

WorkCAD3 Configurator

User Manual - Version 1.0



SYMBOLS

The following symbols are used in this document:



This symbol notifies the user about the instructions that must be followed strictly to ensure the correct installation or operation of the product.



This symbol notifies the user about additional information or optional instructions.

WELCOME TO WORK PRO

Thank you for choosing the WORK PRO WorkCAD3 Configurator.

This document contains essential information about the use of the software. Read this document carefully to become familiar with it.

Please check regularly the WORK PRO website to download the latest version of the document and software updates: <https://www.workpro.es/>

CONTENT

1. Introduction	4
2. Installation	4
2.1. System requirements.....	4
3. WorkCAD3 Configurator	4
3.1. Configuration at the network level.....	5
3.1.1. Configuration with dynamic IP	5
3.1.2. Configuration with static IP	6
3.2. Devices configuration	7
3.3. Device info	8
3.4. Updating the devices	10
3.5. Project configuration	11
3.5.1. Access to configuration layouts	11
3.5.2. Network Status Report.....	12
3.6. Sending OSC commands	15
3.6.1. OSC commands editor.....	17

1. Introduction

WorkCAD3 is the configuration and control software for devices from the BlueLine MKII and LightMouse series, by WORK PRO. WorkCAD3 presents the following developments with respect to its predecessor WorkCAD Designer:

- Inclusion of all BlueLine, BlueLine MKII, LightMouse and WPE devices for configuration and control.
- **WorkCAD3 Configurator.** Application dedicated to the configuration of network devices.
- **WorkCAD3 Editor.** Application dedicated to the creation of customizable layouts for the end user.
- **WorkCAD3 Player.** Application dedicated to the execution of layouts created with WorkCAD3 Editor.

2. Installation

Download the latest version of WorkCAD3 from the WORK PRO website and click on the installation file **WorkCAD3_Setup.exe**. Follow the instructions of the wizard for a correct installation.

Once the installation is done, go to the folder **C: \ Program Files (x86) \ WorkCAD3** where you will find the executable files of the different applications that form WORKCAD3:



Configurator.exe



Editor.exe



Player.exe

If you wish, you can create shortcuts to access the executable files for quicker access.

2.1. System requirements

- Operative system: Windows 7 (32 bits) o higher.
- Free 256MB in your hard disk.
- 2 GB RAM memory.
- 1280 x 960 px screen resolution.

3. WorkCAD3 Configurator

WorkCAD3 Configurator is the application that will allow you to configure the devices within your installation. WorkCAD 3 Configurator allows:

- Configuration at the network level.
- Firmware update.
- Configuration of each device according to its features.

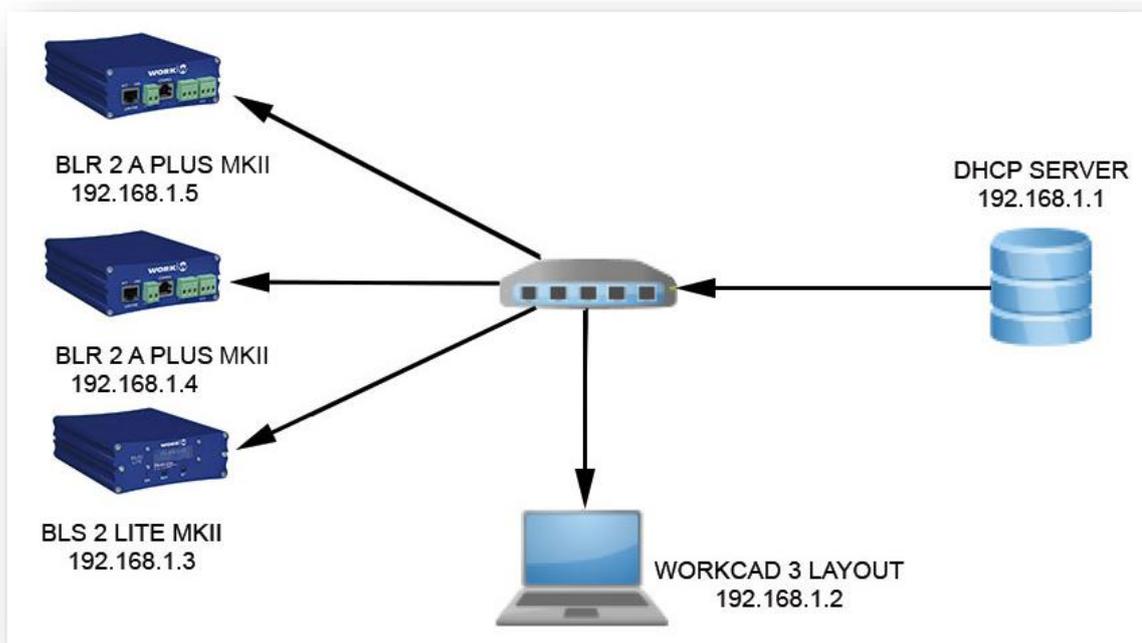
3.1. Configuration at the network level

The BlueLine MKII and LightMouse devices can work with dynamic IP address or with static IP address. By default, both modes are activated, so the devices will first try to connect using their dynamic IP, and if they do not succeed then they will try to connect using their static IP.

The first thing you should do is connect your PC with the installed WorkCAD3 Configurator to the devices to be configured using a switch.

