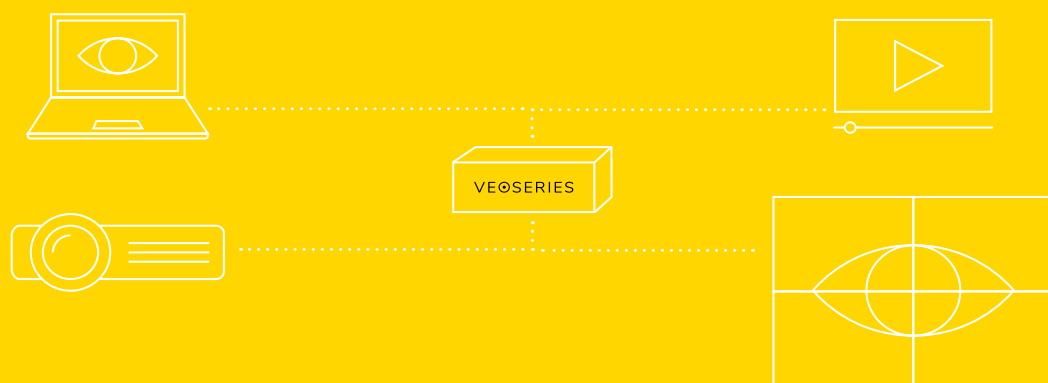


**2021
VIDEO
PRODUCT
GUIDE**

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Since **Ecler's** birth back in 1965, we consistently developed **professional audio** solutions listening to you.

Today Ecler continues to hold true to this aim. We understand that these days technology, in constant change, must be a flexible tool to provide **global and integral solutions**, rather than just individual products. Striving to provide a complete audiovisual experience, Ecler is expanding its product offer introducing **Ecler Video Systems** and **Ecler Acoustics** to enhance our sound experience.

We continue to focus on **innovation and design**, which are two of our core values, appreciating how they really add value: **unique features combined with a user-friendly** and ergonomic approach for the end-user, the nontechnical character of the story, but indeed the main one.

We realize that today **AV integration** has become a solid market, frequently encouraging companies towards a global outlook, which requires **global audio and video partners**, as we are.

A global **green awareness** is growing as well. We are proud to be part of this vital commitment, **taking care of the planet** with products designed for **energy-saving** and manufactured with **sustainable policies**.



Ecler Acoustics Product Guide Ecler Audio Product Guide

OUR PHILOSOPHY

With this new video division, **Ecler** offers you top notch video solutions, including:

- Video management and distribution fulfilling the highest quality standards in the industry, up to 4K @ 60 Hz / HDR / 4:4:4
- Smart integration of video with EclerNet Manager and User Control Panels (UCP) graphical control screens
- Ecler background, focussed on quality, reliability and integral support, from projects' consultancy to total technical assistance

4K ULTRAHD **HDR** **4K HDBT** **4:4:4** **ECLER netmanager**

OUR VALUES

Innovating with you

Experience:



Innovation:



Ergonomics:



Design:

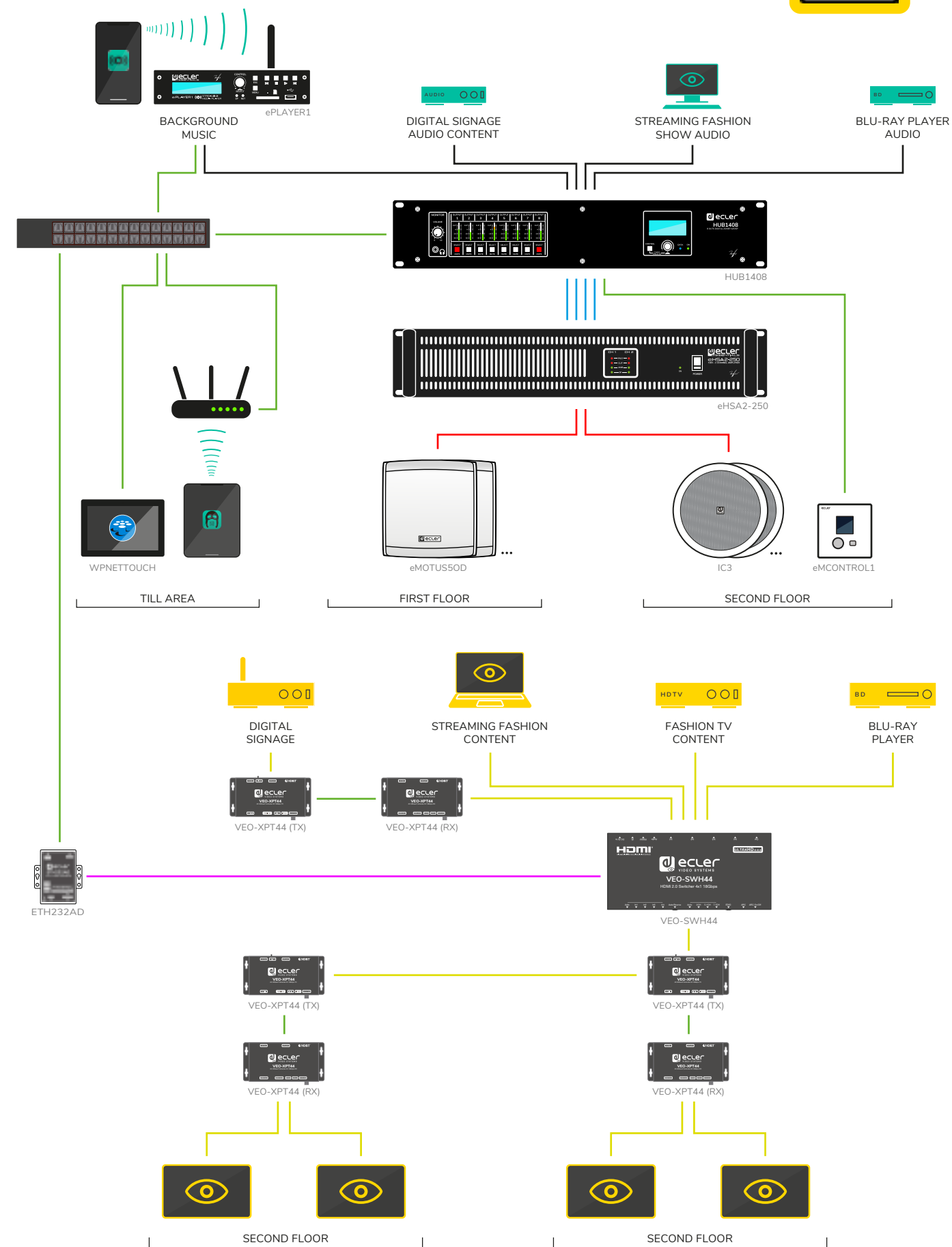


Green:



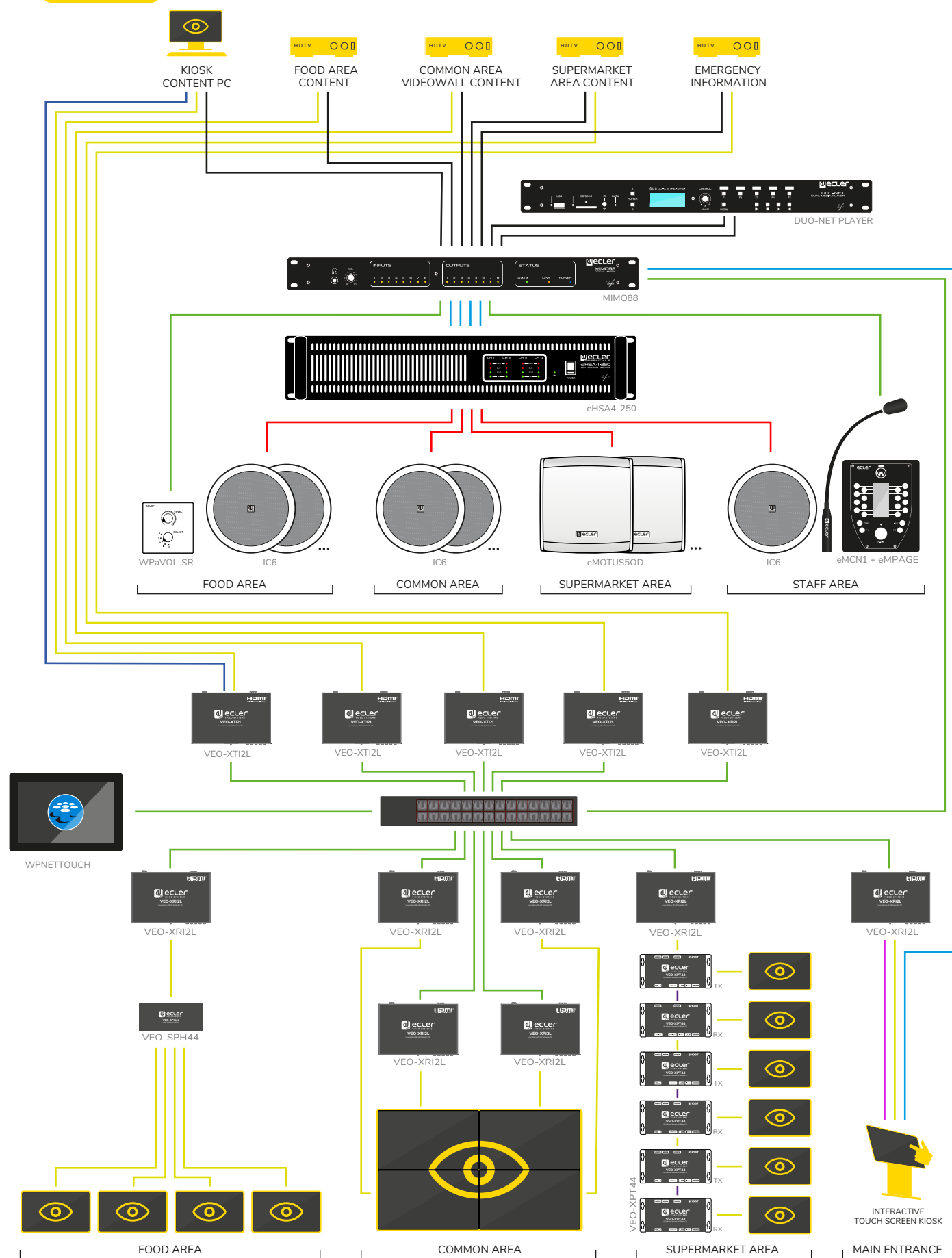
Global:







