DMX interface
D1024W

To read first for WIFI using

By default (or after a reset with the "RESET" button), in "AP mode" (with the switch set to "AP"), our interface generates the WIFI network:
- SSID = D1024W
- password = 00000000

To use the WIFI network of our DMX interface
Connect your platform (computer or mobile device) to the WIFI network "D1024W" of our DMX interface. Then you can straight run our software (TheLightingController V9 or V_II) on your platform and it will find our DMX interface after using the "autodetect interface" function in the software (see below in this manual).

To use the local WIFI network
To make our DMX interface and your platform to communicate via a local WIFI network, you have to enter the SSID & password of the local WIFI network in the "ST mode" (Station mode) parameters of our DMX interface. To do that, you have to use our application "TheLightingController_D1024W" (see below in the manual).
Then our software will be able to find our DMX interface after using the "autodetect interface" function.

When you are not able anymore to communicate with our DMX interface via WIFI

When this happen, you have no other choice than to connect the computer / mobile device which runs our application "D1024W" or the computer which runs our software V9 / V_II to the WIFI network of our DMX interface in AP mode.

To do that:
- set the switch of our DMX interface to "AP" (Access Point).
- hold the button "RESET" of our DMX interface pressed until the two LEDs ("WIFI" and "USB" flash quickly) (hold the button pressed during more than 10 seconds).

Then you can connect the computer / mobile device which runs our application "D1024W" or our software V9 / V_II to the following WIFI network:
- SSID = D1024W
- password = 00000000

DMX interface - front panel

WIFI antenna
Must be installed for a correct wifi communicaion.

WIFI LED
In "AP" mode, "on" when a device is connected to the wifi network of the interface.
In "ST" mode, "on" when the interface is connected to an existing wifi network.
Blinks when our software is driving the interface via wifi.

USB LED
Blinks when our software is driving the interface via USB.

PWR (power) LED
"on" when the interface is powered.

USB socket
Always necessary to power the inteface.
Necessary for a USB communication with our software.

Switch "mode"
- "AP" (Access Point)
The interface generates its own wifi network.
The device running our software has to connect to this wifi network.
- "ST" (Station)
The interface connects to an existing wifi network.
The device running our software has to connect to the same wifi network.

Button "IP RESET"
After holding this button pressed during 10 seconds, the LEDs "WIFI" and "USB" blinks fast during 3 seconds, and the "AP" mode parameters are reset to :
- SSID = D1024W
- password = 00000000

DMX interface - rear panel

DMX socket #1
DMX channels of the first univers.

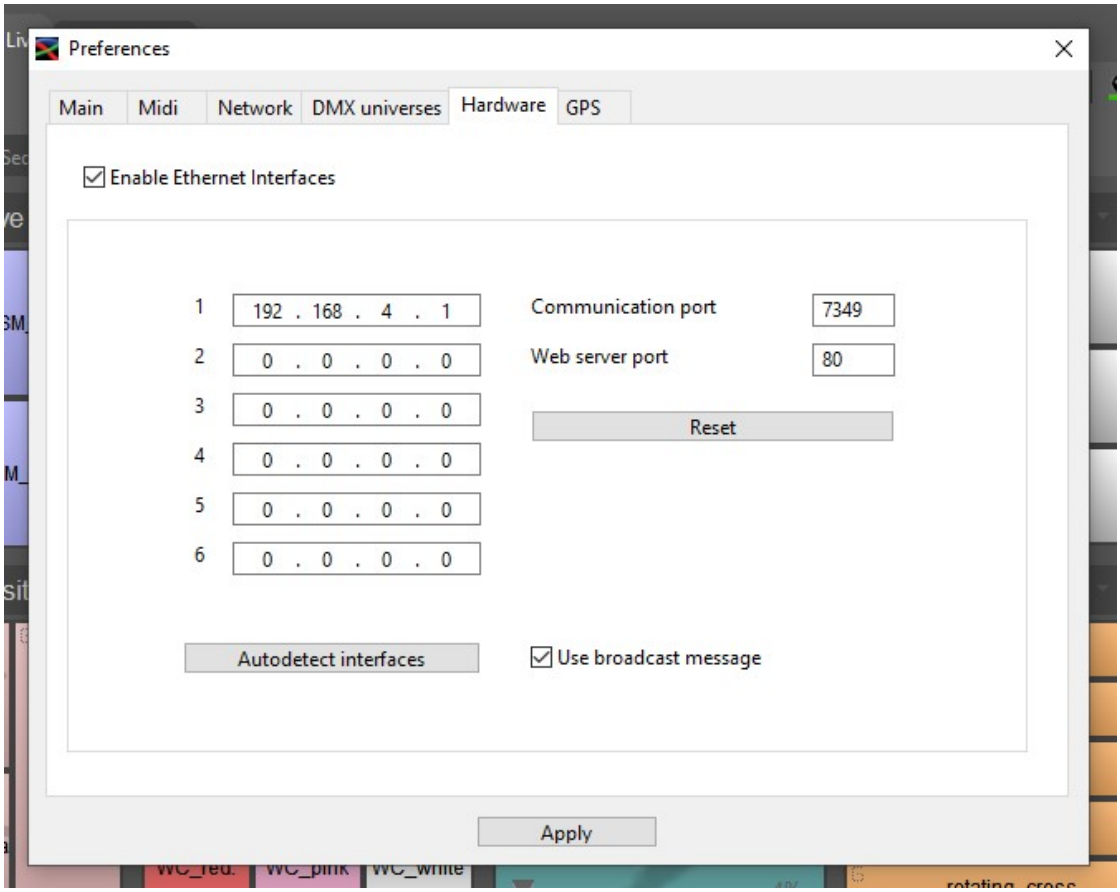
DMX socket #2
DMX channels of the first univers.

