

NETRON

Cue & Remote Inputs Programming

Overview:

The **NETRON** (pronounced: NET-tron) **Remote Input** feature found on many of the devices is a very a powerful tool used for the below list of functions:

- **Disable DMX**
 - Stops all DMX output for as long as the contact is closed.
- **Cue**
 - **Trigger:** The cue is activated, and all times and links are processed even if the contact is opened again
 - **Toggle:** The cue is activated, and all times and links are processed only if the contact is closed. Once the contact is opened, the device will assume DMX traffic or No DMX status.
- **NETRON / User Preset**
 - Recalls a NETRON or User Preset when the contact is closed.
- **Send Value**
 - Sends a specific DMX value (0-255) on all ports for as long as the contact is closed.

Depending on the particular EtherDMX node, the following **Remote Input trigger sources** are available:

- **Disable**
 - Input is disabled
- **DMX Port**
 - With a port set to **Input**, a specific contact may be toggled with a DMX value.
- **Art-Net**
 - Contact is triggered via a value from a specific Universe and Address with the Art-Net Protocol.
- **sACN**
 - Contact is triggered via a value from a specific Universe and Address with the sACN Protocol.
- **Contact**
 - Utilizes the physical contact closure input on the NETRON EtherDMX node.
 - **NOTE:** Inputs 1-10 in the menu are physically mapped directly to each input.
- **BS10** (Available for EN12i Only)
 - Utilizing the **Remote RJ-45** port on the back of the EN12i, a **BS10 Button Station** can be used as an interface to trigger or toggle the specified function.
 - **NOTE:** Up to 9 BS10 button stations can be connected to a single EN12i through multiple **BS10 Split** devices. All BS10 button stations will sync together and provide the same set of functions from multiple locations.

DMX Map for Remote Trigger:

Inputs can be remotely activated over **DMX**, **Art-Net**, or **sACN**. The input is activated if the DMX value is at the level shown below:

VALUE	ACTION
0 - 10:	Idle
11 - 20:	Input 1
21 - 30:	Input 2
31 - 40:	Input 3
41 - 50:	Input 4
51 - 60:	Input 5
61 - 70:	Input 6
71 - 80:	Input 7
81 - 90:	Input 8
91 - 100:	Input 9
101 - 110:	Input 10
111 - 255:	Idle

NOTE: A 1ch dimmer must be patched.
If using Onyx, a fixture profile is available:

MANUFACTURER: Obsidian Control Systems
FIXTURE: NETRON Remote



Cue & Remote Input Configuration via the OLED Display

Overview:

The following options are available in the **Cue Menu**:

- **Run Cue**
 - Opens a list of recorded cues to select and activate/deactivate.
- **Save Cue**
 - Opens a list of cues to select and save all values among all ports to a specified cue slot (1-99).
- **Rename Cue**
 - Opens a screen to rename a specific cue.
 - **NOTE:** There is a **twelve** (12) character limit.
- **Link Cues**
 - Opens the options to select another cue to activate after the **Fade** and **Hold** times have expired.
- **Fade Off Time**
 - The transition time back to DMX input after a cue has been deactivated.
 - **NOTE:** The time may be adjusted from **00:00** (instant) to **99:59** (99 minutes, 59 seconds).
- **Resend Ethernet**
 - Cue data is sent via the protocol (Art-Net or sACN) currently configured for each port.
- **Resend Priority**
 - The ability to set the source priority of the sACN data sent over the network with Resend Ethernet enabled.
 - **NOTE:** The priority may be set to any value between 0 - 200.

Saving a Cue:

The following steps may be taken to record a cue via the OLED display:

1. With the NETRON EtherDMX node receiving DMX and outputting the desired look, begin entering the **Menu** by pressing the encoder wheel.
2. Using the encoder, scroll down to **Cues** and press to enter the **Cues Menu**.
3. Scroll down to **Save Cue** and **press the encoder** to bring up cue slots 1-99.
4. After selecting a cue slot, a screen will appear asking, **"Save Cue?"** If the output is the desired look, scroll to the left and select **Yes**.
 - Once the device has stated, **"Cue Saved,"** return to the previous page by pressing the **Back Button**.
 - **NOTE:** If a cue has already been saved in that cue slot, the device will prompt, **"Overwrite Cue?"** instead of **"Save Cue?"**
5. The **Cue is now saved**. Press the **Back** button until returning to the home screen.

