



# neo:

1-4 HDMI SPLITTER  
BY PULSEEIGHT



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# USER MANUAL

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**P8-HDMI2-SP4**

**HDMI®**

**HDCP2.3**

**amazon alexa**

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## INTRODUCTION

The neo 1-4 HDMI® Splitter distributes a single HDMI® input source to four HDMI® video outputs with automatic EDID support in a reliable and convenient solution.

The Pulse-Eight neo 1-4 HDMI® Splitter is a practical, high specification splitter to cater to the very latest HD products coming into the market for today's and tomorrow's technologies. With one HDMI® source, you can easily distribute to four simultaneous HDMI® outputs and, with our exclusive Cloud Monitoring Portal, you can check up on your installation at any time from anywhere, enabling you to diagnose simple issues without visiting the site.

The splitter also supports multiple control methods including IR control, CEC support, Web Interface, plus voice control using Amazon Alexa.

## FEATURES

- HDMI® 2.0, HDMI® 2.0a, HDMI® 2.0b Compliant
- HDR (High Dynamic Range)
- HDCP 2.3 & 2.2 Compliant
- Legacy HDCP Compliant
- Return IR Control
- CEC Control
- Supports 18Gbps transmission speeds, allowing 4K/60Hz 4:4:4 video resolutions
- Supports 570p, 720p 1080i, 1080p, Ultra HD, 3D
- Automatic EDID Management
- Remote Monitoring
- Responsive Web Interface

## INSIDE THE BOX (KIT)

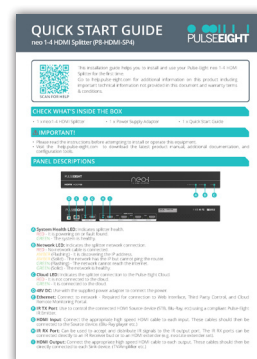
- 1 x neo:1-4 HDMI® Splitter
- 1 x Power Supply Adapter
- 1 x Quick Start Guide



neo:1-4 HDMI®  
Splitter



Power Supply  
Adapter



Quick Start Guide

## SPECIFICATIONS

Video Resolution	All 4K formats, 1080p, 1080i, 720p, 576p, 480p @ 24/25/30/50/59.94/60Hz.
Video Input	1 × HDMI® 2.0a/b
Video Output	4 × HDMI® 2.0a/b
HDMI® Input	1
HDMI® Outputs	4
Input TMDS Signal	6 Gbps per data lane (18 Gbps total)
Bandwidth	18 Gbps
CEC	Yes - Bidirectional
Voice Control	Yes - Alexa
HDMI® Compliance	HDMI® 2.0 (up to 600 MHz TMDS clock)
HDCP Compliance	Up to 2.3 (Pass-through)
Transmission Distance	4K up to 3m (10ft) and 1080p up to 8m (25ft)
Chroma Subsampling	YCbCr4:4:4, YCbCr4:2:2, YCbCr4:2:0, RGB
Colorspace	YUV (rec. 601, rec709, rec2020), RGB
Color Depth	8-bit, 10-bit, 12-bit
IR Inputs from Sink	Yes
IR Outputs to Source	Yes
IR Receiver Port	3.5mm 5V stereo jack (not included)
IR Transmitter Port	3.5mm 5V stereo jack (not included)
Ethernet Port	Yes - Control only
HDMI-CEC	Yes
Audio Return Channel (ARC)	No
Operating Humidity	5 to 90% RH (no condensation)
Operating Temperature	0 to +35°C (32 to +95°F)
Storage Temperature	-20°C to 60°C (-4°F to 140°F)
Power Consumption	10W Max
Power	1 x 5V DC @ 0.5A
Certifications	UKCA, CE, FCC (SDoC), RoHS
ESD Protection	Human Body Model: 8kV air, 4kV contact
Included Accessories	Power Supply Adapter.
Dimensions (W x H x D)	43cm x 4.3cm x 14cm
Weight	0.7kg
Box Dimensions (W x H x D)	53cm x 13cm x 21cm

## SAFETY PRECAUTION

**Please read the instructions before attempting to install or operate this equipment.**

**Please keep the following in mind as you unpack and install this equipment:**

- Always follow basic safety precautions to reduce the risk of fire, electrical shock, and injury.
- To prevent fire or shock hazards, do not expose the unit to rain, or moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Please use the included mounting kit where applicable, avoid blocking any vents on the product and follow best practices in rack design to help avoid overheating.
- Only use the supplied power supply adapter.
- Never push any objects into this product through any openings or empty slots in the unit as you may damage parts inside and/or cause an electrical shock.
- Do not allow anything to rest on the power cabling and avoid putting the weight of any kind on it.
- To protect the unit from overheating do not block any vents or openings in the unit housing that provides ventilation. Allow sufficient space for air to circulate around the unit.
- This product is intended for use in a clean (dust-free) residential environment.

### Ventilation

It's important to keep the product well ventilated when installing this Pulse-Eight splitter.

Any electronic equipment will generate heat. A well-ventilated area helps to disperse the heat. If placed in a poorly ventilated area, your equipment may heat up and cause irreparable damage to the circuitries.

Allowing systems to run for prolonged periods under high temperatures will break down circuitry and electrical component. It also applies if the device is left in the path of direct sunlight or near any heat source.

Dust tends to accumulate and will disrupt any fan and/or electronics system. Dust particles contain various compositions like water, oil, and other minerals or chemicals. Having them in your electronic device can sometimes cause a signal error or degradation to the internal chips and circuitries. Because we cannot accurately predict how or when they can affect your device, we highly recommend that you keep Pulse-Eight products not only in a well-ventilated area but also as clean as possible.

In some cases, insects or reptiles can make nests near or inside the electronic casing. Whilst we design our products to maximize the protection of internal electronics, please be aware that insects and reptiles can be drawn to these types of habitats. In the unlikely event, this does happen, this will lead to poor ventilation inside the unit, and it will be unable to disperse heat effectively.

### FCC Warning

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

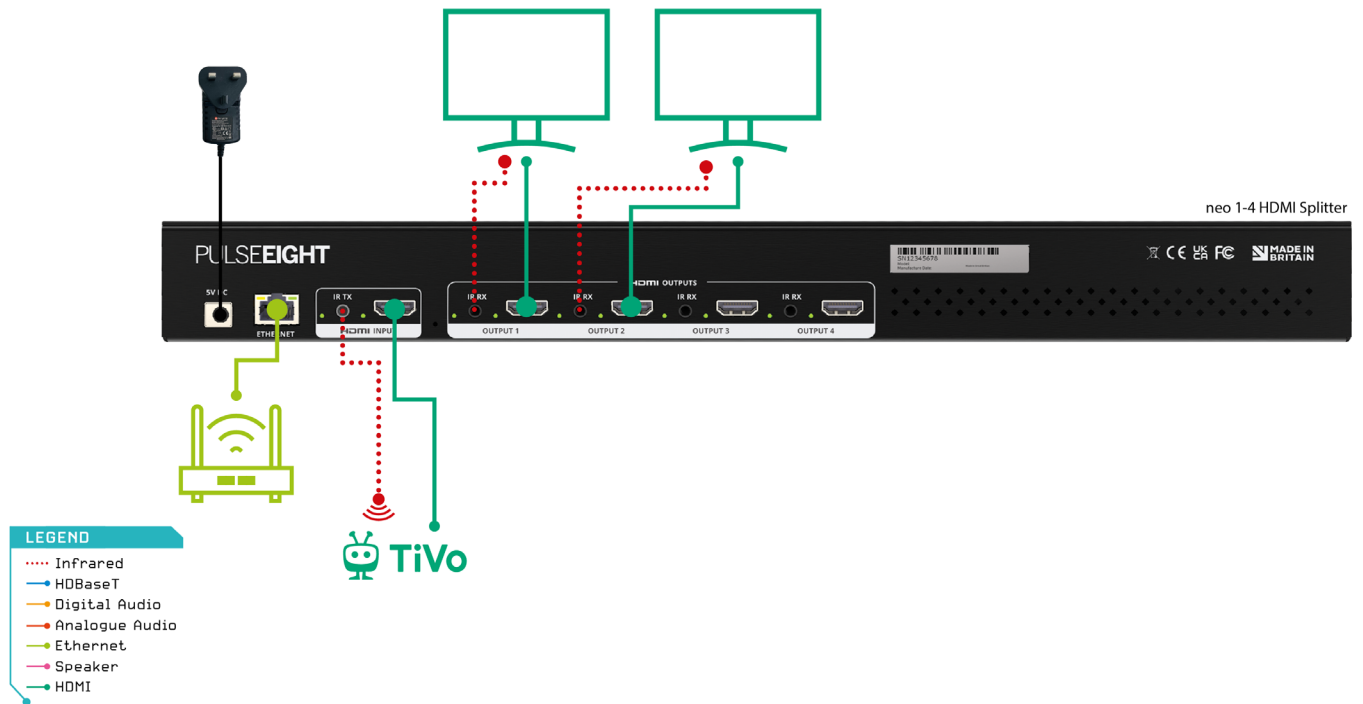
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## PANEL DESCRIPTIONS