Specifications for each pin of each DMX socket
±60V overvoltage fault protection
±40kV HBM and Level 4 IEC ESD protection
±25V input common mode range

Connection with our software TheLightingController V9

Via USB
Windows – install the USB driver and run the software.
MacOS – just run the software.
The welcome screen will show "*Interface D1024W USB found*".

Via WIFI
Ensure the computer / mobile device which is running our software is connected to the same WIFI network as the interface.
Open the window "Preferences > Hardware".
Check the option "Enable Ethernet interfaces".
Press the button "Autodetect interfaces". Our software is supposed to show the IP of the interface.
If the auto-detection fails, enter manually the IP of the interface which is "192.168.4.1" in "AP mode".
Do not change the communication port of the interface when not necessary.
Leave the "Web server port" to 80 (this port is not used with the DMX interface D1024W).

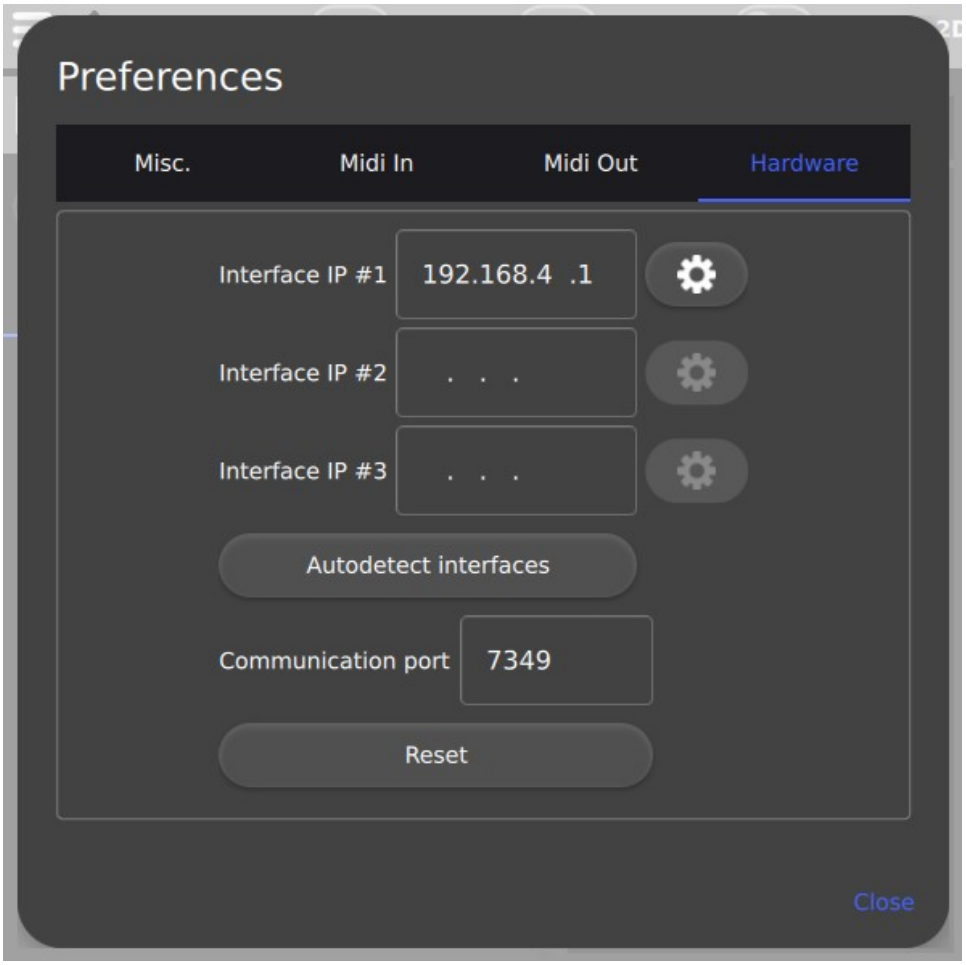


Press the button "Apply".
Restart the software.
The welcome screen will show "*Interface D1024W WIFI found*".

Connection with our software TheLightingController V_II

