OSCA Remote Control-8

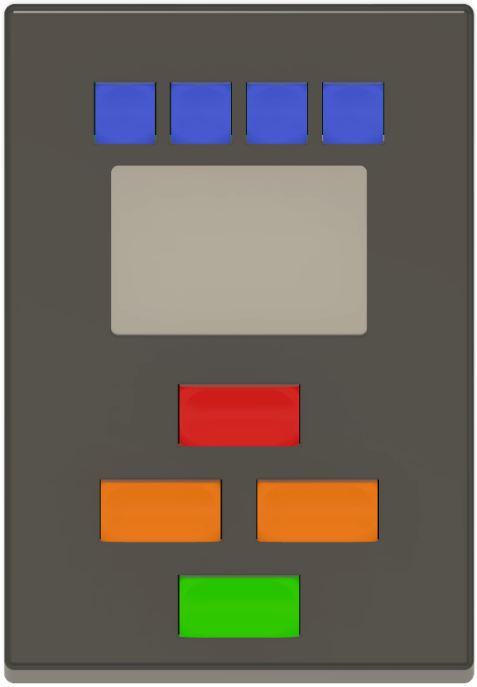
8-Way OSC Advanced Programmable Button Box with TFT Screen

USER GUIDE

Overview

The OSCA Remote Control-8 is a next generation multiple command destination show control solution featuring OSC Network input, POE IEEE 802.3 or 5v DC powering, eight independent momentary push buttons, and a 480x320 pixel TFT display.

Top Panel



Buttons – The Remote Control-8 features 8 momentary push buttons and a 480x320 pixel TFT screen.

Rear Panel Connections

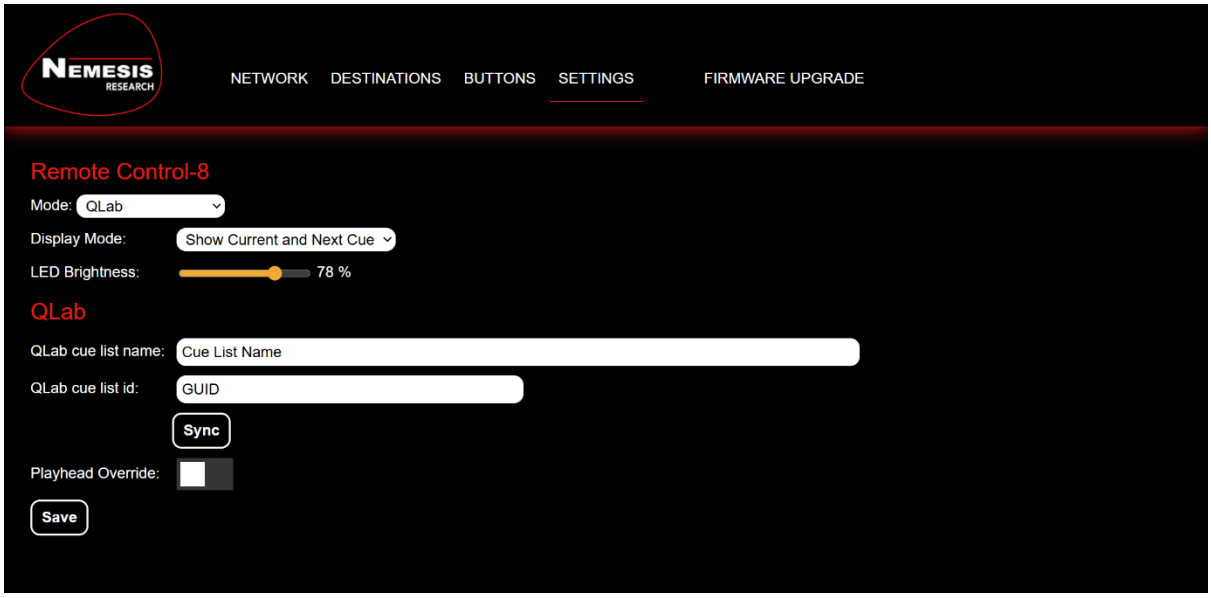
Power & Network – OSCA can be powered by POE IEEE 802.3 or 5v DC via the USB C port

Settings

The Remote Control-8 can operate in 1 of 5 modes. The settings on this page depend on the mode of operation.