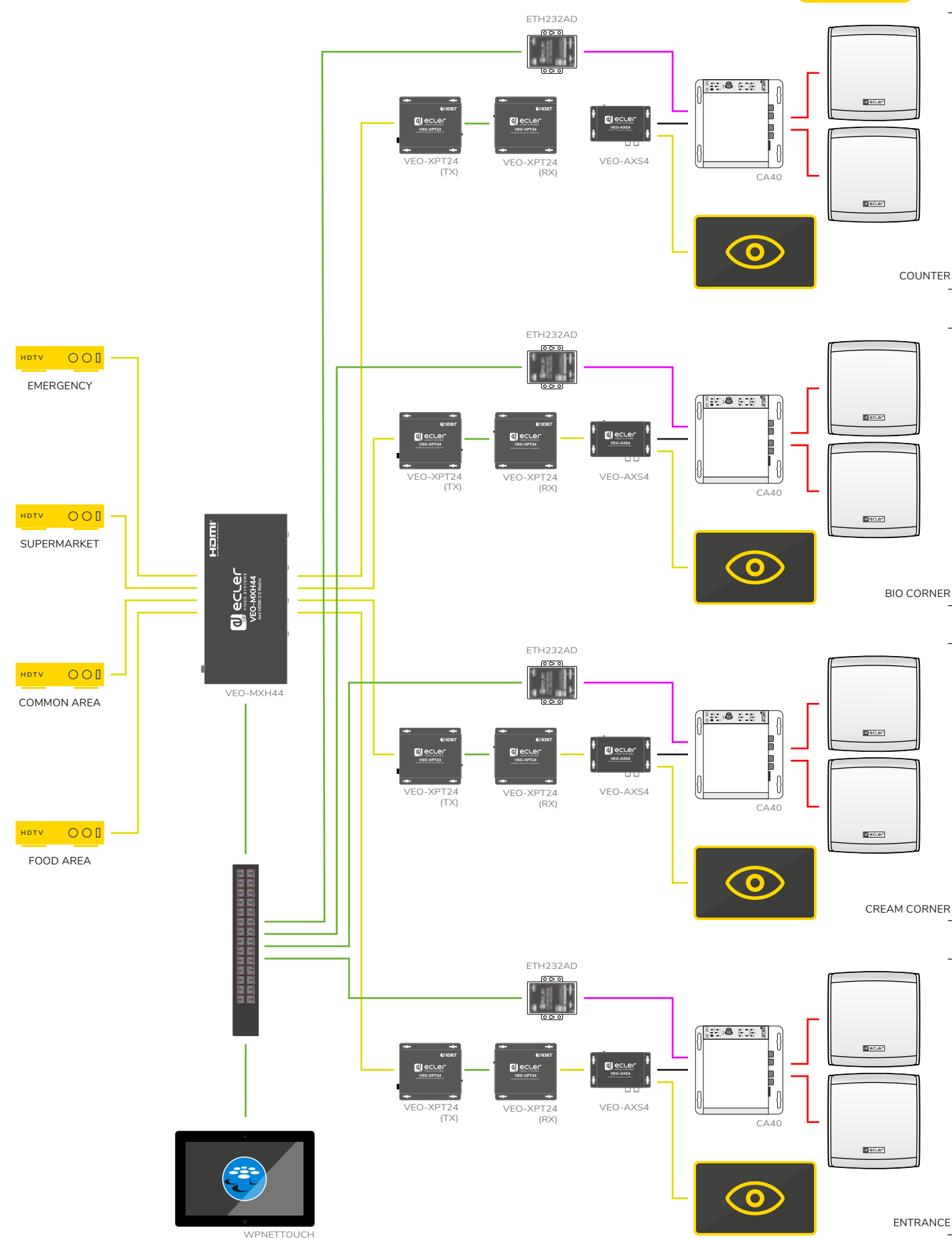
SUPERMARKET



USB RS-232 CABLE HDMI UTP 2x1.5 CABLE UNBAL. AUDIO CABLE BAL. AUDIO CABLE



BIO MARKET



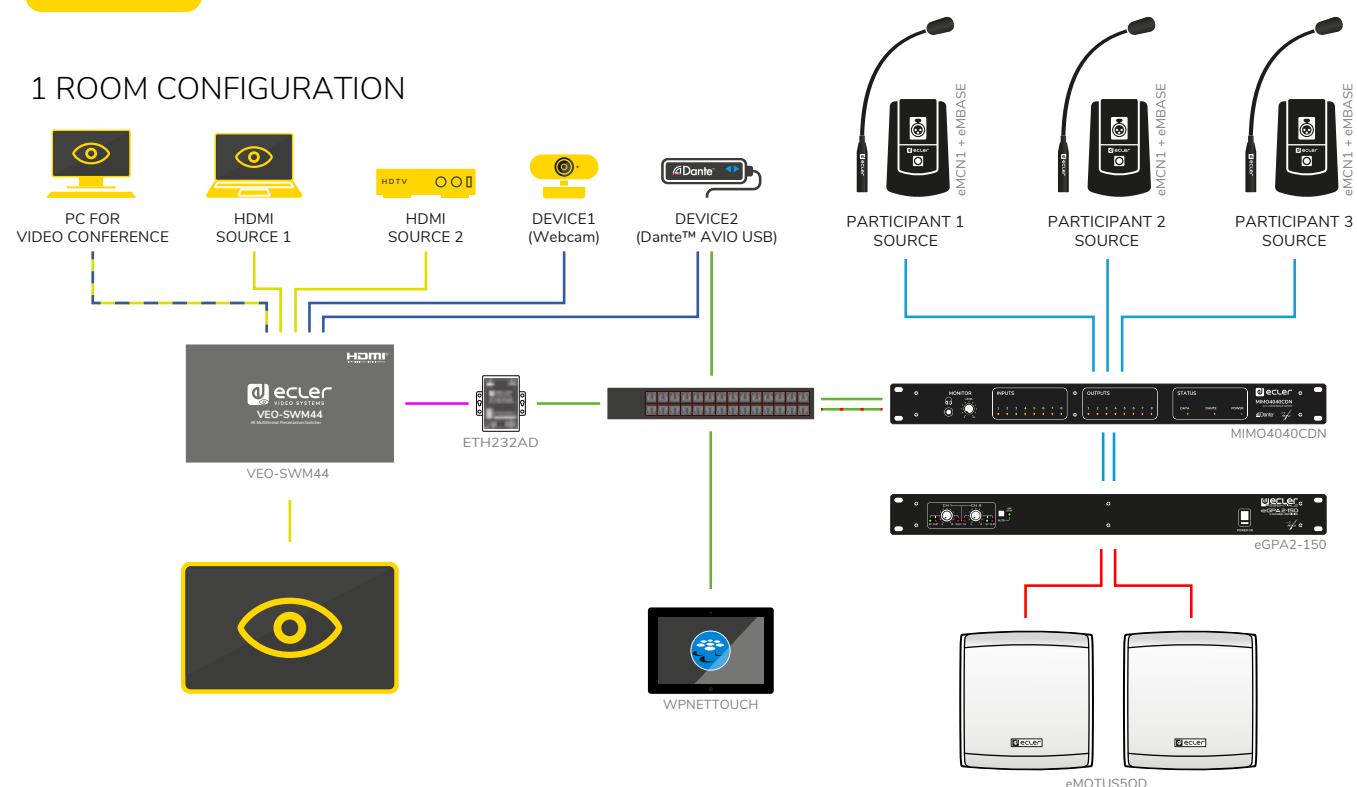
USB RS-232 CABLE HDMI UTP 2x1.5 CABLE UNBAL. AUDIO CABLE



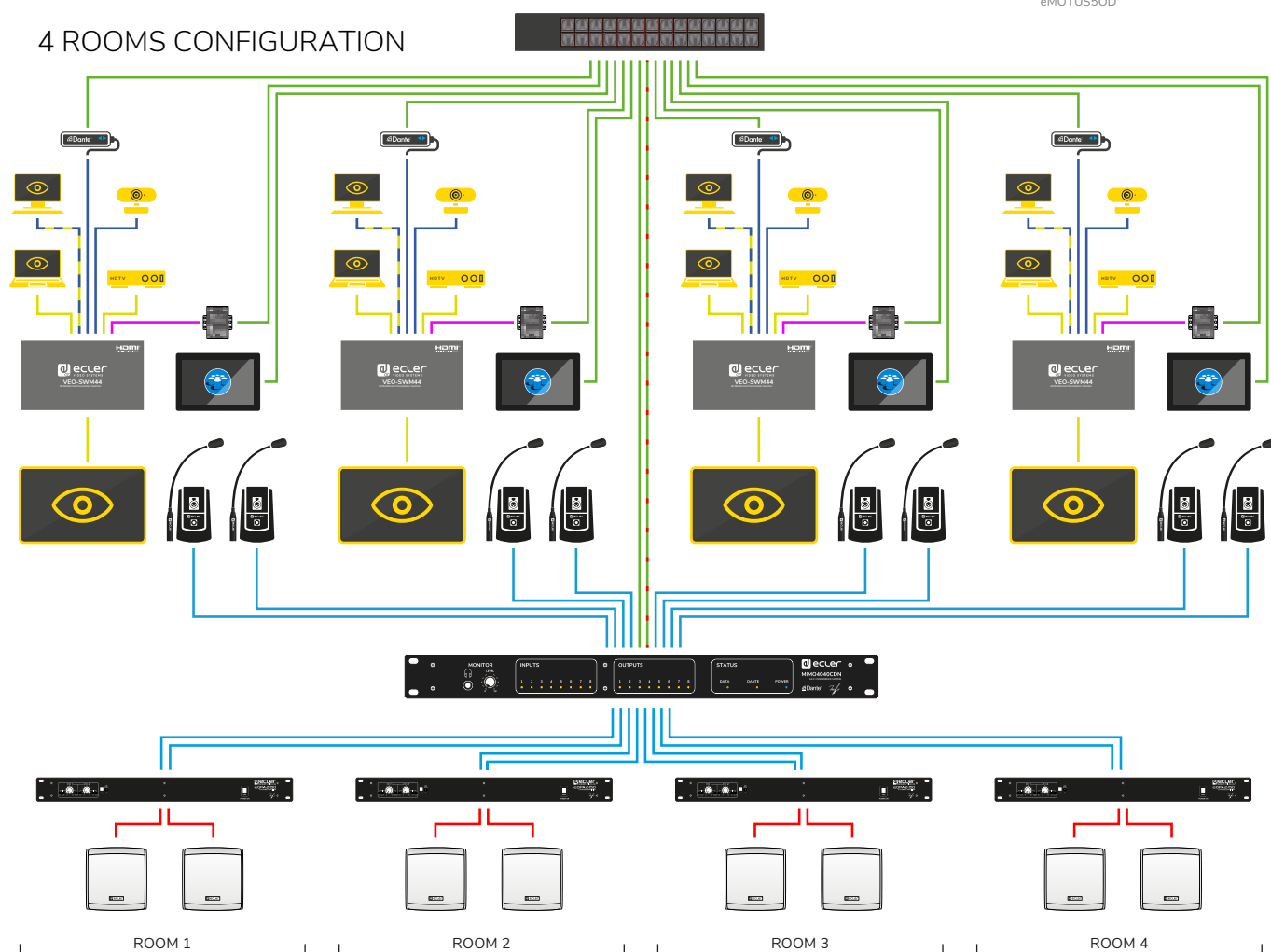
HUDDLE ROOM



1 ROOM CONFIGURATION



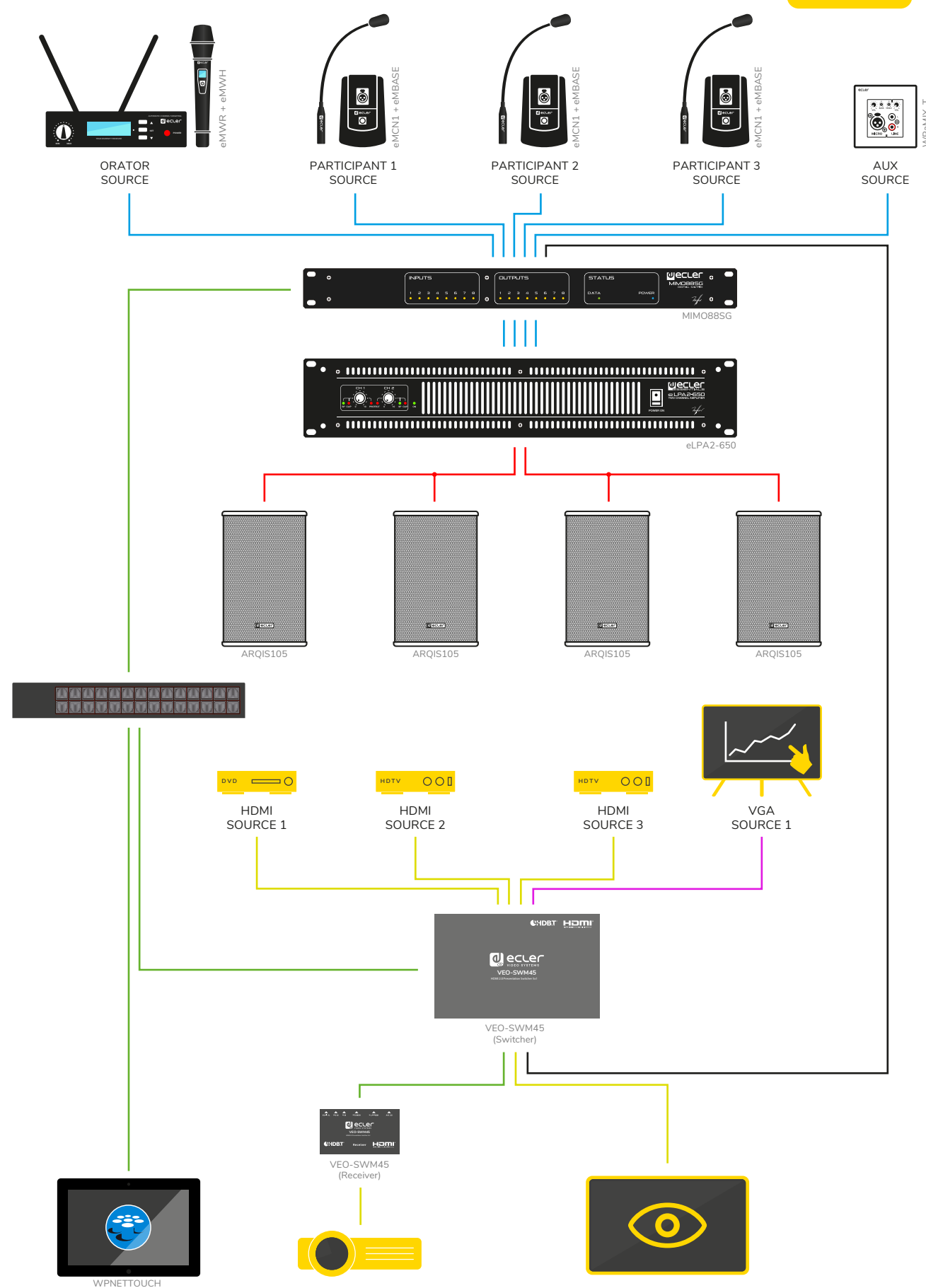
4 ROOMS CONFIGURATION



USB-C USB RS-232 CABLE HDMI UTP UTP (@Dante network) 2x1.5 CABLE BAL. AUDIO CABLE