Via USB
Windows – install the USB driver and run the software.
MacOS – just run the software.
Linux – copy the file "60-thelightingcontroller.rules" in the folder: "/etc/udev/rules.d" (see the readme file in the Linux software package)
The welcome screen will show "*Interface D1024W USB found*".

Via WIFI
Ensure the computer / mobile device which is running our software is connected to the same WIFI network as the interface.
Open the window "Preferences > Hardware".
Press the button "Autodetect interfaces". Our software is supposed to show the IP of the interface.
If the auto-detection fails, enter manually the IP of the interface which is "192.168.4.1" in "AP mode".
Do not change the communication port of the interface when not necessary.



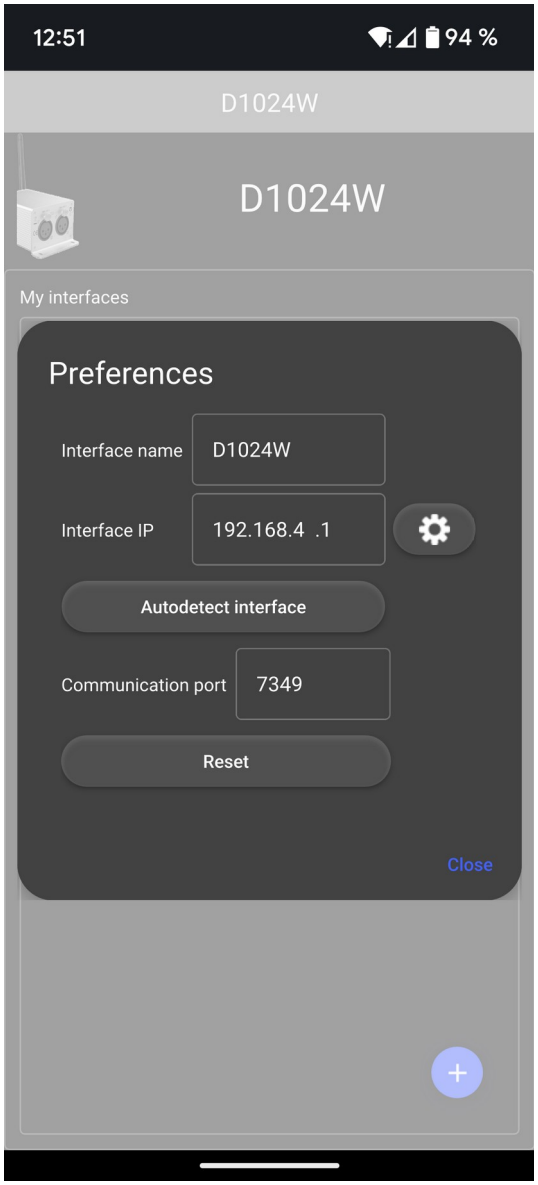
Press the button "Close".
Restart the software.
The welcome screen will show "*Interface D1024W WIFI found*".

The application "TheLightingController_D1024W" interface detection

Ensure the mobile device which is running our application is connected to the same WIFI network as the interface.

Press the button "+" to déclare one interface.