Button	Action
QLab	Buttons 1-4 operate independently and can be used to send OSC messages. Buttons 5-8 send playhead controls to a specific cue list within QLab. The TFT screen will automatically update with the cue name of the playhead position when a button is pressed. For example this mode can be used for a musician to control a cue list of click tracks independently from other cue lists within the workspace.
QLab (Advanced)	As QLab mode, but access is given to buttons 5-8 to allow additions or changes to the auto generated messages.
OSC	The OSCA Remote Control-8 runs its own cue list and sends an OSC message each time button 5 is pushed. The cue number can be embedded into the OSC message sent. This mode can be used to control OSC compatible devices that don't have a built-in cue list or to control an OSC compatible device remotely.
Midi	For future expansion, similar to OSC mode, but sending MIDI rather than OSC messages.
Manual	All 8 buttons send OSC messages independently. TFT screen can be updated via OSC methods.

Qlab



To use the Remote Control-8 to control a QLab cue list, follow the steps below.

1. Set up QLab to allow OSC connections, with no password access for control. For further details see https://qlab.app/docs/v5/fundamentals/workspace-settings/#the-osc-access-tab
2. Ensure that
3. Remote Control-8 and QLab are on the same network with suitable IP addresses and subnets
4. In the Destinations Tab of the Remote Control-8, set the IP address of the QLab system(s) you wish to control in Destination 1 and Destination 2
5. In QLab highlight any cue in the cue list you wish to control

6. In the Settings Tab of the Remote Control-8 click the sync button. If successful, this will populate the name and GUID of the QLab cue list in the section.
7. Click Save to store these settings.

The GUID of a QLab cue list is constant for a particular file, irrespective of computer running the file, so this process will usually only need to be done when first setting up a performance.

Buttons 5 – 8 on the device will now act as Go, Previous, Next, Stop for the configured QLab cue list. The TFT screen will update with the name of the playhead position when any of these buttons are pressed, by querying the QLab system specified as Destination 1. Details of the commands can be found later in this section. These commands respect the current playhead position, which may have been moved by the QLab operator since the TFT screen was updated.

Remote Control-8 will query Destination 1 for cue names and GUIDs by default. Send the message **/qlabdatasource [Destination number]** to the device with a new destination number to amend this until the device is rebooted

Sending the message **/refresh** to the device will cause it to query QLab for the current playhead position and update the TFT screen.

With Playhead Override switched on, the device will send an additional locate message before sending Go, Previous, Next, Stop command. This will force QLab to respect the cue shown on the OSCA Remote Control-8 TFT screen, irrespective of its playhead position in QLab.

Qlab (Advanced)

As QLab mode above, but buttons 5-8 are made available in the buttons setting page. Some messages are preconfigured by OSCA device as described in the tables below. Additional messages may be added, or the generated messages amended, for example to amend button 8 to fire a specific stop cue rather than panic the cue list. The messages below should not usually be changed.

Playhead Override Off

Message 1	Go/Stop/Previous/Next to QLab 1 (Destination 1)
Message 2	Go/Stop/Previous/Next to QLab 2 (Destination 2)
Message 3	Get cue name from updated playhead position (Destination 1)

Messages are generated when Sync button clicked on settings page

Playhead Override On

Message 1	Set playhead position to match TFT screen QLab 1 (Destination 1)
Message 2	Set playhead position to match TFT screen QLab 2 (Destination 2)
Message 3	Go/Stop/Previous/Next to QLab 1 (Destination 1)
Message 4	Go/Stop/Previous/Next to QLab 2 (Destination 2)
Message 5	Get cue name from updated playhead position (Destination 1)

Messages are generated when Sync button clicked on settings page, messages 1 &2 updated with each button push.

Message details

Messages shown for a sample GUID and for destination 1 only.

