# PULSE**EIGHT**



## SPRING 2021 PRODUCT PORTFOLIO

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MADE IN



### ABOUT **PULSE-EIGHT**

Located in the UK, Pulse-Eight is a multi-award winning, industry leading developer and manufacturer of Audio/Video (AV) control and distribution solutions for professional installation markets.

#### **MADE IN BRITAIN**

Since 2010, Pulse-Eight has embraced a passion for AV product design, while investing significantly to provide a full UK based turnkey design and manufacturing capability. Pulse-Eight has developed significant experience in electronic, mechanical and software engineering, combining to produce 'best in class' solutions through its internalised R&D capability and state-of-the-art 24,000sqft factory, located in Poole, Dorset, UK.

#### **FULLY CERTIFIED**

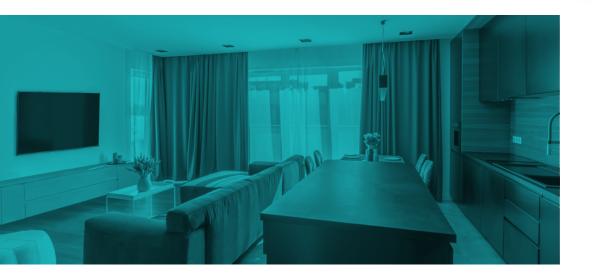
Pulse-Eight is a certified and leading contributor to many major technology platforms, working closing with organisations such as the HDBaseT Alliance. Pulse-Eight were the first organisation in the world to develop and commercialise a fully certified 18Gbps 4K 4:4:4 signal solution over HDBaseT, undoubtedly bench marking Pulse-Eight as one of the leading developers and manufacturers of high-quality AV transmission devices deployed over structured cabling infrastructures.

#### **WORKING WITH YOU**

Pulse-Eight, through greater understanding of its market and customers, has demonstrated the ability to push innovation past the basics of video processing. Already the worldwide market leader in the development of advanced CEC control devices, Pulse-Eight are now leading the way with new embedded technologies which easily substantiate 'best in class' classifications of many products released to the market. The whole organisation embraces superior motivation to provide holistic solutions that provide a better overall experience both for the professional installer and end-user.







MADE IN BRITAIN

The neo:X+ Video & Audio Matrix has it all - with both audio and video inputs and video and audio outputs. Featuring 8 HDMI inputs, 8 HDBaseT Outputs and 2 HDMI outputs alongside 10 audio output zones (with the options of Stereo L/R, Optical and Digital Coax) and 4 audio Inputs (with the option of Optical and Digital Coax).

The neo:X+ goes the distance, supporting full 4K/60, 4:4:4, 8bit or 4K/60 4:2:2, 12bit up to 100 meters (320 feet) and 1080p up to 150 meters (490 feet). With audio breakout, Dolby Digital compliance and multiple video control methods.

#### **KEY FEATURES:**



## THE MASTERS OF AUDIO & VIDEO DISTRIBUTION



#### GO THE DISTANCE WITH DSC

DSC (Display Stream Compression) enables full 4K video transmission over further distances using HDBaseT, with zero latency or tearing. Implementing this technology, the neo:X+ supports 4K/60, 4:4:4 or 4K/60 4:2:2 up to 100 meters and supports 1080p up to an impressive 150 meters! \*1080p 150 meters long range on request (100 meters as standard)



#### AUDIO ROUTING CONTROL

With the integrated audio matrix functions, the neo:X+ can handle routing of audio to external speakers within the install. Using smart TV apps? No problem, utilising ARC (Audio Return Channel), the supplied neo:Ultra Receivers can extract the audio and route it through the matrix and out of the audio output zones. There's no need to worry about lip sync issues either as you can set the audio delay function up to a 340ms per zone. Both systems also feature zone locking settings whereby you can lock the routing of the audio to one or more audio outputs no matter what source changes occur.



#### MAXIMUM FLEXIBILITY

The neo:X+ audio and video matrix supports a variety of control methods, including CEC, IR, Alexa voice control, web interface and set top box IP control. Having these options allows the installer and the end user to agree on what is best for their requirement. The full neo matrix range is also fully compatible with all major control systems including AMX, Crestron, Control 4, Elan, RTI and URC. All CEC features are exposed in the drivers which allows you to create powerful control experiences and ensure full compatibility with home automation products.



#### EXPANDED WEB INTERFACE

Pulse-Eight's Web Interface's admin area has been created for the sole purpose of tweaking the system's settings to requirement during installation. The neo:X+ has expanded functionalities such as zone locking, lip sync delay and volume control. Within the interface you can also change the audio mode to either 'Source mode' to link to a single source (you can add multiple audio output zones) or 'Sink Mode' to link directly to a video output to route the source's audio instantly.







#### **TECHNICAL SPECIFICATION:**

SKU: P8-HDBT2-U-FFMJ1210-KIT HDMI Inputs: 8 Audio Inputs: 4 HDBaseT Outputs: 8x HDBaseT Class C+DSC (Ultra) HDMI Outputs: 2 Audio Output Zones: 10 Max HDBaseT Cable Distance 4K: 100 meters Max HDBaseT Cable Distance 1080p: 150\* meters HDBaseT Recommended Cable: Cat5e or greater Ethernet Passthrough: Yes - 10/100 Serial Control: Yes - RS-232 IP Control: Yes IR Control: Bi-Directional HDMI-CEC Control: Full Voice Control: Yes - Alexa Skill Web Interface: Yes + Android App available Monitoring: Real Time Remote Monitoring Portal Automatic EDID Management: Yes

\*1080p 150 meters long range on request (100 meters as standard)

#### **KIT INCLUDES:**

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neo:X+ Chassis | 8x neo:Ultra POH Receivers | Rack Ears 8x Infrared Blaster Cable Pack | 8x Receiver Wall Brackets Country Specific Power Cord | Installation Guide ALSO AVAILABLE AS CHASSIS ONLY

Google Play

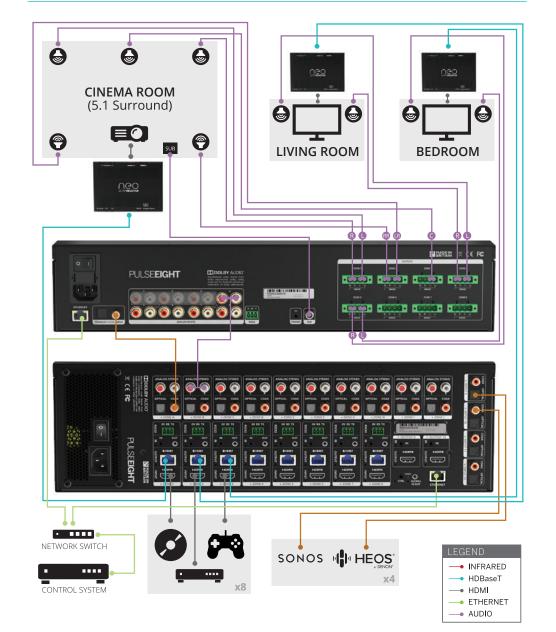
Third Party Control: Yes - Drivers available ARC (Audio Return Channel): Yes DSC (Display Stream Compression): Yes PoH: 8x neo:Ultra PoH Receivers included Encryption: HDCP 1.4 and HDCP 2.2 Maximum Pixel Clock: 600Mhz Maximum Bandwidth: 18Gbps Maximum Video Resolution: 4K/60Hz 4:4:4 Power Consumption: Max 2Amps @ 240V Power Supply: IEC C14 Inlet - 100-240V 4.0/2.0A 50/60Hz Material: Brushed Aluminium (Anodised) Product Dimensions: 44 x 13 x 32 cm - 3U (Matrix) Product Weight: 4.83 kg (Matrix) Operating Temp Range: 0 to +35°C (32 to +95°F) Storage Temp Range: -20°C to 60°C (-4°F to 140°F) Humidity Range: 5 to 90% RH (no condensation) Safety & Emissions: UKCA, CE, FCC, RoHS

Manufactured In: Great Britain by Pulse-Eight MADE IN BRITAIN



Delby Audio HOMI CHOBT HOCPE2 HLG

#### CONCEPT WIRING DIAGRAM: NEO:X+ AND PROAMP8



RTI

#### **COMPATIBLE CONTROL SYSTEMS**

Drivers available for our neo matrix range include:

Control

SAVANT **SAVANT** 

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# OO HDBaseT<sup>™</sup> VIDEO MATRIX RANGE



MADE IN BRITAIN

The neo HDBaseT<sup>™</sup> video matrix range, available in 4x4 and 8x10 variants, is the perfect blend of simplicity and sophistication. Created by our passionate in-house engineering team for the sole purpose of seamlessly distributing video. By utilising the latest HDBaseT<sup>™</sup> technology, our neo matrix systems push the boundaries of both performance and reliability.

Each neo matrix is fully manufactured in our state-of-the-art production facility within our head office in Poole on England's south coast. By retaining the entire design and assembly processes in-house we keep full control, ensuring we produce systems to the highest possible quality.

#### **KEY FEATURES:**





Our neo video matrix range features unrivalled control options including set-top box IP, infrared, HDMI-CEC, voice control and web interface/remote app - the choice is yours! Pulse-Eight's flagship control technology, CEC, allows any supported TV to send key presses from the original TV remote through the HDBaseT<sup>™</sup> link and the matrix will route these messages to the connected source devices, gone are the days of 5 remote controls in one room.