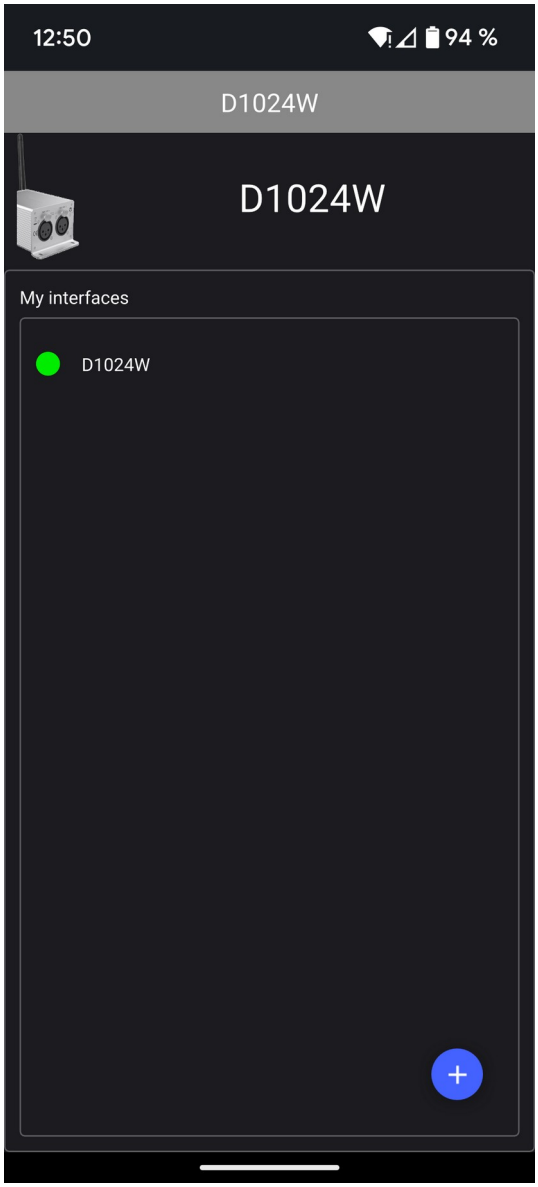
Press "Autodetect interface" or enter the IP of the interface, and press the button "Close".
Change the "Communication port" only when necessary.



This screenshot shows the SSID and IP of our DMX interface in AP mode.

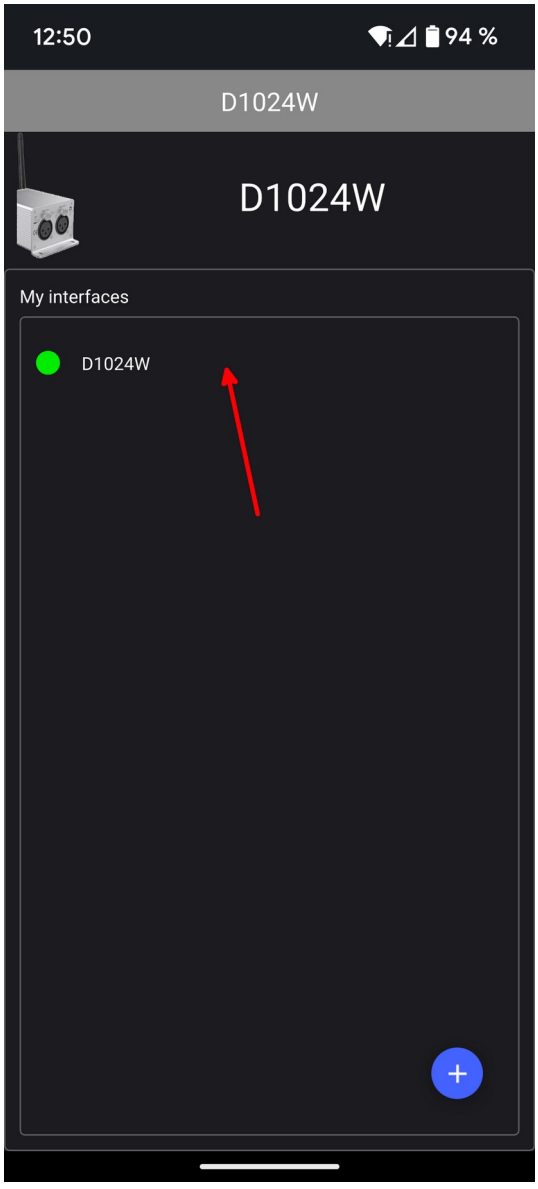
Press the button "Close".

The green light says the application well found the interface.



