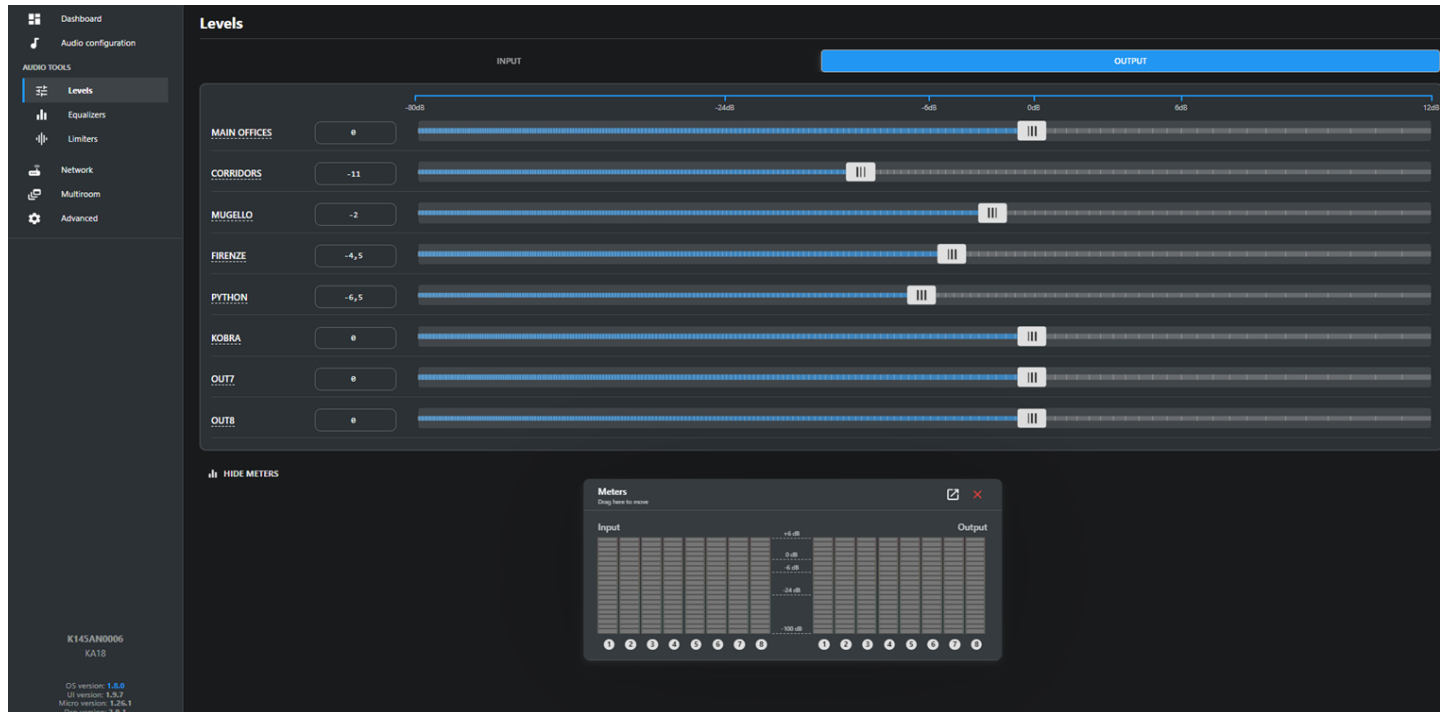
Channel	Speaker Model	Factory Preset	Match
1 MAIN OFFICES	1 x KAN200_Natural	NONE	
2 CORRIDORS	0 x NONE	NONE	
3 MUGELLO	1 x RAIL_Natural	NONE	
4 FIRENZE	1 x KU26_Natural	RAIL_Natural	
5 PYTHON	0 x NONE	NONE	
6 KOBRA	0 x NONE	NONE	
7 OUT7	1 x FLAT	NONE	
8 OUT8	1 x FLAT	NONE	

Channel 4 (FIRENZE) Configuration:

- Impedance: 8Ω
- Speaker: KU26_Natural
- Quantity: 1
- Match: RAIL_Natural
- Apply button