NGO

PULSEEIGHT

#### **REMOTE MONITORING**

It's important that you get video all the time, to enable this your system keeps in contact with our cloud management service. You can tell if this is working with the Monitored LED on the front of the matrix. If you get stuck, you can log into our cloud portal and see helpful diagnosis information, fix problems remotely or see where you may have gone wrong in the installation. All of this is free of charge. If the matrix has a problem, we get alerted too and we can get in contact to arrange to give you a step by step guide to get you up and running again, if required.



#### THIRD PARTY CONTROL

We are truly passionate about the AV industry and for that reason we understand that every installation is unique and some may have additional hardware to integrate. When we established our matrix range we had the aim to create systems that could easily work as a stand-alone unit but could also work with control systems. With drivers for such processors as RTI, Control4, Crestron, Elan (plus many more) we can ensure a neo matrix will be the perfect fit whatever the requirement.

#### EVERY We believ

#### EVERYTHING YOU NEED IN THE BOX

We believe in supplying all the hardware you need for the installation in a single box. With every neo matrix kit you will find the system itself alongside the required PoH receivers, rack ears, IR blaster cables (if you wish to use them) and an IR card remote to help with initial setup. For those times when you do not need the full kit, all of our matrices are also available as chassis only so simply buy the chassis and then add the receivers and accessories you require.

#### NEO:8A 8X10 VIDEO MATRIX KIT





#### **TECHNICAL SPECIFICATION:**

#### SKU: P8-HDBT-L-FFMB810A-KIT

#### HDMI Inputs: 8

Audio Outputs: 8x HDMI Source Audio Breakouts HDBaseT Outputs: 8x HDBaseT Class B (lite) HDMI Outputs: 2 Max HDBaseT Cable Distance 4K: 40 meters

Max HDBaseT Cable Distance 1080p: 70 meters HDBaseT Recommended Cable: Cat5e or greater Ethernet Passthrough: No HDMI-CEC Control: Full Voice Control: Yes - Alexa Skill Web Interface: Yes + Android App available Monitoring: Real Time Remote Monitoring Portal Automatic EDID Management: Yes Third Party Control: Yes - Drivers available ARC (Audio Return Channel): No (Source Audio Breakout only)

PoH: 8x neo:Lite PoH Receivers included with kit Encryption: HDCP 1.4 and HDCP 2.2 Maximum Pixel Clock: 340Mhz Maximum Bandwidth: 10.2Gbps Maximum Video Resolution: 4K/60Hz 4:2:0 Colour Supported: 4K: 8bit, 1080p: 12bit Power Consumption: Max 2Amps @ 240V Power Inlet: IEC C14 Inlet - 100-240V 4.0/2.0A 50/60Hz Material: Brushed Aluminium (Anodised) Product Dimensions: 44 x 9 x 30.5 cm - 2U (Matrix) Product Weight: 3.78 kg (Matrix) Operating Temp Range: 0 to +35°C (32 to +95°F) Storage Temp Range: -20°C to 60°C (-4°F to 140°F) Humidity Range: 5 to 90% RH (no condensation) Safety & Emissions: UKCA, CE, FCC, RoHS Manufactured In: Great Britain by Pulse-Eight

DSC (Display Stream Compression): No

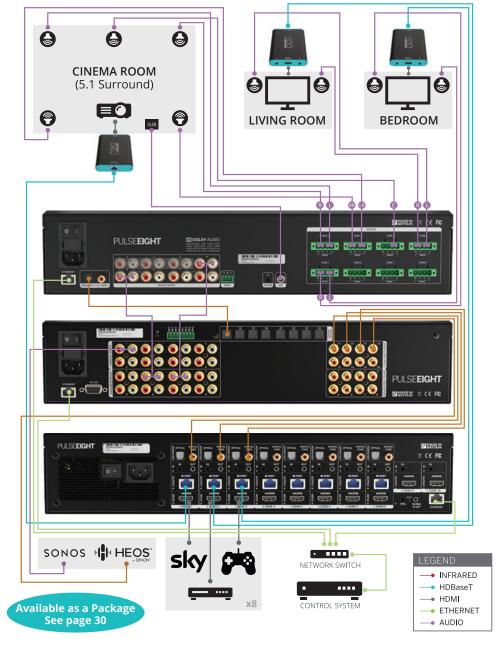
#### **KIT INCLUDES:**

neo:8a Chassis | 8x neo:Lite PoH Receivers 8x Infrared Blaster Cable Pack | Rack Ears Country Specific Power Cord | Installation Guide ALSO AVAILABLE AS CHASSIS ONLY



HOMI CHOBIT HOCPED

#### **CONCEPT WIRING DIAGRAM: NEO:8a, PROAMP8 AND PROAUDI08**



#### **COMPATIBLE CONTROL SYSTEMS**

Control Control Control

## $\bigcirc \bigcirc$

#### NEO:6A 6X8 VIDEO MATRIX KIT





#### **TECHNICAL SPECIFICATION:**

SKU: P8-HDBT-L-FFMN68-KIT HDMI Inputs: 6

Audio Outputs: 6x HDMI Source Audio Breakouts HDBaseT Outputs: 6x HDBaseT Class B (lite) HDMI Outputs: 2 Max HDBaseT Cable Distance 4K: 40 meters

Max HDBaseT Cable Distance 1080p: 70 meters HDBaseT Recommended Cable: Cat5e or greater Ethernet Passthrough: No IR Control: Bi-Directional HDMI-CEC Control: Full Voice Control: Yes - Alexa Skill Web Interface: Yes + Android App available Monitoring: Real Time Remote Monitoring Portal Automatic EDID Management: Yes Third Party Control: Yes - Drivers available ARC (Audio Return Channel): No (Source Audio Breakout only)

#### **KIT INCLUDES:**

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neo:6a Chassis | 6x neo:Lite PoH Receivers 6x Infrared Blaster Cable Pack | Rack Ears Country Specific Power Cord | Installation Guide ALSO AVAILABLE AS CHASSIS ONLY



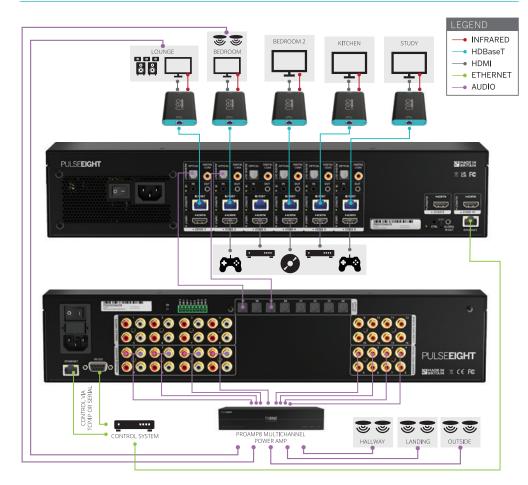
DSC (Display Stream Compression): No PoH: 6x neo:Lite PoH Receivers included with kit Encryption: HDCP 1.4 and HDCP 2.2 Maximum Pixel Clock: 340Mhz Maximum Bandwidth: 10.2Gbps Maximum Video Resolution: 4K/60Hz 4:2:0 Colour Supported: 4K: 8bit, 1080p: 12bit Power Consumption: Max 2Amps @ 240V Power Inlet: IEC C14 Inlet - 100-240V 4.0/2.0A 50/60Hz Material: Brushed Aluminium (Anodised) Product Dimensions: 44 x 9 x 30.5 cm - 2U (Matrix) Product Weight: 3.78 kg (Matrix) Operating Temp Range: 0 to +35°C (32 to +95°F) Storage Temp Range: -20°C to 60°C (-4°F to 140°F) Humidity Range: 5 to 90% RH (no condensation) Safety & Emissions: UKCA, CE, FCC, RoHS

Manufactured In: Great Britain by Pulse-Eight



HOMI" (HDBT" HDCP22

#### **CONCEPT WIRING DIAGRAM: NEO:6a**



#### IDENTIFYING IR BUDS

#### **IR EMITTER**

The grey ended bud is placed over the IR window on the source device. Many of our products feature a matching grey port for easy installation.

#### IR RECEIVER

The black ended bud is to be placed on the TV's underside, designed especially for a discreet look on modern TVs.