Renaming a Cue:

The following steps describe the process of renaming a cue via the **OLED Display**:

1. Enter the device Menu by pressing the encoder wheel.
2. Using the encoder, scroll down to **Cues** and press to enter the **Cues Menu**.
3. Scroll down to **Rename Cue** and **press the encoder** to bring up cue slots 1-99 and then select a cue to rename.
4. After making a selection, navigate and select characters in the following ways:
 - When the character is highlighted in **Blue**, use the encoder to scroll left or right to select the desired character to edit.
 - When the character is highlighted in **Red** (activated pressing the encoder wheel), use the encoder wheel to scroll through the available characters. After the desired character is shown, press the encoder to select it and the character will high-light **Blue** again.
5. With the desired cue named, press the back button until back at the home screen.
6. The cue is now renamed.



Cue & Remote Input Configuration via the OLED Display (continued)

Assigning a Cue to a Remote Input:

The following steps will assign a cue to a remote input via the **OLED Display**:

1. Enter the **Menu** by pressing the encoder wheel.
2. Using the encoder, scroll down to **Remote Inputs** and press to encoder to enter the **Remote Inputs Menu**.
3. Within this menu, there is a setting for **Priority**. Make a selection from the choices below:
 - **DMX**: The device will ignore all input from the Remote Inputs as long as there is an active DMX source.
 - **Input**: The device will receive actions from the Remote Inputs and override an active DMX source.
4. After making a selection, scroll down to an **Input** (1-10) and press the encoder to enter the **Input Options** menu.
5. Select **ACT** and select **Cue**.
 - **NOTE**: Other action types, such as **Disabling DMX**, recalling a **Netron/User Preset**, or **Sending a Value**, may be selected from this menu.
6. Select the desired cue and then select a **Mode**:
 - **Trigger**: The cue is activated, and all times and links are processed even if the contact is opened again.
 - **Toggle**: The cue is activated, and all times and links are processed only if the contact is closed. Once the contact is opened, the device will assume DMX traffic or No DMX status.
7. Next, select a Remote Input **Source**:
 - Select from the following options:
 - **DMX Port**
 - **Art-Net**
 - **sACN**
 - **Contact** (Also used for BS10)
 - **NOTE**: More than one trigger Source can be selected to activate the Remote Input.
8. Specify a **DMX Address**, **Art-Net Universe**, and **sACN Universe** if utilizing any of the **DMX Port**, **Art-Net**, or **sACN** remote input source options.
9. The **Remote Input** is now programmed and ready for use.
 - **NOTE**: When utilizing a **BS10 Button Station** with an EN12i, the same steps are required for programming via the on-device OLED Display.

Additional BS10 Functionality:

The **BS10 Button Station** has additional features not available with the physical contact closures when programmed for recalling a stored cue:

- When the cue mode is set as **Toggle**, the BS10 button will illuminate **Blue** when **Open** and **Red** when **Closed**.
 - The cue can be released by pressing the button again.
 - Additionally, it is not necessary to release one button before selecting another. The BS10 will automatically deactivate the previous button and return to the open, **Blue** state.
- When the cue mode is set as **Trigger**, the BS10 button will illuminate **Blue** normally and **Red** when triggered.
 - Because **Trigger** mode persists and does not release when pressed again, it may be necessary to program a cue with all values at zero.
 - **NOTE**: In order to deactivate a triggered cue from the BS10 and return to DMX input, **press** and **hold** the active button for **5 seconds**. The button will start to **blink while pressed** and will **release the triggered cue**.



Cue Configuration via NETRON Central Utility (CLU)

Run Cues:

The below options are available on the **Run Cues** page:

- **Select**
 - Dropdown list to select between **Disabled** and **Cues 1-99**
- **Current Cue**
 - Displays the current status of the cue system
- **Resend Ethernet**
 - Toggle to **Enable** or **Disable** the Resend Ethernet option
- **“Run” Button**
 - Pressing the button triggers the selected cue

Device Type	Device Name	IP Address	Subnet	Firmware	Web	Manufacturer	Identify
NETRON EN6D	NETRON EN6D	2.169.147.10	255.0.0.0	V3.0.0	V3.0.0	Obsidian	☐
NETRON EN6IP	NETRON EN6IP	2.227.3.32	255.0.0.0	V3.0.0	V3.0.0	Obsidian	☐
NETRON EP2	NETRON EP2	2.7.73.16	255.0.0.0	V3.0.1	V3.0.1	Obsidian	☐

Run Cue

Select

Current Cue No Cue

Resend Ethernet ☐

Save Cue:

Opens a page to select a cue slot from 1 to 99 and displays a **Save** button for saving the current DMX output across all output ports.