- A System Health LED:** indicates splitter health.  
**RED** - It is powering on or fault found.  
**GREEN** - The system is healthy.
- B Network LED:** indicates the splitter network connection.  
**RED** - No network cable is connected.  
**AMBER** (Flashing) - It is discovering the IP address.  
**AMBER** (Solid) - The network has the IP but cannot ping the router.  
**GREEN** (Flashing) - The network cannot reach the internet.  
**GREEN** (Solid) - The network is healthy.
- C Cloud LED:** indicates the splitter connection to the Pulse-Eight Cloud.  
**RED** - It is not connected to the cloud.  
**GREEN** - It is connected to the cloud.
- D 48V DC:** Use with the supplied power adapter to connect the power.
- E Ethernet:** Connect to network - Required for connection to Web Interface, Third Party Control, and Cloud Remote Monitoring Portal.
- F IR TX Port:** Use to control the connected HDMI® Source device (STB, Blu-Ray, etc) using a compliant Pulse-Eight IR Emitter.
- G HDMI® Input:** Connect the appropriate high speed HDMI® cable to the input. This cable should then be connected to the Source device. (Blu-Ray player etc.)
- H IR RX Port:** Can be used to accept and distribute IR signals to the IR output port. The IR RX ports can be connected directly to an IR Receiver bud or to an HDMI® extender (e.g. neo:Lite extender set).
- I HDMI® Output:** Connect the appropriate high speed HDMI® cable to each output. These cables should then be directly connected to each Sink device. (TV/Amplifier etc.)

## INSTALLATION



1. Connect HDMI® cable from your video source (e.g. Blu-Ray player) to the HDMI® input of the neo HDMI® splitter.
2. Connect sink devices directly (i.e. TV) to the HDMI® Outputs via high speed HDMI® cables.
3. If required, connect the compatible IR Flasher (Emitter/Transmitter) cable to the 'TX' port on the neo HDMI® splitter and the IR bud placed over the source device's IR window.
4. If required, connect the IR Receiver to the neo HDMI® Splitter 'RX' port - and place the IR bud on the underside of the sink device (i.e. TV).
5. Insert the supplied power adapter to the neo HDMI® splitter and plug it into the AC mains.
6. Turn ON the AC mains.
7. Once initialization has been completed, the System Health, Network and Cloud LEDs should all appear ON (green).

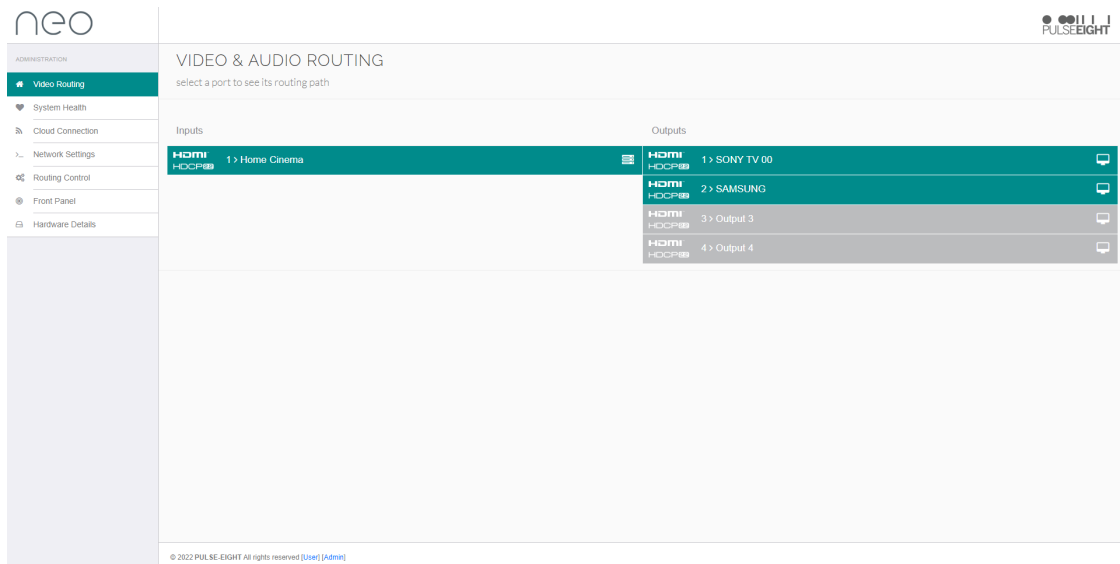
 *Note: The initialization process takes between 20 seconds and up to 2 minutes. However, it is possible that a firmware update may be available the first time the unit is powered ON - in this instance, the 1-4 HDMI® Splitter may take longer to initialize.*

*If the System Health LED flashes (green) quickly together then a firmware update is being applied. Please wait and do not disconnect the power until this update has been completed.*

8. As it powers ON, check the LED status to ensure correct installation and connection. See LED Status in Troubleshooting section.

## NEO WEB INTERFACE

The front page of the web interface shows all available inputs and outputs. The following steps instruct how to access and customise this for the end-user.

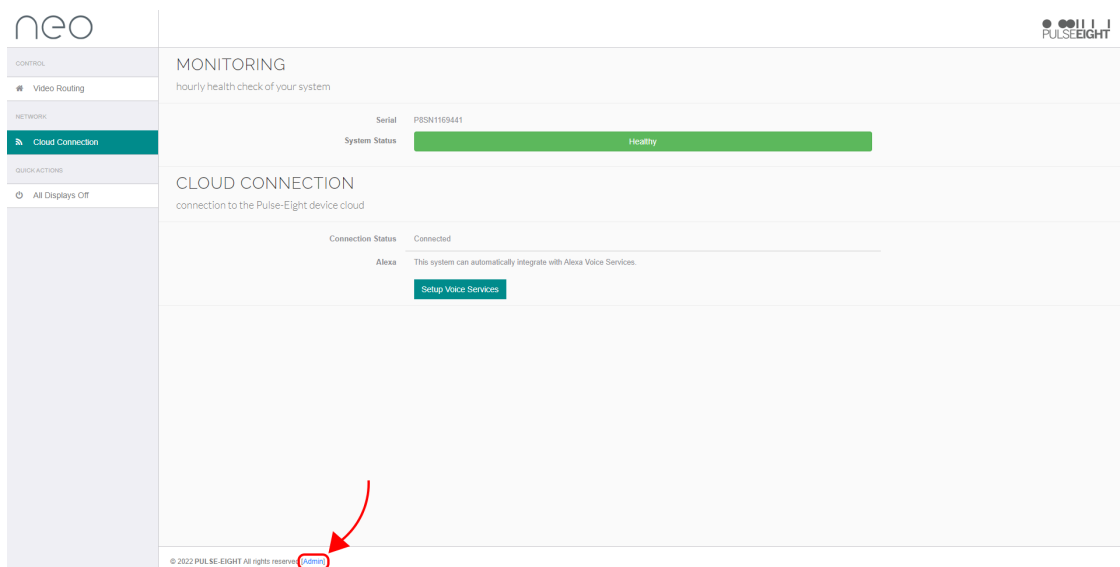


### Accessing The Admin Area

When setting up the HDMI® Splitter, it is important that the installer can access the admin menu on the Web Interface to configure the splitter according to the installation's requirements.

The Web Interface can be accessed using a computer connected to the same router/network as the splitter and by visiting [www.gotomymatrix.com](http://www.gotomymatrix.com) in your web browser. Navigate to the Cloud Connection tab (on the left-hand side) and then click on '[Admin]' link at the foot of the page. Insert your password to log in and access all options.