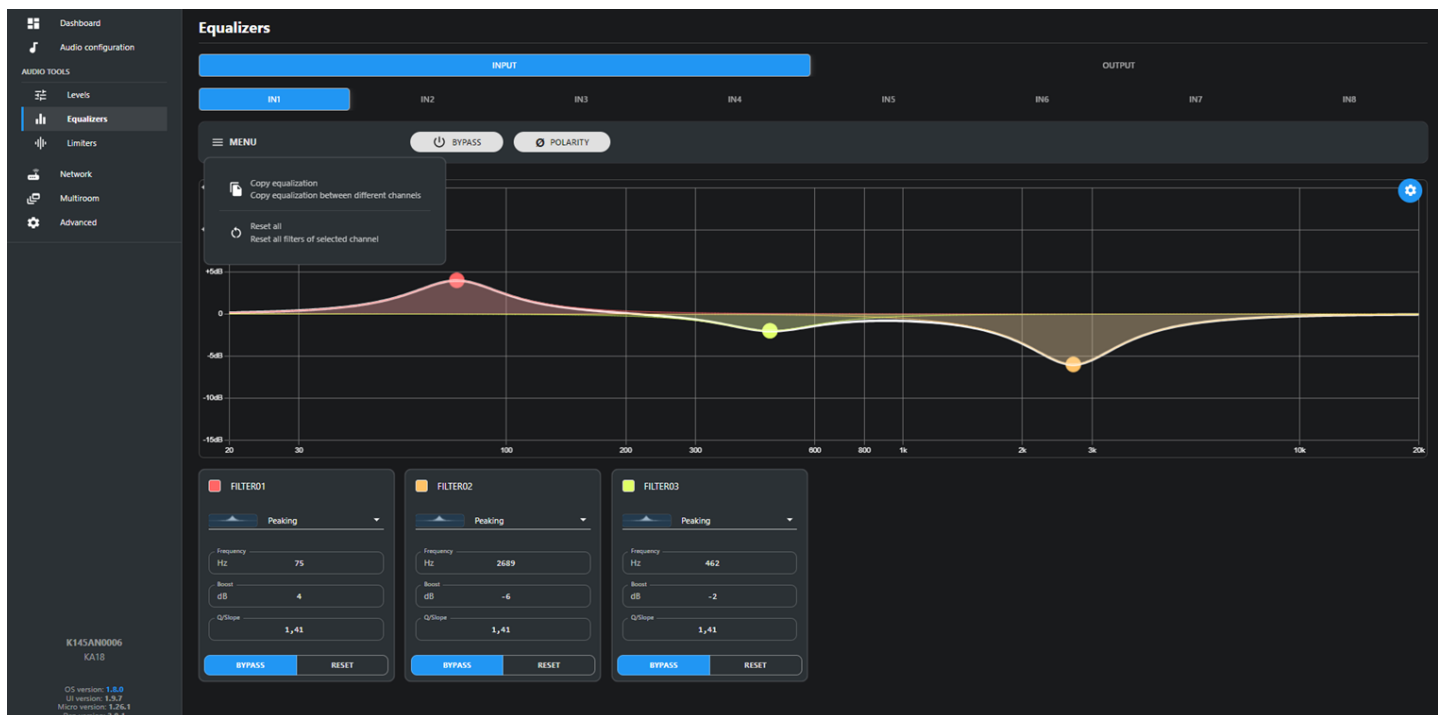
System Information: K145AN0006 KA18, OS version: 1.8.0, UI version: 1.5.7, Micro version: 1.5.6.1, Dip version: 2.0.1

Audio Tools - Levels



In the **Audio Tools** tab, the user can modify input and output **Levels** and **equalizations**, as shown in the next page of this document. In addition, it is also possible to set Output Limiters.

Audio Tools - Equalizers



8 full **parametric filters** are available for each output channel.

Delay, Polarity, Mute functions are available as well.

Filters can be individually bypassed or the entire channel eq can be bypassed clicking on **Bypass**.

Current settings can be copied from one channel to any other using the **Copy** function.

With OsKar 180 we have introduced also 3 full parametric filters for each Input channel.