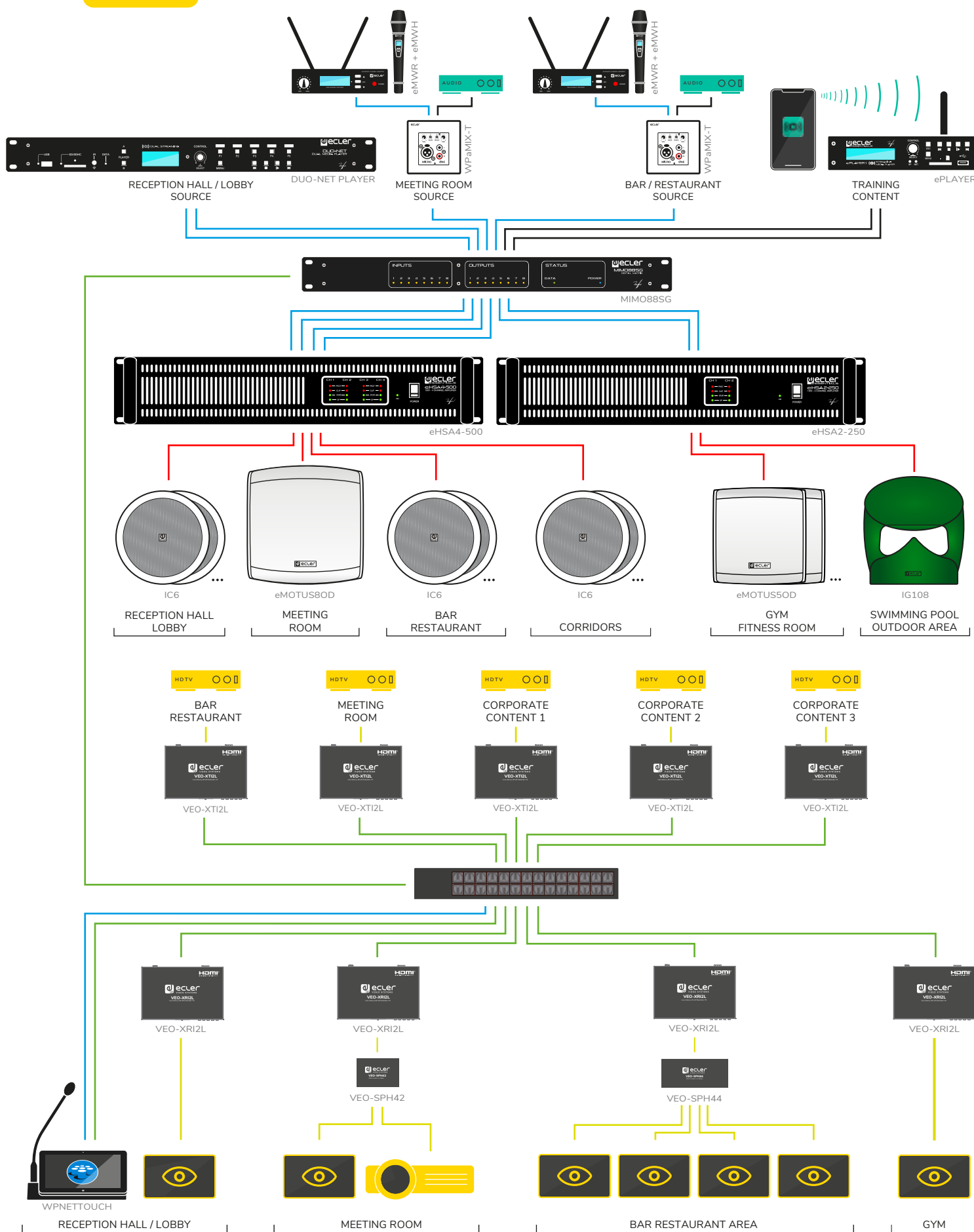
CONFERENCE ROOM



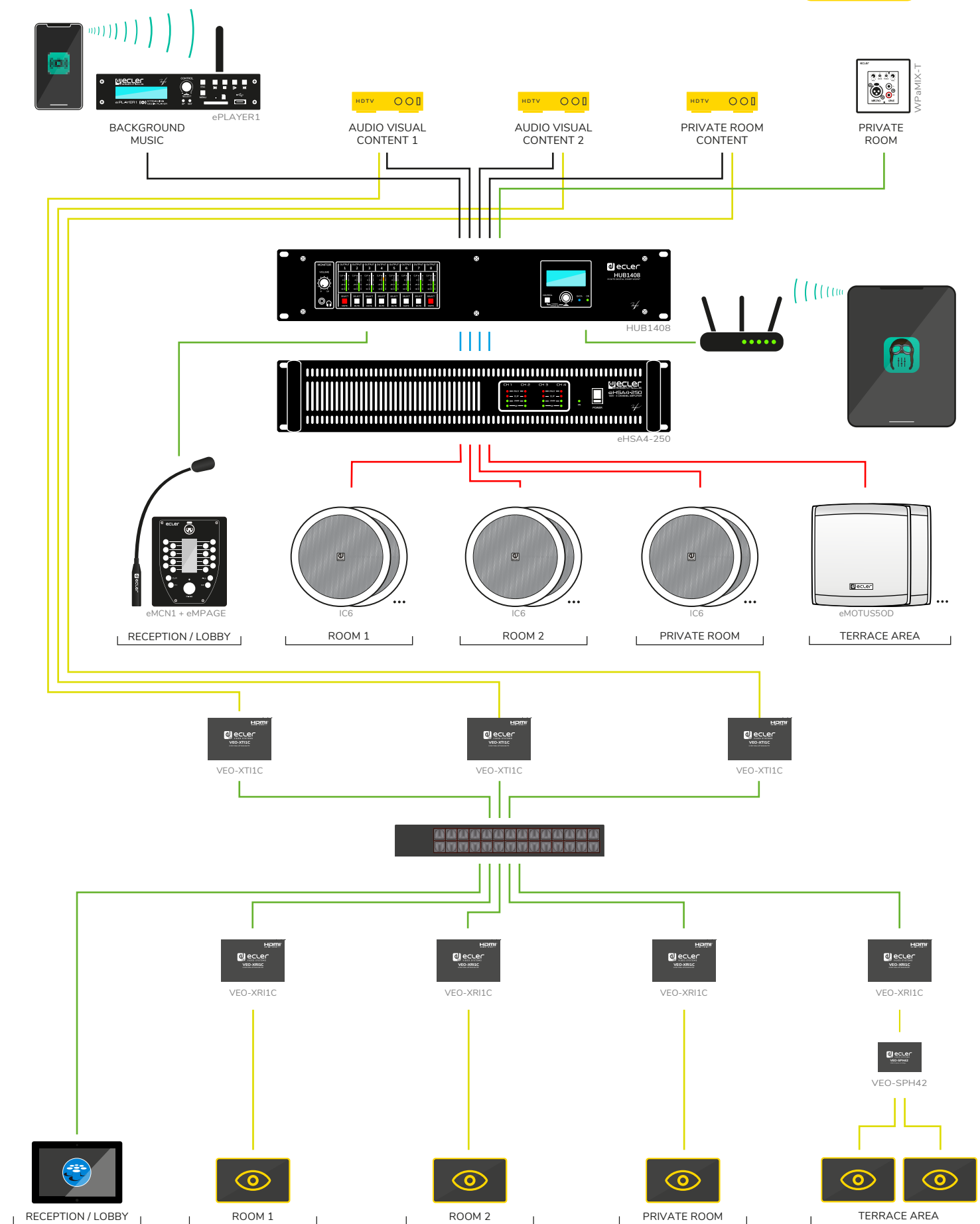
RS-232 CABLE HDMI UTP 2x1.5 CABLE UNBAL. AUDIO CABLE BAL. AUDIO CABLE



MULTIZONE HOTEL

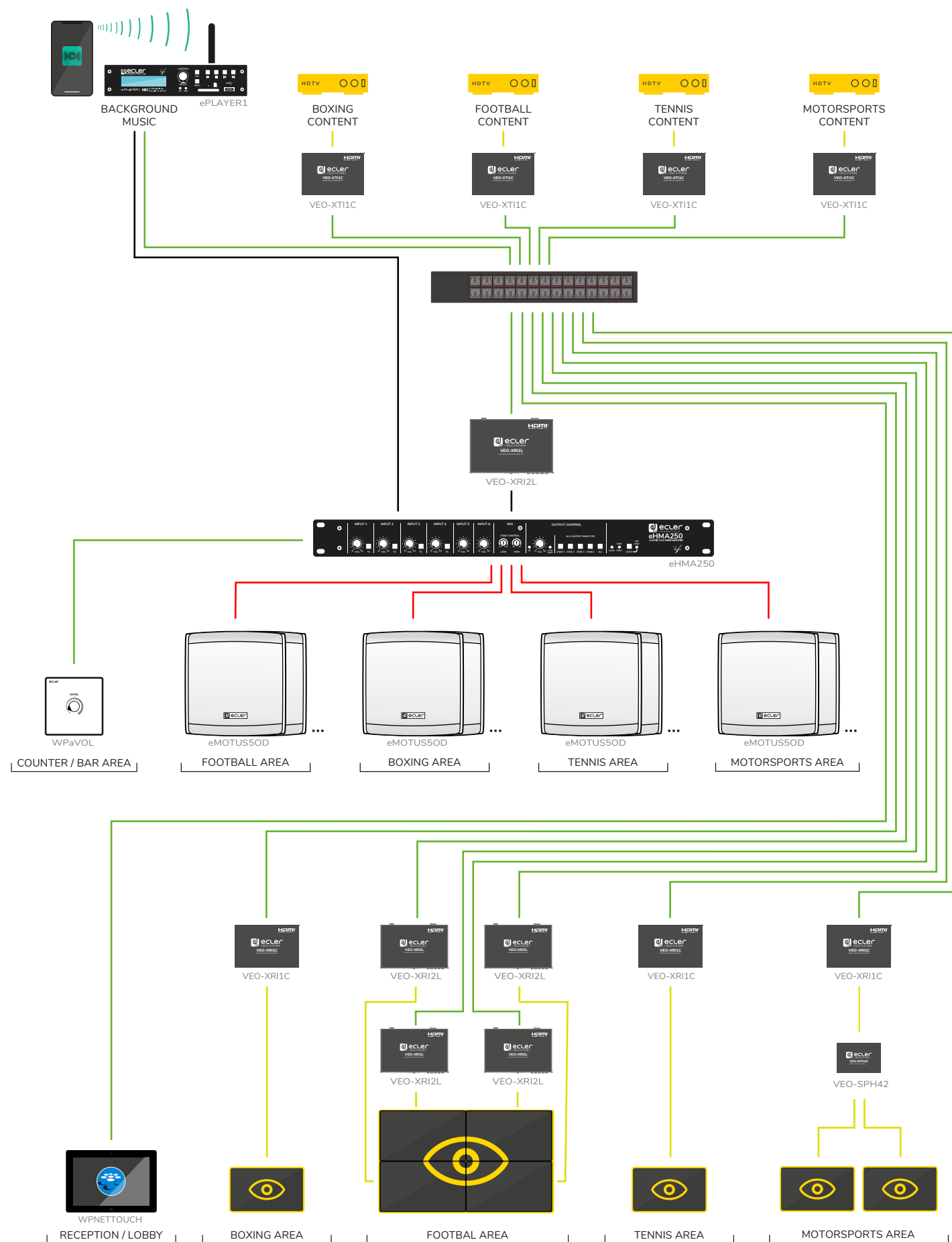


RESTAURANT

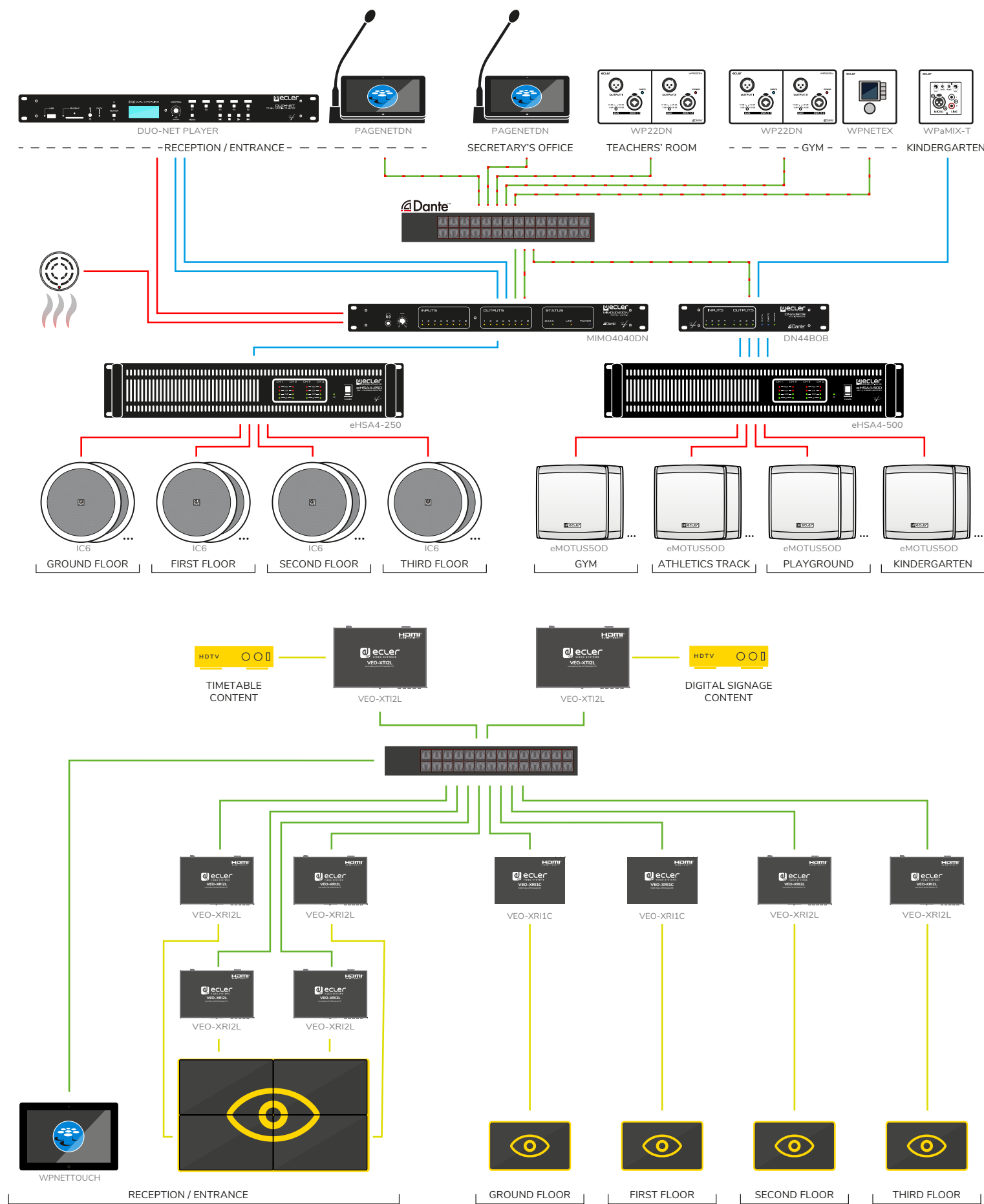


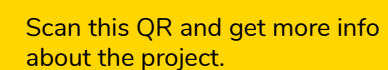


SPORTS BAR



EDUCATION CENTER





Intangibles Exhibition (Telefonica Foundation, Madrid) - SPAIN





ECLERNET, 10 YEARS OF AV EXPERIENCES

10 YEARS INNOVATING FOR THE BEST PRO A/V SYSTEM BUILDING PLATFORM

EclerNet celebrates 10 years of creating amazing AV experiences around the world. EclerNet ecosystem has been developed thinking on the AV system integrators, installers, and end users.

EclerNet Manager is the software application that lets users build a digital audio system, including hardware devices from Ecler.

Click on the panel image to download the UCP panel templates for your projects. Use the UCP v2 app to control panels from your mobile device via WIFI.

CONTROL YOUR A/V INSTALLATION

Once the project file that stores the audiovisual system configuration is created and saved, the **EclerNet Manager** application also include UCPs (User Control Panels), which are graphical control screens, customised for the needs of each remote user.

The software allows to create custom graphical user interfaces to control and monitor "real world" parameters like volumes, mutes, source selection, GPIs, GPOs.

COMPATIBLE

Identifiable and configurable device in an EclerNet project

INTEGRABLE

Integrable and controllable device in an EclerNet project through IP or RS-232 commands with ETH232AD accessory



BUILDING A DIGITAL AUDIO-VIDEO SYSTEM HAS NEVER BEEN SO EASY!

CUSTOMIZED CONTROL PANELS WITH YOUR IMAGES / LOGOS

REMOTE CONTROL FROM YOUR MOBILE DEVICE

A SOLID AND CONTINUOUSLY IMPROVING PLATFORM

SCHEDULE THE FUNCTIONING OF YOUR INSTALLATION THROUGH EVENTS AND PRESETS

SET UP AN AUDIO, VIDEO AND CONTROL SYSTEM

THIRD PARTY CONTROL DRIVERS

Luis Hinojar (Sales Director):

The software platform EclerNet has been a real driving force towards our expansion into more than 70 countries. It's intuitive and user friendly network design has attracted installers and AV integrators from all over the world.

David Loza (Chief Technical Officer)

With our experience and knowledge of the existing offers to digital ecosystems, we focused on creating our own! Combining a powerful tool with a genuine philosophy and friendly approach to the design, programming and start up of system integrators. All with the end user experience as our goal.

Domingo Melé (Head of R & D)

EclerNet is an AV control platform which has scored highly, far surpassing early expectations. We have successfully produced a piece of software that can be used in numerous types of installations. Despite having been in the market for 10 years, its full potential is yet to be taken advantage of.