3.1.1. Configuration with dynamic IP

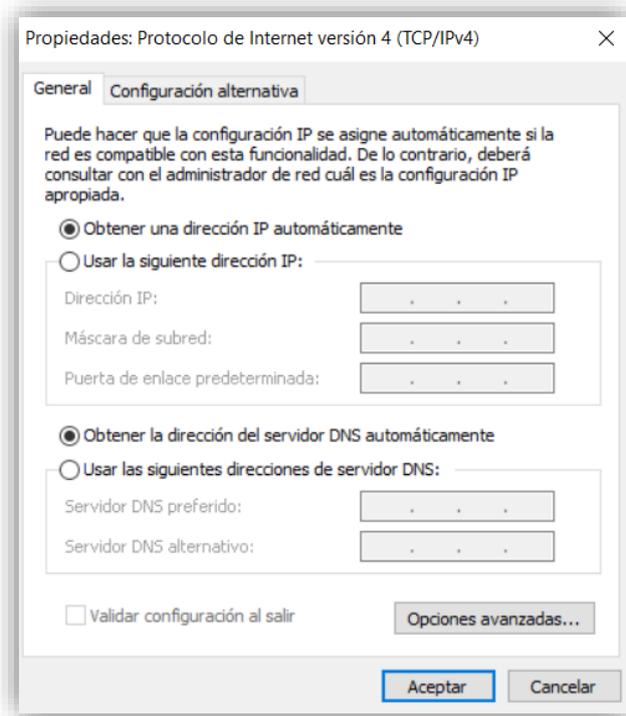
For a configuration with dynamic IP address, your LAN must contain a DHCP server that is responsible for assigning IP addresses to the different devices.



Keep in mind that a configuration with dynamic IP may not be a good choice, since depending on the configuration of the DHCP server, it can assign a different IP address to the devices each time they are restarted. Therefore, if we have OSC commands programmed to be sent to specific IP addresses, or if we are using the WorkCAD3 Player application to control the devices, when the IP addresses are renewed, the programmed OSC commands will not reach the target devices, or the application workCAD3 Player will not connect to the devices.

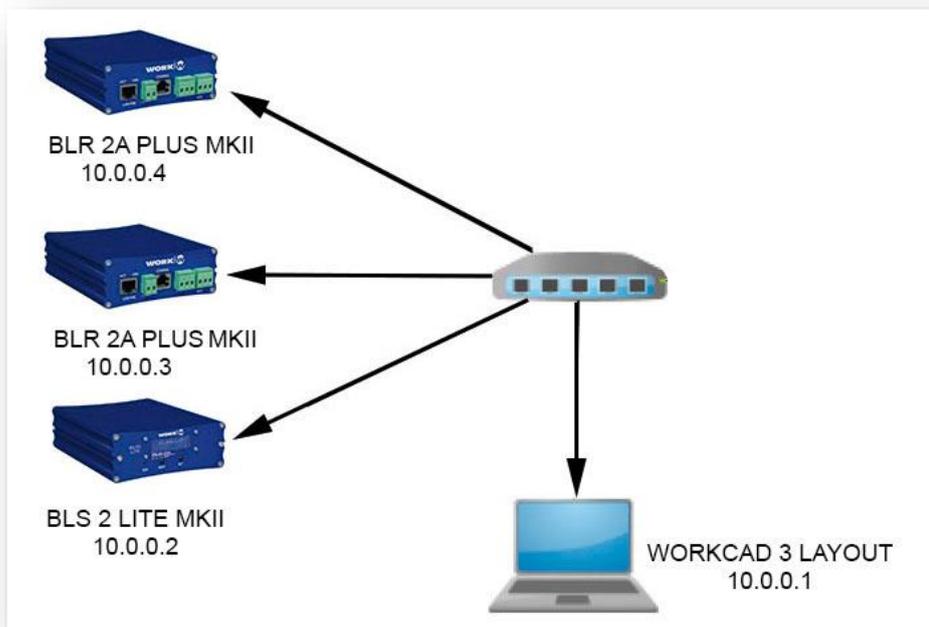
Therefore, it is recommended that, in case of using the dynamic IP in the devices, the DHCP server is configured to assign the IP addresses according to the MAC address of each device. In this way, the devices will always receive the same IP address from the DHCP server.

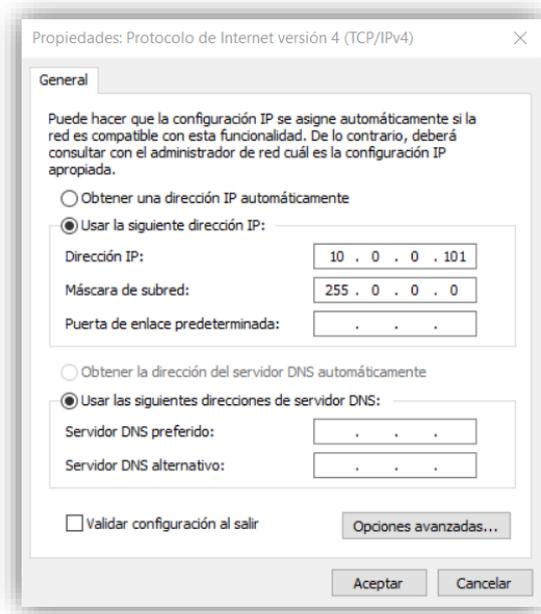
On the other hand, if you want your PC also work with dynamic IP address, go to the Network Center and Shared Resources / Connection: Ethernet / Internet Protocol Properties 4 (TCP / IPv4) on your PC Windows) and configure the IP address of your PC as dynamic. Once the DHCP server has been configured, you can run WorkCAD3 Configurator and start the device configuration



3.1.2. Configuration with static IP

If you want to work with static IP, you must first change the IP address of your PC to the subnet where BlueLine devices (10.0.0.0/8) are by default. Therefore, go to the Network Center and Shared Resources / Connection: Ethernet / Internet Protocol Properties 4 (TCP / IPv4) on your PC (Windows) and configure the static IP of your PC.