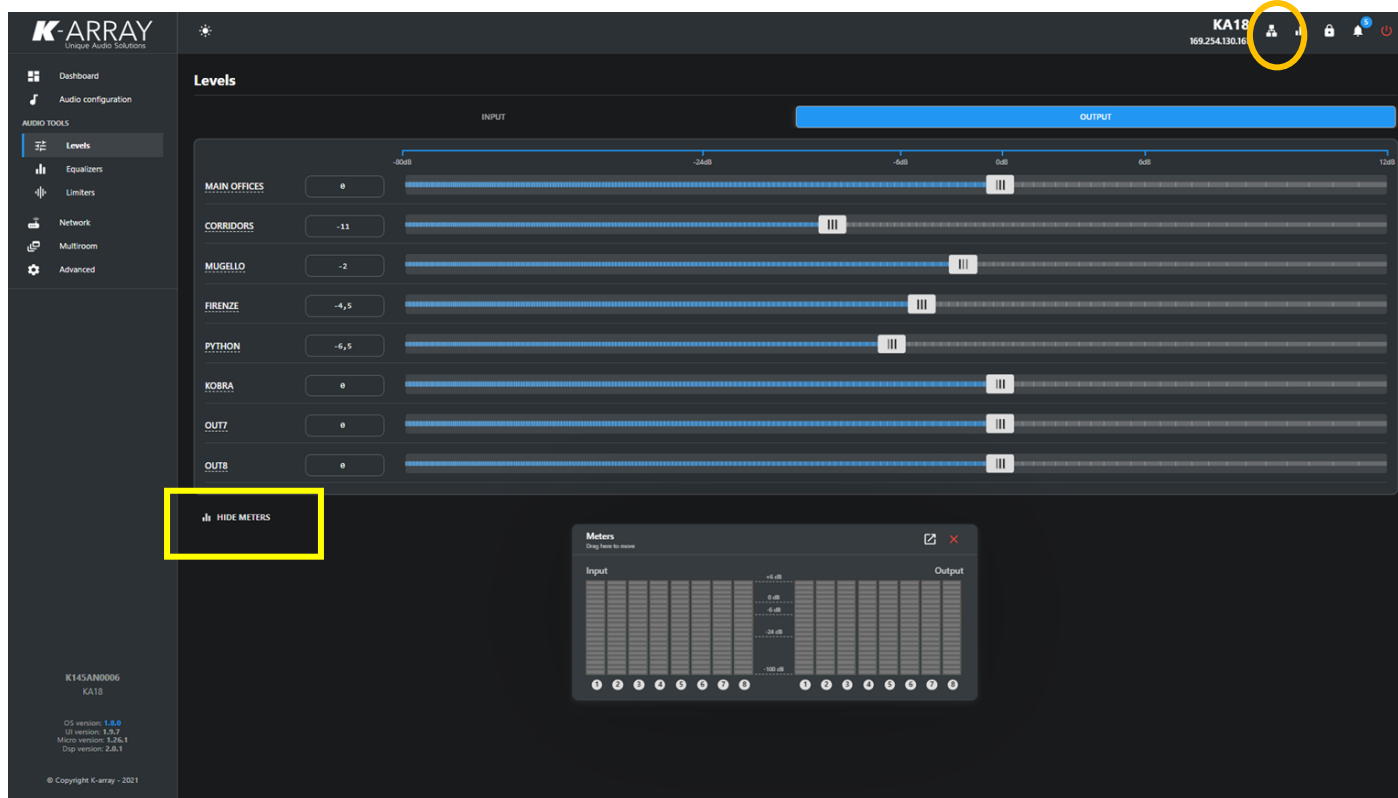
Audio Tools - Limiters

The screenshot displays the 'Limiters' configuration page in a web application. The interface is dark-themed and includes a sidebar menu on the left with options like 'Dashboard', 'Audio configuration', 'Levels', 'Equalizers', 'Limiters', 'Network', 'Multiroom', and 'Advanced'. The main content area is titled 'Limiters' and features a navigation bar with tabs for 'MAIN OFFICES', 'CORRIDORS', 'MUGELLO', 'FIRENZE', 'PYTHON', 'KOBRA', 'OUT7', and 'OUT8'. The 'MAIN OFFICES' tab is active, showing an 'RMS Limiter' control panel. This panel includes a 'Threshold' slider set to -48 dB, 'Attack' and 'Hold' time settings (121 ms and 248 ms respectively), and a 'Decay' setting of 28 ms. A 'Show meter' checkbox is checked. Below the controls are 'BYPASS' and 'RESET' buttons. To the right of the control panel is a VU meter and a graph showing the limiter's response curve. The graph plots gain in dB against input level in dB, showing a linear increase until it reaches the -48 dB threshold, where it levels off. The bottom left corner of the interface displays the device ID 'K145AN0096', model 'KA18', and version information: 'OS version: 1.8.0', 'UI version: 1.3.7', 'Micro version: 1.26.1', and 'Dsp version: 2.6.1'.