Save Cue

Select



Cue Configuration via NETRON Central Utility (CLU) (continued)

Cue Options:

Opens a page to change the below options:

- **Cue**
 - Select a Cue 1 to 99 from a dropdown list
- **Cue Name**
 - Enter a cue name in the space provided.
 - **NOTE:** There is a 12 character limit.
- **Fade Time (mm:ss)**
 - The amount of time that the cue takes to reach full output.
- **Hold Time (mm:ss)**
 - The amount of time the cue will hold at full output before transitioning to a linked cue (if selected).
- **Link Cue**
 - Select a cue from a dropdown list to transition to after the **Hold Time** expires.
 - Select **Disabled** to continue holding the current cue.
- **Save**
 - Saves the edited cue options.

Cue Options

Cue	1: Cue 1 ▼
Cue Name	Cue 1
Fade Time (mm:ss)	00:00
Hold Time (mm:ss)	00:01
Link Cue	Disabled ▼
<button>Save</button>	



Remote Input Configuration via NETRON Central Utility (CLU)

Input:

Opens a page to configure the below options:

- **Input 1 - 10 Selection**
 - Graphical selection of Inputs 1 through 10
- **Event Type**
 - Make a selection between the below event types:
 - **Disable DMX**
 - **Trigger Source:** Disable, DMX Port, Art-Net, sACN
 - Universe
 - DMX Address
 - **Cue**
 - **Cue Number**
 - **Cue Mode**
 - Trigger
 - Toggle
 - **Trigger Source:** Disable, DMX Port, Art-Net, sACN
 - Universe
 - DMX Address
 - **NETRON Preset**
 - **NETRON Preset**
 - **Trigger Source:** Disable, DMX Port, Art-Net, sACN
 - Universe
 - DMX Address
 - **User Preset**
 - **User Preset**
 - **Trigger Source:** Disable, DMX Port, Art-Net, sACN
 - Universe
 - DMX Address
 - **Send Value**
 - **Send Value**
 - **Trigger Source:** Disable, DMX Port, Art-Net, sACN
 - Universe
 - DMX Address
- **“Save” Button**
 - Saves the changes made on the selected Input
 - **NOTE:** The changes must be saved before selecting another input

Inputs Configuration

1 2 3 4 5 6 7 8 9 10

Event Type: Send Value

Send Value: 0

Trigger Source: ArtNet

Universe: 0

DMX Address: 1

Save



Cue Configuration via the Web User Interface

Run Cues:

The below options are available on the **Run Cues** page:

- **“Run Cues” Section**
 - **Select**
 - Dropdown list to select between **Cue OFF** and **Cues 1-99**.
 - **Current Cue**
 - Displays the current status of the cue system.
 - **“Run” Button**
 - Pressing the button triggers the selected cue.
 - **“Cue Grid” Button**
 - Opens a separate window with a visual button grid of saved cues for simple recall.
- **“Configuration” Section**
 - **Fade Off Time** (mm:ss)
 - The amount of time after releasing a cue to return back to the DMX Input.
 - **Resend Ethernet**
 - Toggle to **Enable** or **Disable** the Resend Ethernet option
 - **Resend Priority**
 - The ability to set the source priority of the sACN data sent over the network with Resend Ethernet enabled.
 - **NOTE:** The priority may be set to any value between 0 - 200.
 - **“Save” Button**
 - **“Cancel” Button**

The screenshot displays the NETRON web interface in a browser window. The address bar shows '2.55.50.65/Cues_Run.html'. The left sidebar contains navigation links: Presets, DMX Ports, Cues (selected), Run Cues, Save Cue, Cue Options, IP Settings, Inputs, and System. The main content area is divided into two sections: 'Run Cues' and 'Configuration'. The 'Run Cues' section features a 'Select' dropdown menu currently set to 'Cue OFF', a 'Run' button, and a 'Cue Grid' button. Below the dropdown, it shows 'Current Cue' as 'No Cue'. The 'Configuration' section includes a 'Fade Off Time (mm:ss)' input field set to '00:05', a 'Resend Ethernet' toggle switch, and a 'Resend Priority' input field set to '100'. At the bottom of the configuration section are 'Save' and 'Cancel' buttons.