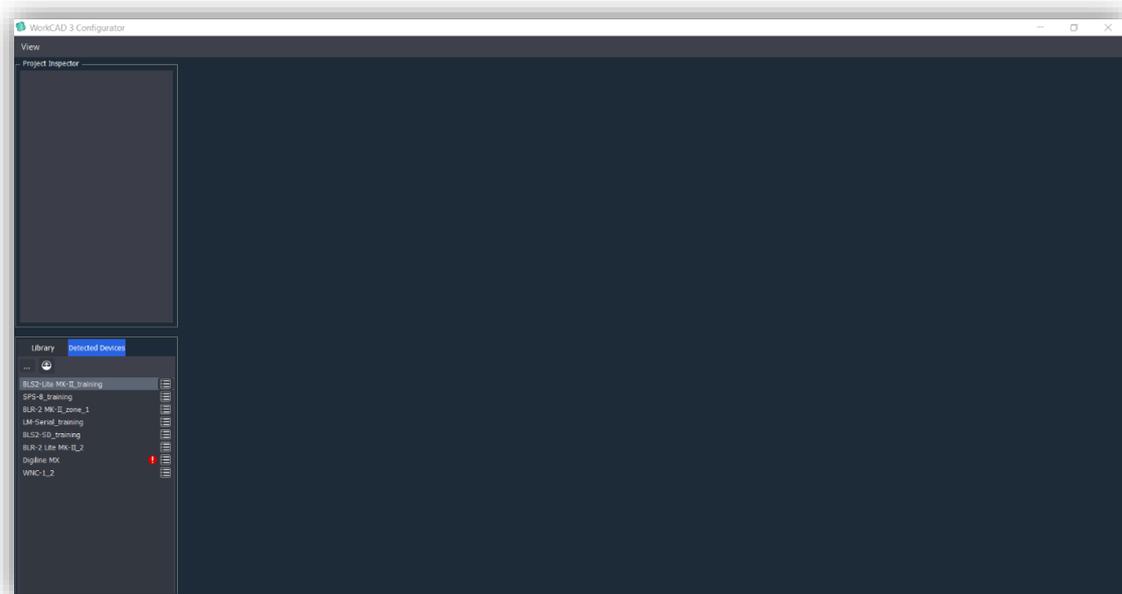


Once the static IP address of your PC is configured, you can run WorkCAD3 Configurator and start the device configuration.

3.2. Devices configuration

Once you have made the IP-level configuration of your PC, proceed to execute WorkCAD3 Configurator.

Next, you will find the following sections:

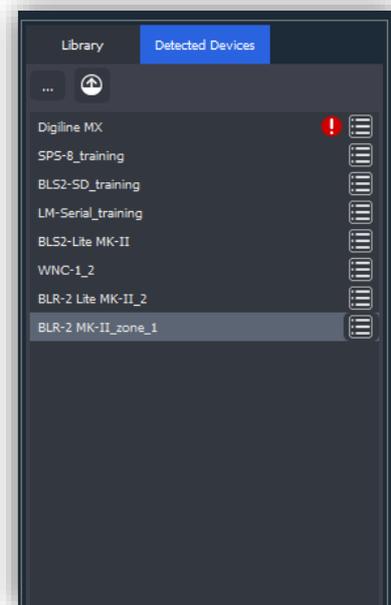


- **Library.** Tab to access examples of the different devices that can be configured with WorkCAD3 Configurator.
- **Detected Devices.** Tab where all the devices of your LAN will appear. In the event that one of these devices is not in the same subnet as your PC, an exclamation point will appear indicating it. 
- **Project Inspector.** Area with the devices to configure. To move the devices from *Detected Devices* to *Project Inspector* you must double click on them. **Only devices that are on the same subnet as your PC can be moved to the Project Inspector.**

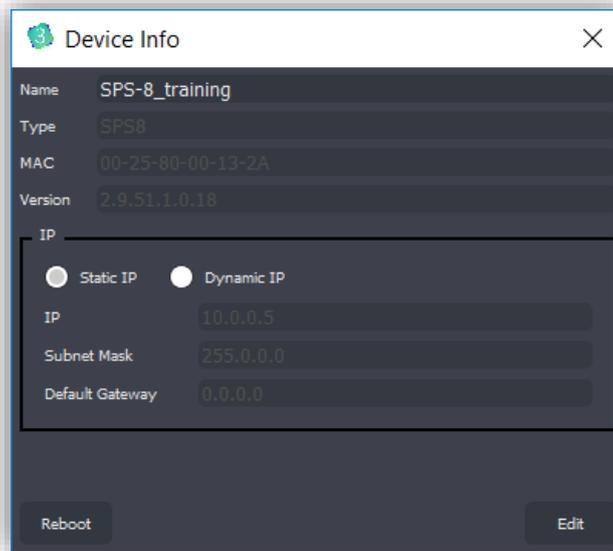
3.3. Device info

Before starting to configure the devices with their configuration layout through the Project Inspector, it is recommended to configure them at the IP and name level.