 *Note: The default password is "admin". It is recommended that this is changed to a unique and memorable password once setup has been completed.*





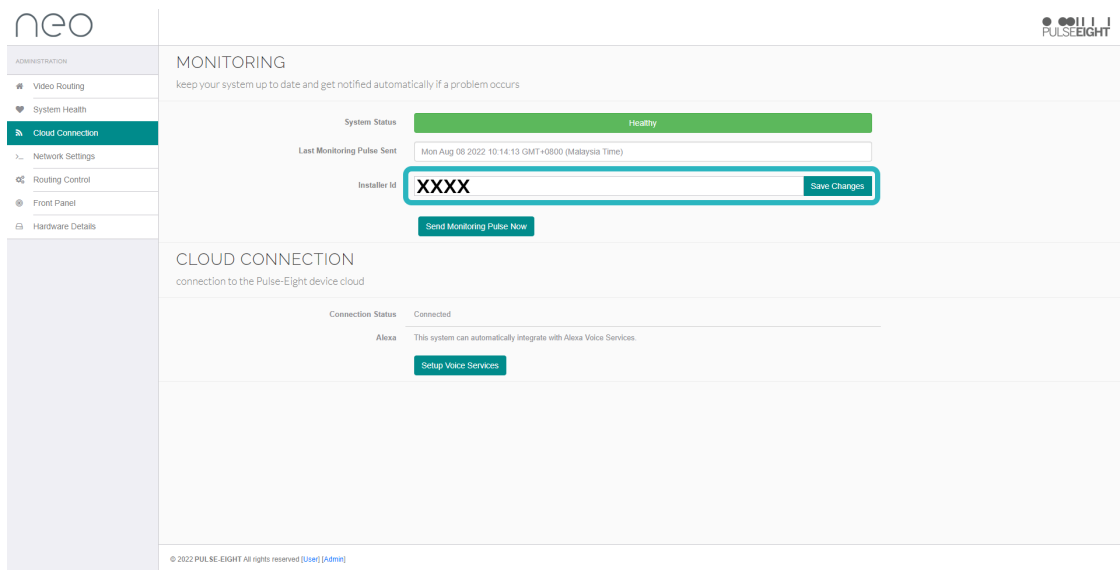
## Link The Installer Account

On the Cloud Connection page, insert your Pulse-Eight Installer ID (4-digit) into the box and save changes - this will enable the splitter to be linked to your monitoring account.



 *Note: If you do not already have an Installer ID then you will need to register for a new account. Please contact your local representative or visit [monitoring.pulse-eight.com/Account/Register](https://monitoring.pulse-eight.com/Account/Register).*

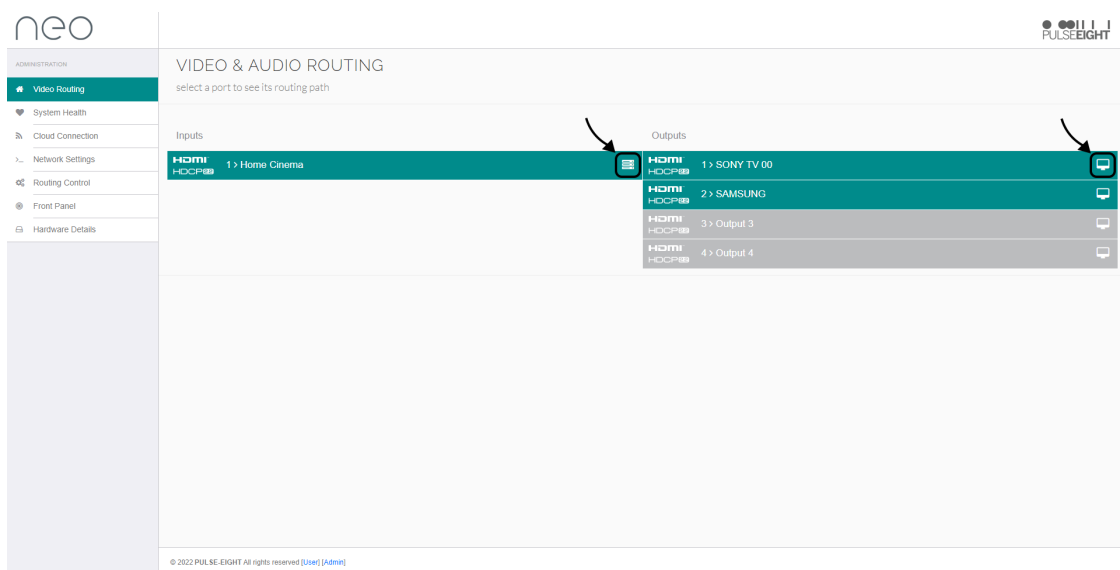
Once you have entered your Installer ID, you will be able to gain access to the Cloud Monitoring Service to monitor all of your Pulse-Eight installations remotely in one place.

For more information, refer to the “Accessing the Monitoring Portal” section in this manual.

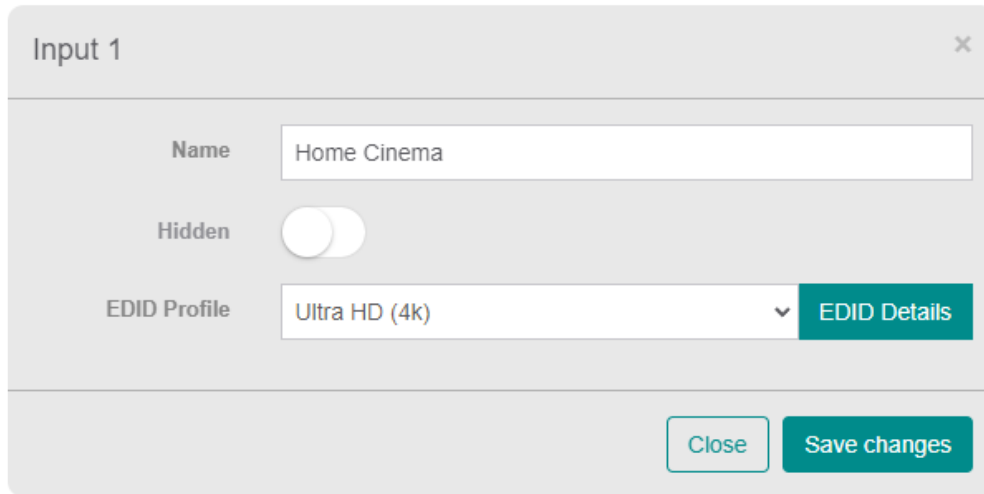


## Input and Output Options Setup

To access the Input and Output Setup options, click on the  symbol for changing the selected Input settings and the  symbol for changing the selected output settings.



## Input Setup Options



The 'Input 1' dialog box contains the following fields and controls:

- Name:** A text input field containing 'Home Cinema'.
- Hidden:** A toggle switch currently turned off.
- EDID Profile:** A dropdown menu showing 'Ultra HD (4k)' with a downward arrow. To its right is a teal button labeled 'EDID Details'.
- Buttons:** At the bottom right, there are two buttons: a light blue 'Close' button and a teal 'Save changes' button.

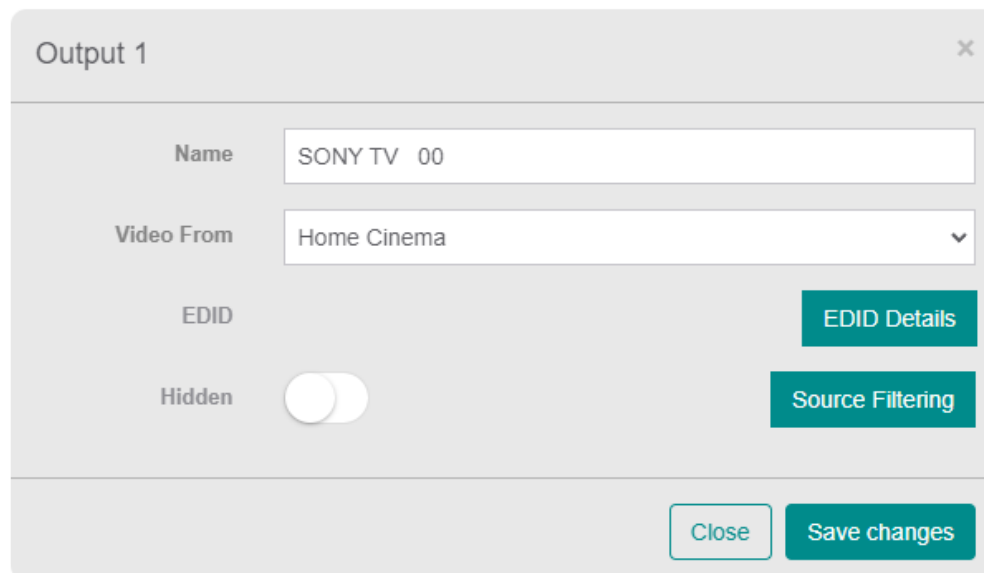
**Name:** Change the name of the selected input. This name will be displayed on the source list on the display device (TV) menu.