Starting with Oskar 178 we have introduced Output Limiters into the WebApp.

Is it possible now to set Attack, Hold, Decay and Threshold for each output channel

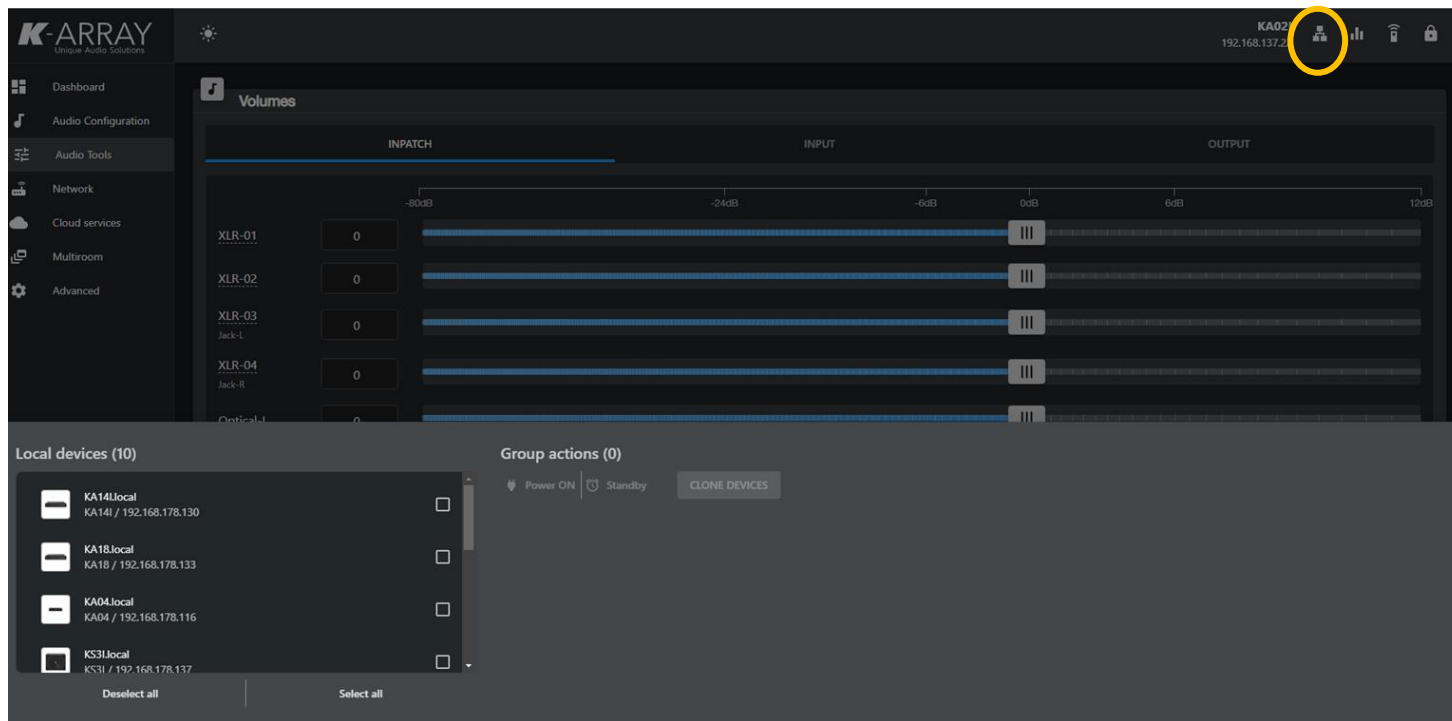
Audio Tools – Floating Meters



Since Oskar version 1.6.4, a floating **Meters** Window is available.