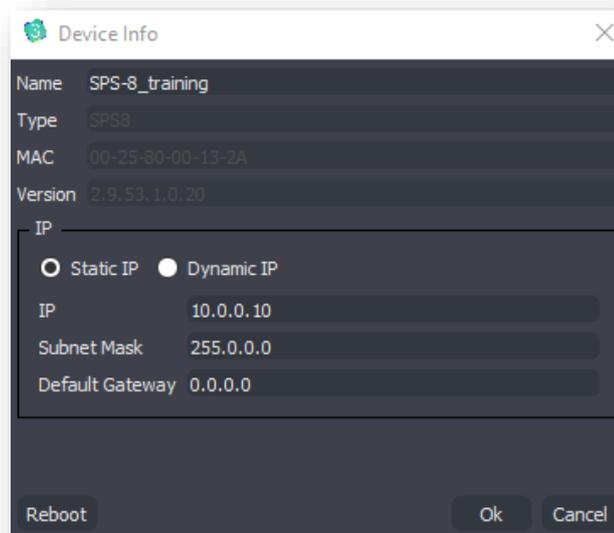
To do this, click on the Info button  , on the right side.



Once the Info button is clicked, the Device Info window will open.



- **Name.** Name of the device. Editable field.
- **Type.** Type of device. Editable field.
- **MAC.** Physic direction of the device. Not editable field.
- **Version.** Device firmware version. Not editable field.
- **IP.** Device IP configuration. To modify this area click on the Edit button:



- **Static IP radio button.** Selection of static IP address for the device.

- **Dynamic IP radio button.** Dynamic IP address selection for the device.
- **IP.** Device IP address, only editable in *Static IP mode*.
- **Subnet Mask.** Device Subnet, only editable in *Static IP mode*.
- **Default Gateway.** Default Gateway, only editable in *Static IP mode*.

Once the changes have been made, click on the OK button so that the device saves the changes made. The device will automatically restart. If you want to discard the changes made, click on the Cancel button.

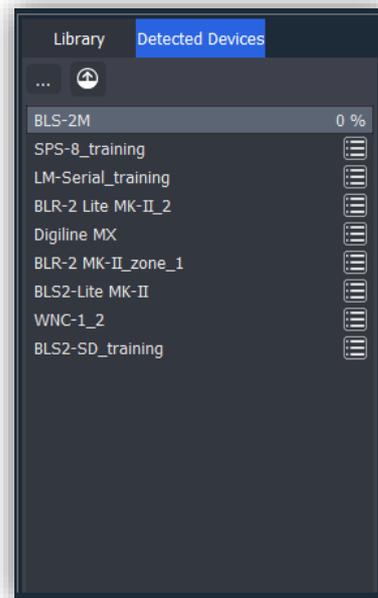
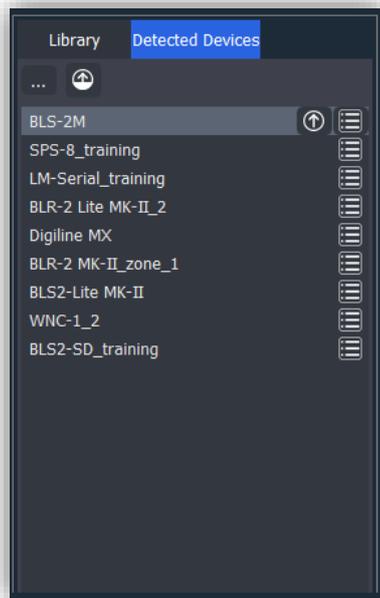
Make the proper configuration for all your devices.



It should be noted that, although each device has its static and dynamic IP address enabled by default, once one of them is chosen in the Edit mode, the device will only work with the IP type chosen.

3.4. Updating the devices

If there is a firmware update for your device, WorkCAD3 Configurator will warn you with the Update icon. Click on the icon to update the device. A loading bar will show you the percentage of updating made. Please do not turn off the device during this process.



If there is more than one device to update, you can update all of them by clicking on the *Update All* button.

Keep in mind that, in order to update the firmware of the devices, your PC must be in the same subnet as the devices.

3.5. Project configuration

After carrying out the firmware updates and name or IP changes (in case they are necessary), you can proceed to configure the devices.