Playhead Override Off

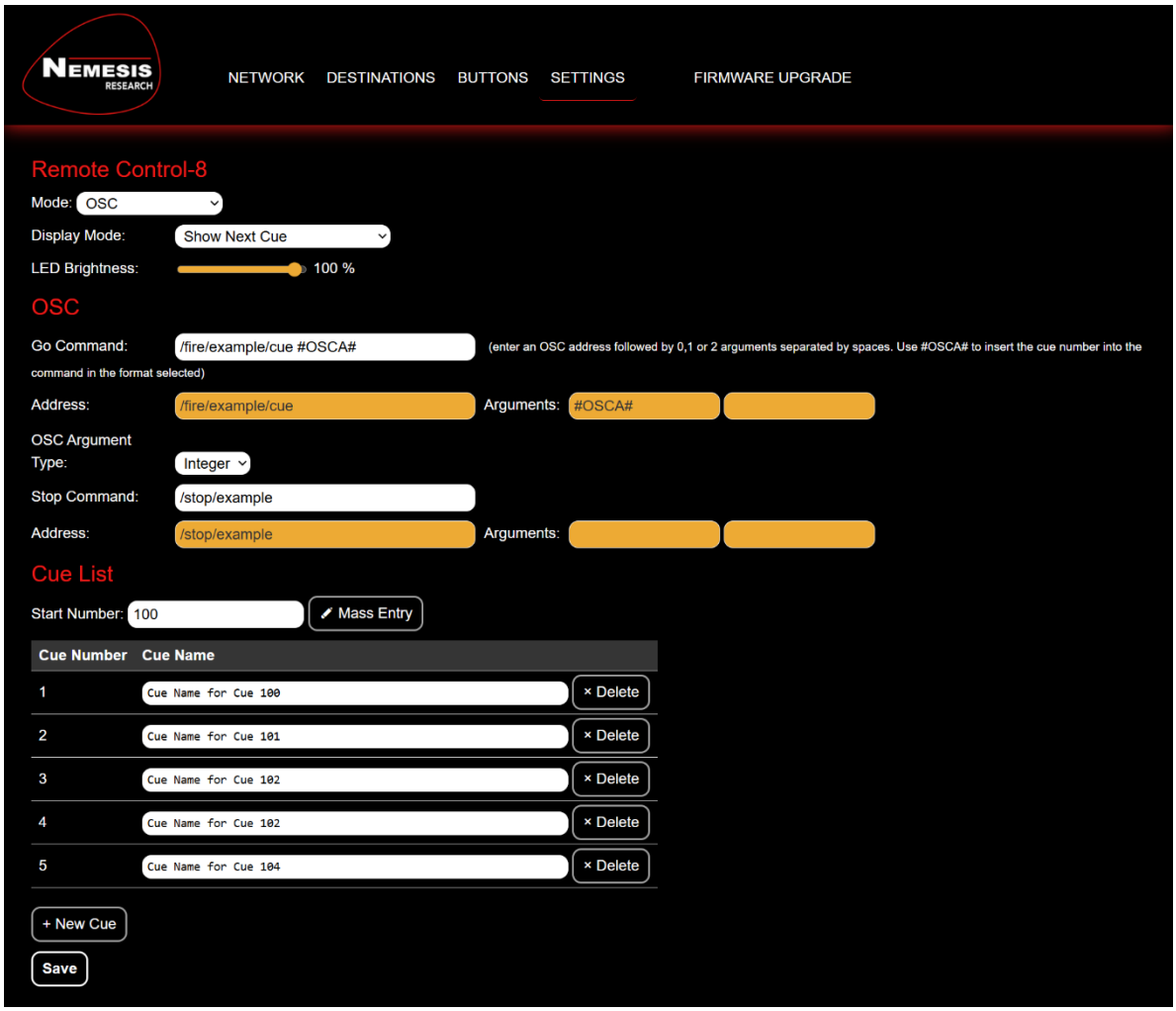
Go	/cue_id/437EDDE0-591C-4D02-9F7B-F2F20CC8C434/go /cue_id/437EDDE0-591C-4D02-9F7B-F2F20CC8C434/playheadId
Previous	/cue_id/437EDDE0-591C-4D02-9F7B-F2F20CC8C434/playhead/previous /cue_id/437EDDE0-591C-4D02-9F7B-F2F20CC8C434/playheadId
Next	/cue_id/437EDDE0-591C-4D02-9F7B-F2F20CC8C434/playhead/next /cue_id/437EDDE0-591C-4D02-9F7B-F2F20CC8C434/playheadId
Stop	/cue_id/437EDDE0-591C-4D02-9F7B-F2F20CC8C434/panic /cue_id/437EDDE0-591C-4D02-9F7B-F2F20CC8C434/playheadId

Playhead Override On

Messages will addresses specific cues, and the GUIDs are updated with each button push.

Go	/cue_id/ A37B85FC-93EF-4AFD-A882-BDA09FE4638E/go /cue_id/437EDDE0-591C-4D02-9F7B-F2F20CC8C434/playheadId
Previous	/cue_id/437EDDE0-591C-4D02-9F7B-F2F20CC8C434/playheadId A37B85FC-93EF-4AFD-A882-BDA09FE4638E /cue_id/437EDDE0-591C-4D02-9F7B-F2F20CC8C434/playhead/previous /cue_id/437EDDE0-591C-4D02-9F7B-F2F20CC8C434/playheadId
Next	/cue_id/437EDDE0-591C-4D02-9F7B-F2F20CC8C434/playheadId A37B85FC-93EF-4AFD-A882-BDA09FE4638E /cue_id/437EDDE0-591C-4D02-9F7B-F2F20CC8C434/playhead/next /cue_id/437EDDE0-591C-4D02-9F7B-F2F20CC8C434/playheadId
Stop	/cue_id/437EDDE0-591C-4D02-9F7B-F2F20CC8C434/panic /cue_id/437EDDE0-591C-4D02-9F7B-F2F20CC8C434/playheadId

OSC



OSC mode is designed to send incrementing OSC messages to an OSC compatible device, with OSCA Remote Control-8 running its own internal cue list. In this mode, only Buttons 5 and 8 send OSC messages, Buttons 6 & 7 will move up and down the internal cue list.