#### **COMPATIBLE CONTROL SYSTEMS**

Drivers available for our neo matrix range include:





Receiver

SAVANT **SULC** 

Emitter

Neo

-





**4X4 VIDEO MATRIX KIT** 

PULSEEIGHT



#### **TECHNICAL SPECIFICATION:**

SKU: P8-HDBT-L-FFMS44-22-KIT HDMI Inputs: 4 Audio Outputs: 0 HDBaseT Outputs: 4x HDBaseT Class B (lite) HDMI Outputs: 2 (Mirror) Max HDBaseT Cable Distance 4K: 40 meters Max HDBaseT Cable Distance 1080p: 70 meters HDBaseT Recommended Cable: Cat5e or greater Ethernet Passthrough: No IR Control: Bi-Directional HDMI-CEC Control: Full Voice Control: Yes - Alexa Skill Web Interface: Yes + Android App available Monitoring: Real Time Remote Monitoring Portal Automatic EDID Management: Yes Third Party Control: Yes - Drivers available ARC (Audio Return Channel): No

#### PoH: 4x neo:Lite PoH Receivers included with kit Encryption: HDCP 1.4 and HDCP 2.2 Maximum Pixel Clock: 340Mhz Maximum Bandwidth: 10.2Gbps Maximum Video Resolution: 4K/60Hz 4:2:0 Colour Supported: 4K: 8bit, 1080p: 12bit Power Consumption: 120W Power Supply: 48V @ 2.5Amps Material: Brushed Aluminium (Anodised) **Product Dimensions:** 44 x 4.3 x 14 cm - 1U (Matrix) Product Weight: 1.15 kg (Matrix) Operating Temp Range: 0 to +35°C (32 to +95°F) Storage Temp Range: -20°C to 60°C (-4°F to 140°F) Humidity Range: 5 to 90% RH (no condensation) Safety & Emissions: UKCA, CE, FCC, RoHS Manufactured In: Great Britain by Pulse-Eight

DSC (Display Stream Compression): No

#### **KIT INCLUDES:**

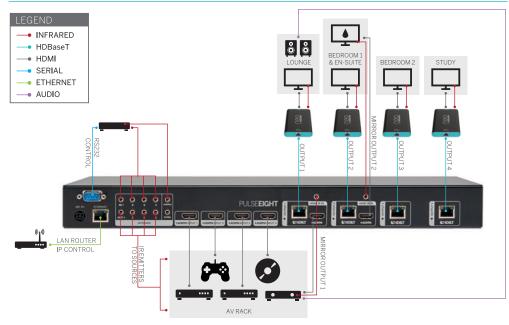
neo:4 Professional Chassis | 4x neo:Lite PoH Receivers 4x Infrared Blaster Cable Pack | Installation Guide Country Specific Power Supply and Cord | Rack Ears ALSO AVAILABLE AS CHASSIS ONLY



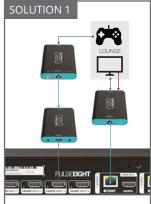
Google Play

HOMI" (HDBT" HDCP22

#### CONCEPT WIRING DIAGRAM: NEO:4 PROFESSIONAL



#### **CONCEPT SOLUTIONS: NEO:4 PROFESSIONAL**



SOURCE IN A ROOM Use an additional neo:Lite HDMI Extender set to loop back to the matrix



**SOLUTION 2** 

HOME THEATRE PC Add a USB-CEC Adapter between the matrix and the PC via a HDMI input

## **SOLUTION 3** BEDROOM 1 LOUNGE ULSEEIGHT .

**EXTRA ZONE** Use a HDMI mirror output with a neo:Lite Extender set (mirrored from the HDBaseT output)

#### **COMPATIBLE CONTROL SYSTEMS**

Drivers available for our neo matrix range include:







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### A WORLD OF CONTROL

Pulse-Eight's neo matrix range offers unrivalled video control options, we believe the installer and end user should be able to select the most appropriate control method for that particular installation.



#### CEC

Imagine being able to control all of your devices (Sky, Blu-Ray Player etc) all from your original TV remote control... CEC control does just that. Most TVs now support CEC and, using our very own libCEC. you can just use your normal TV remote to select and control any connected source devices. even if the source does not support CEC itself.

#### SET TOP BOX IP CONTROL

We have implemented IP control with dynamic forwarding. Meaning that you can now control set top boxes via CEC. Working with Sky HD, Sky Q, Virgin TiVo, Dish Hopper and Kodi, this type of IP based control is a first for a matrix and removes the need for any IR control.

#### **ALEXA VOICE CONTROL**

With the neo Alexa skill enabled on your Amazon Echo or Dot you can use commands to turn a certain TV on or off or to control or switch source devices. Imagine being able to control your TV without having to lift a finger - the matrix will make your requests happen.

#### WEB INTERFACE

Our interface is a free function of all neo matrix systems - simply download the Android app or visit www.gotomymatrix.com to access. With drag and drop source switching plus a virtual remote displaying all the most important functions of a TV remote, the interface controls it all!

### Now compatible with iPhone

The neo:Tap Virtual Remote Launcher<sup>\*</sup> is designed to give the end user quick access to the neo TV Remote Control app for the room they are in. Completely wireless, works with most NFC enabled mobile devices and created by us to work seamlessly with the neo matrix range. No need to open apps... Just tap!

### TOOLS FOR ON AND OFF SITE

We work closely alongside installers to ensure we do everything we possibly can to help every install run as planned. We know installs can sometimes encounter issues at setup and some can run fine until something unexpected happens (such as a builder drilling through a cable), we have refined tests and data listings to help you solve problems whenever they occur.



#### WFB INTERFACE WWW.GOTOMYMATRIX.COM

While on-site our web interface is the one-stop location for the entire setup, alongside the settings, our interface features intuitive diagnostic tools to not only help during install but also for final testing to give you peace of mind that everything is in order before leaving site.

#### Interface Features:

- Cable Link Noise Test
- HDBaseT Link Test • Full EDID Profile Control

Alexa Voice Setup

- Network Settings
  - CEC Control (on/off)
  - Custom IR Profile Control
- LED Adjustment
- System Hardware Details
- Reboot Function
- Audio Routing (neo:X and X+ only)



#### MONITORING PORTAL **MONITORING.PULSE-EIGHT.COM**

Our monitoring portal is the one-stop location to find all the information about your installed systems without needing to visit the site - check up on your installs from anywhere at any time!

Cable Link Quality Check

Reboot Function

Update System

#### **Monitoring Features:**

- System Health Information
- Temperature History Graph
- Network Configuration List
- Temperature History Graph Driver Download



## Pro**Amp MULTI-ZONE POWER AMPLIFIER**



Pulse-Eight's ProAmp8 is a powerful and versatile 8-Zone Power Amplifier that delivers excellent audio performance with robust and reliable Class D amplification in a compact form factor. The ProAmp8 is the all-in-one ideal solution for both surround sound and distributed audio systems.

The ProAmp8 offers a wide range of feature sets such as: full audio DSP and EQ settings, Multi-Zone Mode and Dolby Digital 5.1/3.1/2.1 Surround Sound Mode. This level of versatility allows for a home theatre alongside a multi-room whole-house distributed audio system all in one box. The amplifier is the perfect partner to Pulse-Eight's ProAudio DSP pre-amp range and latest neo matrices.

#### **KEY FEATURES:**



### THE ALL-IN-ONE SOLUTION FOR AMPLIFICATION

PULSEEIGHT

\_Pro**Amp**8\_





#### **DRIVEN BY ICEpower**

Each zone of the ProAmp Power Amplifier is driven by ICEpower modules, delivering up to 100 watts of high-quality sound per channel. Through ground-breaking innovation and worldclass knowledge, ICEpower has developed superior sound solutions for professional audio industries and end users all over the world.

#### FLEXIBLE CONFIGURATION

The ProAmp8 can be configured to either Stereo Multi-Zone Mode or Dolby Multi-Channel Mode. Stereo Multi-Zone enables 8 zones of stereo audio whereas Dolby Multi-Channel Mode allows a ground-breaking solution of a 5.1 Dolby surround setup alongside an additional 5 zones of stereo audio. This level of versatility allows for a 5.1 "home theatre" alongside a multi-room whole-house distributed audio system all in one box and eliminating the AVR.



#### THIRD PARTY CONTROL

We truly understand the AV market and work closely with industry professionals to ensure our products provide everything the end-user requires. For this reason we love to integrate the ability to work with third party control systems and provide drivers and API protocols for all major control brands.



#### ENERGY EFFICIENT

ProAmp has been designed for low-energy consumption, so when the amplifier is in standby and not in use it will 'auto-sense' which zones are in use and will power down those zones. With fast wake up times, the ProAmp will 'auto-sense' and power up within 1 second. The parameters of the sense levels and idle timeouts can be adjusted through the web interface.

#### EXPANDED WEB INTERFACE

Pulse-Eight have created a brand new custom Web Interface's for the ProAmp, the user-end enables controls for day-to-day use such as muting and volume control and the admin area is designed specifically for initial professional setup including full Dolby Mode settings and room acoustic adjustments.







#### **TECHNICAL SPECIFICATION:**

SKU: P8-PROAMP8 Audio Inputs: 9 Stereo L/R Audio Inputs: 8 Digital Audio Inputs: 1 (Dolby 5.1 Supported) Audio Outputs Zones: 8 Active Subwoofer: 1x Line-Level Active Output 12V Triggers: 1 Serial Control: Yes - RS232 Phoenix TCP/IP Control: Yes Auto-Sense Wake-Up: <1 second (from standby) Third Party Control: Yes - Drivers available Rated Power @4Ω load: 100 watts per channel @1% THD+N / 80 watts per channel @0.1% THD+N Rated Power @8Ω load: 50 watts per channel @1% THD+N Rated Bridged Power @8Ω load: 200 watts @1%

THD+N / 160 watts @0.1% THD+N

**Configuration Modes:** Stereo Multi-Zone Mode or Dolby Multi-Channel Mode

#### KIT INCLUDES:

ProAudio8 Chassis | Power Cord | Rack Mounting Kit

 Material: Brushed Aluminium (Anodised)

 Product Dimensions: 44 x 8 x 22 cm - 2U

 Operating Temp Range: 0 to +45°C (32 to 113°F)

 Storage Temp Range: -20°C to 70°C (-4°F to 158°F)

 Humidity Range: 5 to 90% RH (no condensation)