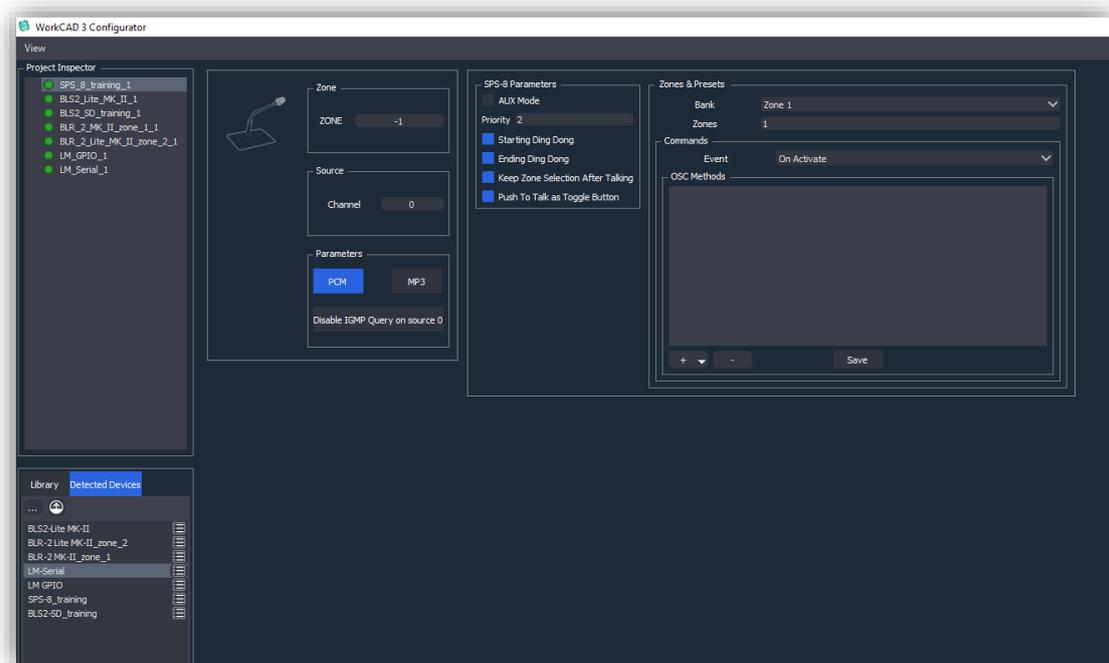


Each device consists of a configuration layout where we can modify its features. It is important to emphasize that **the modifications of the devices will always be stored in the device itself.** WorkCAD3 Configurator application is a modification tool and does not store information, for BlueLine and LightMouse devices.

3.5.1. Access to configuration layouts

To access the configuration layout, follow the next steps:

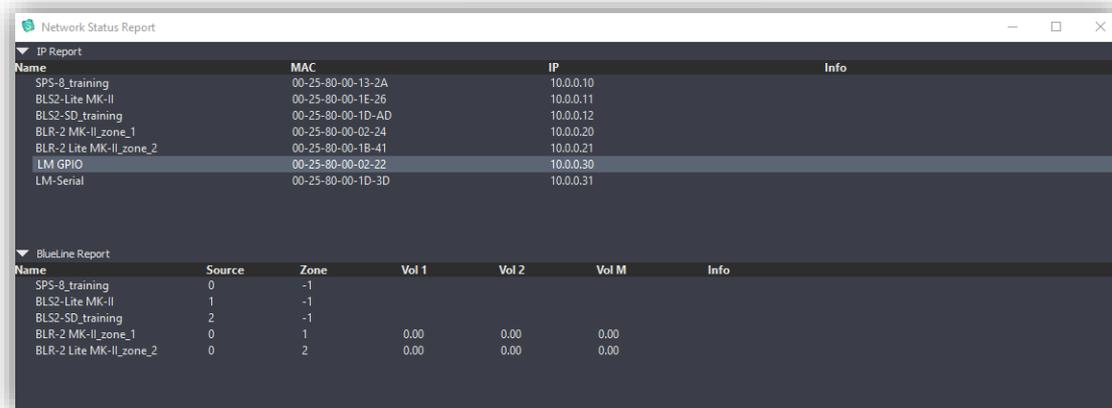
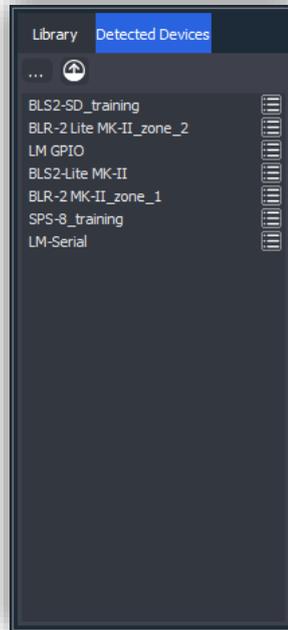
1. Make sure your computer is on the same subnet as the devices.
2. Double click on the devices you want to access to upload them to the Project inspector.
3. Once uploaded to the Project inspector, click on the device and the configuration layout will be displayed.



To know the operation of each one of the layouts, go to the individual manual of each device.

3.5.2. Network Status Report

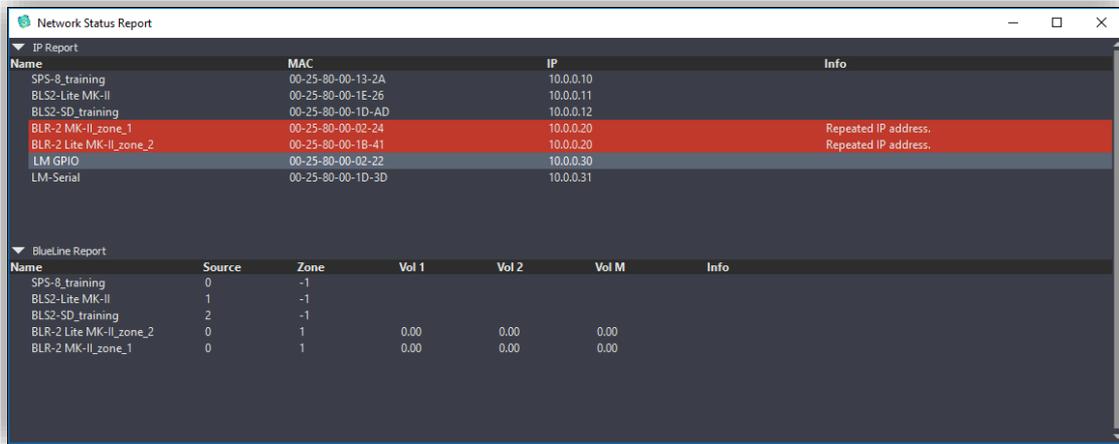
WorkCAD3 Configurator has a status report tool with which you can access the information of the devices in the form of a list and even edit if necessary. To access this report, click on the button 