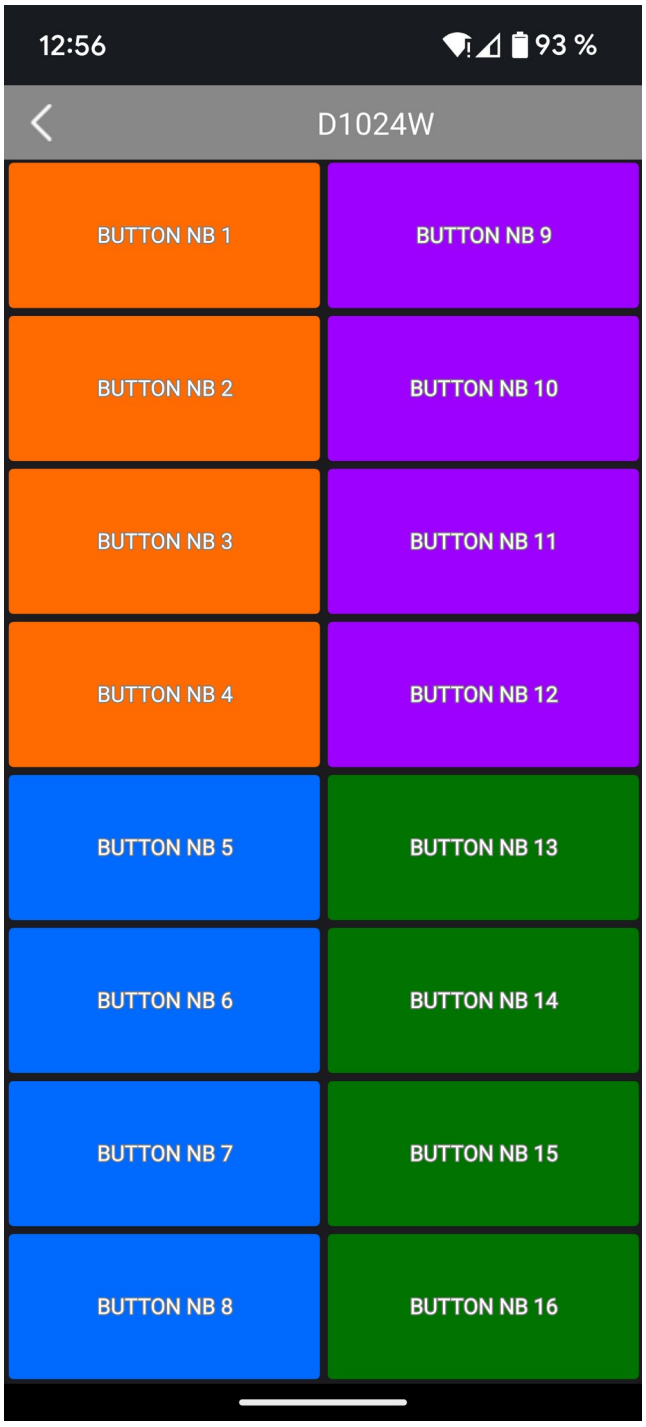
The application "TheLightingController_D1024W" standalone lightshow management

Make a short press over the line with the name of the interface.



If you have previously uploaded some scenes in the standalone memory of the interface, you will see a page with buttons to trigger the standalone scenes.

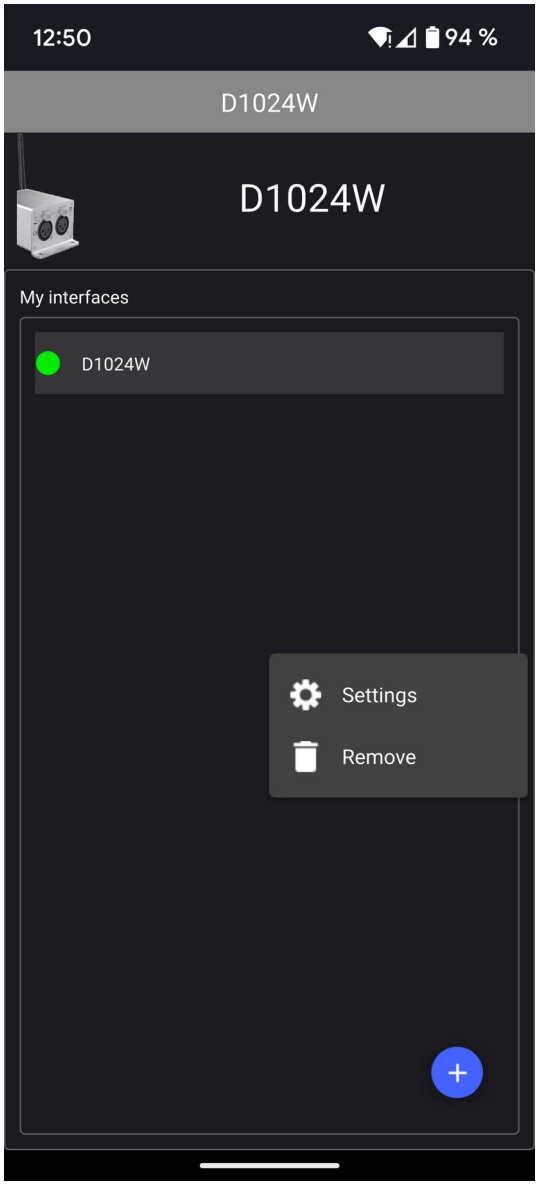
This page will be empty when no scenes have been uploaded.