 Safety & Emissions: UKCA, CE, FCC, RoHS

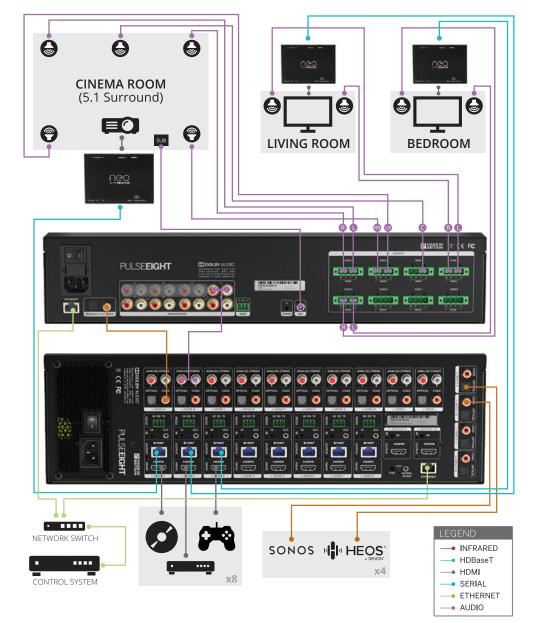
 Manufactured In: Great Britain by Pulse-Eight

#### **Dolby Audio Mode:**

Audio Delay: Up to 50ms per zone Volume Adjustments: -99.5dB to +24dB Equalizer: +/- 12dB Bass & Treble: +/- 12dB Line Level Output: Line level subwoofer Volume Range: 0 – 100. Adjustable Mute: On / Off Bass & Treble: +/- 12dB Stereo Channel Up-mix: Auto of stereo digital audio

Delby Audio

#### CONCEPT WIRING DIAGRAM: PROAMP8 AND NEO:X+



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#### **COMPATIBLE CONTROL SYSTEMS**

Drivers available for our ProAmp8 include:

Control

SAVANT &U:C

## Pro**Audio** Audio Matrix Range



Pulse-Eight's ProAudio<sup>™</sup> range of DSP pre-amp audio matrices offers innovative features and unmatched capabilities within the range. Designed exclusively by our own engineering team, the ProAudio systems are a versatile and cost-effective multi-zone audio system.

ProAudio has been designed for the custom install AV market, in many cases the need for an audio receiver can be eliminated by using the audio features of the ProAudio<sup>™</sup> Series. Cutting edge features such as lip sync delay, 5 band DSP attenuator per zone, zone locking, adjustable gain settings and automatic audio conversion, to name a few, and works seamlessly with all major control systems.

#### **KEY FEATURES:**



### AUDIO DISTRIBUTION MADE SIMPLE





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MADE IN BRITAIN

#### MAXIMUM AUDIO CONTROL

The ProAudio series provides maximum sound control including bass, treble and a 5 band DSP attenuator available for each zone. Audio and tone control is adjustable in 0.5dB steps, and all allow direct or relative adjustments (eg: Set the volume to an absolute -12.5dB, or increase it by 3.0dB). The tone controls have a range of +/-20dB. To balance the different levels of audio coming from different pieces of equipment, each audio input has a full range gain adjustment. The adjustment range is: +24dB to -99.5dB, or full mute, in 0.5dB increments.



#### SUBWOOFER CONTROL

With low pass and high pass filter settings adjustable from 50Hz to 300Hz, selectable 12db/24db per octave slope with Butterworth or Linkwitz-Riley filters and selectable polarity for each zone, the ProAudio provides easily adaptable subwoofer control.



#### DOORBELL/PAGING FEATURES

The connections on the reverse of the system provides the ability to connect doorbell/pager inputs to any output zone and to automatically lower the current volume and push through the doorbell/pager signal. This can also be adapted for fire/evacuation messages.

## All It ni inp

K.I.S.S

#### AUTOMATIC AUDIO CONVERSION

It makes no difference whether your audio comes in through the analogue inputs, digital coax inputs or digital optical inputs, all inputs can be converted to analogue to provide full flexibility. For hallways, and outdoor speakers, where stereo is not particularly useful, each zone can be mixed from stereo to mono using a variety of different methods.

#### KEEP IT SIMPLE SERIAL<sup>™</sup>

Available through the TCP/IP port or the RS-232 port, our K.I.S.S.<sup> $\infty$ </sup> is one of the easiest to use, serial port protocols, on the market. Yet the extensive bi-directional command set allows total control over the ProAudio<sup> $\infty$ </sup>.

## Pro**Audio**3248





#### **TECHNICAL SPECIFICATION:**

SKU: P8-PROAUDIO3248 Audio Inputs: 80 Stereo L/R Audio Inputs: 32 **Optical Audio Inputs:** 16 Digital Coax Audio Inputs: 32 Audio Outputs: 48 Stereo L/R Audio Outputs: 48 **Optical Audio Outputs:** 48 12V Triggers: 18 Serial Control: Yes - RS232 TCP/IP Control: Yes Third Party Control: Yes - Drivers available Lip Sync Delay: Up to 170ms per zone Volume Adjustments: 20db to +20db 0.5db steps Equalizer: 5 band EQ per zone Subwoofer Control: Yes Treble: -20db to +20db 0.5db steps Equalizer: 5 band EQ per zone

ProAudio3248 Chassis | Power Cord | Rack Mounting Kit

Input Gain Control: 24db to +24db Output Gain Control: -24db to +24db Transfer Rates: 13.2Mb/S Audio Modes: PCM, DD5.1, DTS, All modes Coax Input Levels: 200mV-7.0V (PC card compatible) Coax Output Level: 500mV nominal into 75 ohms Freq. Response: 5Hz-20KHz @ +/-0.1dB S.N Ratio: > 85dB, 5Hz-20KHz Input Impedance: 10K ohms Power Supply: 12V/60W Material: Brushed Aluminium (Anodised) Product Dimensions: 44 x 26 x 25 cm - 6U **Product Weight:** 5 kg Operating Temp Range: -10 to +70°C (14 to +158°F) Storage Temp Range: -20°C to 60°C (-4°F to 140°F) Humidity Range: 5 to 90% RH (no condensation) Safety & Emissions: UKCA, CE, FCC, RoHS Manufactured In: Great Britain by Pulse-Eight

## Pro**Audio**32

**DSP PRE-AMP AUDIO MATRIX** 







#### **TECHNICAL SPECIFICATION:**

**KIT INCLUDES:** 

SKU: P8-PROAUDIO32 Audio Inputs: 80 Stereo L/R Audio Inputs: 32 **Optical Audio Inputs:** 16 Digital Coax Audio Inputs: 32 Audio Outputs: 32 Stereo L/R Audio Outputs: 32 **Optical Audio Outputs: 32** 12V Triggers: 12 Serial Control: Yes - RS232 TCP/IP Control: Yes Third Party Control: Yes - Drivers available Lip Sync Delay: Up to 170ms per zone Volume Adjustments: 20db to +20db 0.5db steps Equalizer: 5 band EQ per zone Subwoofer Control: Yes Treble: -20db to +20db 0.5db steps Equalizer: 5 band EQ per zone

ProAudio32 Chassis | Power Cord | Rack Mounting Kit

Input Gain Control: 24db to +24db Output Gain Control: -24db to +24db Transfer Rates: 13.2Mb/S Audio Modes: PCM, DD5.1, DTS, All modes Coax Input Levels: 200mV-7.0V (PC card compatible) Coax Output Level: 500mV nominal into 75 ohms Freg. Response: 5Hz-20KHz @ +/-0.1dB S.N **Ratio:** > 85dB, 5Hz-20KHz Input Impedance: 10K ohms Power Supply: 12V / 60W Material: Brushed Aluminium (Anodised) Product Dimensions: 44 x 22 x 25 cm - 4U **Product Weight:** 4 kg Operating Temp Range: -10 to +70°C (14 to +158°F) Storage Temp Range: -20°C to 60°C (-4°F to 140°F) Humidity Range: 5 to 90% RH (no condensation) Safety & Emissions: UKCA, CE, FCC, RoHS Manufactured In: Great Britain by Pulse-Eight

> N MADE IN BRITAIN

#### MADE IN BRITAIN

**KIT INCLUDES:** 

## Pro**Audio**1632



Third Party Control

Zone

24

Made In Britain



#### 48 Audio Out Inputs Audio Out Zones Delay Cone Delay Cone Delay Cone Lock Third Party Control Britain

#### **TECHNICAL SPECIFICATION:**

SKU: P8-PROAUDIO16 Audio Inputs: 48 Stereo L/R Audio Inputs: 16 **Optical Audio Inputs:** 16 Digital Coax Audio Inputs: 16 Audio Outputs: 16 Stereo L/R Audio Outputs: 16 **Optical Audio Outputs:** 16 12V Triggers: 0 Serial Control: Yes - RS232 TCP/IP Control: Yes Third Party Control: Yes - Drivers available Lip Sync Delay: Up to 170ms per zone Volume Adjustments: 20db to +20db 0.5db steps Equalizer: 5 band EQ per zone Subwoofer Control: Yes Treble: -20db to +20db 0.5db steps **Equalizer:** 5 band EQ per zone

**KIT INCLUDES:** 

ProAudio16 Chassis | Power Cord | Rack Mounting Kit

Input Gain Control: 24db to +24db Output Gain Control: -24db to +24db Transfer Rates: 13.2Mb/S Audio Modes: PCM, DD5.1, DTS, All modes Coax Input Levels: 200mV-7.0V (PC card compatible) Coax Output Level: 500mV nominal into 75 ohms Freq. Response: 5Hz-20KHz @ +/-0.1dB S.N Ratio: > 85dB, 5Hz-20KHz Input Impedance: 10K ohms Power Supply: 12V/60W Material: Brushed Aluminium (Anodised) Product Dimensions: 44 x 8 x 22 cm - 2U Product Weight: 2 kg Operating Temp Range: -10 to +70°C (14 to +158°F) Storage Temp Range: -20°C to 60°C (-4°F to 140°F) Humidity Range: 5 to 90% RH (no condensation) Safety & Emissions: UKCA, CE, FCC, RoHS Manufactured In: Great Britain by Pulse-Eight