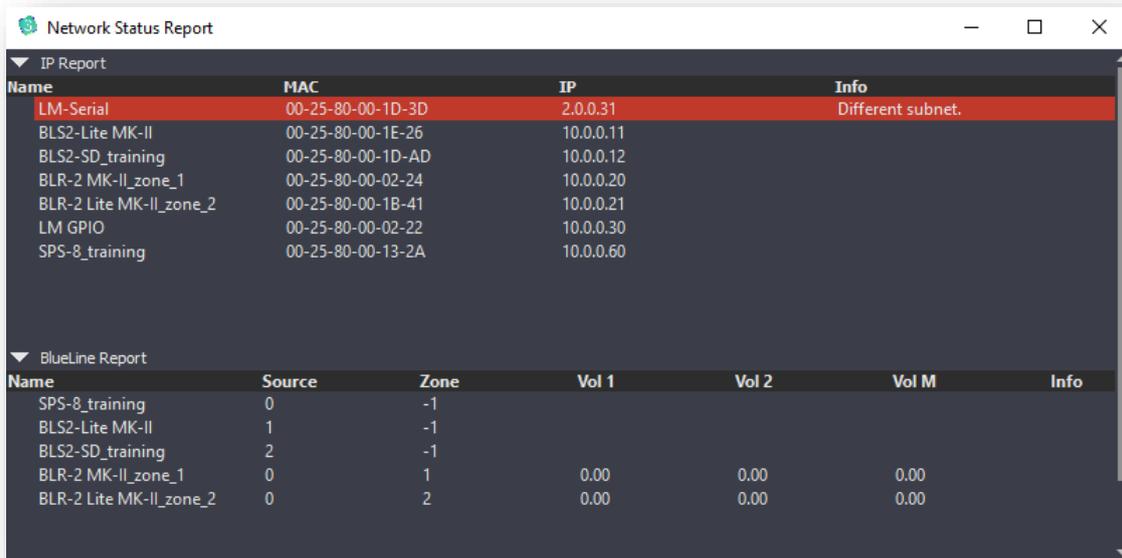
- **IP Report.** Report of MACs and IPs of the devices. The IP field is editable.
- **BlueLine Report.** Report about the channel number, zone and volume. The volume field will only have content for the case of the receivers. All fields are editable.

The status report will also inform you of possible conflicts in your installation.

- **Repeated IP address.** It indicates that there is some IP address repeated. To fix it, change the repeated IP of one of the devices.



- **Different subnet.** It indicates that there is a device in another subnet than the PC. Change the IP address of the device to the subnet where your PC is located.



- **Multiple senders with same source.** Indicates that you have more than one sender emitting on the same channel. Change the channel of one of the devices in conflict to a free channel.

The screenshot shows the 'Network Status Report' window. It contains two sections: 'IP Report' and 'BlueLine Report'.

IP Report

Name	MAC	IP	Info
BLS2-Lite MK-II	00-25-80-00-1E-26	10.0.0.11	
BLS2-SD_training	00-25-80-00-1D-AD	10.0.0.12	
BLR-2 MK-II_zone_1	00-25-80-00-02-24	10.0.0.20	
BLR-2 Lite MK-II_zone_2	00-25-80-00-1B-41	10.0.0.21	
LM GPIO	00-25-80-00-02-22	10.0.0.30	
LM-Serial	00-25-80-00-1D-3D	10.0.0.31	
SPS-8_training	00-25-80-00-13-2A	10.0.0.60	

BlueLine Report

Name	Source	Zone	Vol 1	Vol 2	Vol M	Info
SPS-8_training	0	-1				
BLS2-Lite MK-II	1	-1				Multiple senders with same source.
BLS2-SD_training	1	-1				Multiple senders with same source.
BLR-2 MK-II_zone_1	0	1	0.00	0.00	0.00	
BLR-2 Lite MK-II_zone_2	0	2	0.00	0.00	0.00	

- **No sender on source 0 acting as IGMP querier.** Indicates that there is no IGMP querier in the network. Change the channel of one of the devices to 0. For more information, refer to the *OSC and Network set up manual*.

The screenshot shows the 'Network Status Report' window. It contains two sections: 'IP Report' and 'BlueLine Report'.

IP Report

Name	MAC	IP	Info
BLS2-Lite MK-II	00-25-80-00-1E-26	10.0.0.11	
BLS2-SD_training	00-25-80-00-1D-AD	10.0.0.12	
BLR-2 MK-II_zone_1	00-25-80-00-02-24	10.0.0.20	
BLR-2 Lite MK-II_zone_2	00-25-80-00-1B-41	10.0.0.21	
LM GPIO	00-25-80-00-02-22	10.0.0.30	
LM-Serial	00-25-80-00-1D-3D	10.0.0.31	
SPS-8_training	00-25-80-00-13-2A	10.0.0.60	