It can be accessed in the Audio Tools tab by clicking on the “Show Meters” button, or simply by clicking on the Meters icon on the top right corner of the web APP interface

Device discovery and Clone



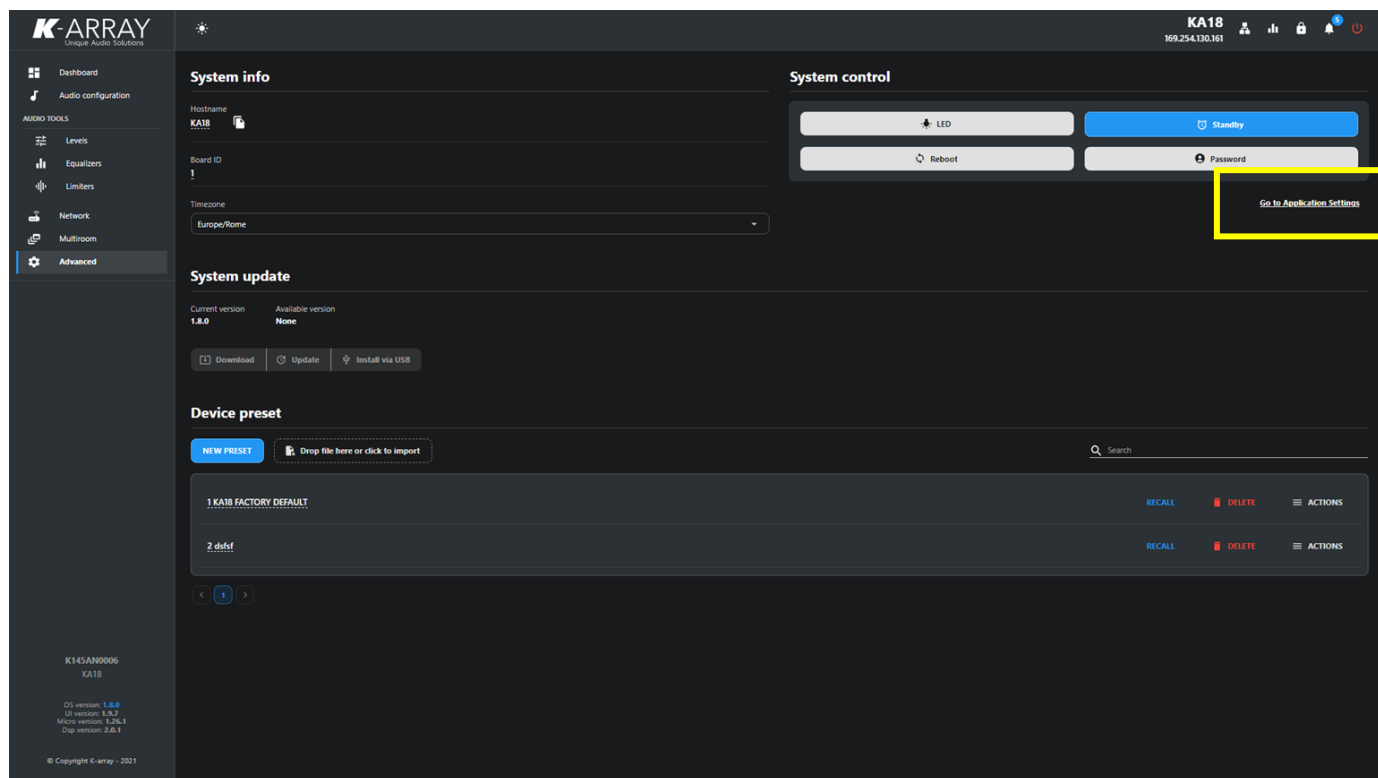
Since Oskar version 1.6.8, a discovery option is available.

From any tab you can access it clicking on the “**Local Devices**” button, then a new section will appear.

In this new section you can discover any device connected in the same network and open its webpage just clicking on it. You can also perform some operations on multiple devices at once (power on, standby).

You can select two or more devices of the same model to **clone** the actual amp configuration to the other selected devices.