#### **TECHNICAL SPECIFICATION:**

SKU: P8-PROAUDIO1632 Audio Inputs: 40 Stereo L/R Audio Inputs: 16 **Optical Audio Inputs:** 8 Digital Coax Audio Inputs: 16 Audio Outputs: 32 Stereo L/R Audio Outputs: 32 **Optical Audio Outputs: 32** 12V Triggers: 12 Serial Control: Yes - RS232 TCP/IP Control: Yes Third Party Control: Yes - Drivers available Lip Sync Delay: Up to 170ms per zone Volume Adjustments: 20db to +20db 0.5db steps Equalizer: 5 band EQ per zone Subwoofer Control: Yes Treble: -20db to +20db 0.5db steps Equalizer: 5 band EQ per zone

KIT INCLUDES: ProAudio1632 Chassis | Power Cord | Rack Mounting Kit Input Gain Control: 24db to +24db Output Gain Control: -24db to +24db Transfer Rates: 13.2Mb/S Audio Modes: PCM, DD5.1, DTS, All modes Coax Input Levels: 200mV-7.0V (PC card compatible) Coax Output Level: 500mV nominal into 75 ohms Freq. Response: 5Hz-20KHz @ +/-0.1dB S.N Ratio: > 85dB, 5Hz-20KHz Input Impedance: 10K ohms Power Supply: 12V/60W Material: Brushed Aluminium (Anodised) Product Dimensions: 44 x 22 x 25 cm - 4U Product Weight: 3.7 kg Operating Temp Range: -10 to +70°C (14 to +158°F) Storage Temp Range: -20°C to 60°C (-4°F to 140°F) Humidity Range: 5 to 90% RH (no condensation) Safety & Emissions: UKCA, CE, FCC, RoHS Manufactured In: Great Britain by Pulse-Eight



## Pro**Audio8** DSP PRE-AMP AUDIO MATRIX



#### **TECHNICAL SPECIFICATION:**

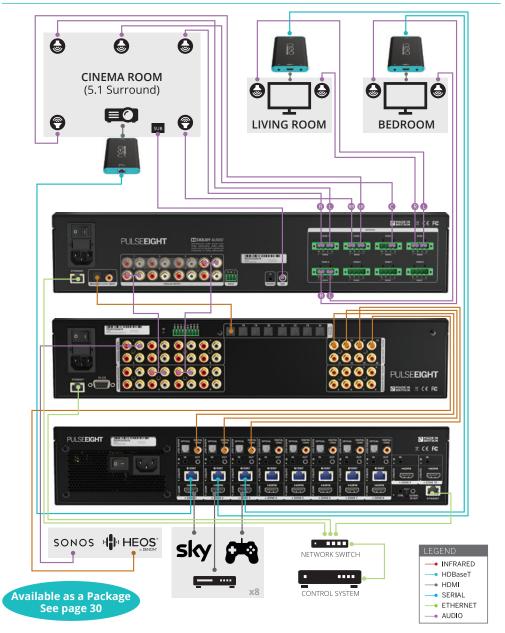
SKU: P8-PROAUDIO8 Audio Inputs: 24 Stereo L/R Audio Inputs: 8 **Optical Audio Inputs:** 8 Digital Coax Audio Inputs: 8 Audio Outputs: 8 Stereo L/R Audio Outputs: 8 **Optical Audio Outputs:** 8 12V Triggers: 0 Serial Control: Yes - RS232 TCP/IP Control: Yes Third Party Control: Yes - Drivers available Lip Sync Delay: Up to 170ms per zone Volume Adjustments: 20db to +20db 0.5db steps Equalizer: 5 band EQ per zone Subwoofer Control: Yes Treble: -20db to +20db 0.5db steps Equalizer: 5 band EQ per zone

Output Gain Control: -24db to +24db Transfer Rates: 13.2Mb/S Audio Modes: PCM, DD5.1, DTS, All modes Coax Input Levels: 200mV-7.0V (PC card compatible) Coax Output Level: 500mV nominal into 75 ohms Freq. Response: 5Hz-20KHz @ +/-0.1dB S.N Ratio: > 85dB, 5Hz-20KHz Input Impedance: 10K ohms Power Supply: 12V/60W Material: Brushed Aluminium (Anodised) Product Dimensions: 44 x 8 x 22 cm - 2U **Product Weight:** 2 kg Operating Temp Range: -10 to +70°C (14 to +158°F) Storage Temp Range: -20°C to 60°C (-4°F to 140°F) Humidity Range: 5 to 90% RH (no condensation) Safety & Emissions: UKCA, CE, FCC, RoHS

Manufactured In: Great Britain by Pulse-Eight

Input Gain Control: 24db to +24db

#### CONCEPT WIRING DIAGRAM: PROAUDIO8, NEO:8a AND PROAMP8



#### **COMPATIBLE CONTROL SYSTEMS**

Drivers available for our ProAudio range include:

Control



#### KIT INCLUDES:

ProAudio8 Chassis | Power Cord | Rack Mounting Kit



### AUDIO PACKAGES



#### 1x ProAudio8 + 1x ProAmp8 PPP8 Package

Package Allows 24 input choices (8 total) both digital and analogue and either 8 zones of distributed DSP corrected audio or a 5.1 theatre zone and 5 zones of stereo audio plus 12V triggers multiple subwoofer options and RS232 and IP control.



#### 1x ProAudio16 + 2x ProAmp8 PPP16 Package

Package Allows 46 input choices (16 total) both digital and analogue and either 16 zones of distributed DSP corrected audio or two 5.1 theatre zones and 10 zones of stereo audio plus 12V triggers multiple subwoofer options and RS232 and IP control.

### VIDEO & AUDIO PACKAGES

PERFECT

**PACKAGES** 

PULSEEIGHT

ULSEEIGHT

We have combined products to create powerful packages for all of your audio and video distribution

requirements. Our PPV packages combine our neo video matrices alongside ProAudio DSP pre-amps

plus our ProAmp power amplifiers for complete audio and video distribution working side-by-side. Our PPP packages focus purely on audio with packages featuring our powerful ProAudio systems

alongside ProAmp power amplifiers for large scale audio distribution.



1x neo:8a, 1x ProAudio8 + 1x ProAmp8 PPV8A Package

Package allows 10 zones of 4K/60Hz 4:2:0 HDBaseT Video plus 24 audio input choices, both digital and analogue, and a choice of either 8 zones of distributed audio or a 5.1 theatre zone and 5 zones of DSP corrected audio plus 12V triggers, multiple subwoofer options and RS232 and IP control.



ProAudio16

ProAmp8

ProAmp8

1x neo:X+, 1x ProAudio16 + 2x ProAmp8 **PPVX Package** 

Package Allows 10 zones of 4K/60Hz 4:4:4 UHD HDBaseT Video with ARC and Ethernet plus 40x audio input choices both digital and analogue to a choice of either 16 zones of distributed audio or two 5.1 theatre zones and 10 zones of DSP corrected audio plus 12V triggers, multiple subwoofer options and R5232 and IP control.



#### 1x ProAudio1632 + 4x ProAmp8 PPP1632 Package

Package Allows 40 input choices (16 total) both digital and analogue and either 32 zones of distributed DSP corrected audio or four 5.1 theatre zone and 20 zones of stereo audio plus 12V triggers multiple subwoofer options and RS232 and IP control.



#### 1x ProAudio32 + 4x ProAmp8 PPP32 Package

Package Allows 80 input choices (32 total) both digital and analogue and either 32 zones of distributed DSP corrected audio or four 5.1 theatre zone and 20 zones of stereo audio plus 12V triggers multiple subwoofer options and RS232 and IP control.

## ∩⊖⊖ HDMI EXTENDER RANGE



Our neo range of HDMI over HDBaseT<sup>™</sup> extender sets offer the very best in performance and flexibility. With the aim to keep our HDMI extension solutions simple, instead of hundreds of variants, we created just three tiers, each more capable than the last.

The neo:Lite Extender Kit can extend 4K up to 40 Meters and 1080p to 70 Meters over a single CAT cable. For those times when 70metres is not quite enough, the neo:Pro Extender Set extends 4K up to 70 meters and 1080p up to 100 meters. The neo:Ultra is our top of the range extender set reaching distances of 150<sup>\*</sup> meters for 1080p and up to 100 meters for 4K (4:4:4 8Bit or 4K/60HDR 4:2:2). \*1080p 150 meters long range on request (100 meters as standard)

#### **KEY FEATURES:**



HDMI EXTENSION WITH A DIFFERENCE



BRITAIN

#### **BI-DIRECTIONAL IR**

Not just source control, sometimes your control system needs to use IR to control the TV or perhaps another item of equipment in the room, with bi-directional IR, you can connect the supplied IR buds to devices to control remote and local devices

LITETRANSMITTER



#### PoH (POWER OVER HDBaseT)

Each neo HDMI receiver can be powered via the HDBaseT link. Simply connect a CAT cable between the receiver and transmitter and the video and power will all be transferred, no need for a power supply on the receiver, just the single cable will do it all.