Button 8 will always send the same message determined by the Stop Command

Button 5 will send the message specified by the Go command. It is possible to insert the internal cue list Cue Number into the OSC message, either as part of the address, or as a String/Integer/Float argument.

In the example above,

1. at boot up, device will show "Cue Name for Cue 100" on the TFT screen.
2. On pressing Button 5, the device will send the address **/fire/example/cue** with an integer argument of **100**
3. The TFT screen will update to show "Cue Name for Cue 101"
4. On pressing Button 5, the Remote Control-8 will send the address **/fire/example/cue** with an integer argument of **101**
5. This will continue down the cuelist.

Cue list cue number are incremental, specify the first cue number in Start Number

Click mass entry to paste in a list of Cue Names from a text file or spreadsheet.

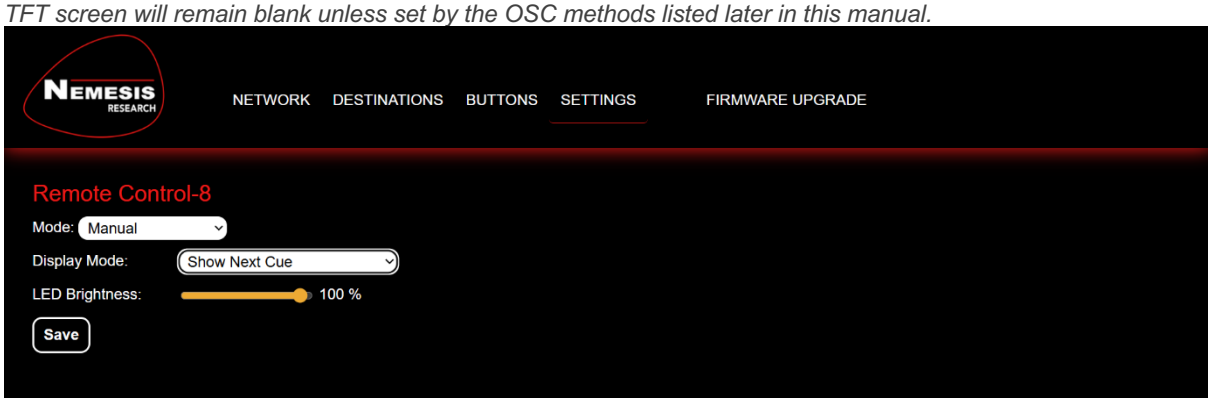
OSCA Remote Control-8 is limited to a maximum of 50 cues.

Midi

To be developed in a future firmware release.

Manual

In Manual mode, button and TFT screen brightness can be controlled. All other settings are specified on the other menu tabs.
TFT screen will remain blank unless set by the OSC methods listed later in this manual.



Network Settings

Default IP settings

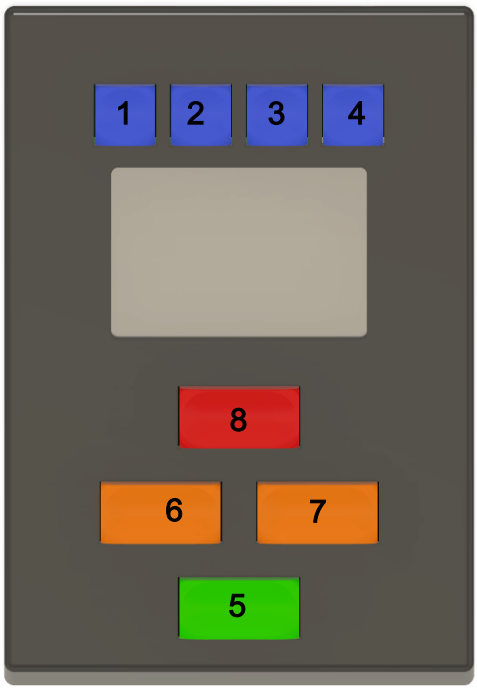
IP Address	192.168.1.253
Subnet Mask	255.255.255.0
Gateway	192.168.1.1
DNS Main	192.168.1.1
DNS Backup	192.168.1.1
Network Device Name	OSCA-RC8
OSC Listen Port	53500