VEO-SWM44

4K 4X1 PRESENTATION SWITCHER WITH VEOCast



4K
ULTRAHD

HDR



18
GBPS

HDMI

VIDEO TRANSMISSION MULTIMEDIA INTERFACE



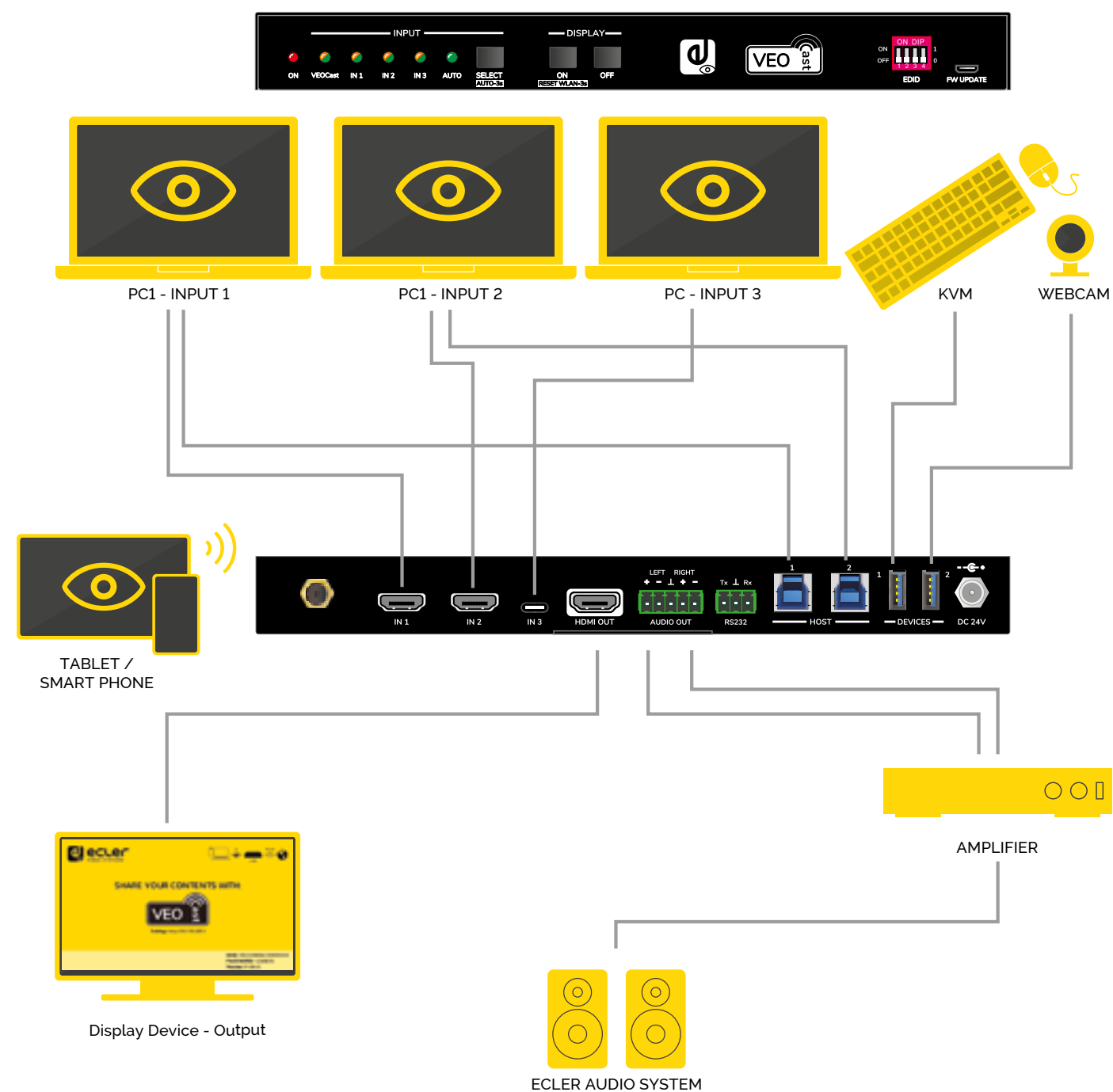
VEO-SWM44

VEO-SWM44 is a compact 4K presentation switcher that includes 2 HDMI 2.0, a USB-C and wireless input selection via VEOCast to a single HDMI 2.0 output.

- Bandwidth up to 18Gbps, resolution up to 4k @60hz YUV 4:4:4
- Support HDR10, Dolby Vision
- Wireless BYOD (bring your own device) capability via VEOCast (for iOS, Android, Windows and MacOS devices)
- Provide up to 60w charging, USB data and 4K video over USB-C
- HDMI Audio de-embedded via balanced analogue audio port on Euroblock connectors
- HDCP2.2 Compliant
- EDID Smart Management (via dip-switch)
- Switching function via front panel, auto-switching function, RS-232
- Configuration via web-page (WiFi)
- Send CEC and RS-232 commands for display control



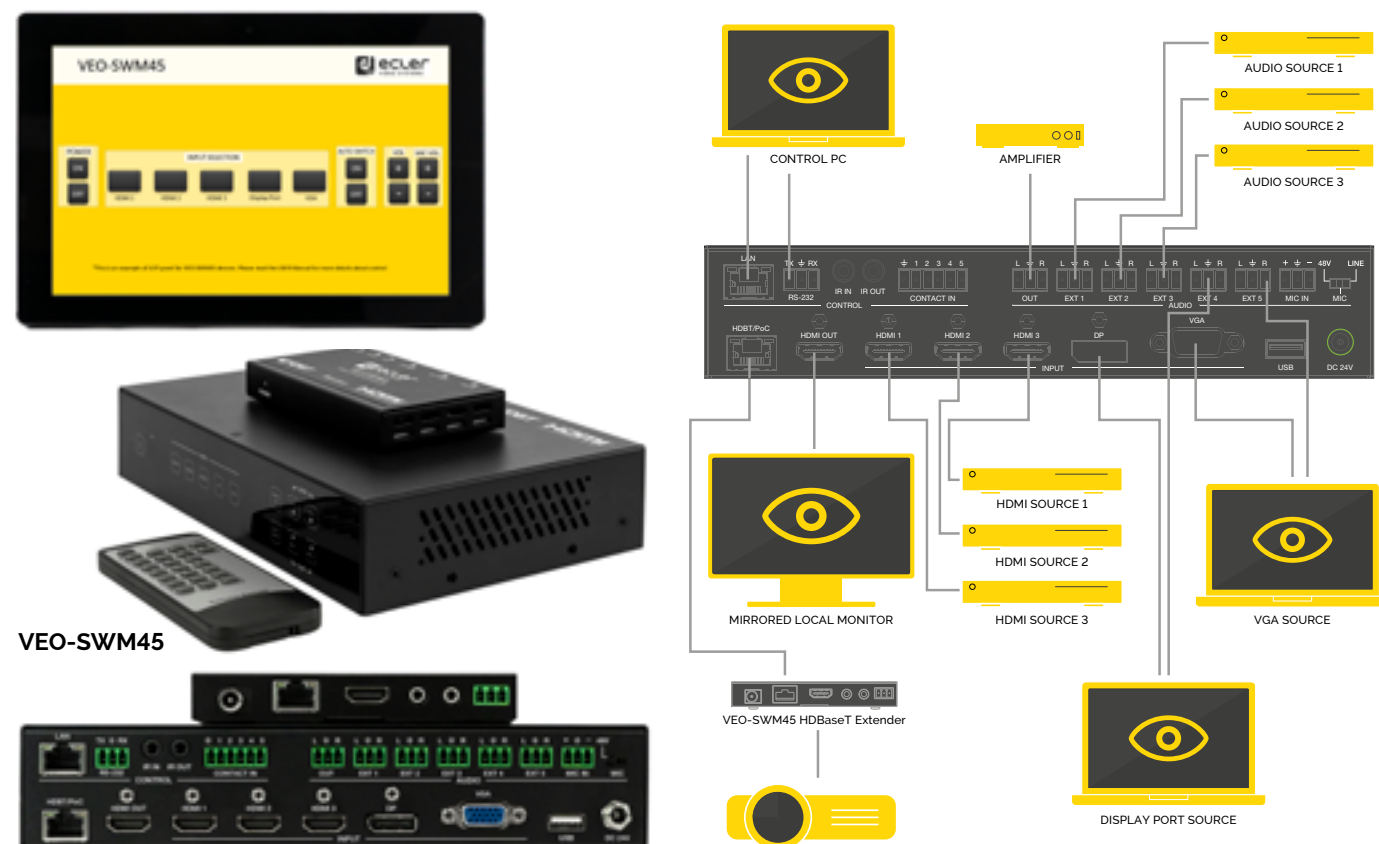
VEOCast is a multiplatform wireless technology protocol compatible with iOS, Android, Windows and OSX systems allowing for two devices to detect and connect to each other. Once connected, their displays can be mirrored without requiring additional applications. This is useful for example when duplicating the content of a mobile phone or laptop to an external display or a projector screen.



VEO-SWM45

4K 5X1 PRESENTATION SWITCHER WITH HDBaseT EXTENDER

4K ULTRAHD
HDMI
VGA
DP
HDBT
PoH



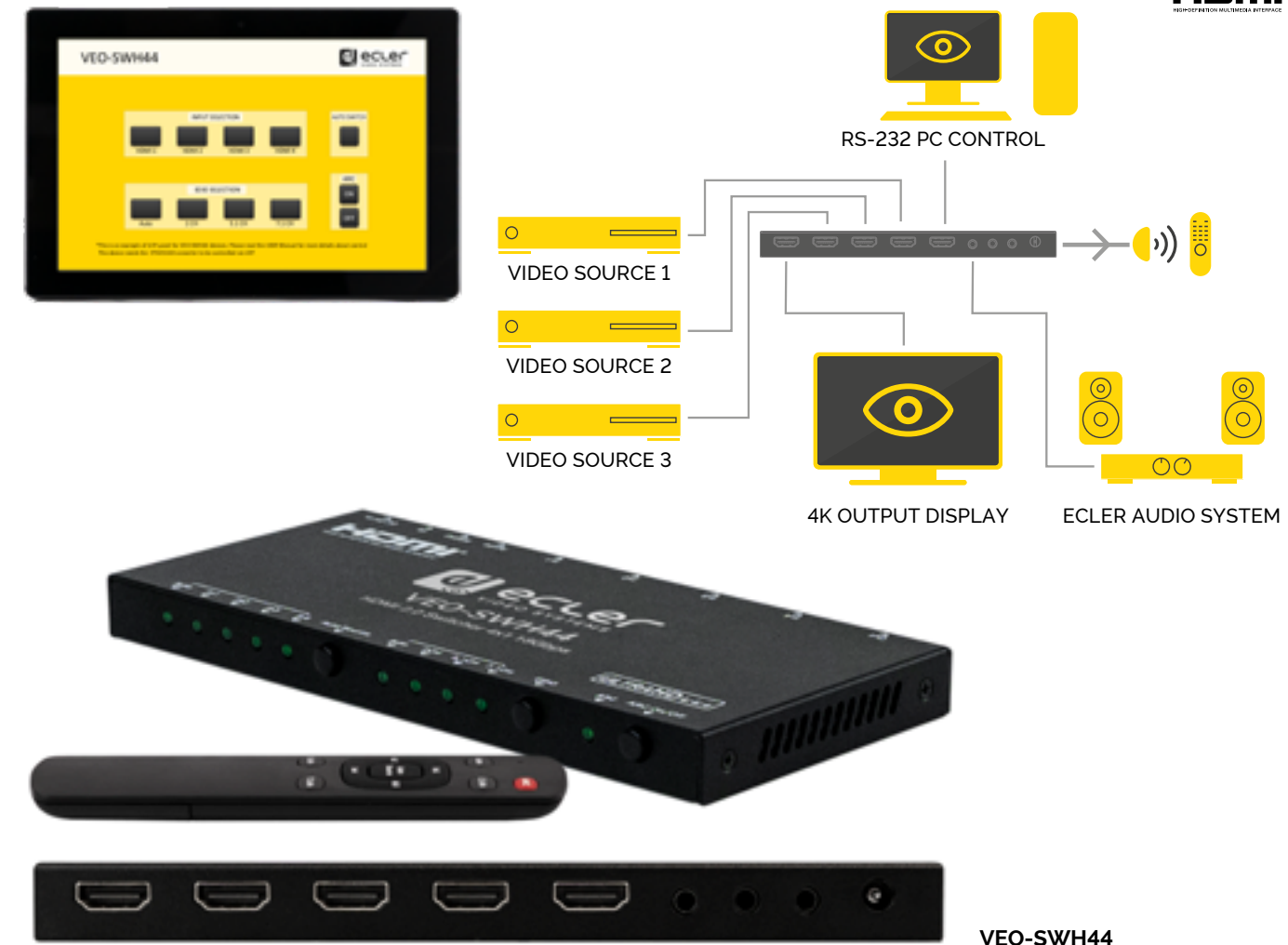
VEO-SWM45 is a compact 4K presentation switcher and scaler. An integrated audio matrix allows to embed 5 unbalanced stereo signals and route them independently to the output. With friendly control options, VEO-SWM45 is a flexible and smart solution, tailor-made for small-to-medium sized commercial applications such as corporate, education and training room environments.

- Ultra High Definition source selector with presentation features and integrated scaler
- Three HDMI 2.0 Inputs, one VGA (YPbPr/CVBS) and one DisplayPort video input
- Five Unbalanced Stereo and one Balanced Microphone/Line Inputs with 48V phantom power
- Digital input video resolutions up to 4Kx2K (4096x2160@60Hz YUV 4:4:4)
- VGA resolution up to 1920x1200@60Hz
- Output resolutions up to 4096x2160@30Hz
- Mirrored HDBaseT output for extension up to 70m
- Included HDBaseT Receiver
- HDCP 2.2 Compliant
- Supports automatic and manual switching options
- Supports EDID management
- Supports PCM stereo pass-through
- Touch Panel buttons, Embedded Web GUI, IR Remote, Logic contacts, RS-232 control and TCP/IP control (EclerNet Manager and third party remote control compatible)

VEO-SWH44

HDMI 2.0 4X1 18Gbps SWITCHER WITH AUDIO DE-EMBEDDER AND RS-232 CONTROL

4K ULTRAHD
HDR
18 GBPS
HDMI



VEO-SWH44 is a 4x1 HDMI switcher for high dynamic range (HDR) formats. It is the ideal solution for applications requiring 4K/UHD and HDR sources and displays. VEO-SWH44 includes audio de-embedding features and audio EDID management. The HDMI selection could be automatic (sense selection) and manual (frontal panel, remote control or serial commands). The controls include ARC mute and LED indications of the selected sources and settings.