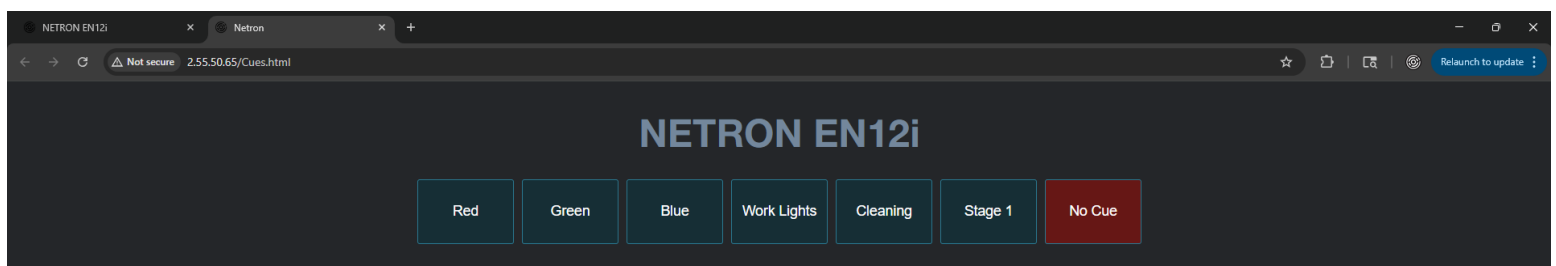
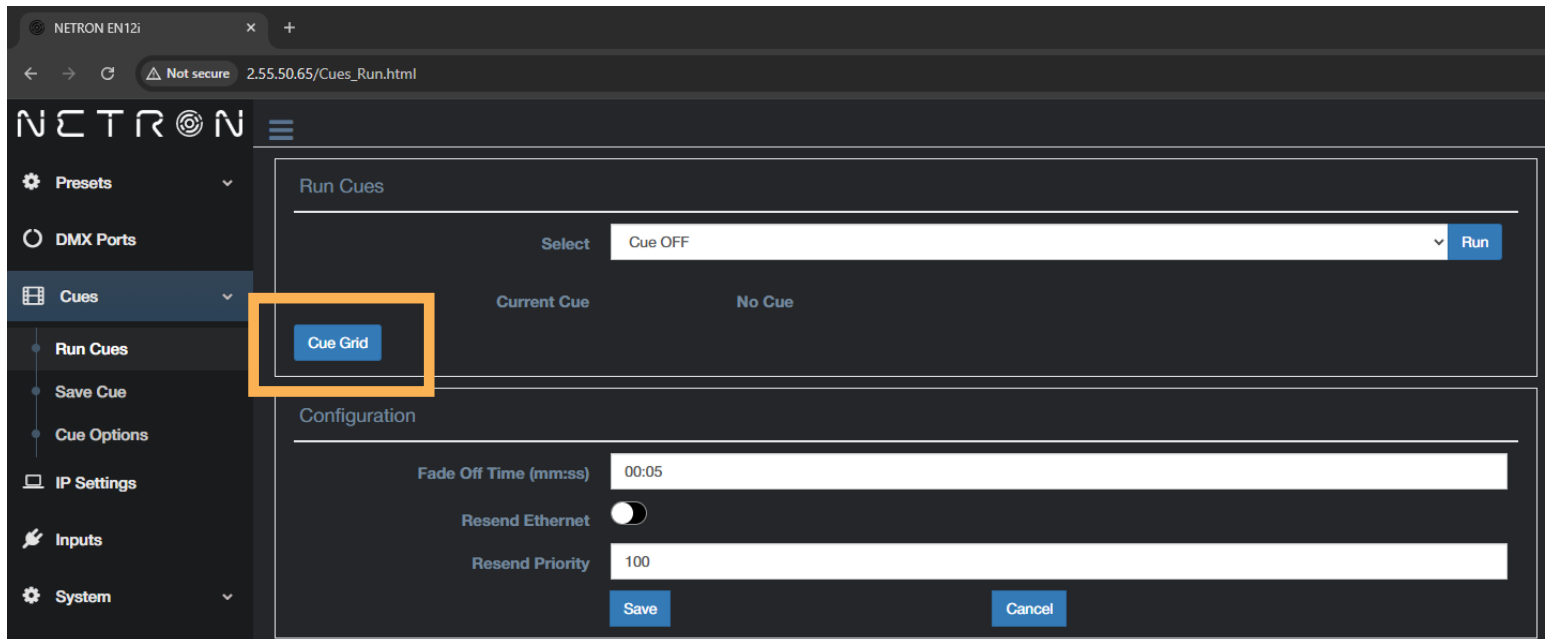