Press the "left arrow" at the top of the screen to return to the previous page.

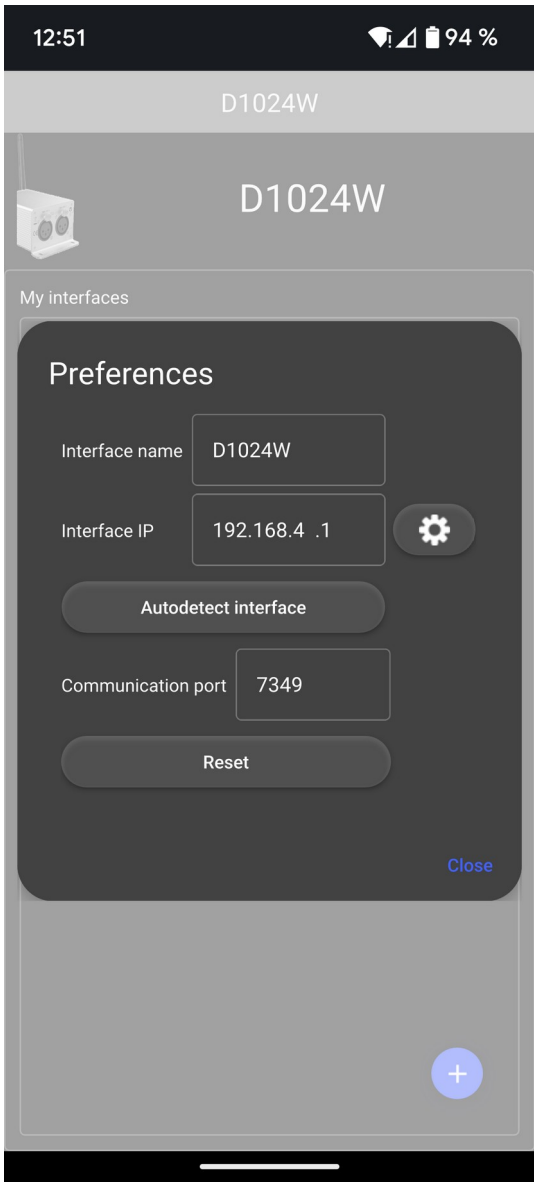
The application "TheLightingController_D1024W" wifi settings

To change the WIFI parameters, make a long press over the line with the name of the interface and select the menu "Settings".



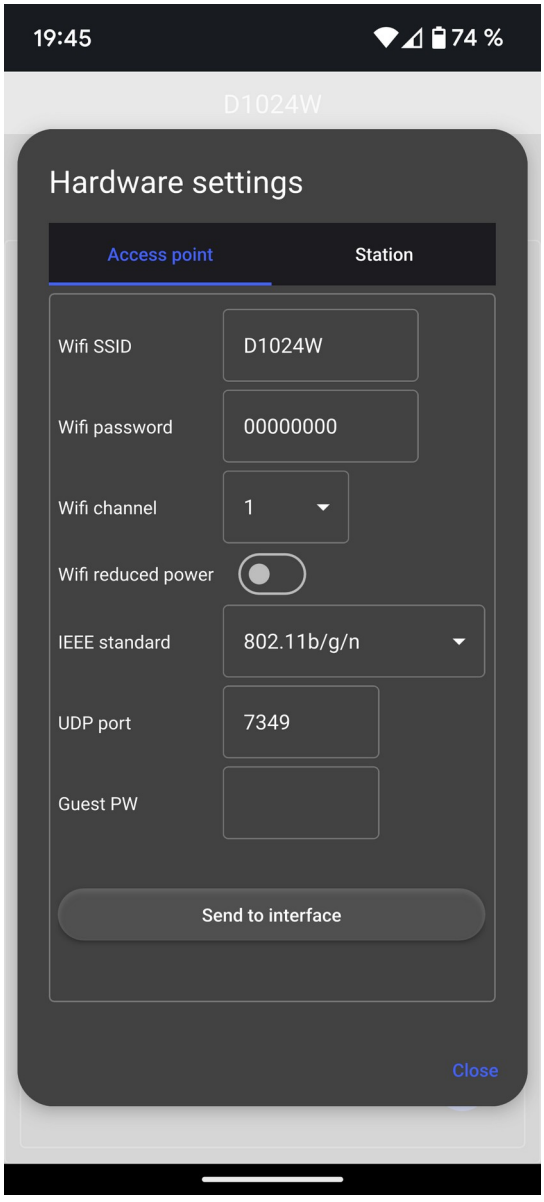
If you select "Remove", a message requester will ask you to confirm you would like to remove the interface from the list.