**Hidden:** Turn on to hide the selected input from the end user's web interface.

**EDID Profile:** Drop down menu to select an alternative EDID profile for the selected Input. See the EDID Management section of this manual for more information.

**EDID Details:** This will bring up a page detailing the current EDID information for the selected Input.

## Output Setup Options



The 'Output 1' dialog box contains the following fields and controls:

- Name:** A text input field containing 'SONY TV 00'.
- Video From:** A dropdown menu showing 'Home Cinema' with a downward arrow.
- EDID:** A label positioned to the left of a teal button labeled 'EDID Details'.
- Hidden:** A toggle switch currently turned off, positioned to the left of a teal button labeled 'Source Filtering'.
- Buttons:** At the bottom right, there are two buttons: a light blue 'Close' button and a teal 'Save changes' button.

**Name:** Change the name of the selected output.

**Video From:** A dropdown list showing the source the output is currently displaying.

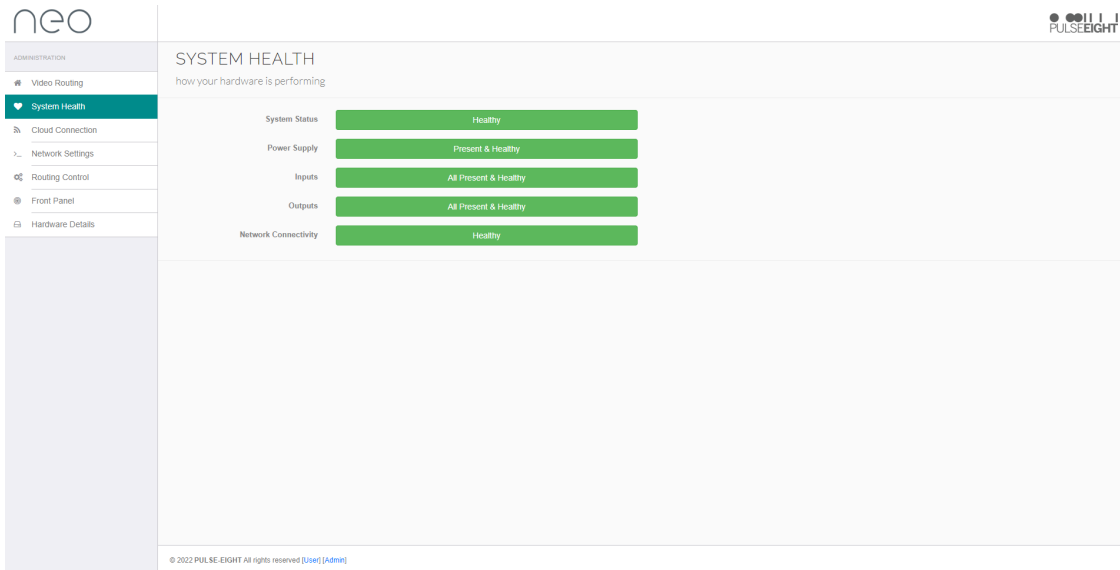
**EDID Details:** This will bring up a page detailing the EDID information of the HDMI® Sink (display) connected to that output.

**Hidden:** The toggle switch can be turned on to hide the selected output from the end user's web interface.

**Source Filtering:** Toggle switches to select which inputs can be routed to the selected output display.

 *Note: Ensure that after any changes you click the 'Save Changes' button.*

## System Health



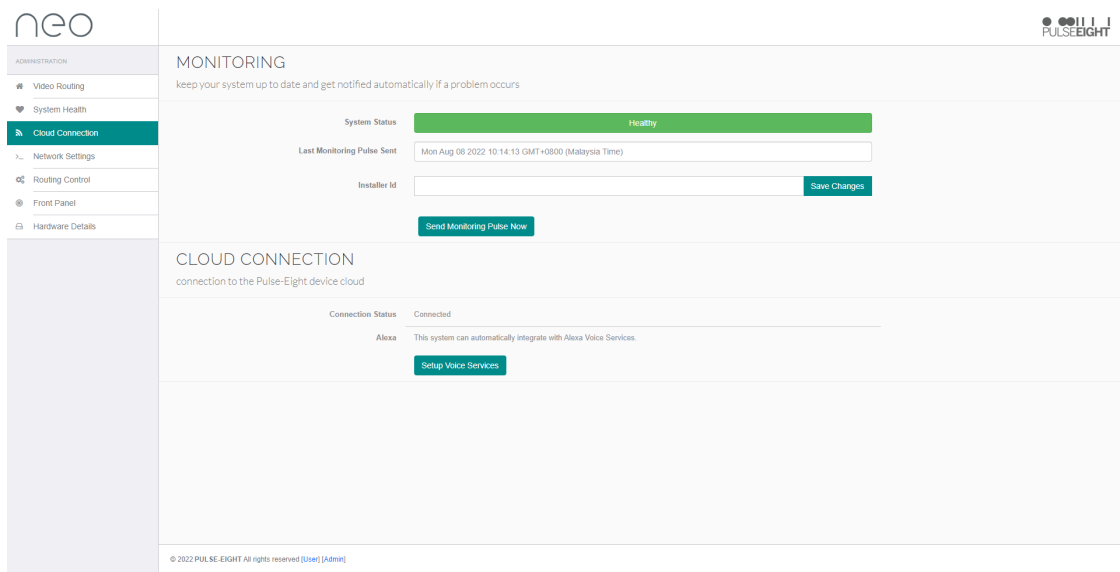
**SYSTEM HEALTH**  
how your hardware is performing

System Status	Healthy
Power Supply	Present & Healthy
Inputs	All Present & Healthy
Outputs	All Present & Healthy
Network Connectivity	Healthy

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Under the System Health tab, information about the hardware's performance is displayed. The colour-coded (Green = Good, Orange = Warning, Red = Issue) boxes will indicate if it is performing correctly along with the reading of the internal temperature sensor that will indicate if the system is overheating.

## Cloud Connection



Under the Cloud Connection tab, you will have basic monitoring information:

**System Status:** This colour-coded (Green = Good, Orange = Warning, Red = Issue) status will notify you if the system is healthy or if there is an issue.

**Last Monitoring Pulse Sent:** This will indicate the date and time when the splitter last 'phoned home'.

**Installer ID:** Enter your Pulse-Eight Installer ID to link to the Pulse-Eight Monitoring Portal.


**Connection Status:** This will detail if the splitter is connected to the Pulse-Eight Monitoring Portal.

**Alexa:** This splitter can be controlled by Alexa's voice command control. To set this up, please follow the 'Alexa Voice Control' section for further details.

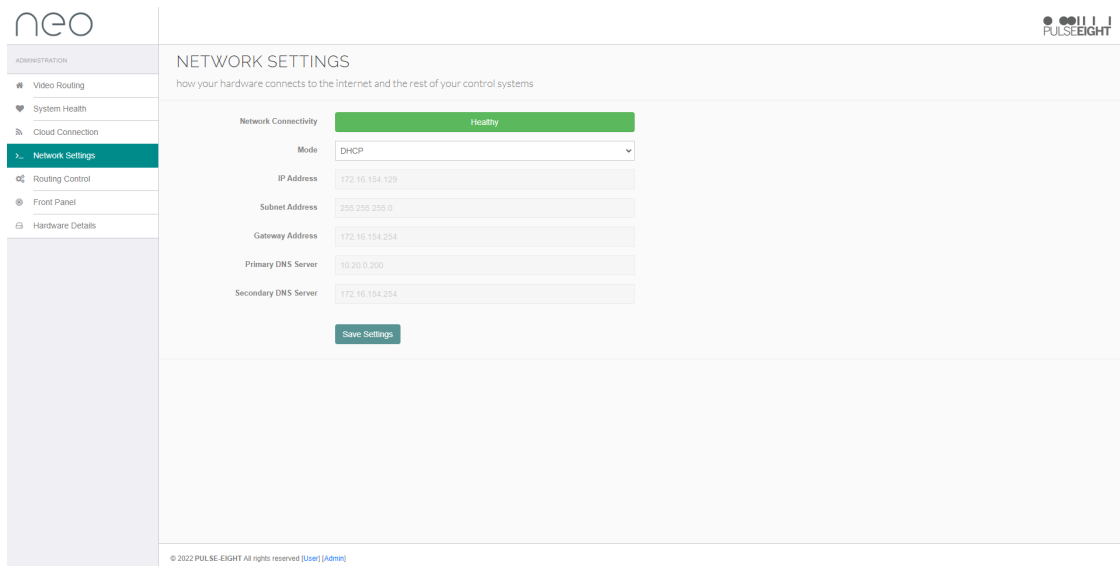
### ALEXA VOICE CONTROL

It is possible to add the HDMI® Splitter to your Alexa smart-home setup in order to control the attached Sink and Sources using voice commands.