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-RC8 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 6) 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



Buttons 1-4 can send up to six messages (commands), with each one sent to one of six destinations. (to send the same command to multiple destinations send identical command to each location)
Buttons 5-8 have special function as described in the section for each mode unless in Manual mode where buttons 5-8 can be programmed in the same way as buttons 1-4

Firmware Upgrade

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

OSC methods (incoming OSC)

OSCA will react to incoming OSC messages on the port specified. In some instances it can be useful to configure a button on OSCA Remote Control-8 to send itself an OSC message e.g. /refresh. This can be done by using 127.0.0.1 as the IP address of a destination and matching the port numbers.

/button/[button number]
e.g. **/button/1**
Will send the commands specified by button 1 as if button 1 had been pressed.
/input/[button number]
e.g. **/input/1**
Will send the commands specified by button 1 as if button 1 had been pressed.
/qlabdatasource [destination number]
e.g. **/qlabdatasource 1**
When in QLab or QLab (Advanced) mode with specify which destionation number to use to query QLab for cue names. This will revert to destination 1 when OSCA Remote Control-8 is restarted.

/tft/printlarge/[first line]/[last line]

e.g. **/tft/printlarge/1/2 "Hello World!"**

Print the string argument on the tft screen starting at line 1 and ending on line 2. The tft has 5 lines of large text.

/tft/printsmall/[first line]/[last line]

e.g. **/tft/printsmall/1/2 "Hello World! This is a longer test message to print on the screen"**

Print the string argument on the tft screen starting at line 1 and ending on line 2. The tft has 10 lines of small text.

/tft/printmessage/[top/bottom]

e.g. **/tft/printmessage/top "Hello World!"**

Print the string argument on the tft screen in the top/bottom half of the screen in large font, with a title of "Incoming OSC Message" in small font.

/refresh

e.g. **/refresh**

When in QLab or QLab (Advanced) mode, OSCA Remote Control-8 will send an OSC message to QLab to get the current playhead position and update the TFT screen with that cue name

/reload

e.g. **/reload**

When in QLab or QLab (Advanced) mode with playhead override off, OSCA Remote Control-8 will send a message to QLab to set the playhead position to match the cue shown on the TFT.

/redirect

e.g. **/redirect/input/5/message/3 2**

Change the destination that the specified message is sent to. This change will persist until the device is rebooted and is not stored in the configuration file.

/saveconfig

e.g. **/saveconfig**

This will save the current config to the internal config file.

Please note saves can take a second or two and OSCA Remote Control-8 will not respond to button pushes made during a save or load operation

/loadconfig

e.g. **/loadconfig**

This will load the internal config file, and can be used to revert temporary changes made by sending in /redirect messages

Please note saves can take a second or two and OSCA Remote Control-8 will not respond to button pushes made during a save or load operation

/reply

This is used to handle messages received from QLab and update the TFT when in QLab or QLab (Advanced) mode and is not intended to be used in other situations

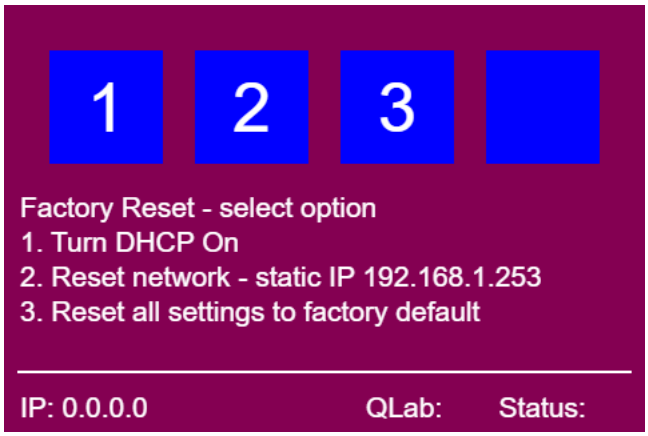
Additional Information

Power

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

Factory Reset

Hold the reset button at power on for 3 seconds to enter factory reset mode. Press button 1-3 corresponding to the desired option. These options are also offered if OSCA Remote Control-8 is booted without a network connection, or fails to obtain an IP address lease when DHCP is on.



EU declaration of conformity (CE symbol)

This declaration applies to
- OSCA REMOTE CONTROL-8 XX:XX:XX:XX:XX:XX
manufactured by Nemesis Research

All products of type OSCA Remote Control-8 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.

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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