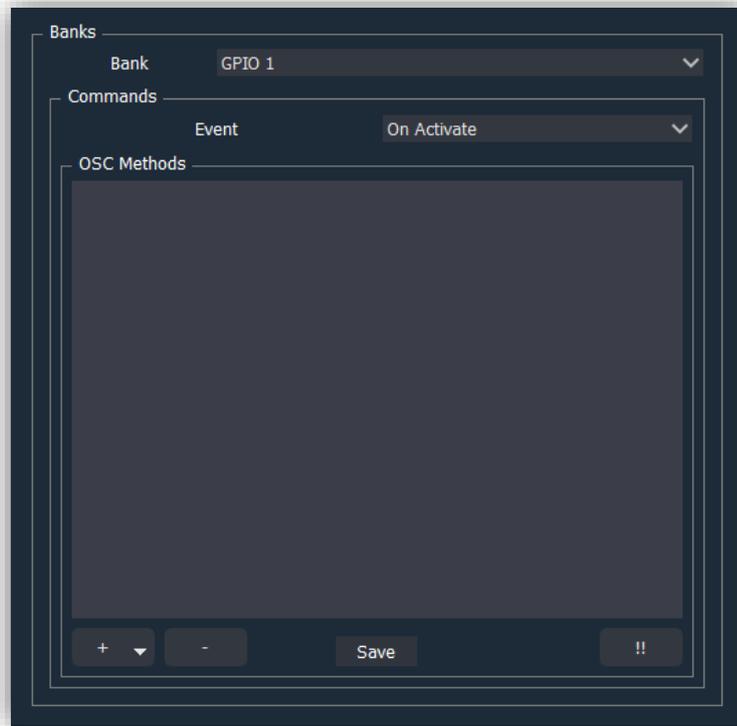
BlueLine Report

Name	Source	Zone	Vol 1	Vol 2	Vol M	Info
BLS2-Lite MK-II	1	-1				No sender on source 0 acting as IGMP querier.
BLS2-SD_training	2	-1				No sender on source 0 acting as IGMP querier.
SPS-8_training	5	-1				No sender on source 0 acting as IGMP querier.
BLR-2 MK-II_zone_1	0	1	0.00	0.00	0.00	
BLR-2 Lite MK-II_zone_2	0	2	0.00	0.00	0.00	

3.6. Sending OSC commands

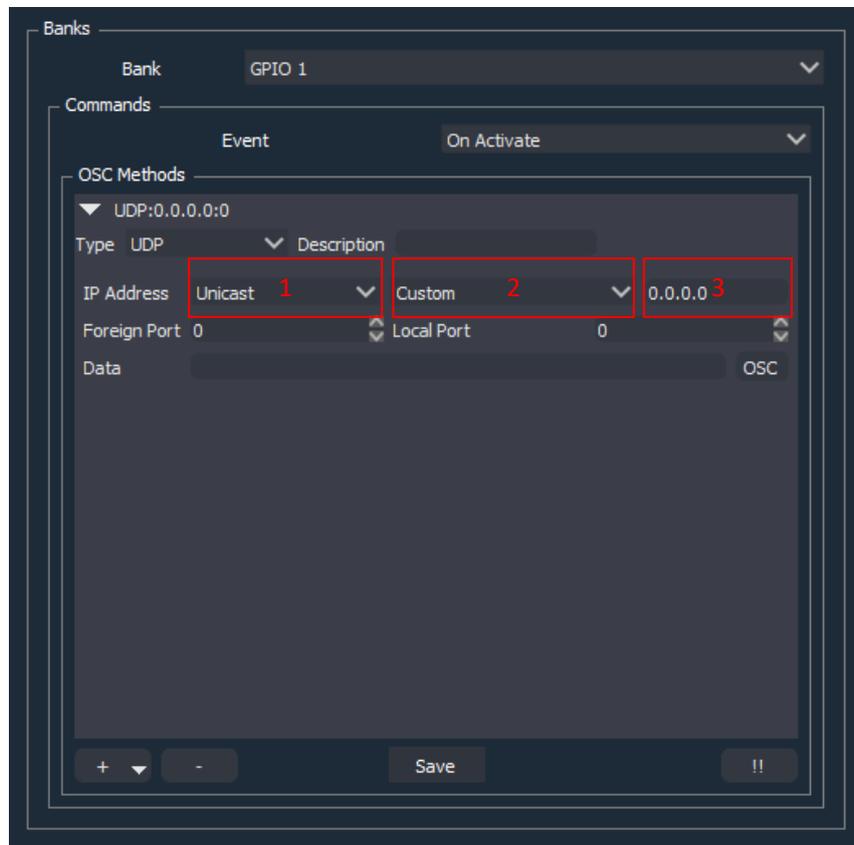
All the devices that support OSC commands will include a section in their configuration layout dedicated to it. This section incorporates an OSC command editor that will greatly facilitate this task to the integrator.

Next, all the fields included in the OSC command programming section are detailed:



- **Bank:** Bank of UDP/OSC commands associated to the element that will execute it. The element will be a GPI or a programmable button (SPS8).
- **Event:** Indicates when we want to send the UDP/OSC command.
 - **On Activate.** When closing GPI or pressing button (SPS8).
 - **On Deactivate.** When opening GPI or releasing button (SPS8).
- **Button to add a command**  : To add a UDP/OSC command.
- **Button to eliminate a command**  : To eliminate a UDP/OSC command previously selected.
- **Test button**  : Executes the commands included in the OSC Methods field.
- **Button to save commands**  : Saves the commands programming. If you do not save the commands, they can not be executed later.