1. Install the 'neo' Alexa skill from Amazon on the Alexa app.
2. On the Cloud Connection tab, click the 'Setup Voice Services' button, this will take you to - my.pulse-eight.com with instructions on setup.
3. Click on the 'Login via Amazon' button and proceed to login to your Amazon account. A page will appear listing your discovered devices - these are the systems available for Alexa control. Click 'Connect' next to the appropriate system.
4. Tell Alexa to 'Discover Devices' - your system should now be connected.

 *Note: Alexa is a virtual assistant AI technology developed by Amazon. It is capable of voice interaction with smart speakers, but it is also used to control smart devices in home automation systems.*

## Network Settings



Under the Network Settings tab you will find details about the system's connection to the internet and the rest of your control systems:

**Network Connectivity:** This colour-coded status (Green = Good, Orange = Warning, Red = Issue) will notify you if the system is connected to a network or if there is an issue.

**Mode:** Dropdown menu to either set a static IP and DHCP.

 **IMPORTANT:** Ensure that after making any changes to network settings, that you click Save Settings button.


### ACCESSING THE SPLITTER WITHOUT AN INTERNET CONNECTION

While the video splitter works best with an active internet connection it is possible to still configure and operate the system without one. However, to configure the system from its defaults a local network connection is required. Normal operation of the CEC and IR control systems does not require any network connection, but IP-based API control or Web-based control does require a persistent network connection.

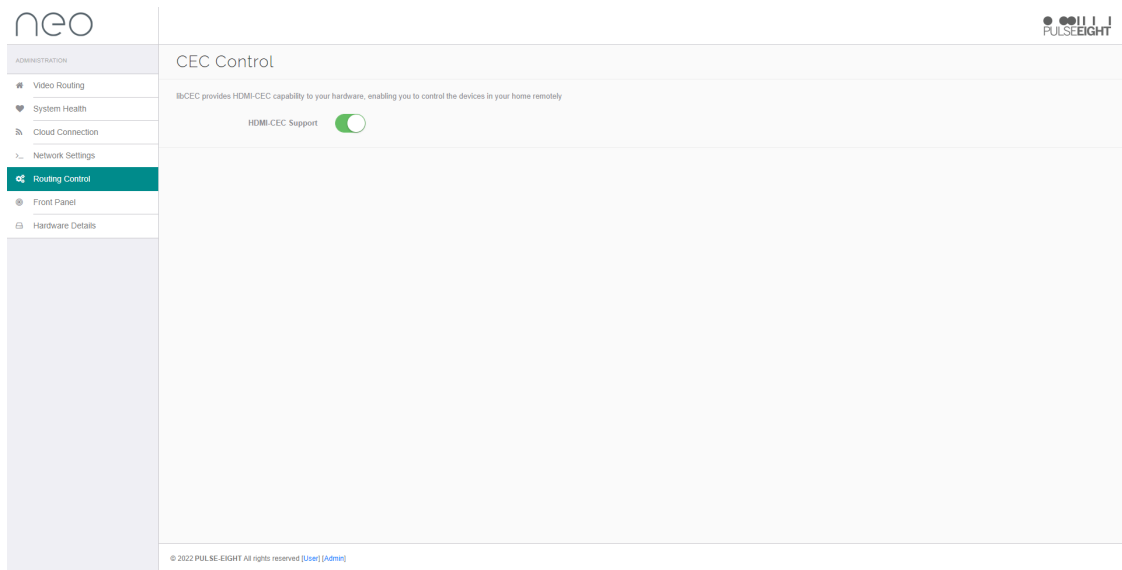
#### Discovery Tool

You can download a discovery tool from your monitoring portal at <http://monitoring.pulse-eight.com/> this program will run on Windows 7 or newer only. When run it will scan your network and detect the IP address of your video splitter. If you have multiple neo devices on the same network, the discovery tool will only display the last found. If you do have more than one system, it is advised that you disconnect other systems first.

The discovery tool will display the IP address of the splitter, you can then access the splitter by typing that IP address into your web browser's address bar.

 *Note: It is recommended in this mode that you configure the networking to use a static IP address, this allows you to bookmark the page easily and return to the web interface easily without needing to run the discovery tool again.*

## Routing Control Tab

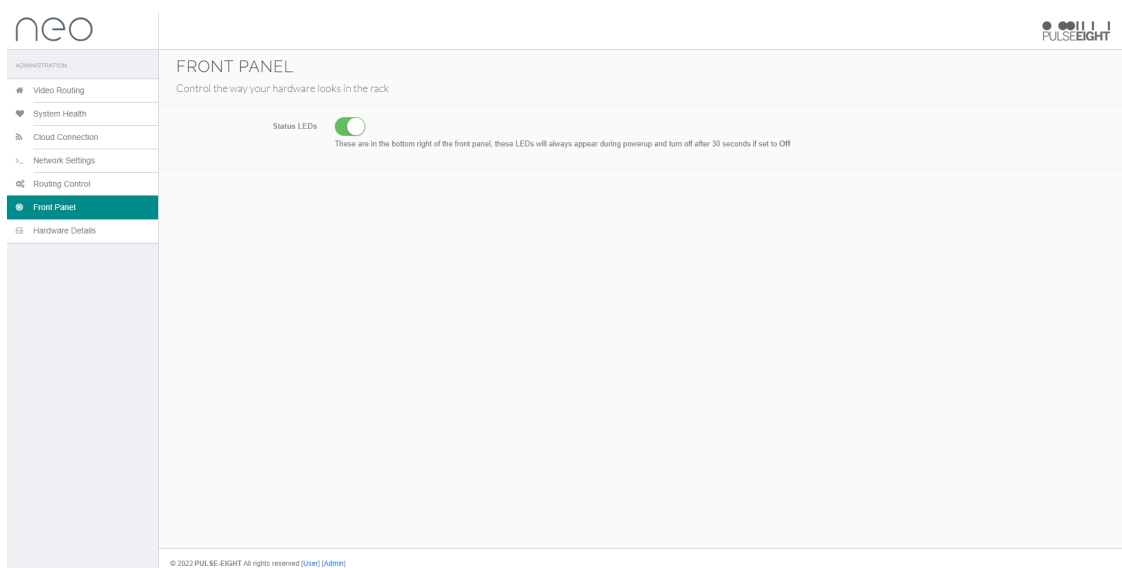


Under the Routing Control tab, you will find settings for CEC control:

### CEC Control

**HDMI-CEC Support:** Toggle switch to turn CEC control on or off, according to your requirements. By having CEC turned on, you will have the ability to control your connected devices (with CEC) without the need for a third-party Control system. The splitter can work independently.

