

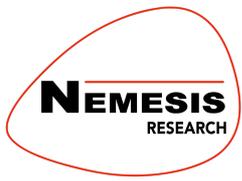
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OSCA-R2

2-Way OSC Programmable Button Box

USER GUIDE



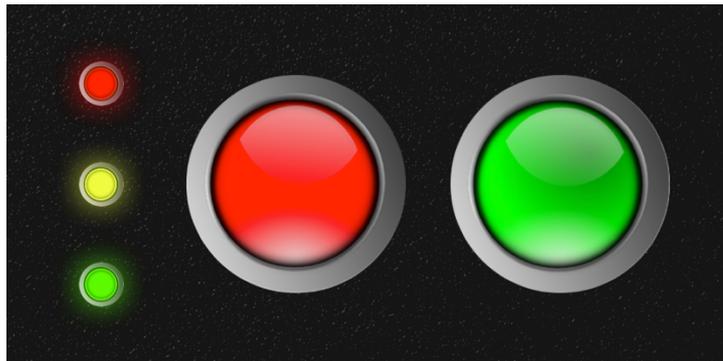
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Overview

The OSCA-R2 is a next generation multiple command destination show control solution featuring OSC Network input, POE IEEE 802.3 or 5v DC powering two illuminated momentary push buttons (non-latching), and three LED indicators.

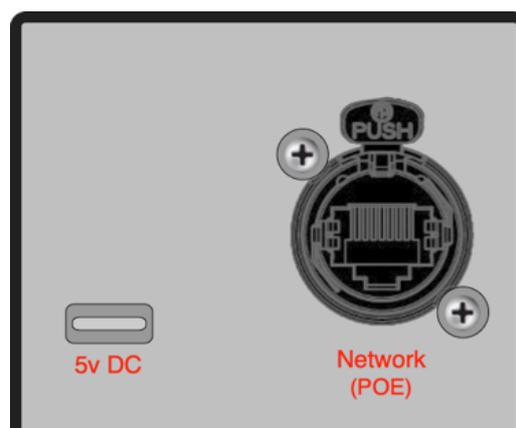
Top Panel



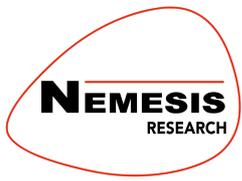
Buttons – The OSCA-R2 features 2 illuminated momentary push buttons (non-latching)

LEDs – The OSCA-R2 features 3 LED indicators.

Rear Panel Connections



Power & Network – OSCA can be powered by POE IEEE 802.3 or 5v DC via the USB C port



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Network Settings

Default IP settings

IP Address	192.168.1.253
Subnet Mask	255.255.255.0
Gateway	192.168.1.1
DNS Main	192.168.1.1
DNS Backup	192.168.1.1
Network Device Name	OSCA-R2
OSC Listen Port	53500

In order to change settings navigate to the device's IP address (default: 192.168.1.253) on the network using a web browser or use its network name (default: OSCA-R2) and navigate to the "Network page"

In order for changes to take effect press save and then restart (Please note if you have changed IP address or device name the page may not refresh, and you will need to open a new tab in your browser with the new user settings).

Destination Settings

On the Destinations page, you can specify and name destinations (a maximum of 5 when in advanced mode and 2 when in a preset) which will be stored in the device's memory. Please specify the IP address and OSC listen to port of the receiving device(s).

Button Settings

Button 1	Green
Button 2	Red

Each button can send up to two messages (Command), with each one sent to one of five destinations. (to send the same command to both destinations send identical command to each location)

The device comes with three pre-sets built-in with predefined commands for CSC and Qlab and OSCA-04.

All commands in these pre-sets will be sent to Destination 1 and 2 (if specified on the destinations page)

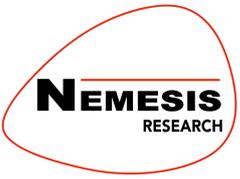
Qlab Preset

Button	Function	Command
1	Go	/go
2	Stop	/panic

When using this pre-set it may be necessary to configure QLab to allow OSC connection access without a passcode.

CSC Preset

Button	Function	Message (Command)
1	Go	/cuelist/go
2	Stop	/cuelist/stop



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OSCA-04 Preset

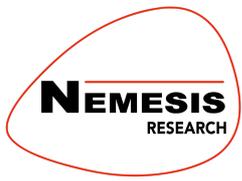
Button	Function	Address	Integer Argument
1	Relay 1 ON	/relay/1	1
2	Relay 2 ON	/relay/2	1

Advanced Mode - Buttons

By putting the device into advanced mode and navigating to the buttons menu the user can specify custom messages (Commands) for each of your buttons. The OSCA can send up to two arguments with each command. OSCA will automatically determine the format of the argument based on the value. For example, 1 will be sent as an integer, 1.00 as a float and one as a string. OSCA will also automatically read the entered OSC command (String) and determine what is the address and argument(s). For further information please see <http://www.nemesis-research.com/opensoundcontrol>