#### IN-BUILT TOOLS

All of our Extender Sets feature IR activity sensors where an LED indicates that an IR signal is being received - no more guessing if the IR is connected correctly, simply check the LED. The neo:Lite has an additional Link Quality LED which illuminates to show the cable link cannot support 4K. All 3 of our Extender Sets feature LEDs on the HDBaseT connection to show if PoH and the video link are being transferred.



#### DSC (DISPLAY STREAM COMPRESSION)

The neo:Ultra Extender features DSC, a VESA approved compression that ensures full 4K with zero latency and a visually lossless picture. With DSC you can finally extend 4K 4:4:4/60Hz over a HDBaseT link up to 100 meters and 1080p up to 150 meters. \*1080p 150 meters long range on request (100 meters as standard)

ARC (AUDIO RETURN CHANNEL)

With ARC on the neo:Ultra Extender, audio from the sink device (TV) can be sent back to the transmitter enabling audio breakout - perfect when using the TV's in-built apps but require the audio through external speakers. What's more is ARC uses the same cable as the HDBaseT link so no additional wires required.

SUPPORTED RESOLUTIONS & FORMATS ON PAGE 50

## ∩@O:Ultra

#### HDBaseT<sup>™</sup> CLASS C + DSC HDMI EXTENDER SET

## ∩@O:Pro

#### HDBaseT<sup>™</sup> CLASS C HDMI EXTENDER SET







#### **TECHNICAL SPECIFICATION:**

SKU: P8-HDBT2-U-EXSET Transmitter Inputs: 1x HDMI Transmitter Outputs: 1x HDBaseT Class C + DSC Receiver Inputs: 1x HDBaseT Class C + DSC Receiver Outputs: 1x HDMI Max HDBaseT Cable Distance 4K: 100 meters Max HDBaseT Cable Distance 1080p: 150\* meters HDBaseT Recommended Cable: Cat5e or greater Ethernet Passthrough: Yes Serial Control: RS232 via 3.5mm (adapter required) IR Control: Bi-Directional HDMI-CEC Control: Full ARC (Audio Return Channel): HDMI & Toslink 3.5mm DSC (Display Stream Compression): Yes PoH: Yes LED Indicators: Yes

Encryption: HDCP 1.4 and HDCP 2.2 Maximum Pixel Clock: 600Mhz Maximum Bandwidth: 18Gbps Maximum Video Resolution: 4K/60Hz 4:4:4 Colour Supported: 4K: 12bit, 1080p: 12bit Power Consumption: Transmitter: 7.3W / Receiver: 8W **Power Supply:** 1 x 48V @ 0.5A (Transmitter only) Wall Mountable: Yes - Bracket Included Material: Aluminium **Product Dimensions:** 14.8 x 1.3 x 10.5 cm each Product Weight: 0.16 kg each Operating Temp Range: 0 to +35°C (32 to +95°F) Storage Temp Range: -20°C to 60°C (-4°F to 140°F) Humidity Range: 5 to 90% RH (no condensation) Safety & Emissions: UKCA, CE, FCC, RoHS Manufactured In: Great Britain by Pulse-Eight BRITAIN

#### KIT INCLUDES:

neo:Ultra PoH Receiver | neo:Ultra Transmitter | IR Blaster Cable Pack | Wall Brackets | Installation Guide | Power Supply (Transmitter) \* Receivers and Transmitters also sold separately

#### **TECHNICAL SPECIFICATION:**

SKU: P8-HDBT2-P-EXSET Transmitter Inputs: 1x HDMI Transmitter Outputs: 1x HDBaseT Class C Receiver Inputs: 1x HDBaseT Class C Receiver Outputs: 1x HDMI Max HDBaseT Cable Distance 4K: 70 meters Max HDBaseT Cable Distance 1080p: 100 meters HDBaseT Recommended Cable: Cat5e or greater Ethernet Passthrough: Yes Serial Control: RS232 via 3.5mm (adapter required) IR Control: Bi-Directional HDMI-CEC Control: Full ARC (Audio Return Channel): HDMI only DSC (Display Stream Compression): No PoH: Yes LED Indicators: Yes

**Encryption:** HDCP 1.4 and HDCP 2.2 Maximum Pixel Clock: 340Mhz Maximum Bandwidth: 10.2Gbps Maximum Video Resolution: 4K/60Hz 4:2:0 Colour Supported: 4K: 8bit, 1080p: 12bit Power Consumption: Transmitter: 7.3W / Receiver: 8W **Power Supply:** 1 x 48V @ 0.5A (Transmitter only) Wall Mountable: Yes - Bracket Included Material: Aluminium Product Dimensions: 14.8 x 1.3 x 10.5 cm each Product Weight: 0.16 kg each **Operating Temp Range:** 0 to +35°C (32 to +95°F) Storage Temp Range: -20°C to 60°C (-4°F to 140°F) Humidity Range: 5 to 90% RH (no condensation) Safety & Emissions: UKCA, CE, FCC, RoHS Manufactured In: Great Britain by Pulse-Eight BRITAIN

#### KIT INCLUDES:

neo:Pro PoH Receiver | neo:Pro Transmitter | IR Blaster Cable Pack | Wall Brackets | Installation Guide | Power Supply (Transmitter) \* Receivers and Transmitters also sold separately

\*1080p 150 meters long range on request (100 meters as standard)

## ∩@O:Lite

HDBaseT<sup>™</sup> CLASS B HDMI EXTENDER SET





#### **TECHNICAL SPECIFICATION:**

SKU: P8-HDBT-L-EXSET Transmitter Inputs: 1x HDMI Transmitter Outputs: 1x HDBaseT Class B Receiver Inputs: 1x HDBaseT Class B Receiver Outputs: 1x HDMI Max HDBaseT Cable Distance 4K: 40 meters Max HDBaseT Cable Distance 1080p: 70 meters HDBaseT Recommended Cable: Cat5e or greater Ethernet Passthrough: No Serial Control: No IR Control: Bi-Directional HDMI-CEC Control: Full ARC (Audio Return Channel): No DSC (Display Stream Compression): No PoH: Yes LED Indicators: Yes

Encryption: HDCP 1.4 and HDCP 2.2 Maximum Pixel Clock: 340Mhz Maximum Bandwidth: 10.2Gbps Maximum Video Resolution: 4K/60Hz 4:2:0 Colour Supported: 4K: 8bit, 1080p: 12bit Power Consumption: Transmitter: 3W / Receiver: 5.5W **Power Supply:** 1 x 48V @ 0.5A (Transmitter only) Wall Mountable: Yes - bracket sold separately Material: Extruded Aluminium Product Dimensions: 11.5 x 1.8 x 8.2 cm each Product Weight: 0.17 kg each Operating Temp Range: 0 to +40°C (32 to +104°F) Storage Temp Range: -20°C to 60°C (-4°F to 140°F) Humidity Range: 5 to 90% RH (no condensation) Safety & Emissions: UKCA, CE, FCC, RoHS Manufactured In: Great Britain by Pulse-Eight BRITAIN

#### KIT INCLUDES:

neo:Lite PoH Receiver | neo:Lite Transmitter | IR Blaster Cable Pack | Installation Guide | Power Supply (Transmitter) \* Receivers and Transmitters also sold separately

## **COMING SOON**

## HDBaseT<sup>™</sup> Spec 3.0

UNCOMPROMISED & UNCOMPROMISED 4K/60Hz 4:4:4



#### HOMI" CHOBIT" HDCP@2





## ACCESSORIES SOLUTION RANGE



Modern day installations are not always plain sailing and when a minor issue occurs you need a simple fix that will sort the problem in a permanent and stable way. We have worked closely with installers to create a range of such products. From lip sync to mixed resolution deployments, we create products that will solve the commonly found issues that our installers often face.

Our accessory solutions include HDMI Splitters, 4K Downscaler, Opto-Coupling Cable, Audio Delay Device, Audio Extender Set and our ever-popular DACs (Digital to Analogue Converter). All of our accessories are designed in-house by us, to work seamlessly alongside our matrices and extenders but also can work independently if required.

#### SOLUTIONS FOR:



ISSUES

















PULSEEIGHT



#### **TECHNICAL SPECIFICATION:**

SKU: P8-HDBT-L-SP4 Inputs: 1x HDMI Outputs: 4x HDBaseT Class B Max HDBaseT Cable Distance 4K: 40 meters Max HDBaseT Cable Distance 1080p: 70 meters HDBaseT Recommended Cable: Cat5e or greater Ethernet Passthrough: No Serial Control: No IR Control: Return IR HDMI-CEC Control: Full Voice Control: Yes - Alexa Skill IP Control: Yes Web Interface: Yes + Android App available Monitoring: Real Time Remote Monitoring Portal ARC (Audio Return Channel): No DSC (Display Stream Compression): No

PoH: Requires neo:Lite PoH Receivers (sold separately) **Encryption:** HDCP 1.4 and HDCP 2.2 Maximum Pixel Clock: 340Mhz Maximum Bandwidth: 10.2Gbps Maximum Video Resolution: 4K/60Hz 4:2:0 Colour Supported: 4K: 8bit, 1080p: 12bit Power Consumption: 48V @ 0.5A **Power Supply:** 1 x 48V @ 0.5A (Transmitter only) Material: Anodized Aluminium **Product Dimensions:** 18.6 x 4.3 x 22 cm **Product Weight:** 0.6 kg **Operating Temp Range:** 0 to +35°C (32 to +95°F) **Storage Temp Range:** -20°C to 60°C (-4°F to 140°F) Humidity Range: 5 to 90% RH (no condensation) Safety & Emissions: UKCA, CE, FCC, RoHS Manufactured In: Great Britain by Pulse-Eight

#### **KIT INCLUDES:**

neo:1-4 HDBaseT Splitter | Country Specific Power Cord | Power Supply \* neo:Lite PoH Receivers Required - Sold Separately





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Don't Forge

Receive

# 1-4 HDMI SPLITTER





**1-2 HDMI SPLITTER** 



1 HDMI INPUT 4 HDMI outputs 4K 18Gbps 4K 18Gbps 4K IR IR IR IR IR IS Warranty Warranty

The ideal solution for splitting a single HDMI input to 4 HDMI inputs simultaneously. With automatic EDID management, IR and CEC control. Supports high-speed HDMI 2.0a and/or HDMI 2.0b Ultra HD 4K/60Hz, 4:4:4 (18Gbps).