- 4x1 Ultra High Definition sources selector compliant with HDMI 2.0a standards
- Video formats up to 4Kx2K(4096x2160@60Hz YUV 4:4:4) and all HDMI 3D video formats and all HDMI
- Supports HDR and 3D contents
- HDCP2.2/1.4 Compliant
- Supports 36 bit Deep Color
- Smart EDID management (Auto/2CH/5.1CH/7.1CH selectable)
- PCM, Dolby TrueHD, DTS-HD Master Audio up to 7.1CH
- Supports Audio Return Channel (ARC)
- Digital and analog audio output
- RS-232 Control
- Supports up to 18Gbps video data rate

VEO-MXH44

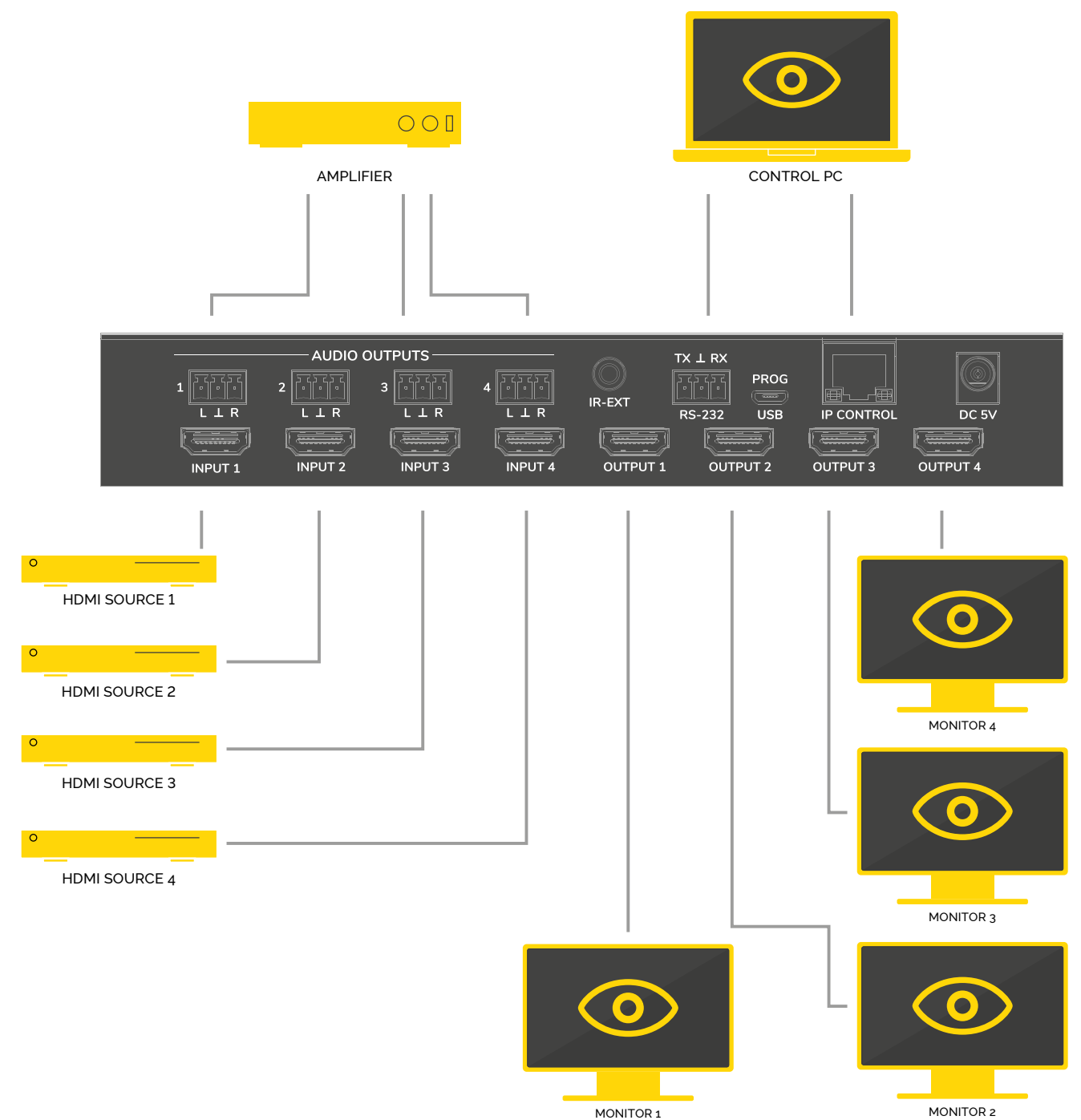
**HDMI 2.0 4X4 18Gbps MATRIX
WITH AUDIO DE-EMBEDDERS**



VEO-MXH44

Ecler VEO-MXH44 is a 4x4 HDMI Matrix for high dynamic range (HDR) formats. The HDMI selection can be manual via frontal panel, or remote via serial commands, TCP/IP, and IR. The integrated web GUI allows to configure and control the unit in a very user friendly way.

- 4x4 Ultra High Definition sources selector compliant with HDMI 2.0 standards
- Video formats up to 4096x2160@60Hz YUV 4:4:4 and 3D video formats.
- Supports HDR and 3D contents
- HDCP2.2/1.4 Compliant
- Supports 48 bit Deep Color
- Support EDID audio management (2CH/5.1CH/7.1CH selectable)
- Support PCM, Dolby TrueHD, DTS-HD Master Audio up to 7.1CH
- 4 stereo analogue audio output for audio de-embedding
- TCP/IP, RS232 Control, IR control
- Supports up to 18Gbps video data rate

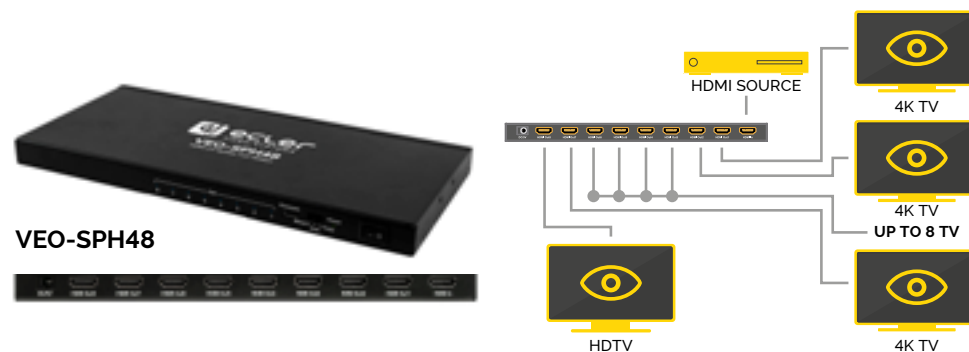


SPLITTERS

VEO-SPH48

**1X8 HDMI 2.0
SPLITTER**

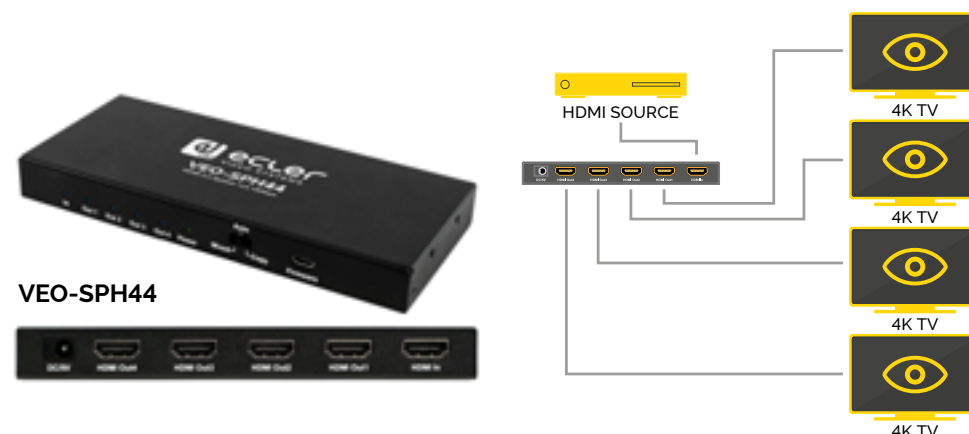
1x8 HDMI splitter for high dynamic range (HDR) formats. Simultaneously displays an Ultra Hi-Definition source on up to eight Ultra HD displays.



VEO-SPH44

**1X4 HDMI 2.0
SPLITTER**

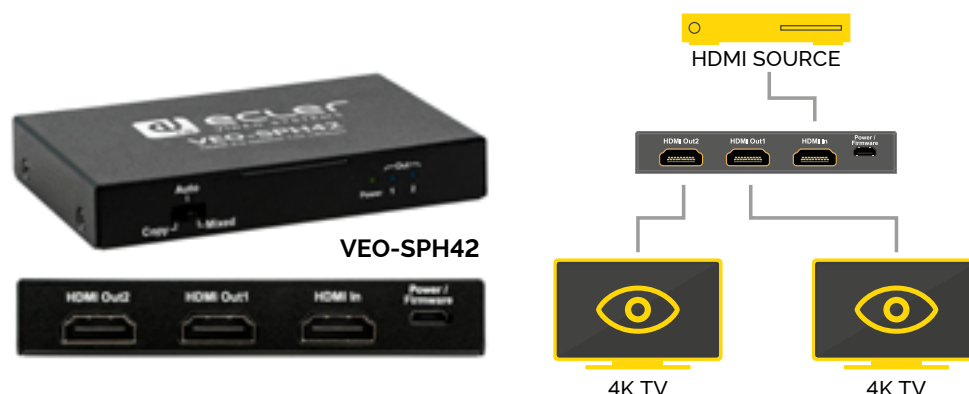
1x4 HDMI splitter for high dynamic range (HDR) formats. Simultaneously displays an Ultra Hi-Definition source on up to four Ultra HD displays.



VEO-SPH42

**1X2 HDMI 2.0
SPLITTER**

1x2 HDMI splitter for high dynamic range (HDR) formats. Simultaneously displays an Ultra Hi-Definition source on up to two Ultra HD displays.



VEO-SPH48 / VEO-SPH44 / VEO-SPH42

- Supports resolutions up to 4Kx2K (4096x2160@60Hz YUV 4:4:4)
- Three EDID setting modes
- HDCP2.2/14 Compliant
- Supports 36 bit Deep Color
- Supports LPCM 7.1, Dolby TrueHD, Dolby digital Plus, and DTS-HD Master Audio
- Supports HDR and 3D contents
- Supports up to 18Gbps video data rate
- Front panel LED indicators for power and signal status



VIDEO DISTRIBUTION OVER IP

VEO-XTI1C / VEO-XRI1C

**H.264 FULL HD OVER IP
VIDEO EXTENDERS**

FULLHD
HDMI
PoE



VEO-XTI1C



VEO-XRI1C



VEO-XRI1C

VEO-XTI1C and VEO-XRI1C are HDMI over IP Extenders that use the advanced H.264 compression for a limited network bandwidth use. This over IP solution is widely suitable for installations like hotels, shopping malls, meeting rooms, classrooms, airports, train and metro stations and all the applications where latency is secondary to bandwidth occupation. An intuitive user panel with LEDs display allows to select the stream channel just out of the box, without the need of connecting a PC. Web browser interface, PC tools and third party control protocol are available for advanced settings and advanced control.

- Full HD over IP Extension
- Supports point-to-point, point-to-multipoint and multipoint-to-multipoint configurations
- Up to 120m over a single Cat.5e/6 cable in point-to-point connection. with 1x looping HDMI output for daisy chaining
- TCP/IP protocol compliant with selectable streaming bit rate up to 15Mbps per stream
- H.264 compression encoding that support resolution up to 1080p@60Hz
- HDCP Compliant
- IR Remote control, with LED display to show the Group ID. Fully operating just out of the box without the need of PC connection
- Integrated web server for configuration, PC tool control and Telnet control (EclerNet Manager and third party remote control compatible)
- Supports LPCM audio format
- Wide-band IR pass through to control the source (38kHz to 56kHz)
- 2 way UART/RS-232 (Up to 115200) pass-through, with remote control function to select 8 group Baud rate options
- Dual power input: 802.3af compliant POE & DC 5V (No need of external power supply when encoders and decoders are connected to a POE Switch)
- Included DC 5V/1A international power supply



VIDEO DISTRIBUTION OVER IP

VEO-XTI2L / VEO-XRI2L

LOW LATENCY 4K OVER IP VIDEO EXTENDERS WITH KVM AND VIDEOWALL FEATURES

4K
ULTRAHD
HDR
HDMI
PoE



VEO-XRI2L



VEO-XTI2L



VEO-XRI2L



VEO-XTI2L

VEO-XTI2L and VEO-XRI2L are low latency 4K HDMI extenders over IP. They also provide optional fiber optic connection for extension of 4K signals up to 2Km. This over IP solution is widely suitable for all the applications that require low latency video extension such as real time application or KVM. An intuitive user panel with LEDs display allows to select the stream channel just out of the box, without the need of connecting a PC. The extenders can be power supplied both via PoE or via the included external PSU. Web browser interface, PC tools and third party control protocol are available for advanced settings and advanced control.

- Support Video Wall composition (Max 8x8)
- 4K UHD HDMI over IP/Fiber Extension
- Support point-to-point, point-to-multipoint and multipoint-to-multipoint configurations
- USB2.0 over IP extension for KVM
- Support transmission distances up to 120m over single Cat.5e/6 cable
- Support fiber optic extensions up to 60Km (Single Mode)
- Support up to 4K@60Hz YUV 4:2:0 input and 4K@30Hz outputs
- HDCP 2.2 / HDCP1.4 compliant
- Support Bi-Directional Wide Band IR (38kHz-56kHz) Pass through
- Support RS-232 pass through and Telnet control (EclerNet Manager and third party remote control compatible).
- Include IR remote/ Frontal Panel control of Group ID channel, with LED display to show the Group ID in use
- Support Dolby True HD, DTS-HD Master Audio formats
- Support 3D video formats
- SPDIF 5.1 and L/R analog stereo embedding and de-embedding
- Easy installation over Gigabit, IGMP Snooping, Jumbo Frame compliant LAN Networks
- The extenders can be powered with PoE or with the included external power supply



CONTROL VIDEO WITH ECLERNET MANAGER

VEO-XTI2L and VEO-XRI2L become native EclerNet products, thanks to the firmware update 2.0.

This important step allows offering to pro AV installers a unique platform for installation and commissioning of Audio and Video distribution systems. In addition, by creating UCP panels, it is possible to create fully customizable graphical interfaces for simple and immediate control through WPNETTOUCH controllers or using the different control options offered by EclerNet, such as control via WEB or through Android® / iOS® devices installing the UCP Ecler app.

Therefore, this important innovation opens the doors to the EclerNet platform for all applications where the integration of Audio Video and Control is required.