Application settings

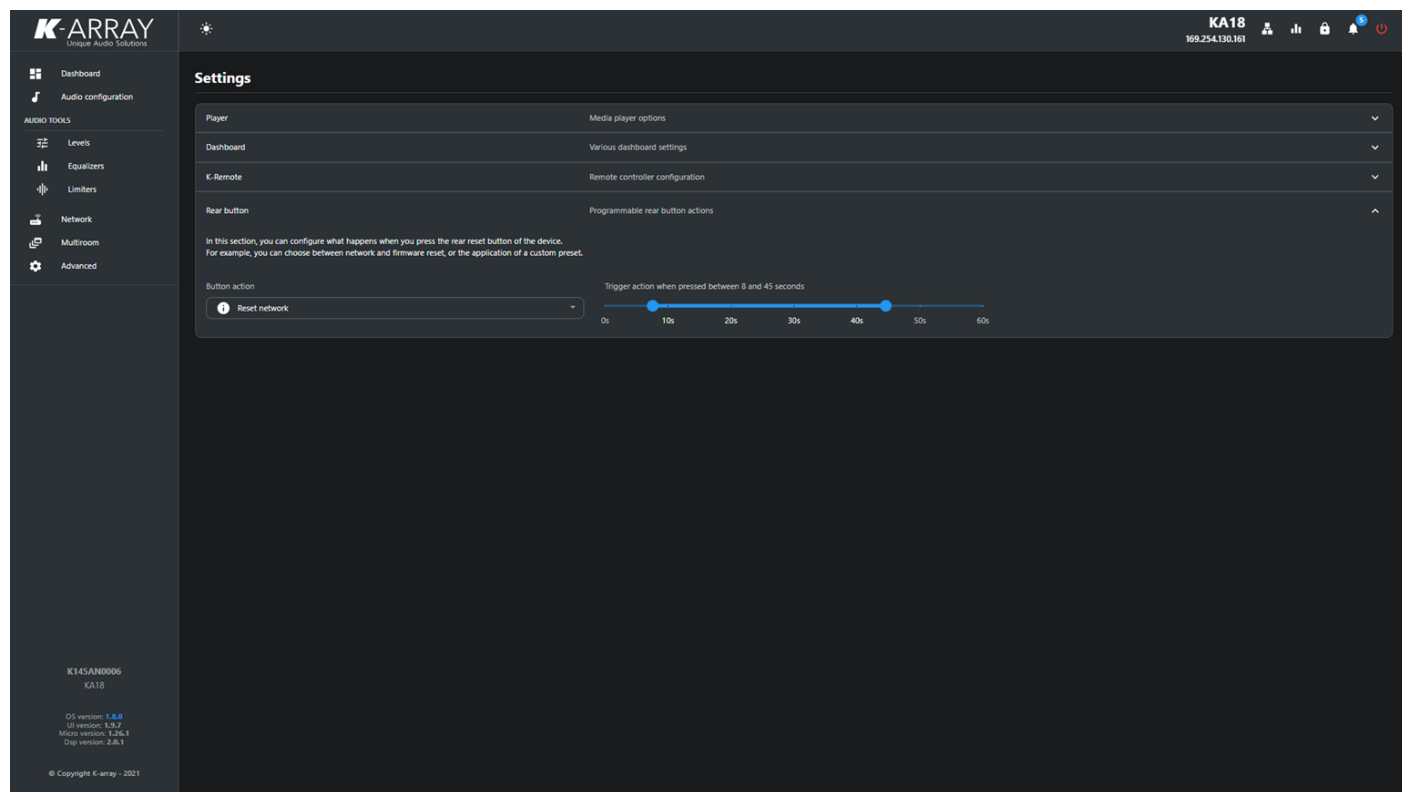


Since Oskar version 1.6.8 we have added more settings editable by the user.

These “Applications Settings” are accessible in two ways:

- From the Advanced tab, in the **system control** window
- If you have a remote dongle connected to your Device, you can access its configuration from the “**Remote icon**” in the top right corner.

Application settings



In the Settings window you can customize same behaviours of your device:

- Enable/Disable the **Autoplay on boot** option for the Player (off by default)
- **Temperature Unit** (Celsius or Fahrenheit)
- Which Volumes you want to control with the **K-REMUCTRL** remote, if available (Player volume by default)
- Remote Button Actions (PReset Recall, Reset Network, Nothing, Reinstall Firmware)

Application settings - Remote

The screenshot shows the K-ARRAY web interface for remote settings. The top navigation bar includes the K-ARRAY logo, a sun icon, and the device ID KA18 with IP address 169.254.167.152. The left sidebar contains navigation options: Dashboard, Audio configuration, and AUDIO TOOLS (Levels, Equalizers, Limiters, Network, Multiroom, Advanced). The main content area is titled 'Settings' and is divided into sections: Player, Dashboard, and K-Remote. The K-Remote section is expanded, showing a list of inputs (INPUT CHL.001 to INPUT CHL.006) and outputs (OUTPUT CHL.001 to OUTPUT CHL.008). The 'Volume step (dB)' section is active, displaying a slider and an 'Aligned' checkbox. Below this is a 'Programmable rear button actions' section with a trigger action time range set from 8 to 45 seconds. The bottom left corner shows the device model K145AN0006, KA18, and version information: OS version: 1.8.0, UI version: 1.9.7, Micro version: 1.2.1, and Dip version: 2.0.1. Copyright © K-array - 2021 is also present.