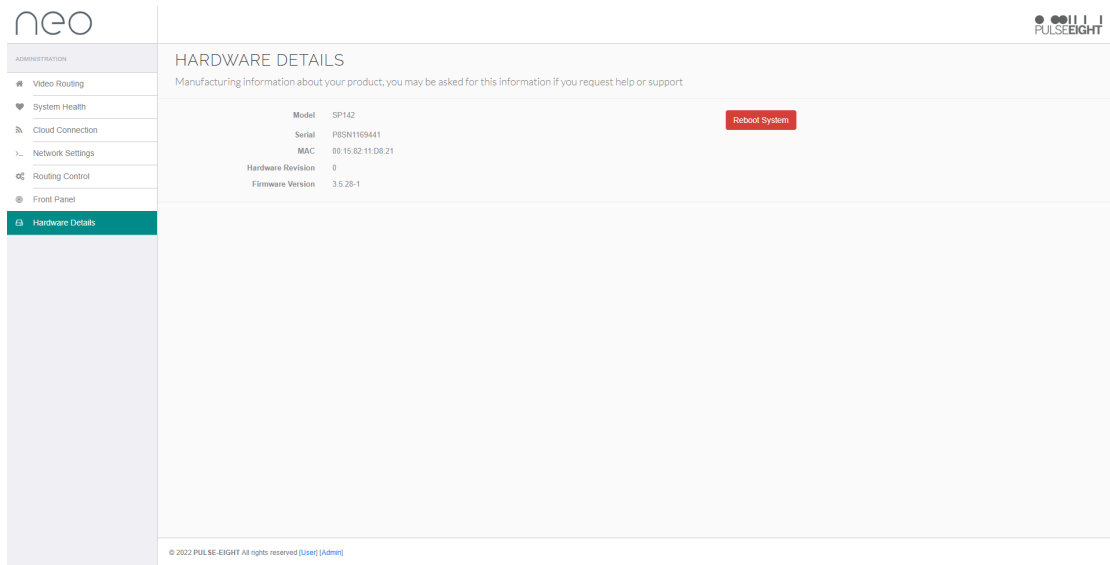
## Front Panel Settings



Under the Front Panel tab, you will find options for the front panel of the splitter for turning off the status LEDs.

**Note:** The status LEDs are in the bottom right of the front panel, these LEDs will always appear during powerup and turn off after 30 seconds if set to Off.

## Hardware Details




The screenshot shows the 'neo' web interface. On the left is a sidebar with a menu under 'ADMINISTRATION' containing: Video Routing, System Health, Cloud Connection, Network Settings, Routing Control, Front Panel, and Hardware Details (which is highlighted). The main content area is titled 'HARDWARE DETAILS' and includes a sub-header: 'Manufacturing information about your product, you may be asked for this information if you request help or support.' Below this, a table displays the following information:

Model	SP142	<a href="#">Reboot System</a>
Serial	PBSN1169441	
MAC	00:15:82:11:D8:21	
Hardware Revision	0	
Firmware Version	3.5.28-1	

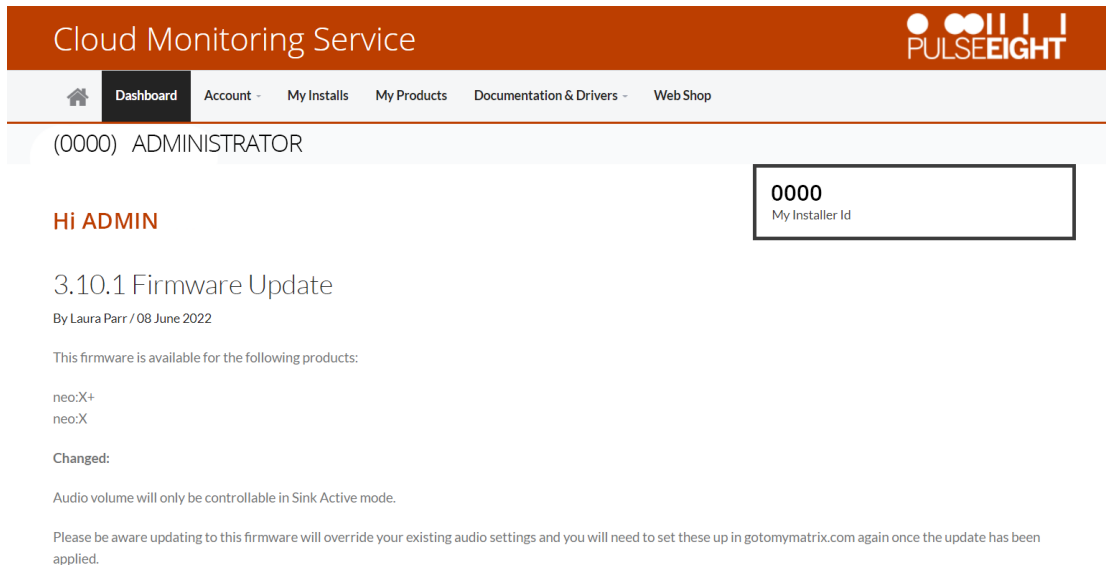
At the bottom of the page, a footer reads: '© 2023 PULSE EIGHT All rights reserved. [User](#) [Admin](#)'.

Under the Hardware Details tab, you will find manufacturing information about your product such as model, serial number, MAC, hardware revision, and current firmware version installed. You may be asked for this information if you request support.

 *Note: The design and features of the Web Interface are ever-evolving and may be subject to changes at any time without warning.*

## MONITORING PORTAL

### Accessing The Monitoring Portal



Cloud Monitoring Service

PULSEEIGHT

Dashboard Account My Installs My Products Documentation & Drivers Web Shop

(0000) ADMINISTRATOR

Hi ADMIN

0000  
My Installer Id

3.10.1 Firmware Update

By Laura Parr / 08 June 2022

This firmware is available for the following products:

neo:X+  
neo:X

Changed:

Audio volume will only be controllable in Sink Active mode.

Please be aware updating to this firmware will override your existing audio settings and you will need to set these up in gotomymatrix.com again once the update has been applied.

To access the monitoring portal please visit [monitoring.pulse-eight.com](https://monitoring.pulse-eight.com), click 'Login' in the top left corner, and sign in with your registered details.

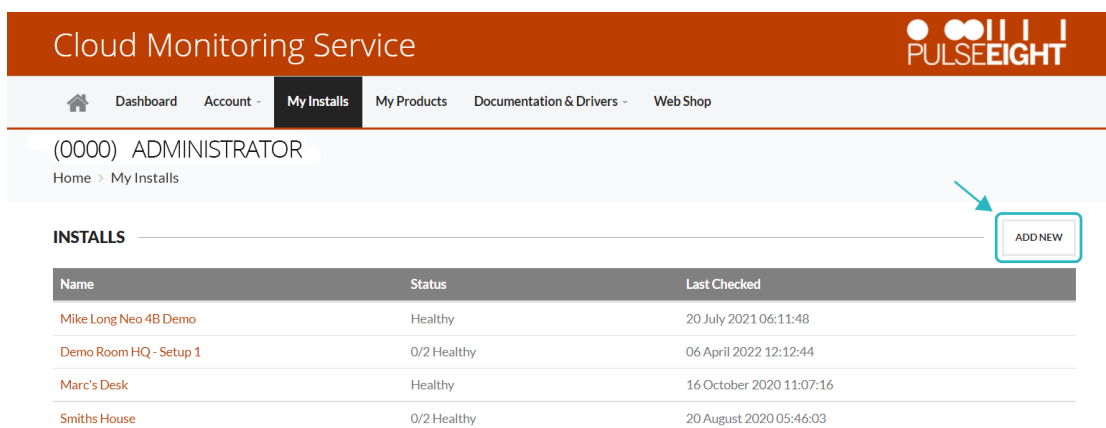
Once logged in, the dashboard will display your details including your Installer ID.

**Note:** If you do not already have an Installer ID then you will need to register for a new account. Please contact your local representative or visit [monitoring.pulse-eight.com/Account/Register](https://monitoring.pulse-eight.com/Account/Register).

### My Install

Under the My Installs tab you can add projects and assign your installed systems in order to easily access and monitor certain installations.

To create an install, click the 'Add New' button and insert the details on the following screen.



Cloud Monitoring Service

PULSEEIGHT

Dashboard Account My Installs My Products Documentation & Drivers Web Shop

(0000) ADMINISTRATOR

Home > My Installs


ADD NEW


Name	Status	Last Checked
Mike Long Neo 4B Demo	Healthy	20 July 2021 06:11:48
Demo Room HQ - Setup 1	0/2 Healthy	06 April 2022 12:12:44
Marc's Desk	Healthy	16 October 2020 11:07:16
Smiths House	0/2 Healthy	20 August 2020 05:46:03




Once created, you will then be able to assign systems to the install by clicking the 'Add' button in the 'Products' section. This will then bring up a page with a dropdown menu to select a system.


Cloud Monitoring Service





 Dashboard

 Account -

**My Installs**


 My Products

 Documentation & Drivers -

 Web Shop

(0000) ADMINISTRATOR

Home > My Installs > New Install


 NEW INSTALL

Testing

Suad

0123456789


NOTES



ADD

## My Products


Under the My Products tab, all your assigned Pulse-Eight systems will be listed.