Cue Configuration via the Web User Interface

Cue Grid:

The **Cue Grid** button opens a separate tab with a layout of buttons of all available cues:

- When a cue is saved, a button for recall will automatically populate on the **Cue Grid**.
- The **“No Cue”** button automatically populates and is used to release any active cue.
- **NOTE:** There is not currently a way to delete a saved cue. A recorded cue may be overwritten and renamed at any time. The button on the cue grid will update after saving the changes.



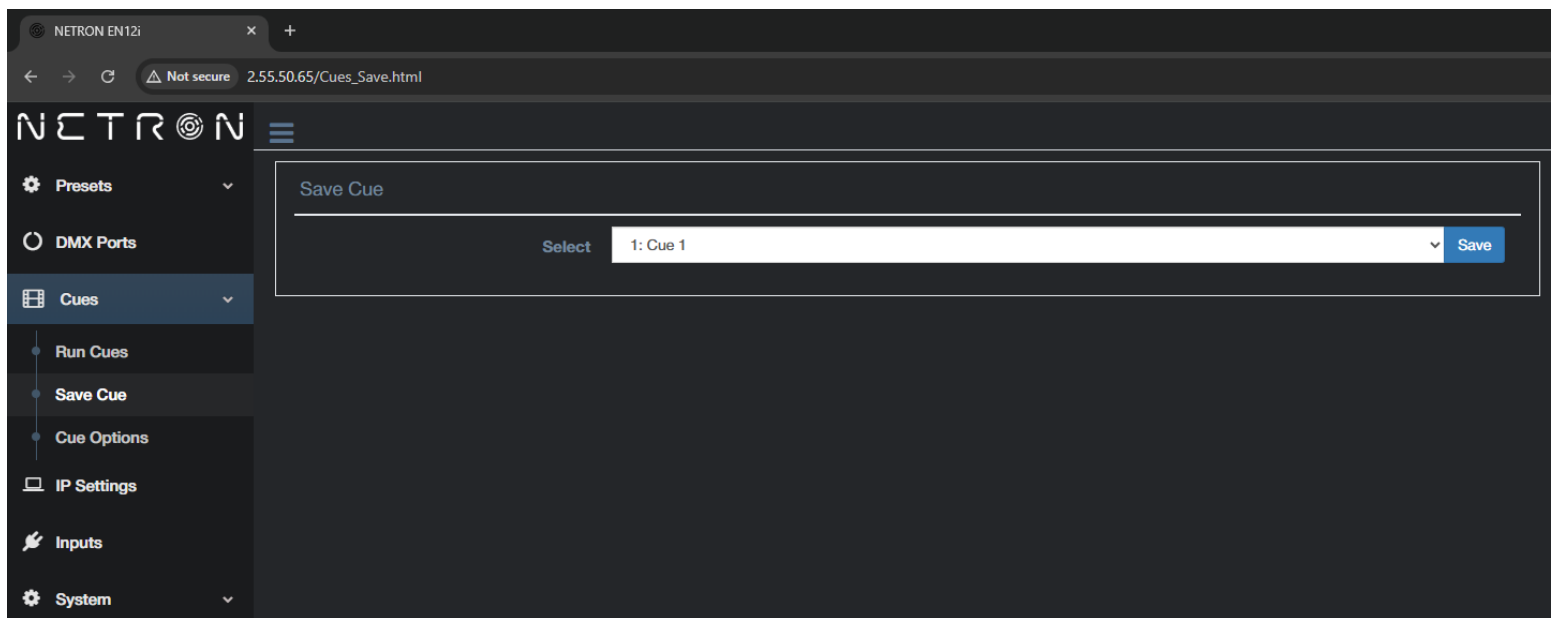


Cue Configuration via the Web User Interface (continued)

Save Cue:

The below options are available on the **Save Cue** page:

- **Select**
 - Dropdown list to select between **Cue 1 through 99**.
- **“Save” Button**
 - Saves the DMX output across all ports of the device to the selected cue slot.