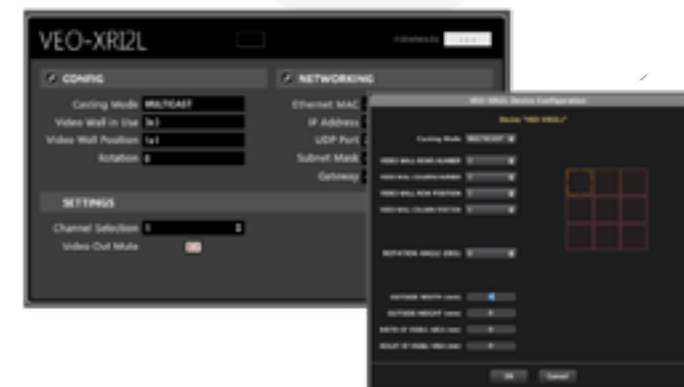
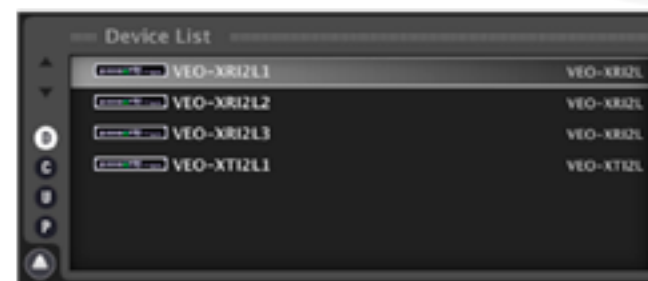
The software and firmware will add the following features:

• VEO-XTI2L and VEO-XRI2L device discovery

The software will automatically detect the devices in the network and they will appear in the "Device List".

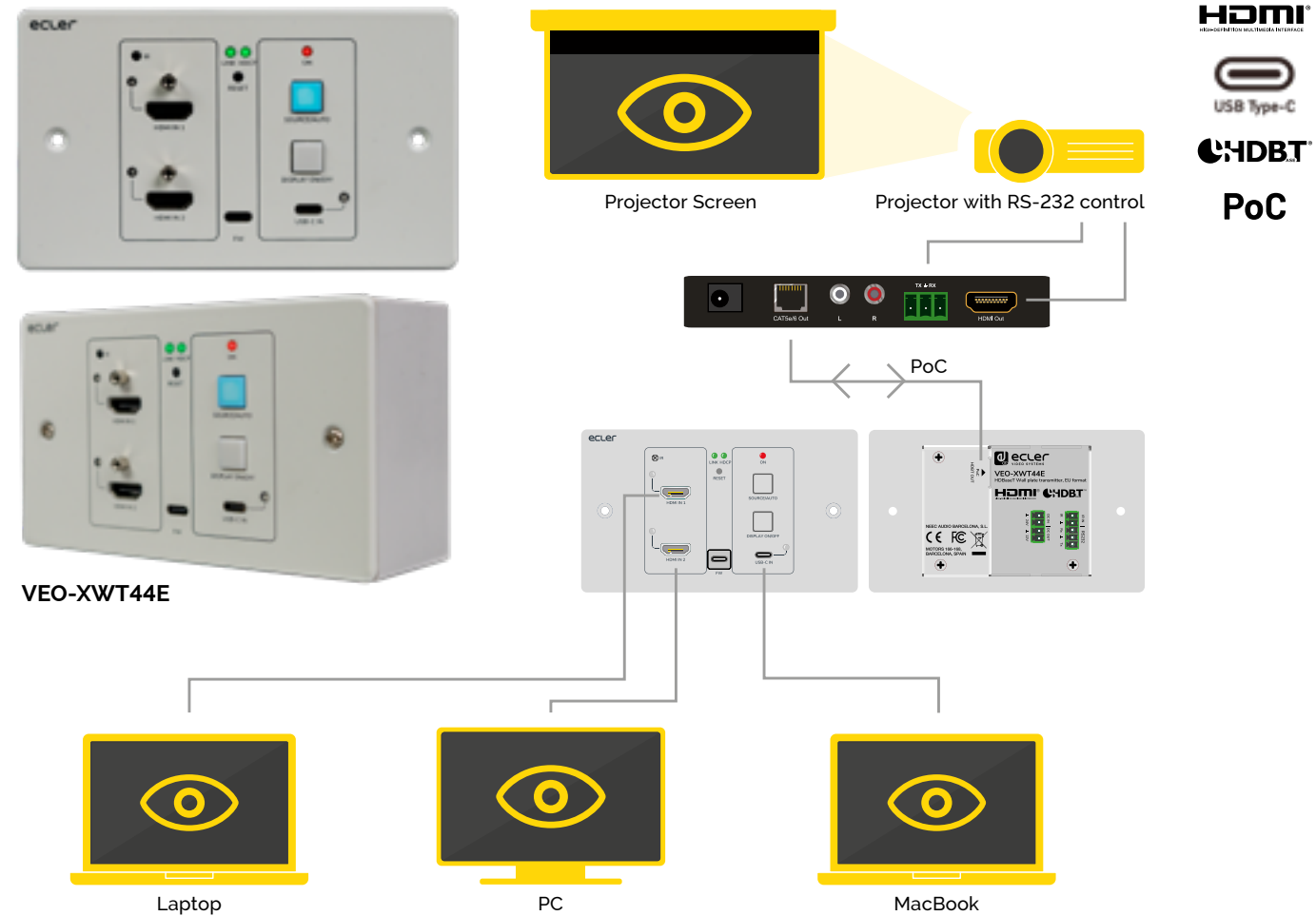
• VEO-XTI2L and VEO-XRI2L configuration

Network and Device configuration windows allow to easily change IP address and basic, and advanced device options, including videowall composing options, in order to simplify the commissioning process.



VEO-XWT44E

SELECTOR / TRANSMITTER PANEL 4K HDBaseT 18Gbps

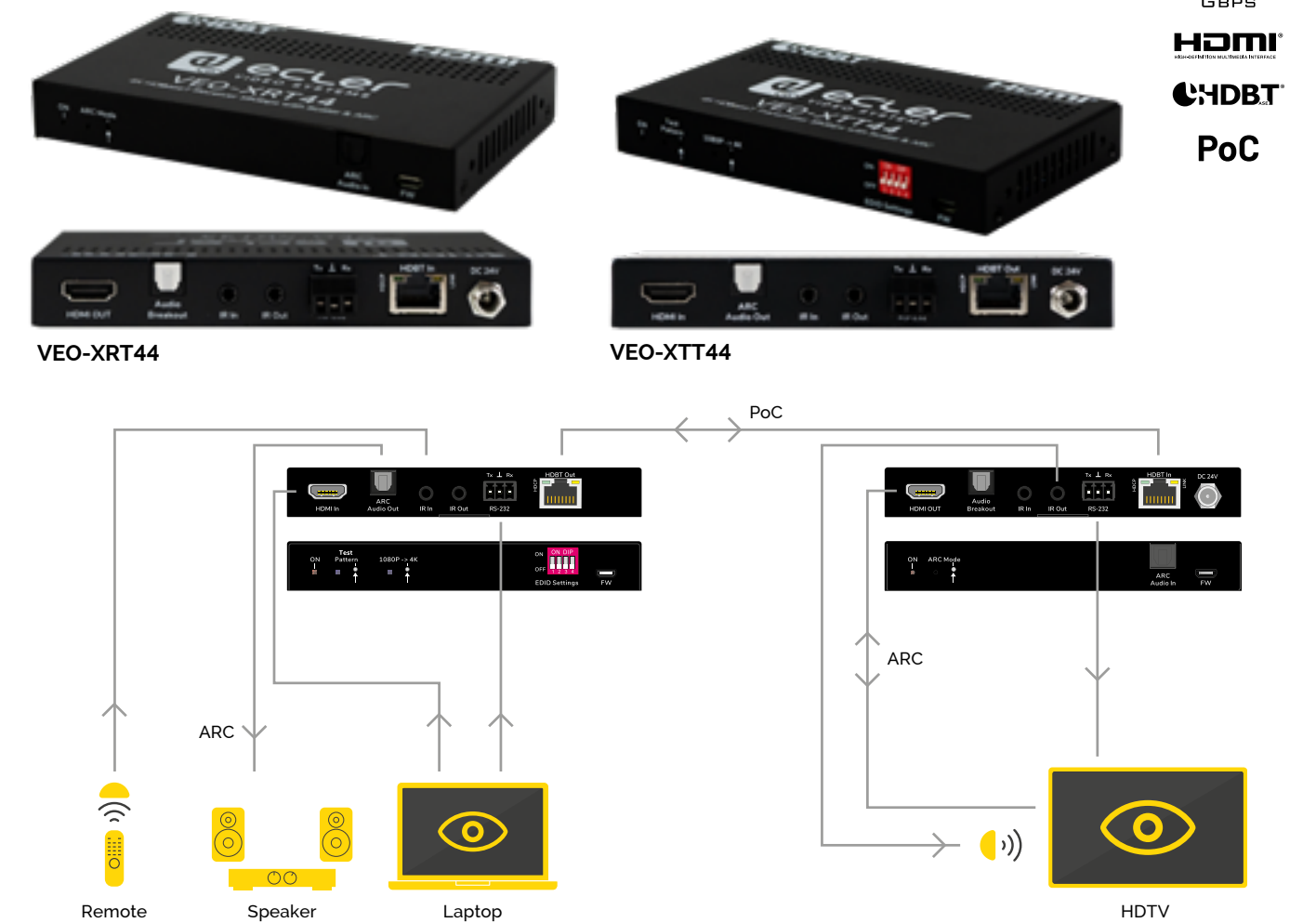


Ecler VEO-XWT44E is a HDBaseT transmitter in European 2-gang wallplate format. It allows to extend one 4K video signal up to 40m over a single Cat 5e/6 cable or a FullHD signal up to 70m when connected to VEO-XRT44. It supports real 4K video signals at 60Hz with 4:4:4 YUV chroma subsampling and HDR 10 with a maximum bandwidth of 18Gbps. With bidirectional PoC feature, the transmitter can be powered by the receiver and vice versa. A second front panel button can be used to switch ON/OFF a display via CEC or it can be alternatively programmed by IR learning or RS-232 to send two RS-232 commands, offering a simple and versatile control option.

- 4K HDMI wall-plate transmitter with 2 HDMI IN, and 1 USB-C IN
- Supports HDMI 2.0, 4Kx2K/60Hz/4:4:4
- HDCP 2.2 compliant
- Video source auto-switching
- Video lossless compression for HDBaseT technology, transmission up to 40m@4K and 70m@1080p over CATx cable
- Displays can be turned ON/OFF via CEC & RS-232 commands by 'DISPLAY ON/OFF' button
- RS-232 and IR pass through
- IR learning to control display on/off
- EDID pass through and smart managing
- Two-way PoC Supports CEC pass-through
- Provides LEDs to indicate the current operating status
- Firmware upgrade by Micro-USB port
- ESD protection

VEO-XTT44 / VEO-XRT44

4K HDBaseT EXTENDER KIT 18Gbps



Ecler VEO-XTT44 and VEO-XRT44 are professional HDBaseT transmitter and receiver for HDMI 2.0 extension of High Dynamic Range (HDR) formats. Bidirectional PoH (Power Over HDBaseT) allows to use only one power supply connected to the Transmitter or the Receiver, according to the installation needs. This product represents the ideal solution for residential and commercial applications that include the latest 4K/UHD and HDR sources and displays.

- Supports HDMI 2.0 and the HDMI video resolution up to 4K@60Hz 4:4:4 HDR
- HDCP 2.2 and 1.4 supported
- Extends 4K signals to distances up to 40 meters (131 feet) and 1080P signals to distances up to 70 meters (230 feet) over a single CATx cable
- Supports video resolution up-scaling, the 1080P input can be automatically upgraded to 4K output
- SPDIF out on receiver for source audio de-embedding
- 18Gbps high bandwidth
- Advanced EDID management: multiple built-in EDID settings or customized EDID can be selected
- Test pattern provides a built-in 4K/1080P image for troubleshooting
- Bidirectional IR, RS232 and 24V PoH
- Supports ARC
- Supports CEC pass-through
- Provides LEDs to indicate the current operating status
- Firmware upgrade by Micro-USB port
- ESD protection

4K HDBaseT EXTENDER

VEO-XPT44

4K HDMI 2.0 HDBaseT EXTENDER KIT 18Gbps



VEO-XPT44

4K
ULTRAHD
HDR
18
GBPS
HDMI
HDBaseT
PoH

VEO-XPT44 allows to extend one 4K video signal up to 40m over a single Cat.5e/6 cable or a Full HD signal up to 70m. The transmitter includes 1 HDMI link output while the receiver includes 2 mirrored HDMI outputs for daisy-chain connection. With a very reduced form factor added features of RS-232 and bidirectional IR, this is the perfect solution for any application where AV and control extensions are required.

- Complete extender kit, no settings needed
- Bandwidth up to 18Gbps, resolution up to 4K @60Hz YUV 4:4:4
- HDR10 and 3D supported
- Transmission distances up to 70 meters under 1080p and 40 meters under 4K
- Bi-directional IR and RS-232 pass-through
- Bidirectional PoH (RX powered by TX or TX powered by RX)
- 1x looping HDMI out on Transmitter and 2 x HDMI out at Receiver for daisy chaining or local monitoring purposes
- Use single UTP/STP category cable (Cat.5e/6/7) to substitute HDMI cable to achieve long distance transmission
- UTP/STP cable termination follows the standard of IEEE-568B
- HDCP2.2/1.4 compliant
- ESD protection

VEO-XPT24

4K HDBaseT EXTENDER KIT 10.2Gbps



VEO-XPT24



4K
ULTRAHD
HDMI
HDBaseT
PoH

VEO-XPT24 allows to extend one 4K video signal up to 40m over a single Cat.5e/6 cable or a Full HD signal up to 70m. With the added features of RS-232 and bidirectional IR, this is the perfect solution for extending a HDMI 1.4 video signal and control signals.