It is possible to change the name of the interface.
Do not change the IP / port when not necessary.
Press the button "Gear wheel" to change the WIFI AP & ST parameters.



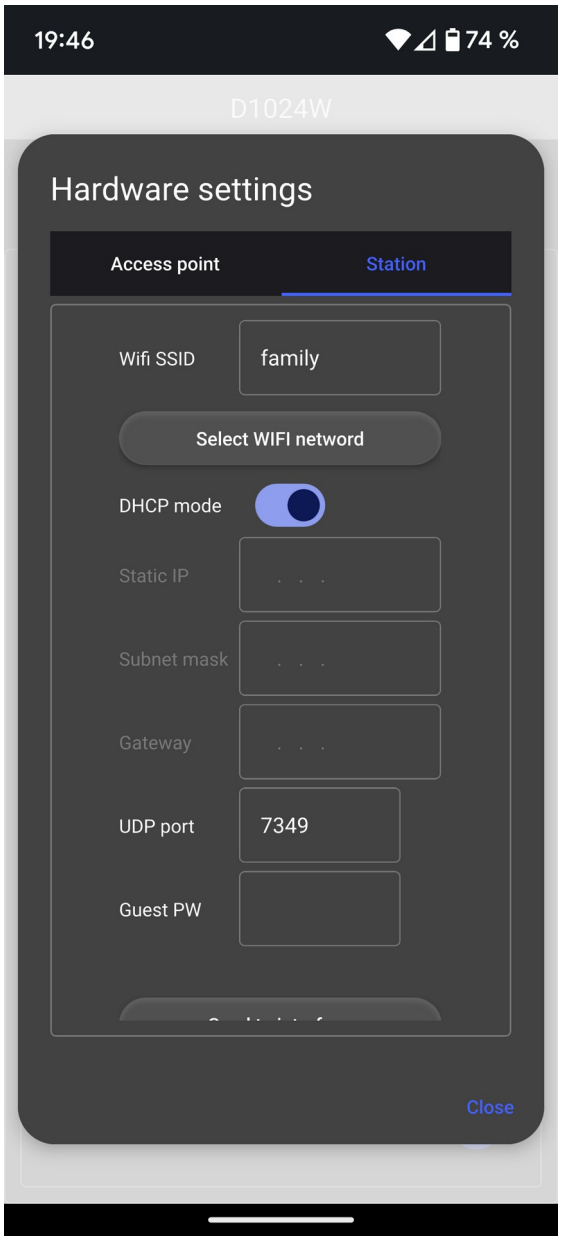
The application "TheLightingController_D1024W"
Access Point mode

It is possible to change here the parameters of the "Access Point" WIFI network of the interface:
- the name of the WIFI network (SSID)
- the password of the WIFI network
- the WIFI channel
- the power of the signal
- the IEE standard (use "b/g/n" by default)
- the communication port (UDP port) (do not change it when not necessary)
- the password for a third-party application to trigger the standalone scenes
- press the button "Send to interface" to send the changes to the interface
- powercycle the interface or move the "AP / ST" switch to apply the changes



The application "TheLightingController_D1024W"
Station mode

It is possible to change here the parameters of the "Station" WIFI network of the interface:
- press the button "Select WIFI network" to see the list of the existing wifi networks and select one
- the DHCP mode
- the static / Subnet mask / Gateway IPs when not in DHCP mode
- the communication port of the interface (UDP port) (do not change it when not necessary)
- the password for a third-party application to trigger the standalone scenes
- press the button "Send to interface" to send the changes to the interface
- powercycle the interface or move the "AP / ST" switch to apply the changes