In the remote menu you can decide which volumes are going to be controlled by the K-REMUCTRL, if available. By default the remote controls the volume of the internal player, but you can decide to control multiple input or output **DSP volumes**. Moreover you can select the db steps for the volume buttons on the remote.

Keep in mind that if you select the “keep aligned “ option, all the fader will be set to 0 db then will be controlled from the same starting point.

If it is deselected, the volumes will be managed proportionally.

Network

The screenshot shows the Network configuration page for a K-Array device (KA18). The interface is dark-themed and includes a sidebar with navigation options: Dashboard, Audio configuration, Levels, Equalizers, Limiters, Network (selected), Multiroom, and Advanced. The main content area is divided into several sections:

- Wifi:** A toggle for Power is visible. Below it, the Adapter section explains that the adapter can be set to Client or Hotspot mode. A horizontal bar shows 'CLIENT' selected over 'HOTSPOT'. The Available networks section shows a list with 'EOL0_229590' selected and 'Autconnect' as an option. A 'WIFI SCAN' button is present.
- Wifi Configuration:** A table displays the current settings:

Mode	Client
Connected to	EOL0_229590
Signal	<div style="width: 100%;"><div style="width: 100%;"></div></div>
Addressing	DHCP
IP	192.168.1.125
Netmask	255.255.255.0
Gateway	
DNS	192.168.1.1

A 'Copy to clipboard' button is located at the bottom right of this section.
- Mode:** A horizontal bar shows 'STATIC' and 'DHCP' options, with 'DHCP' selected.
- Ethernet:** A horizontal bar shows 'STATIC' and 'DHCP' options, with 'DHCP' selected. Below it, a table displays the current settings:

MAC	DC:A6:32:2A:8E:07
Addressing	DHCP
IP	
Netmask	
Gateway	
DNS	

A 'Copy to clipboard' button is located at the bottom right of this section.

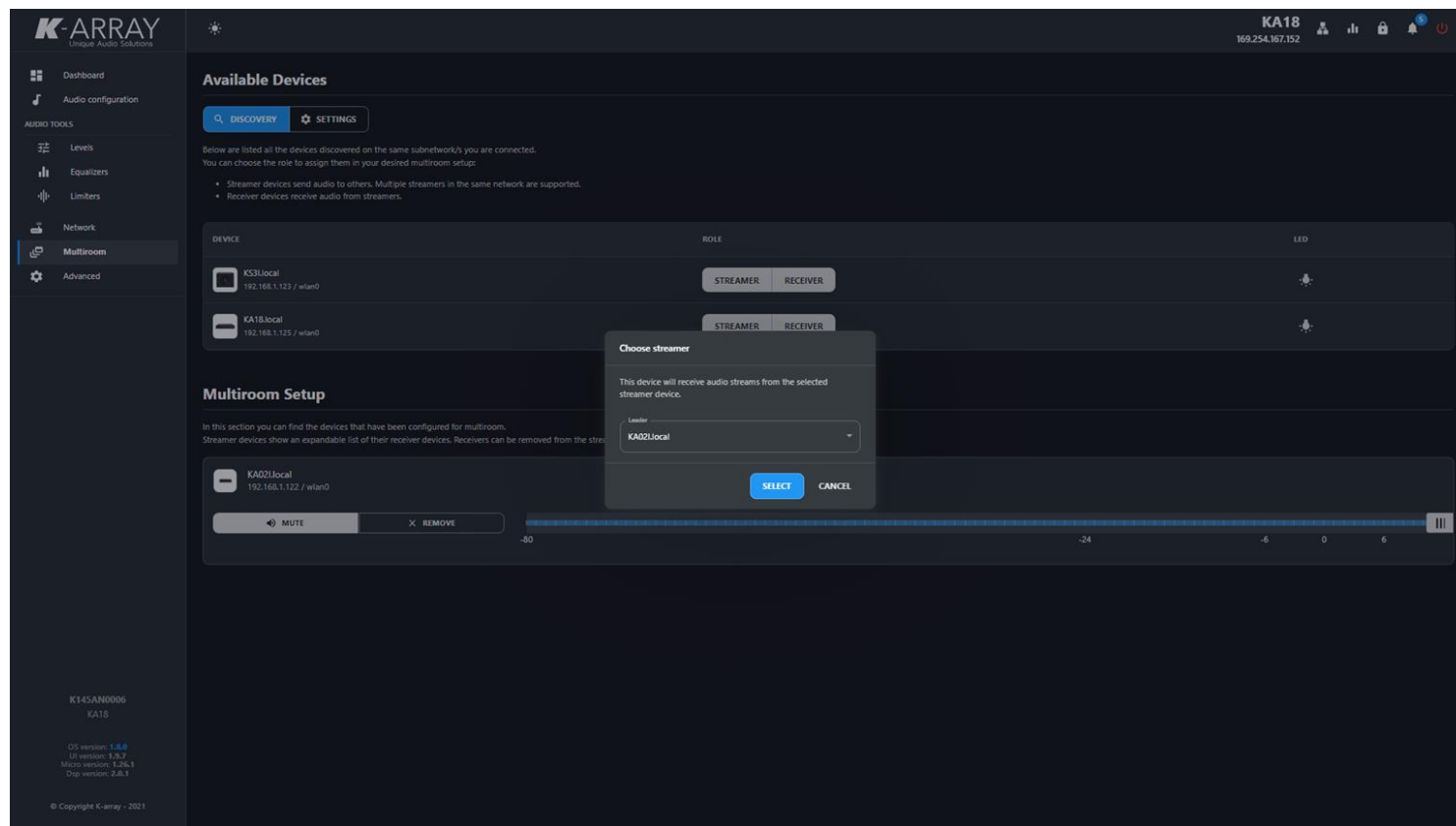
At the bottom left, the device ID 'K145AN0006 KA18' and version information (OS: 1.8.0, UI: 1.9.7, Micro: 1.2.26.1, Dip: 2.0.1) are displayed. The footer contains the copyright notice: '© Copyright K-array - 2021'.