#### **TECHNICAL SPECIFICATION:**

SKU: P8-HDMI2-SP4 Maximum Pixel Clock: 600Mhz Inputs: 1x HDMI Maximum Bandwidth: 18Gbps Outputs: 4x HDMI Maximum Video Resolution: 4K/60Hz 4:4:4 Ethernet Passthrough: No Colour Supported: 4K: 12bit, 1080p: 12bit Serial Control: No Power Consumption: 5V @ 2Amps IR Control: Return IR Power Supply: 5V DC Barrel Jack 2.1mm HDMI-CEC Control: Full Material: Anodized Aluminium Voice Control: Yes **Product Dimensions:** 43 x 4.3 x 14 cm IP Control: No **Product Weight:** 0.7 kg Web Interface: Yes Operating Temp Range: 0 to +35°C (32 to +95°F) Monitoring: Yes Storage Temp Range: -20°C to 60°C (-4°F to 140°F) ARC (Audio Return Channel): No Humidity Range: 5 to 90% RH (no condensation) DSC (Display Stream Compression): No Safety & Emissions: UKCA, CE, FCC, RoHS **Encryption:** HDCP 1.4 and HDCP 2.2 Manufactured In: Great Britain by Pulse-Eight

Distribute high speed HDMI 2.0a and/or HDMI 2.0b Ultra HD 4K, 4:4:4 (18Gbps) video to 2 outputs simultaneously. Automatic EDID management simplifies installation, automatically copying capabilities from output 1 display

#### **TECHNICAL SPECIFICATION:**

SKU: P8-HDM12-SP2 Inputs: 1x HDMI Outputs: 2x HDMI Ethernet Passthrough: No Serial Control: No IR Control: Return IR HDMI-CEC Control: Output 1 only Voice Control: No IP Control: No Web Interface: No Monitoring: No ARC (Audio Return Channel): No DSC (Display Stream Compression): No Encryption: HDCP 1.4 and HDCP 2.2 Maximum Pixel Clock: 600Mhz Maximum Bandwidth: 18Gbps Maximum Video Resolution: 4K/60Hz 4:4:4 Colour Supported: 4K: 12bit, 1080p: 12bit Power Consumption: 5V @ 2Amps Power Supply: 5V DC Barrel Jack 2.1mm Material: Extruded Aluminium Product Dimensions: 11.5 x 8.2 x 1.8 cm Product Weight: 0.14 kg Operating Temp Range: 0 to +35°C (32 to +95°F) Storage Temp Range: -20°C to 60°C (-4°F to 140°F) Humidity Range: 5 to 90% RH (no condensation) Safety & Emissions: UKCA, CE, FCC, RoHS Manufactured In: Great Britain by Pulse-Eight

#### KIT INCLUDES:

neo:1-2 HDMI Splitter | Country Specific Power Supply



neo:1-4 HDMI Splitter | Country Specific Power Supply









PULSEEIGHT

HDMI UHD

18Gbps

DOWNSCALER

HOMI

HDMI IN

1.1

SCALE



#### **DIGITAL AUDIO OVER CAT5e/6 EXTENDER**



Our 6G (18Gbps) HDMI 4K downscaling solution can convert your 4K content to 1080p in real time with no latency or tearing. Ideal as a quick fix to your mixed resolution deployments, and its low profile means it sits perfectly behind the TV.

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#### **KEY FEATURES:**

- Seamlessly downscales 4K UHD signals to 1080p
- Designed for installation with mixed resolution TVs
- Simple set up using HDMI input and output
- Rotation dial switch for selecting downscale mode
- Discreet design, only 1.8cm high
- Optional optical port for using S/PDIF audio output

#### **OVERVIEW:**

BRITAIN



#### **TECHNICAL SPECIFICATION:**

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OPTICAL OUT

SKU: P8-HDMI2-4KDS Inputs: 1x HDMI Outputs: 1x HDMI, 1x Optical (Toslink) Scale Video Down from: 3840x2160p @24/25/30/60Hz to 1920x1080p @ 24/25/30/60Hz Output Impedance: 100Ω Encryption: HDCP 1.4 and HDCP 2.2 Audio Input Format: 5.1 Dolby Digital or 2ch Stereo PCM Audio Output Format: 5.1 Dolby Digital or 2ch Stereo PCM Maximum Pixel Clock: 600Mhz Maximum Bandwidth: 18Gbps Maximum Video Resolution: 4K/60Hz 4:4:4 Power Supply: 5V DC **Product Dimensions:** 7.8 x 2.4 x 7.8 cm Product Weight: 0.1 kg Operating Temp Range: 0 to +35°C (32 to +95°F) Storage Temp Range: -20°C to 60°C (-4°F to 140°F) Humidity Range: 5 to 90% RH (no condensation) Manufactured In: Great Britain by Pulse-Eight

#### HJMI<sup>®</sup> HDCP22

Digital audio over extreme distances can be tricky in isolation, our audio extender uses a standard Cat5e/6 cable to seamlessly transmit S/PDIF (Toslink) audio. The perfect solution to extending audio signals up to distances of 200m over a single cable.

#### **KEY FEATURES:**

- Supports coaxial or S/PDIF digital audio signals
- Supports Stereo and Multichannel digital audio
- Supports 2ch PCM audio inputs
- 5.1 Compressed audio supported
- Extension length up to 200m
- Extends via a single CAT5e or CAT6 cable

#### **OVERVIEW:**

N MADE IN BRITAIN



### SKU: P8-AE-CAT-EXSET

Transmitter Inputs: Digital Coax or Optical (S/PDIF) Transmitter Outputs: Cat5e/Cat6 Receiver Inputs: Cat5e/Cat6 Receiver Outputs: Digital Coax or Optical (S/PDIF) Recommended Cable: Cat5e or greater Maximum Cable Length: 200 meters Audio Format Input: 5.1 Dolby Digital / 2ch Stereo PCM Audio Format Output: 5.1 Dolby Digital / 2ch Stereo PCM Power Consumption: Max 5W Power Supply: 5V DC Material: Anodized Aluminium Product Dimensions: 6.3 x 2.2 x 6.2 cm each Product Weight: 0.10 kg each Operating Temp Range: 0 to +35°C (32 to +95°F) Operating Humidity Range: 5 to 90% RH (no condensation) Safety & Emissions: UKCA, CE, FCC, RoHS Manufactured In: Great Britain by Pulse-Eight





With our digital to analogue audio converter, audio setups are capable of decoding connected S/PDIF coaxial or TOSLINK optical digital audio sources to standard analogue stereo (L/R) audio. Stereo output signals can then be fed to external devices.

#### **KEY FEATURES:**

- Both inputs and outputs for coaxial and optical connections
- Ensures a reliable transition from modern digital source devices
- Decodes connected digital S/PDIF coaxial or TOSLINK optical digital audio sources to standard analogue stereo L/R audio

#### **OVERVIEW:**



#### **TECHNICAL SPECIFICATION:**

#### SKU: P8-DDAC

Inputs: Digital Coax or Optical (S/PDIF) Outputs: Stereo L+R (Phono) Distortion: <0.001% @ 1kHz at 2V RMS Signal to Noise Ratio: > 90dB (20Hz - 20kHz) Output Impedance: 500Ω Frequency Response: <+/-0.5dB" Encryption: HDCP 1.4 and HDCP 2.2 Power Consumption: Max 5W Power Supply: 5V DC Material: Anodized Aluminium Product Dimensions: 7.8 x 2.4 x 6.2 cm Product Weight: 0.1 kg Operating Temp Range: 0 to +35°C (32 to +95°F) Stearage Temp Bange: 20°C to 60°C (45 to 140°F)

Storage Temp Range:-20°C to 60°C (-4°F to 140°F)Humidity Range:5 to 90% RH (no condensation)Manufactured In:Great Britain by Pulse-Eight





The P8-HDMIDAC video scaler and digital audio converter (DAC) is designed to be placed between a display and a source device. It adjusts resolution and audio from an incoming HDMI source and scales the output to a level compatible with its display capabilities.