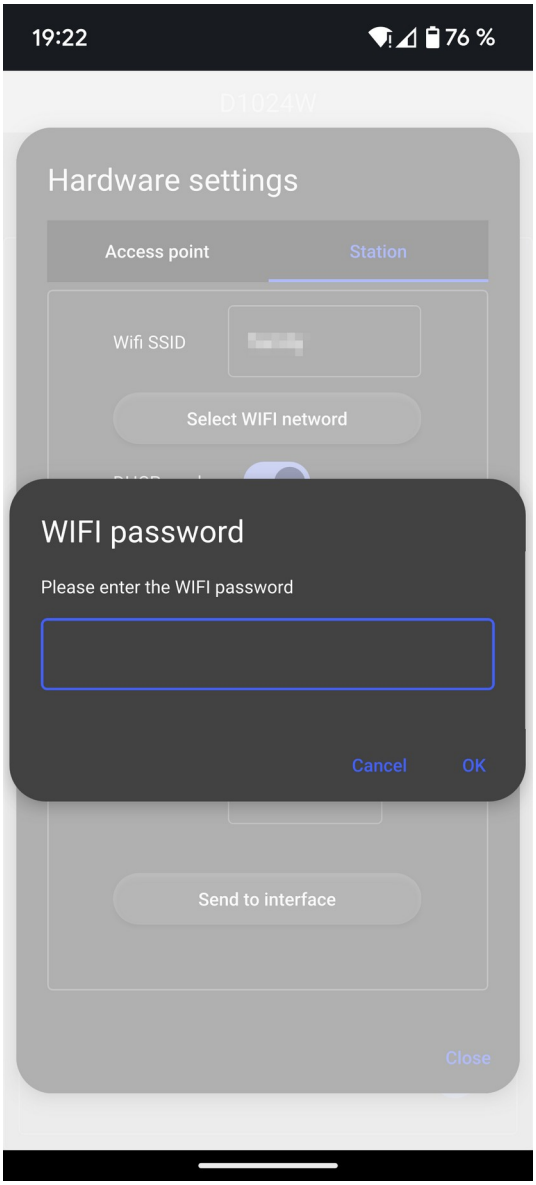
The button "Select WIFI network" opens this window to select the local wifi network.

Press the button "Refresh WIFI networks list when necessary (in case of a new WIFI network).
Select the WIFI network.
Presse the button "Close".

Then the entry box "Wifi SSID" will show the selected WIFI network.
It is also possible to manually enter the SSID of the WIFI network.

Remark
The app does not check the entered password is correct.
Why ? because if it does that in AP mode, it will stop generating its AP mode WIFI network during the password check process, and in the meantime the platform will connect to another memorized WIFI local network.

Press the button "Send to interface".
This will open the "WIFI password" requester.
Enter the password of the selected local wifi network and press the button "OK".



Third-party application to trigger the standalone scenes

First of all, you have to define a password in the field "Guest PW" in our application.
Then you have to do this to connect the third-party application with the interface D1024W.

Connection

The communication with the interface D1024W has to be established in UDP on the port 7349 by default. The IP address, the communication port and an access password have to be configurable in the third-party application.

Just after connecting, the third-party application must send the message "0|GUEST|{guest_password}|" to the interface.
- "{guest_password}" is the guest access password previously defined in our application (max 14 characters).

The interface returns "GUEST|4|{x}".
- "4" is the product ID (D1024W) ; it is always "4".
- "{x}" is not used

Driving the buttons

The third-party application sends "10|{button_number}|" to change the state of a button of the interface D1024W.
- {button_number} is the number of the button ; from 1 to 16.

The interface returns "10|abcdefghijklmnop|"
- "a" is the state of the button #1 ; 0 = off ; 1 = on
- "b" is the state of the button #2 ; 0 = off ; 1 = on
...
- "p" is the state of the button #16 ; 0 = off ; 1 = on

The third-party application can send "13|" at anytime to request the buttons state.

To know

The WIFI part of the interface is off when it is communicating with our software via USB.

The interface Access Point WIFI network allows only one connected device at the same time.

When you change the AP or ST parameters while the interface is in the same mode (AP or ST), either the mode needs to be changed (or changed and changed back again) or the interface needs to be switched off / on so that the new parameters can actually be used,

When there are **more than one interface D1024W** to manage, you have to give them different SSID's :
- switch on the first interface and switch off the others
- run the app "TheLightingController D1024W" and go the the Access Point page
- **enter a unique name for the AP SSID**
- press the button "Send to interface"
- close the app
- switch on the second interface and leave the others off
- run the app "TheLightingController D1024W" and go the the Access Point page
- **enter a unique name for the AP SSID**
- press the button "Send to interface"
- do that for all interfaces

The reason is the WIFI does not allow multiple devices with same SSID.