- Complete extender kit, no settings needed
- Full HD support: 1080p@60Hz
- 4K/UHD support: up to 4096x2160@30Hz (or 60Hz with YUV 4:2:0)
- Transmission distances up to 70 meters under 1080p and 40 meters under 4K
- Bi-directional IR and RS-232 pass-through
- Use single UTP/STP category cable (CAT.5e/6/7) to substitute HDMI cable to achieve long distance transmission
- UTP/STP cable termination follows the standard of IEEE-568B
- POC (RX powered by TX)
- HDCP2.2/1.4 compliant
- Mounting ears supplied

FULL HD EXTENDER

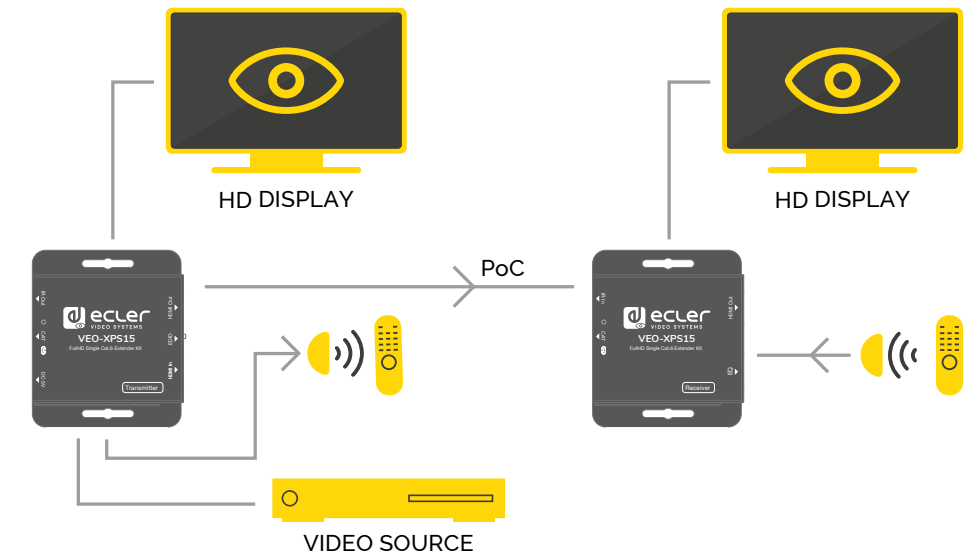
VEO-XPS15

FULL HD SINGLE CAT.5e/6
EXTENDER KIT

FULLHD
HDMI
PoC



VEO-XPS15



VEO-XPS15 allows to extend 1080p video signal up to 50m over a single Cat.5e/6 cable. With a very reduced form factor and unidirectional IR extension from the source to the display, this is a the perfect cost effective solution where Full HD and IR extensions are required.

- Complete HDMI Extender Kit for HDMI Audio Video and IR signals extension over single Cat.5e/6/7 cable
- Supports up to 1080p/60Hz High Definition resolution
- Compact design for easy and flexible installation
- Supports EDID copying from receiver display or loop out display
- Allows for cascading via additional HDMI loop out port
- Supports Power over cable function (Receiver is powered by Transmitter)
- Works with HDMI and HDCP compliant devices



DIGITAL CONTROL

WPNETTOUCH

USER CONTROL PANELS (UCP) TOUCH SCREEN CONTROL DEVICE



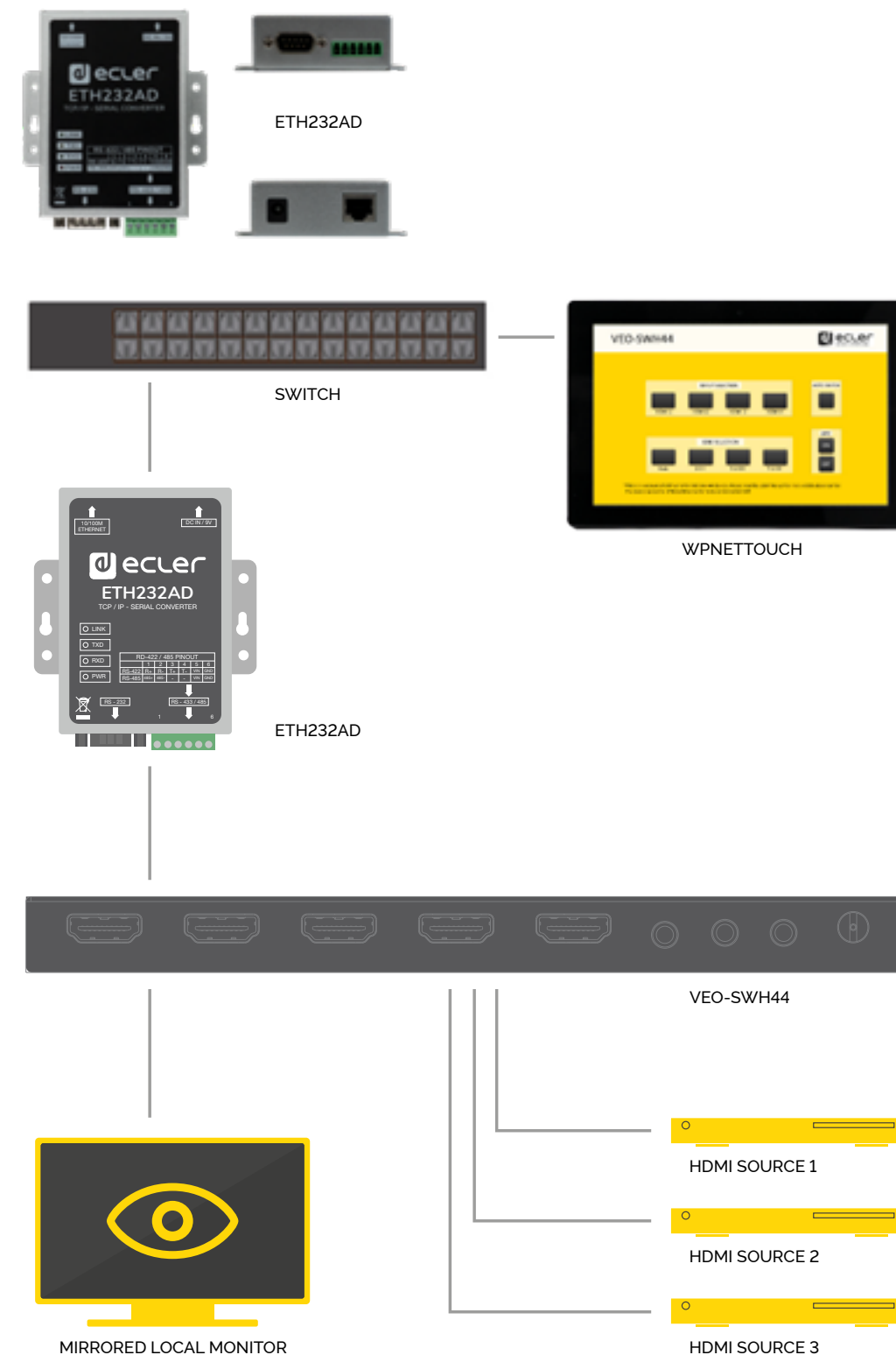
WPNETTOUCH is a 10" capacitive TFT tactile panel compatible with all the VEO Series networked products (VEO-XTI1C, VEO-XRI1C, VEO-SWM44, VEO-SWM45, VEO-MXH44 and VEO-SWH44) and all the EclerNet native products. When including a WPNETTOUCH in a VEO Series or EclerNet installation it is not necessary to use a computer to manage connected devices. Each WPNETTOUCH unit could be configured to work as a single zone control panel or as a global multi-zone controller. It allows executing customized User Control Panels that are able to control volume, sound source selection, video sources selection, presets recovery, communication via TCP/UDP with external devices, etc. Is fully compatible as a UCP server for third party devices (iOS®, Android®, Windows®, etc.).

CONTROL OF ECLER VIDEO EQUIPMENT: EclerNet Manager allows creating UCP panels to control native EclerNet devices and also other equipment equipped with third-party control protocol (TCP / IP, UDP, RS-232 via Ethernet to RS-232 adapter). In this way, a UCP panel displayed on a WPNETTOUCH unit, on an Android ® / iOS ® device + UCP Ecler app, or on a device that has a web browser, can take control of Audio Ecler equipment, Video Ecler VEO Series equipment and third party equipment.

- 10" Capacitive Touch Panel for fully customized control surfaces
- EclerNet, VEO Series and third party devices remote control compatible
- UCP client/server
- POE and local power supply (multi-plug universal PSU included)
- VESA75 standard mounting accessory included



DIGITAL CONTROL



ETH232AD is Ecler's new Ethernet-RS232 interface that allows to control devices featuring serial control, through the EclerNet platform using for example a WPNETTOUCH or the multiple control options offered by the platform, such as control via WEB or through an Android ®, iOS ® devices through the UCP Ecler app.

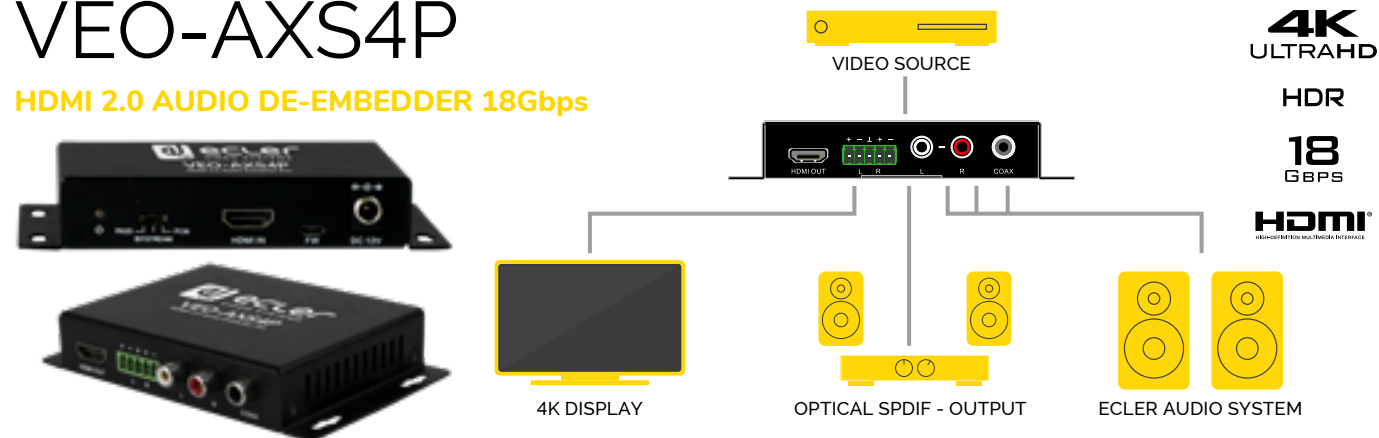
With EclerNet Manager it's possible to create customized graphical interfaces to send commands to the ETH232AD, which will be responsible for the translation of the network protocol to the RS-232 protocol.

This way, using a WPNETTOUCH you can control audio devices such as a CA series amplifier, video devices such as a VEO series selector or any third party device with RS-232 or RS-485 control.

AUDIO DE-EMBEDDER

VEO-AXS4P

HDMI 2.0 AUDIO DE-EMBEDDER 18Gbps

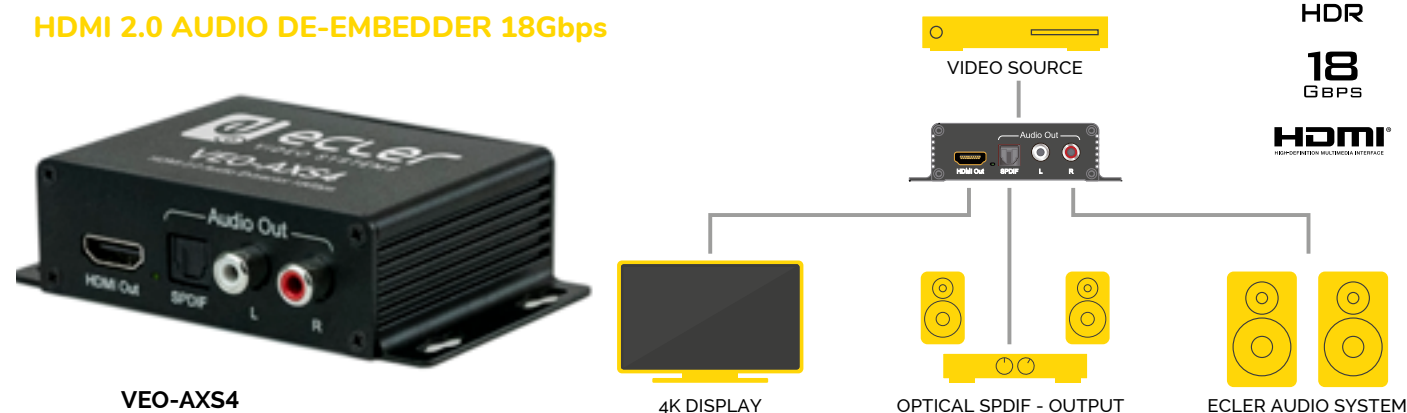


Ecler VEO-AXS4P is a professional HDMI audio extractor that allows to de-embed audio from a HDMI signal, including audio from 4K sources. VEO-AXS4P provides uncompressed LPCM analogue stereo signal through RCA and Phoenix balanced output as well as Dolby Digital and DTS multichannel signals through the coaxial S/PDIF digital output.

- Audio EDID Settings: Auto/2.0 CH/5.1CH
- Extracts the digital HDMI audio signal from the HDMI input to 2channel analog stereo output or to 5.1 S/PDIF output
- Signal amplification and equalization to extend HDMI input and output ports up to 10 meters (33 feet)
- Supports LPCM, Dolby Digital and DTS
- Supports resolution up to 4K @ 60Hz YUV 4:4:4
- Supports deep color up to 36bit
- Supports sample rate up to 192 KHz and resolutions up to 24 bit
- HDCP2.2/14 Compliant
- Supports CEC

VEO-AXS4

HDMI 2.0 AUDIO DE-EMBEDDER 18Gbps



The VEO-AXS4 allows to extract audio signals from HDMI signals up to 4K. It provides a stereo analog output on RCA connectors or a 5.1 digital output on Toslink connector, selectable through the onboard switch.

- Extracts the digital HDMI audio signal from the HDMI input to analog stereo output or to 5.1 S/PDIF output
- Audio EDID Settings: Auto/2.0 CH/5.1CH
- Signal amplification and equalization to extend HDMI input and output ports up to 10 meters (33 feet)
- Supports LPCM, Dolby Digital and DTS
- Supports resolution up to 4K@60Hz YUV4:4:4
- Supports deep color up to 36bit
- Supports sample rate up to 192 kHz and resolutions up to 24 bit
- HDCP2.2/14 Compliant
- Supports CEC
- Supports up to 18Gbps video data rate

ACCESSORIES

VEO-CH201-202-205-210

HDMI 2.0 CABLE

VEO-CH201-202-205-210



This professional HDMI 2.0 cable family is specially designed to complete Ecler video products line. It includes 4 standard lengths of 1m, 2m, 5m and 10m. These high quality cables are the perfect solution for professional installations, ensuring reliable and seamless HDMI 2.0 connections up to 18Gbps.

All cables support HDMI, Ethernet, Audio and Control (ARC and CEC) signals.

- Maximum supported HDMI clock: 600 MHz
- Supported TMDS data rate: 18 Gbit/s
- Maximum supported color depth: 48 bit/px
- Maximum supported resolution: 4096x2160p60
- HEAC (HDMI Ethernet Audio Control)

VEO-RACK19

19" RACK MOUNTING SHELF



Ecler VEO-RACK19 is a universal rack mounting support compatible with standard 19" racks. It allows to rack mount multiple devices with different format factor like VEO serie devices.