#### **KEY FEATURES:**

- In line downmix of incoming Dolby Digital to stereo PCM audio over HDMI
- 3.5mm audio breakout
- Downscale 4K/30p > 1080/24p, to enable 1080p screens to view 4K sources through a video matrix
- Upscale 1080/24p > 4K/30p, for 4K screens

#### **OVERVIEW:**



\*Does not support downscaling for Sky Q 2TB or Virgin V6 4K content. Please use the HDMI UHD 18Gbps Downscaler (P8-HDMI2-4KDS)

#### **TECHNICAL SPECIFICATION:**

SKU: P8-HDMIDAC

Input: 1x HDMI

Output: 1x HDMI

**Scale Video Up from:** 1920x1080p @ 24/25/30Hz to 3840x2160p @ 24/25/30Hz

Scale Video Down from: 3840x2160p @24/25/30Hz to 1920x1080p @ 24/25/30Hz

Audio Output Format: Passthrough / 2ch PCM with Downmix selected

Audio Input Format: 5.1 Dolby Digital / 2ch Stereo PCM

Power Consumption: Max 5W Power Supply: 5V DC

Material: Anodized Aluminium

Product Dimensions: 6.8 x 2.1 x 7.7 cm

Product Weight: 0.105 kg

Operating Temp Range: 0 to +35°C (32 to +95°F)

Storage Temp Range: -20°C to 60°C (-4°F to 140°F)

Humidity Range: 5 to 90% RH (no condensation)

Manufactured In: Great Britain by Pulse-Eight

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The P8-AD340 is a perfect solution to lip sync problems, with 20~ millisecond increments options from its 16-way selector you can delay the audio from 20-340ms. Delay stereo audio with a simple L/R phono input and output connection.

#### **KEY FEATURES:**

- The perfect solution to lip sync problems
- 20~ millisecond increments from its 16-way selector
- Delay the audio from 20-340ms
- Simple L/R phono input and output connection
- Compact design

#### **OVERVIEW:**



#### TECHNICAL SPECIFICATION:

#### SKU: P8-AD340

Inputs: Stereo L/R (Phono) Outputs: Stereo L/R (Phono) Audio Input Format: 2ch Stereo / Analogue line level Audio Output Format: 2ch Stereo / Analogue line level Lip Sync Delay: Up to 340ms Power Consumption: Max 5W Power Supply: 5V DC Material: Anodized Aluminium Product Dimensions: 6.2 x 2.3 x 7.7 cm Product Weight: 0.10 kg Operating Temp Range: 0 to +35°C (32 to +95°F Storage Temp Range: -20°C to 60°C (-4°F to 140°F) Operating Humidity Range: 5 to 90% RH (no condensation) Safety & Emissions: UKCA, CE, FCC, RoHS Manufactured In: Great Britain by Pulse-Eight



AVAILABLE IN MONO>STEREO OR STEREO OPTIONS



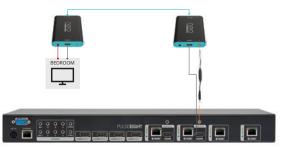
Avoid manually coupling IR transmitter and receiver buds together, provide a secure direct connection between IR control systems, such as Control4 and our neo series of matrices. Our generic Mono to Stereo solution will convert any IR signals between a mono transmitter and a stereo receiver.

#### **KEY FEATURES:**

- Avoids the requirement to manually couple IR transmitter and receiver buds together
- Provides a secure direct connection between IR control systems, such as Control4 or Elan and our neo series of matrices.
- Converts IR signals between a stereo transmitter and a mono receiver.

#### **CONCEPT WIRING GUIDES:**

LINK EXTENDER TO MATRIX HDMI OUTPUT (Stereo>Stereo Variation)



#### **TECHNICAL SPECIFICATION:**

SKU: P8-IR-OPTOCABLE

Total Length:1m (other lengths available)Input:IR Output from Control System/B&O TVOutput:IR Input to MatrixMax Input Voltage on Mono Jack:13VMax Frequency:100kHzSupported Control Systems:Control4, RTI, ElanOperating Temp Range:0 to +35°C (32 to +95°F)Storage Temp Range:-20°C to 60°C (-4°F to 140°F)Humidity Range:5 to 90% RH (no condensation)Manufactured In:Great Britain by Pulse-Eight

ALSO AVAILABLE IN STEREO>STEREO FORMAT

#### LINK MATRIX AND A CONTROL SYSTEM (Stereo>Mono Variation)



BRITAIN

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Extend uncompressed HDMI 2.0 (600Mhz/18Gbps) signals longer than standard copper HDMI cables while maintaining high signal integrity. EU CPR Certified/US Plenum Certified, LSZH (Low Smoke Zero Halogen)

SKU	DESCRIPTION					
HDMI 2.0 Cables						
P8-OPT-HDMIAA-10	10 meter - HDMI-HDMI					
P8-OPT-HDMIAA-15	15 meter - HDMI-HDMI					
P8-OPT-HDMIAA-20	20 meter - HDMI-HDMI					
P8-OPT-HDMIAD-30	30 meter - HDMI-HDMI Cable with removable adapter including pulling accessory					
P8-OPT-HDMIAD-50	50 meter - HDMI-HDMI Cable with removable adapter including pulling accessory					

#### **KEY FEATURES:**

- CPR EU Certified/US Plenum Certified LSZH (Low Smoke Zero Halogen)
- 18Gbps Bandwidth
- HDR10/HDR10+/HLG/Dolby Vision
- 4K 4:4:4 UHD (3840 × 2160) at 60Hz resolution
- HDMI 2.0 Standards
- HDCP 2.3/CEC/ARC
- Removable adapter only available on 30 & 50 meter HDMI 2.0 variants





Extend uncompressed HDMI 2.1, 48Gbps signals longer than standard copper HDMI cables while maintaining high signal integrity. EU CPR Certified/US Plenum Certified. LSZH (Low Smoke Zero Halogen)

SKU	DESCRIPTION						
HDMI 2.1 Cables							
P8-OPT2.1-HDMIAA-10	10 meter - HDMI-HDMI						
P8-OPT2.1-HDMIAA-15	15 meter - HDMI-HDMI						
P8-OPT2.1-HDMIAA-20	20 meter - HDMI-HDMI						

#### **KEY FEATURES:**

- CPR EU Certified/US Plenum Certified LSZH (Low Smoke Zero Halogen)
- 48Gbps Bandwidth
- HDR10/HDR10+/HLG/Dolby Vision
- 8K 4:4:4 UHD (7680 x 4320) at 60Hz resolution
- HDMI 2.1 Standards
- HDCP 2.3/CEC/ARC/eARC



#### HJMI<sup>®</sup>2.1 eARC

**HDMI<sup>®</sup>2.0** 



#### SUPPORTED RESOLUTIONS & FORMATS

		Video Resolutions							HD	СР	Video Distances						
												4К			1080p		
		4K/60Hz 4:4:4	4K/60Hz 4:2:2	4K/60Hz 4:2:0	8 10 @ 60Hz	(10 @ 24Hz	a.	iC	1080p (+3D)	CP 2.2	CP 1.4	100 meters	70 meters	40 meters	50* meters	100 meters	70 meters
	Product	4K/(	4K/(	4K/(	HDR	HDR	720p	1080i	108	HDCP	HDCP	100	70 r	40 r	150	100	70 r
	neo:X+ Matrix	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	••
rix	neo:8a Matrix			•		•	•	•	•	٠	•			•			•
Matrix	neo:6a Matrix			•		•	•	•	•	•	•			•			•
	neo:4 Professional			•		•	•	•	•	•	•			•			•
er	neo:Ultra Ex Set	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Extender	neo:Pro Ex Set			•		•	•	•	•	•	•		•	•		•	•
EXI	neo:Lite Ex Set			•		•	•	•	•	٠	•			•			•
sr	neo:1-4 HDBT Split			•		•	•	•	•	•	•			•			-
Splitter	neo:1-2 HDMI Split	•	•	•	•	•	•	•	•	•	•	-	-	-	-	-	-
Sp	neo:1-4 HDMI Split	•	•	•	•	•	•	•	•	•	•	-	-	-	-	-	-

\*1080p 150 meters long range on request (100 meters as standard)



#### All products support the following

LPCM 2.0, LPCM 5.1	Dolby Atmos 5.1.4
LPCM 6.1, LPCM 7.1	Dolby Atmos 7.1.2
Dolby Digital 2.0	Dolby Atmos 7.1.4
Dolby Digital 5.1	Dolby Atmos 9.1.2
Dolby Digital EX 6.1	DTS 5.1, DTS-HD Master 5.1
Dolby Digital Plus 7.1	DTS-HD Master 7.1
Dolby TrueHD 5.1	DTS 96/24 5.1
Dolby TrueHD 7.1	DTS-ES Discrete 6.1
Dolby Atmos 5.1.2	DTS-ES Matrix 6.1



#### WARRANTY INFORMATION





Since 2014 we have designed and manufactured our own products in-house in our very own manufacturing facility, based in Poole on England's south coast.

Owning our own design, R&D and manufacturing facility gives us the unique opportunity to fully manage our entire production process ensuring the very best products are created for you and your clients.

However from time to time things do go wrong therefore we back all of our products with a 3 year warranty that will cover all parts and labour should anything go wrong. This warranty gives you the confidence that should the product develop a fault, we will support you.

#### 24/5 CUSTOMER SERVICE DEPARTMENT

Alongside our own design, R&D and manufacturing departments, we proudly host a 5 star customer service department which offer our customers round the clock support, 5 days a week.

By offering this 24/5 service we can ensure customers from all over the world will be able to access product support or installation assistance whenever required. This not only benefits customers around the world in different time zones but also helps customers who may require assistance when they can get on site out of usual working hours.

#### WANT TO OFFER EVEN MORE PEACE OF MIND TO YOUR CLIENTS?

We can offer additional extended warranty options, please contact your Pulse-Eight representative for more information.

\* Extended warranty only available for dealers purchasing and installing products in the UK or USA.



#### **HEAD OFFICE:**

Pulse-Eight Limited 8-12 Alder Hills, Poole, Dorset, BH12 4AL, UK

Tel: +44 (0)1202 413610