 *Note: If the system you are looking for is not listed, please make sure you have added your Installer ID into the web interface of the system.*

When you click on a system, an overviewpage will appear with details of the unit such as:

- Serial Number
- Model Number
- Status
- System Temperature
- Firmware Version
- Current Uptime
- System Status - Inputs
- System Status - Outputs
- External Network Details
- Local Network Configuration
- System Commands
- Reboot Function

Cloud Monitoring Service



[Dashboard](#)
[Account](#)
[My Installs](#)
[My Products](#)
[Documentation & Drivers](#)
[Web Shop](#)

(0000) ADMINISTRATOR  
[Home](#) > [My Products](#) > P8SN1155763

CONFIGURATION

OVERVIEW

PORT DETAILS ☒

Inputs

Input 1 (Input 1)

Input 2 (Input 2)

Input 3 (Input 3)

Input 4 (Fire TV Stick)

Input 5 (Input 5)

Input 6 (UBP X500)

Input 7 (Input 7)

Input 8 (Input 8)

Outputs

Output 1 (Output 1)

Output 2 (SONY TV)

Output 3 (Output 3)

P8SN1155763

Status: Healthy

Inputs: All Present & Healthy

Outputs: All Present & Healthy

System Temperature: 44°C

Model: neo:X

Firmware Version: 3.2.20

Current Uptime: 1130 days, 16 hours, 41 minutes

SYSTEM STATUS

Inputs

1) Input 1

2) Input 2

3) Input 3

4) Fire TV Stick

5) Input 5

6) UBP X500

7) Input 7

8) Input 8

Outputs

1) Output 1

2) SONY TV

3) Output 3

4) Output 4

5) Output 5

6) Output 6

7) Output 7

8) Output 8


9) Output 9

10) Output 10

On the left hand side, a navigation bar features more options:

- Port Details allows you to individually monitor all inputs and outputs.
- Health displays information about the system's health plus a visual history of the system's temperature over the previous month.
- Updates display the current software version and detail any updates available for the system. There is also a toggle switch to turn on 'Hotfix Updates' whereby updates are delivered automatically to the system.
- Installation Report displays all crucial information about the installation on one page. We recommend you print this page once the installation is complete to ensure the installation is correct.

Cloud Monitoring Service



Dashboard

Account

My Installs

My Products

Documentation & Drivers

Web Shop

(0000) ADMINISTRATOR

Home > My Products > P8SN1155763 > Installation Report

CONFIGURATION

OVERVIEW

PORT DETAILS ☒

Inputs

Input 1 (Input 1)

Input 2 (Input 2)

Input 3 (Input 3)

Input 4 (Fire TV Stick)

Input 5 (Input 5)

Input 6 (UBP X500)

Input 7 (Input 7)

Input 8 (Input 8)

Outputs

Output 1 (Output 1)

Output 2 (SONY TV)

Output 3 (Output 3)

Output 4 (Output 4)

INSTALLATION REPORT

SYSTEM HEALTH

Status: Healthy

Inputs: All Present & Healthy

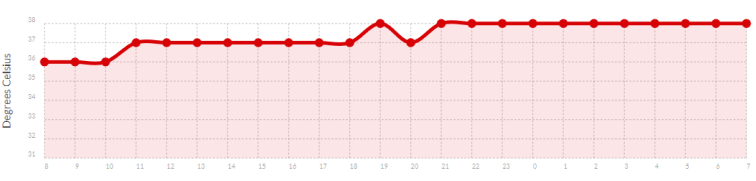
Outputs: All Present & Healthy

Model: neoX

Firmware Version: 3.2.20

Current Uptime: 1130 days, 16 hours, 48 minutes

Temperature, Day Trend



INPUTS

Input	Name	Signal Received


OUTPUTS

Output	Name	Manufacturer

## Documentation & Drivers

Under the Documentation and Drivers tab you will find links to the latest third party control drivers, manuals and troubleshooting guides alongside API information.

Cloud Monitoring Service



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DOCUMENTATION

Visit our Documentation Hub

API

Overview

CEC

EDID

IR

Monitoring

Network

Port

System

Misc

By Laura Parr / 08 June 2022

This firmware is available for the following products:

neo:X+

neo:X

Changed:

Audio volume will only be controllable in Sink Active mode.

Please be aware updating to this firmware will override your existing audio settings and you will need to set these up in gotomymatrix.com again once the update has been applied.

## TROUBLESHOOTING

Should you encounter installation difficulties or issues with device communication, the following checklist of common issues and causes should help resolve your issues. If you still continue to experience issues, please contact your local representative for further assistance.

### No or Poor Picture Quality

- Connected and powered? Double check all HDMI®, and power cables are firmly connected into the correct ports and all devices are correctly powered.
- Cable length? Are you approaching the maximum distance of the HDMI® cable (e.g. 8m) if so, try adjusting the picture resolution/format. Cables bundled together may cause cross-talk and further degrade signal quality.
- Signal strength? The use of cable joins, stranded patch panels, wall outlands and stranded patch leads as interconnects between them can significantly reduce signal strength. Use solid core straight through connections wherever possible.
- If you reduce the resolution of the source (e.g. from 4K to 1080p), do you get a picture? If so, this suggests a conflicting resolution between source and display or a bandwidth capacity issue with your cable. Check all inputs and outputs share the same resolution capabilities.
- Pink or off-colour picture? This could be caused by an invalid EDID or the source device failing to read the EDID over the splitter. Try plugging and replugging (hotplug) the HDMI® cable on the transmitter that is connected to the video Source, or even rebooting the attached Source, to force the re-reading of the EDID.
- Cable quality and condition - HDMI® cable/connectors can easily be damaged and the quality of material can vary. Always use good quality leads and cables and try swapping cables that are known to be working into the solution to see if this improves your image.

### Infrared Not Functioning

1. Make sure to use the compatible IR flasher/receiver for this video splitter.
2. Check and see if the LED beside the IR port is lighting up. It signifies whether the IR connection is working.
3. If the IR bud is not receiving or transmitting, test it out with a different port or swap with another IR bud to deduce the problem

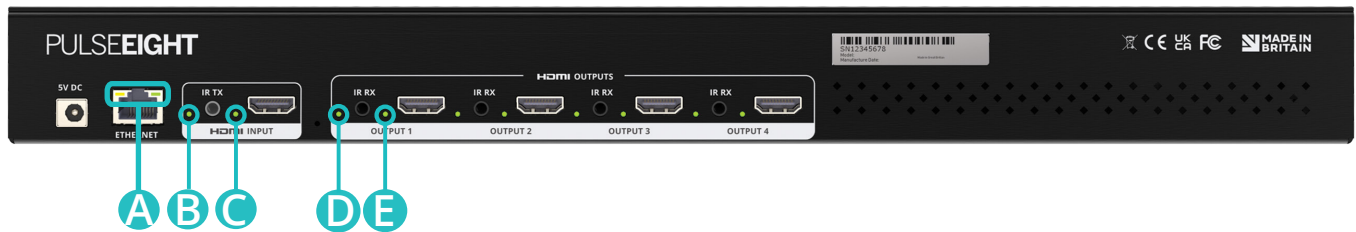
 *Note: Do not mix and match 12V or 5V IR products to different video splitters as they could cause irreparable damage.*

### IR Control

- Are the IR emitters and receivers correctly positioned to allow infrared signals to be transmitted and received? Emitters should be fixed firmly over infrared sensors of sources. Receivers should be attached or next to displays ensuring a clear line of sight to the remote control used to operate. Each IR port has an LED, when correctly installed the LED will flash when IR is transmitting or receiving.
- Is your remote control powered and sending a signal? As IR is invisible to the naked eye. A good trick to check whether your remote is transmitting a signal is by viewing the remote handset sensor through a digital camera/camera phone. The sensor should flash when a button on the handset is held down.
- IR signal dropout can be experienced due to exterior emissions of infrared radiation. Ensure emitters and receivers are away from direct sunlight. Halogen lighting and plasma screens may also interfere with IR signals.

## LED Status

There are several debug LEDs next to the input and output ports that can help with any further troubleshooting.



### A ETH RJ45 Left:

OFF - No Ethernet.

AMBER (Blinking) - Activity on Network.

### ETH RJ45 Right:

OFF - No Ethernet.

GREEN - Connected to Network.