The screenshot shows the 'Buttons' configuration page in the OSCA web interface. At the top right, it displays 'IP: 192.168.4.222', 'Device: OSCA-R2', and a green 'Connected' indicator. The navigation menu includes 'HOME', 'NETWORK', 'DESTINATIONS', 'BUTTONS', 'SETTINGS', 'FIRMWARE UPGRADE', and 'PRO UPGRADE'. Below the menu, there are two tabs for 'BUTTON 1' and 'BUTTON 2'. The 'BUTTON 1' tab is active, showing configuration options: 'Debounce' set to 250 (default 250ms), 'Polarity' set to 'On Release', and a 'Test' button. Two message configuration sections are visible: 'Message 1' and 'Message 2'. Each message section has fields for 'Description' (e.g., 'QLAB Go'), 'Command' (e.g., '/go'), 'Address' (e.g., '/go'), 'Arguments' (two empty fields), and 'Destination' (e.g., 'Destination 1'). A 'Delete' button is present for Message 2. At the bottom right, there is a 'Save' button. The footer contains device information: 'Device: OSCA-R2', 'MAC: E8:9F:6D:D0:ED:8B', 'IP: 192.168.4.222', 'Code Version: OSCA-R-2-S.0.0.10.3', 'HTML Version: 20230519', and 'NOT RELEASE CODE - Compiled in debug Mode'.

Specify the message(s) for each input and configure polarity and debounce. The status of each input can be seen on the tabs, and the configured messages can be sent by clicking the Test button.



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OSCA has a maximum command length of 192 characters. You can then select which destination you would like this command to be sent to. Each input can send up to 4 commands, with each command being sent to one destination (To send the same command to 2 destinations send identical commands to each receiving device).

A debounce time can be set per input in milliseconds. This is the time after the input is released before it can be pressed again (the default is 250ms).

The indicators show whether an input is currently active or not (green active, red inactive). An X on the indicator will show if an input is configured to activate on release.

LED Indicators

To turn LED indicator on and off send the following messages to the device via OSC (make sure the transmitting device's send port matches the device's listen port and is sending to the correct IP address).

Address	Integer Argument	Action
/led/red	1	Red indicator LED On
/led/red	0	Red indicator LED Off
/led/yellow	1	Yellow indicator LED On
/led/yellow	0	Yellow indicator LED Off
/led/green	1	Green indicator LED On
/led/green	0	Green indicator LED Off

You can also pulse an indicator LED for a duration between 100 and 3000ms:

Address	Integer Argument	Action
/led/green	500	Green indicator LED On for 500ms

Settings

Adjust the brightness of the two button LEDs and the 3 indicator LEDs with the slider.

The two button LEDs can be set to operate in one of 4 ways.

Option	Function
Off	Button LEDs are always off
Blink On	Button LEDs are off and flash on briefly when corresponding button is pressed
Blink Off	Button LEDs are on and flash off briefly when corresponding button is pressed
On	Button LEDs are always on

Firmware Update

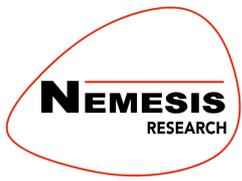
If connected to the internet you can use the Firmware update page to install the latest firmware from the Nemesis server.

Additional Information

Incoming OSC

OSCA will react to incoming OSC messages on the port specified.

e.g., /button/1 Will send the commands specified by button 1 as if button 1 had been pressed.



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Power

OSCA can be powered by POE or 5v DC via the USB C port

Factory Reset

Press the red button at power on to reset the network settings to default. Please then power cycle the unit for the changes to take effect.

Version	By	Date	Firmware
1.0	BA	Jan 24	
1.1	BA	Jul 24	
1.2	BA	Feb 26	0.0.10.3

EU declaration of conformity (CE symbol)

This declaration applies to
- OSCA-R2 XX:XX:XX:XX:XX:XX
manufactured by Nemesis Audio



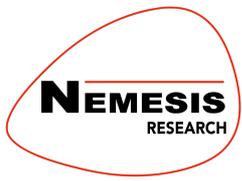
All products of type OSCA-R2 are included, provided they correspond to the original technical version and have not been subject to any later design or electromechanical modifications.

We herewith declare that said products are in conformity with the provisions of the respective EC directives including all applicable amendments.

A detailed declaration is available on request and can be ordered from Nemesis Audio.

WEEE Declaration (Disposal)

Electrical and electronic equipment must be disposed of separately from normal waste at the end of its operational lifetime.



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Please dispose of this product according to the respective national regulations or contractual agreements. If there are any further questions concerning the disposal of this product please contact Nemesis Audio.

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