To add a UDP/OSC command, click on the add button and select UDP. Then, the command to edit will appear, click on the arrow to display the fields to be edited



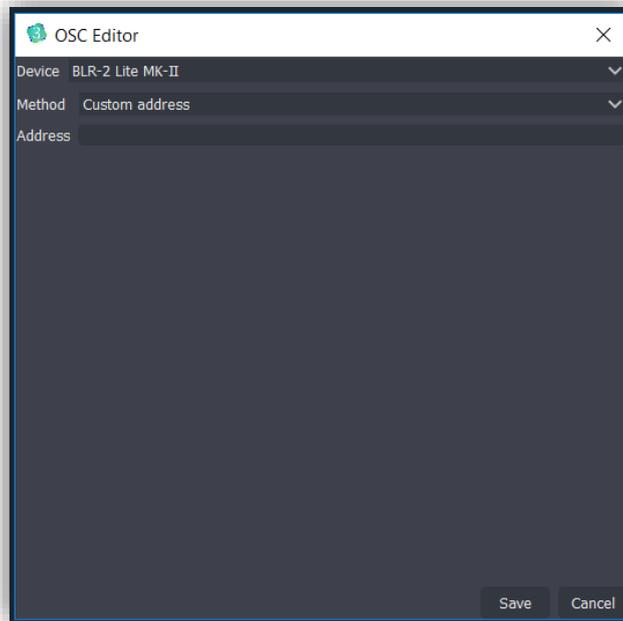
- **Type:** Transport protocol. Currently, only UDP mode is available.
- **Description:** Description of the UDP/OSC command. Information that will appear when we close the command edition drop-down.
- **IP Address:**
 - **1° field**, IP address type:
 - **Unicast:** IP address of a specific device.
 - **Multicast:** IP address that includes a group of devices.
 - **Loopback:** IP address to send a UDP/OSC command to itself.
 - **Broadcast:** IP address to send the UDP/OSC command to all the devices in the network. (Only for third-party devices that accept Broadcast commands).
 - **2° field.** Selection of the device to send the UDP/OSC command. This field depends on the type field of IP address previously selected:

- **Unicast:** All devices in the *Detected Devices* list will appear. Select the device to which you want to send the command. If you select custom it will be for a third party device, not included in the list.
- **Multicast:** The field disappears, since you can not select any specific device.
- **LoopBack:** The field disappears, the command is sent to itself.
- **Broadcast:** The field disappears, since you can not select any specific device.
- **3° field.** It Indicates the IP address to which the command will be sent. It depends on the IP address type field:
 - **Unicast:** IP address of the device selected in the 2nd field or, in the case of choosing custom, the IP address entered by the user.
 - **Multicast:** 239.192.0.100 (not editable), established by protocol.
 - **LoopBack:** 127.0.0.1 (not editable), established by protocol.
 - **Broadcast:** 255.255.255.255 (not editable), established by protocol.
- **Foreign Port:** Destination port. It is automatically configured with the exception of the Unicast/Custom case.
- **Local Port:** Local port of reception, is automatically configured with the exception of the Unicast/Custom case.
- **Data:** Field where the UDP/OSC command to be sent will appear. It is automatically filled except in the Unicast/Custom case.
- **OSC:** Button to access the OSC command editor.

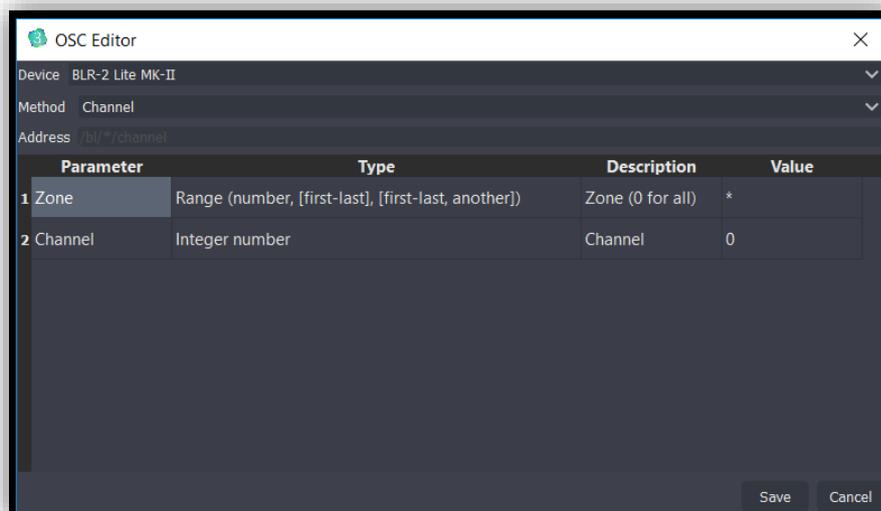
3.6.1. OSC commands editor

Using the OSC command editor you can access all the existing OSC commands to control the BlueLine and LightMouse devices in a quick and intuitive way. Next, you will find how to use it.

To access the OSC command editor, click on the dedicated button for it. The next window will appear:



- **Device.** If you are working in Unicast and have previously selected a device, it will be shown as selected. If you are working in Multicast, Loopback, or Broadcast, the device will have to be manually selected.
- **Method.** Field to select the type of OSC command that you want to send. In the *OSC and Network set up manual*, you will find out the meaning of each command. After selecting the type of OSC command to be used, the fields to be edited will appear. Depending on the chosen method the fields will vary.



- **Address.** Path of the OSC command that defines the method. For more information, refer to the *OSC and Network set up manual*. This field is automatically filled according to the selected method and the entered values.
 - **Parameter.** Parameters contained in the OSC command.
 - **Type.** Type of data to enter for the parameter.
 - **Description.** Additional description of the parameter.
 - **Value.** Value of the parameter.
- **Save.** Button to save the OSC command in the bank.
- **Cancel.** Button to cancel and exit the OSC command editor.

The programming of OSC commands will remain stored in each device until it is decided to modify or delete it.



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