### B IR TX:

GREEN (Flashing) - IR signal present on IR transmitter port (TX).

### C HDMI® Input:

OFF - No Signal.

GREEN - HDMI® +5V and Signal.

### D IR RX:

GREEN (Flashing) - IR signal present on IR receiver port (RX).

### E HDMI® Output:

OFF - No Signal.

GREEN - HDMI® Hotplug.

## MANUAL VERSION HISTORY

V2.0 - 21st July 2022. Update existing manual to new format

V2.1- 11th October 2022. Further updates.

V2.2 - 28th June 2023. Included Revision History section.

V2.3 - 9th February 2024. Minor update on the Safety Precaution and Intallation section.

## WARRANTY PROCEDURE

The following policies covers all Pulse-Eight products.

Unless otherwise instructed, please do not open any of our products. Doing so will invalidate your warranty. As part of the troubleshooting procedure, you may be instructed to open the device, but you can only proceed with this once consent has been given.

To open a support ticket, please visit: [www.pulse-eight.com/support](http://www.pulse-eight.com/support).

**Please Note:** Warranty cover for ALL products starts from date of receipt of goods NOT date of installation. Should we find that your product does need replacing, we will send your replacement directly to the distributor you purchased from, if not purchased directly from Pulse-Eight.

From 1st April 2022, any products purchased will have new warranty lengths. The length of warranty is determined by the type of product purchased. Our cover can be broken down into 3 categories:

### **Gold, Silver, and Bronze.**

#### **GOLD: Pulse-Eight Audio and Video Matrices**

- 5-year warranty as standard
  - 3-year advanced replacements
  - 2-year return to base for repair

#### **SILVER: Pulse-Eight Amps, Extender Sets, and Accessories**

- 3-year warranty as standard
  - 1-year advanced replacements
  - 2-year return to base for repair

#### **BRONZE: IR, Cables, Brackets, and our Tech Tools**

- 1-year advanced replacements

### **Pulse-Eight Current Product—Within the advanced replacement warranty year(s)**

1. Contact support via phone or a support ticket. Pulse-Eight will try to help troubleshoot and resolve the issue remotely.
2. If unable to resolve the fault remotely and the unit needs replacing an advanced replacement will be raised with the installer who purchased it. If you purchased from a distributor you will need to return to your distributor and they will contact Pulse-Eight to get the RMA raised. All distributor advanced replacements will be sent to the distributor and cannot be sent directly to their installer.

### **Pulse-Eight Current Product—Within return to base warranty**

1. Contact support via phone or a support ticket. Pulse-Eight will try to help troubleshoot and resolve the issue remotely.
2. If unable to resolve the fault remotely and the unit needs to be repaired, an RMA will be raised with the installer if purchased direct from Pulse-Eight. Or if purchased from a distributor, the installer will be directed back to their distributor who will raise an RMA.

### **Pulse-Eight Products Purchased Before 1st April, 2022.**

Please visit: [Warranty Page](#). Or Contact support via phone, opening a support ticket or emailing [support@pulse-eight.com](mailto:support@pulse-eight.com).

## WARRANTY TERMS & CONDITIONS

### **IMPORTANT INFORMATION ABOUT YOUR RIGHTS AND OBLIGATIONS, AS WELL AS LIMITATIONS AND EXCLUSIONS THAT MAY APPLY TO YOU. YOUR RIGHTS AND THIS LIMITED WARRANTY**

This Limited Warranty gives you specific legal rights. You may also have other legal rights that vary by state, province, or jurisdiction. The disclaimers, exclusions, and limitations of liability under this Limited Warranty will not apply to the extent prohibited by applicable law. For a full description of your legal rights, you should refer to the laws applicable in your jurisdiction and you may wish to contact a relevant consumer advisory service.

#### **1. WHAT THIS LIMITED WARRANTY COVERS; PERIOD OF COVERAGE**

Pulse-Eight Limited ("Pulse-Eight"), 8-12 Alder Hills, Poole, BH12 4AL, UK, warrants to the owner of the enclosed product that the product contained in this box ("Product") will be free from defects in materials and workmanship for a period of three years from the date of delivery following the original purchase (the "Warranty Period"), or if this product has been professionally installed, the warranty start date is from the date your installer purchased the item, not your system commissioning date. Please check with your installer for their purchase date. If the Product fails to conform to this Limited Warranty during the Warranty Period, Pulse-Eight will, at its sole discretion, either (a) repair or replace any defective Product or component; or (b) accept the return of the Product and refund within 45 days of return the money actually paid by the original purchaser for the Product. Repair or replacement may be made with a new or refurbished product or components, at Pulse-Eight's sole discretion.

If the Product or a component incorporated within it is no longer available, Pulse-Eight may replace the Product with a similar product of similar function, at Pulse-Eight's sole discretion. This is your sole and exclusive remedy for breach of this Limited Warranty. Any Product that has either been repaired or replaced under this Limited Warranty will be covered by the terms of this Limited Warranty for the longer of ninety (90) days from the date of delivery or the remaining Warranty Period. This Limited Warranty is transferable from the original purchaser to subsequent owners, but the Warranty Period will not be extended in duration or expanded in coverage for any such transfer.

#### **2. TOTAL SATISFACTION RETURN POLICY**

If you are the original purchaser of the Product and you are not satisfied with this product for any reason, you may return it in its original condition within thirty (30) days of the original purchase and receive a full refund. If this is a professionally installed product, you must check with your installer regarding their own returns policy.

#### **3. WARRANTY CONDITIONS; HOW TO GET SERVICE IF YOU WANT TO CLAIM UNDER THIS LIMITED WARRANTY**

Before being able to claim under this Limited Warranty, the owner of the Product must (a) notify Pulse-Eight of the intention to claim by emailing [support@pulse-eight.com](mailto:support@pulse-eight.com) during the Warranty Period and providing a description of the alleged failure, and (b) comply with Pulse-Eight's return shipping instructions, and (c) ship the Product at owner's cost (except where prohibited by applicable law) to Pulse-Eight for repair or replacement. Pulse-Eight will have no warranty obligations with respect to a returned Product if it determines, in its reasonable discretion after examination of the returned Product that the Product is an Ineligible Product (defined below). Pulse-Eight will bear all costs of return shipping to the owner, except with respect to any Ineligible Product, for which the owner will bear all shipping costs.

#### **4. WHAT THIS LIMITED WARRANTY DOES NOT COVER**

This warranty does not cover the following (collectively "Ineligible Products"): Products marked as "sample" or sold "AS IS"; or Products that have been subject to: (a) modifications, alterations, tampering, or improper maintenance or repairs; (b) handling, storage, installation, testing, or use not in accordance with the Installation Guide or other instructions provided by Pulse-Eight; (c) abuse or misuse of the Product; (d) breakdowns, fluctuations, or interruptions in electric power or the telecommunications network; or (e) Acts of God, including lightning, fire, flood, tornado, earthquake, or hurricane. This warranty does not cover consumable parts, including batteries unless damage is due to defects in materials or workmanship of the Product, or software (even if packaged or sold with the product). Pulse-Eight recommends that you use only authorized service providers for maintenance or repair. Unauthorized use of the Product or software can impair the Product's performance and may invalidate this Limited Warranty. Pulse-Eight does not warrant that operation of the Product will be error-free or uninterrupted or that the Product will in every case process all data correctly.

## 5. DISCLAIMER OF WARRANTIES

Except as stated above in this limited warranty, and to the maximum extent permitted by applicable law, Pulse-Eight disclaims all express, implied, and statutory warranties and conditions with respect to the product, including the implied warranties of merchantability, fitness for a particular purpose. To the maximum extent permitted by applicable law, also limits the duration of any implied warranties or conditions to the duration of this limited warranty.

## 6. LIMITATION OF DAMAGES

In addition to the above warranty disclaimers, in no event will Pulse-Eight be liable for any consequential, incidental, exemplary, or special damages, including any damages for lost data or lost profits, arising from or relating to this limited warranty or the product, and Pulse-Eight's total cumulative liability arising from or related to this limited warranty or the product will not exceed the amount actually paid for the product by the original purchaser.

## 7. LIMITATION OF LIABILITY

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## 8. VARIATIONS THAT MIGHT APPLY TO THIS LIMITED WARRANTY

Some jurisdictions do not allow limitations on how long an implied warranty lasts or exclusions/limitations on incidental or consequential damages, so some of the limitations set out above may not apply to you.

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