Cue Configuration via the Web User Interface (continued)

Cue Options:

Opens a page to change the below options:

- **Cue**
 - Select a Cue 1 to 99 from a dropdown list
- **Cue Name**
 - Enter a cue name in the space provided.
 - **NOTE:** There is a 12 character limit.
- **Fade Time (mm:ss)**
 - The amount of time that the cue takes to reach full output.
- **Hold Time (mm:ss)**
 - The amount of time the cue will hold at full output before transitioning to a linked cue (if selected).
- **Link Cue**
 - Select a cue from a dropdown list to transition to after the **Hold Time** expires.
 - Select **Disabled** to continue holding the current cue.
- **“Save” Button**
 - Saves the edited cue options.

The screenshot shows a web browser window with the address bar displaying "2.55.50.65/Cues_Edit.html". The page title is "NETRON". On the left is a sidebar menu with options: Presets, DMX Ports, Cues (selected), Run Cues, Save Cue, Cue Options, IP Settings, Inputs, and System. The main content area is titled "Cue Options" and contains the following fields:

Cue	1: Cue 1
Cue Name	Cue 1
Fade Time (mm:ss)	00:00
Hold Time (mm:ss)	00:01
Link Cue	Disabled
Save	



Remote Input Configuration via the Web User Interface

Inputs:

Opens a page to configure the below options:

- **Priority**
 - **DMX:** The device will ignore all input from the Remote Inputs as long as there is an active DMX source.
 - **Input:** The device will receive actions from the Remote Inputs and override an active DMX source.
- **Input 1 - 10 Selection**
 - Graphical selection of Inputs 1 through 10
- **Event Type**
 - Make a selection between the below event types:
 - **Disable DMX**
 - **Cue**
 - **Cue Number**
 - **Cue Mode**
 - Trigger
 - Toggle
 - **NETRON Preset**
 - **User Preset**
 - **Send Value**
- **Contact / BS10 Toggle**
 - Toggle on or off the physical contact closure or BS10 inputs
- **DMX Toggle**
 - Toggle on or off remote input via a DMX Port
- **Art-Net Toggle**
 - Toggle on or off remote input via Art-Net
- **sACN Toggle**
 - Toggle on or off remote input via sACN
- **DMX Port**
 - Set a specific port that will be used as an input for a DMX Remote Input
- **DMX Address**
 - Sets a DMX address between 1-512 that will be used for DMX Port, Art-Net, or sACN Remote Input
- **Art-Net Universe**
 - Sets the universe that will be used for Art-Net Remote Input
- **sACN Universe**
 - Sets the universe that will be used for sACN Remote Input
- **“Save” Button**
 - Saves the changes made on the selected Input
 - **NOTE:** The changes must be saved before selecting another input



NETRON Device Cue Storage & Remote Input Comparison Table

			Activate Cues Via:									Configure Device Via:		
			DMX-512	Art-Net	sACN	Contact Closure	API	OLED Display	Web Browser	CLU Software	Button Station (BS10)	OLED Display	CLU Software	Web Browser
	Cue Storage	Emergency Cue												
EP1												●	●	●
EP1D													●	●
EP2												●	●	●
EP4	●		●	●	●		●		●	●			●	●
EN4	●		●	●	●		●	●	●	●		●	●	●
EN6D	●	●	●	●	●		●	●	●	●		●	●	●
EN6 IP	●		●	●	●		●	●	●	●		●	●	●
RDM10	●		●	●	●	●	●	●	●	●		●	●	●
EN12	●		●	●	●	●	●	●	●	●		●	●	●
EN12i	●		●	●	●	●	●	●	●	●	●	●	●	●
DA2410V	●	●	●	●	●		●	●	●	●		●	●	●