The **Network** tab will let you manage the Wifi Hotspot and Ethernet interface settings.

K-array devices can generate a **WiFi** hotspot (Hotspot Mode) or they can be set as clients of an existing WiFi network (Client Mode). Wifi now can also be set in Static IP.

Anyway the recommended connection option is over **Ethernet**. The Ethernet interface can be set in DHCP mode or a static IP address can be specified. Please note that a Gateway must be always specified if the Device is set in static IP mode. Starting from 1.7.2 you can also specify a DNS server, useful in very restrictive network environments

Multiroom



The new **Multiroom** feature, introduced with Oskar version 1.6.4, gives you the possibility to stream audio from a device to other devices through the network.

Just select one device as a **streamer** and one or multiple devices as **receivers** of that streamer. The receivers will reproduce into the media inputs the same music that the streamer is reproducing from the internal player.

Multiple devices can be set as streamers in the same network.

Before adding a device as a receiver in a multiroom setup, please set its internal player in USB mode in the Dashboard tab.

Advanced

In the **Advanced** tab you can

- Change the Hostname
- Change the Board ID (useful for the synchronization with K-Framework)
- Country (for your reference)
- Update the system OTA or with USB pen drive
- Save and Recall Device Presets
- Reboot, Standby, Identify the device (status LED turns blue) and protect with password the web APP so that nobody else have access to it.

The screenshot displays the K-ARRAY web interface for device KA18. The top navigation bar includes the K-ARRAY logo, a dashboard icon, and the device name KA18 with its IP address 169.254.167.152. The left sidebar lists various configuration options, with 'Advanced' selected. The main content area is divided into several sections:

- System info:** Shows Hostname (KA18), Board ID (!), and Timezone (Europe/Rome).
- System control:** Features buttons for LED (with a lightbulb icon), Standby (with a power icon), Reboot (with a refresh icon), and Password (with a lock icon).
- System update:** Displays the current version (1.8.0) and available version (None), with buttons for Download, Update, and Install via USB.
- Device preset:** Includes a 'NEW PRESET' button and a 'Drop file here or click to import' area. Below, a table lists presets:

Preset Name	RECALL	DELETE	ACTIONS
1 KA18 FACTORY DEFAULT	RECALL	DELETE	ACTIONS
2 dsfsf	RECALL	DELETE	ACTIONS

At the bottom left, the device model K145AN0006 KA18 and version information (OS version: 1.8.0, UI version: 1.5.7, Micro version: 1.28.1, Dip version: 2.8.1) are shown, along with the copyright notice © Copyright K-array - 2021.