- Universal shelf for rack mounting all VEO products
- Products can be mounted in the front or in the rear side of the shelf
- Includes 12 x M3 screws with nuts and Dual Lock™ tape for devices not provided of mounting ears
- Central holes for cable ties

TYPE	TECHNOLOGY	DESCRIPTION
CABLES & CONNECTORS	HDMI 2.0	HDMI stands for High Definition Multimedia Interface: it is the most used standard for video communications. Its 2.0 version enables transmission of High Dynamic Range (HDR) video Bandwidth up to 18Gbps Up to 32 audio channels for a multi-dimensional immersive audio experience. Up to 1536kHz audio sample frequency for the highest audio fidelity.
	HDMI 1.4	HDMI stands for High Definition Multimedia Interface: it is the most used standard for video communications. Its 1.4 version enables transmission of 4K/UHD video Bandwidth up to 10.2Gbps and Up to 8 audio channels. It supports 3D content and Ethernet transmission on the same cable.
	VGA	Video Graphics Array (VGA) is an analog graphics standard for video display controller. Today, the VGA analog interface is used for high-definition video, including resolutions of 1080p and higher.
	DISPLAY PORT	DisplayPort is an interface protocol for digital displays, particularly computer monitors. It was developed by the Video Electronics Standards Association (VESA) as a high-performance replacement for other display modes such as VGA (Video Graphics Array) and DVI (Digital Visual Interface). Its last 1.4 version enables video transmission bandwidth up to 32.4 Gbps.
	UTP	Found in many Ethernet networks and telephone systems, UTP (Unshielded Twisted Pair) cables are the most common cables used in computer networking.
	FTP	In a Ethernet cable it stands for Foiled Twisted Pair. Each pair is individually shielded with aluminum foil. This type of shielding protects cable from external EMI entering or exiting the cable and also protects neighboring pairs from crosstalk.
	SFTP	In a Ethernet cable it stands for Shielded Foiled Twisted Pair. Each pair is individual shielded using foil between the twisted pair sets, and also an outer foil or braided shielding. This type of shielding helps prevent EMI from entering or exiting the cable and also protects neighboring pairs from crosstalk.
INTERNET & PROTOCOLS	ETHERNET JUMBO FRAME	A jumbo frame is an Ethernet frame with a payload greater than the standard maximum transmission unit (MTU) of 1,500 bytes. Jumbo frames are used on local area networks that support at least 1 Gbps.
	DHCP	The Dynamic Host Configuration Protocol (DHCP) is a network management protocol used on UDP/IP networks whereby a DHCP server dynamically assigns an IP address and other network configuration parameters to each device on a network so they can communicate with other IP networks.
	TCP	TCP is a connection-oriented protocol. A connection is established and maintained until the application programs have finished exchanging messages. It determines how to break data into packets, flow control and eventual retransmissions.
	UDP	UDP is "connectionless" protocol widely used for streaming audio and video over IP. It is considered an unreliable delivery protocol because it does not check for errors. When transmitting voice and video, there is no time to retransmit erroneous or dropped packets.
	VEOCAST	VEOcast is a multiplatform wireless technology protocol compatible with iOS, Android, Windows and OSX systems allowing for two devices to detect and connect to each other. Once connected, their displays can be mirrored without requiring additional applications. This is useful for example when duplicating the content of a mobile phone or laptop to an external display or a projector screen.
	UNICAST & MULTICAST	Unicast is communication between a single sender and a single receiver over a network. The term exists in contradistinction to multicast, communication between a single sender and multiple receivers. The format of IP multicast packets is identical to that of unicast packets and is distinguished only by the use of a special class of destination address (class D IPv4 address). Since TCP supports only the unicast mode, multicast applications must use the UDP transport protocol.
	IGMP	The Internet Group Management Protocol (IGMP) is a communications protocol used by hosts and adjacent routers on IPv4 networks to establish multicast group memberships. IGMP is an integral part of IP multicast.
A/V TECHNOLOGY & PROTOCOLS	HDCP	HDCP stands for High-Bandwidth Digital Content Protection. It is a copy protection scheme created to eliminate the possibility of intercepting digital data midstream between the source and the display.
	CEC	An HDMI feature enabling control of up to 15 CEC-enabled devices connected through HDMI by using one of their remote controls.
	ARC	Audio Return Channel is a HDMI feature that allows to simplify the connection between displays and external audio systems like home theaters or soundbars. The same HDMI cable is used to send the video signal to the display and to receive the audio back, avoiding external SPDIF or analog connections.
	KVM	KVM stands for "keyboard, video and mouse". A KVM switch is a hardware device that allows a user to control multiple computers from one or more sets of keyboards, video monitors, and mice.
	1080p	1080p stands for 1920x1080 pixels and it is also known as Full HD. It is a set of HDTV high definition video modes characterized by 1,920 pixels displayed across the screen horizontally and 1,080 pixels down the screen vertically; the p stands for progressive scan, i.e. non-interlaced.
	2K	2K resolution stands for 2048x1080 pixels. 2K is often used to indicate a Full HD resolution (1920x1080).

TYPE	TECHNOLOGY	DESCRIPTION
A/V TECHNOLOGY & PROTOCOLS	4K	4K resolution stands for 4096x2160 pixels. 4K is often used to indicate a UHD resolution (3840x2160).
	UHD	Ultra High Definition resolution stands for 3840x2160 pixel. It is the dominant 4K standard.
	HDBaseT	HDBaseT is a global standard for the transmission of ultra-high-definition video & audio, Ethernet, control, USB and up to 100W of power over a single Cat. cable, for up to 100 m/328 ft. HDBaseT simplifies the connections without compromising performance and AV quality.
	HDR	High Dynamic Range is a technology that improves the range of color and contrast in a digital image.
	H.264	H.264 or MPEG-4 Part 10, Advanced Video Coding (MPEG-4 AVC) is a block-oriented, motion-compensation-based, video compression standard designed to greatly reduce transmission bandwidth requirements while maintaining high video quality at the cost of greater video latency. Generally, when bandwidth is the primary concern, H.264 is a better choice than MJPEG.
	16:9	16:9 is a screen aspect ratio with a width of 16 units and height of 9. It is very common in TV and Cinema.
	4:3	Es una relación de aspecto con un ancho de 4 unidades y una altura de 3, habitual en en televisores y monitores de computadores antiguos.
	4:2:2	Chroma subsampling is the practice of encoding images by implementing less resolution for chroma information than for luma information, taking advantage of the human visual system's lower acuity for color differences than for luminance. The two chroma components are sampled at half the sample rate of luma: the horizontal chroma resolution is halved. This reduces the bandwidth of an uncompressed video signal by one-third with little to no visual difference.
	4:4:4	Chroma subsampling is the practice of encoding images by implementing less resolution for chroma information than for luma information. Each of the three YCbCr components have the same sample rate. This scheme is used in high-end film scanners and cinematic post production. 4:4:4 has no compression (so it is not subsampled) and transports both luminance and color data entirely.
	YUV	YUV digital model defines a color space in terms of one luma (Y) and two chrominance (UV) components.
	YPbPr	YPbPr, is a color space used in video electronics, in particular in reference to component video cables. The three cables ("Y," "Pb" and "Pr") provided a higher quality analog connection than the single-wire composite cable commonly used to hook up earlier video equipment, because the brightness and color components of the signal were maintained separately.
	CVBS	CVBS significa Composite Video Blanking Sync. En este nivel, la información de color, luminancia y sincronización se combinan en una señal. La señal de audio se transfiere por separado. Y / C ofrece una mejor calidad de señal que CVBS.
A/V TECHNOLOGY & PROTOCOLS	PAL/NTSC	There are two television display systems in commercial use: PAL (common in Europe and parts of Asia) delivers a frame rate of 25 fps (frames per second) with 625 lines, while NTSC (used in the U.S. and Canada) delivers a frame rate of 30 fps using 525 lines.
	LPCM	Linear Pulse-Code Modulation (LPCM) is a method of encoding digital uncompressed audio. Once encoded, the audio signal can be transported along with a digital video signal. HDMI1.4 interface supports up to 8-channel of LPCM/192 kHz/24-bit audio, which is generally the default audio output format of Blu-ray player. HDMI 2.0 supports up to 32 channels for immersive audio formats.
	SPDIF 5.1	Sony/Philips Digital Interface is a type of digital audio interconnect used in consumer audio equipment to output audio over reasonably short distances. The signal is transmitted over either a coaxial cable with RCA connectors or a fibre optic cable with TOSLINK connectors.
	EDID	Extended Display Identification Data (EDID) is a metadata format for display devices to describe their capabilities to a video source. The data format is defined by a standard published by the Video Electronics standards Association (VESA).
	PoE	Power over Ethernet (PoE) is a technology for wired Ethernet local area networks (LANs) that allows the electrical current necessary for the operation of each device to be carried by the data cables rather than by power cords. Doing so minimizes the number of wires on the installation.
	PoC/PoH	PoC stands for Power Over Cable and it identifies the delivery of power from a source to device over a standard Cat 5e/6 cable. The HDBaseT protocol includes this feature and it's also called PoH (Power over HDBaseT).

	SWITCHERS & MATRIXES				SPLITTER			AV DISTRIBUTION OVER IP				EXTENDERS HDBASET						EXTENDERS FULL HD	AUDIO EXTRACTOR	
	VEO-SWM45	VEO-SWH44	VEO-MXH44	VEO-SWM44	VEO-SPH48	VEO-SPH44	VEO-SPH42	VEO-XT11C		VEO-XR11C	VEO-XTI2L	VEO-XRI2L	VEO-XPT44	VEO-XPT24	VEO-XTT44	VEO-XRT44	VEO-XWT44E	VEO-XPS15	VEO-AXS4	VEO-AXS4P
INPUTS																				
HDMI	3	4	4	2	1	1	1	1		-	1	-	1(TX)	1(TX)	1	-	2	1	1	1
VGA	1	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
DisplayPort	1	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
USB-C Video	-	-	-	1	-	-	-	-		-	-	-	-	-	-	-	1	-	-	-
VeoCast	-	-	-	Yes	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
HDBaseT	-	-	-	-	-	-	-	-		-	-	-	1(RX)	1(RX)	-	1	-	-	-	-
H.264 Streaming	-	-	-	-	-	-	-	-		Yes	-	-	-	-	-	-	-	-	-	-
Fiber Port	-	-	-	-	-	-	-	-		-	-	1	-	-	-	-	-	-	-	-
USB Control	-	-	-	Yes	-	-	-	-		-	Yes	Yes	-	-	-	-	-	-	-	-
RS232	1	1	1	1	-	-	-	1		1	1	1	1	1	1	1	1	-	-	-
IR	1	1	1	-	-	-	-	1		2	2	2	1	1	1	1	1	-	-	-
SPDIF	-	-	-	-	-	-	-	-		-	1	-	-	-	-	1	-	-	-	-
Stereo Analog Audio	5 / 1 (Mic Line)	-	-	-	-	-	-	-		-	1	-	-	-	-	-	-	-	-	-
Full HD Support	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4K@30 Hz Support	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-		-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
4K@60 Hz Support	-	Yes	Yes	Yes	Yes	Yes	Yes	-		-	-	-	Yes	-	Yes	Yes	Yes	-	Yes	Yes
OUTPUTS																				
HDMI	1	1	4	1	8	4	2	1		1	-	1	1(TX) / 2(RX)	1(RX)	-	1	-	1(TX) / 1(RX)	1	1
HDBaseT	1 (Mirrored)	-	-	-	-	-	-	-		-	-	-	1(TX)	1(TX)	1	-	1	-	-	-
H.264 Streaming	-	-	-	-	-	-	-	Yes		-	-	-	-	-	-	-	-	-	-	-
Fiber Port	-	-	-	-	-	-	-	-		-	1	-	-	-	-	-	-	-	-	-
USB Control	-	-	-	Yes	-	-	-	-		-	Yes	Yes	-	-	-	-	-	-	-	-
RS232	1	1	1	-	-	-	-	1		1	1	1	1	1	1	1	1	-	-	-
IR	1	-	1	-	-	-	-	1		-	1	1	1	1	1	1	1	-	Yes	-
SPDIF	-	1	-	-	-	-	-	-		-	-	1	-	-	1	1	-	-	1	1
Stereo Analog Audio	1	1	4	1	-	-	-	-		-	-	1	-	-	-	-	-	-	1	2
Full HD Support	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		-	-	-	Yes	-	-	-	-	-	Yes	Yes
4K@30 Hz Support	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-		-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
4K@60 Hz Support	-	Yes	Yes	Yes	Yes	Yes	Yes	-		-	-	-	Yes	-	Yes	Yes	Yes	-	Yes	Yes
FEATURES																				
Videowall	-	-	-	-	-	-	-	-		-	Yes	Yes	-	-	-	-	-	-	-	-
Video Scaler	Yes	-	-	-	-	-	-	Downscaling		Downscaling	Yes	Yes	-	-	Yes	-	-	-	-	-
EDID Management	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-		-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
HDR	-	HDR10	HDR10	HDR10/Dolby Vision	HDR10	HDR10	HDR10	-		-	-	-	HDR10	HDR10	HDR10	HDR10	HDR10	-	HDR10	HDR10
HDCP Support	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
CEC	-	Yes	-	Yes	-	-	-	-		-	-	-	-	Yes	Yes	Yes	Yes	-	Yes	Yes
ARC	-	Yes	-	-	-	-	-	-		-	-	-	-	-	Yes	Yes	-	-	-	-
RS232 Extension	Yes	-	-	-	-	-	-	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
IR Extension	Yes	-	-	-	-	-	-	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
Audio Extension	-	-	-	-	-	-	-	-		-	Yes	Yes	-	-	Yes	Yes	-	-	-	-
KVM Extension	-	-	-	Yes	-	-	-	-		-	Yes	Yes	-	-	-	-	-	-	-	-
Cat.6a/7 Extension	40m@4K30 70m@FullHD	-	-	-	-	-	-	120m@FullHD		120m@FullHD	100m/ 60Km@4K30	100m/ 60Km@4K30	40m@4K60 70m@FullHD	40m@4K30 70m@FullHD	40m@4K60 70m@FullHD	40m@4K60 70m@FullHD	40m@4K60 70m@FullHD	50m@FullHD	-	-
PoE, PoH	Yes	-	-	-	-	-	-	Yes		Yes	Yes	Yes	Bidirectional	Bidirectional	Bidirectional	Bidirectional	Bidirectional	Yes	-	-
CONTROL OPTIONS																				
Web	Yes	-	Yes	Yes	-	-	-	Yes		Yes	Yes	Yes	-	-	-	-	-	-	-	-
Telnet	Yes	-	Yes	-	-	-	-	Yes		Yes	Yes	Yes	-	-	-	-	-	-	-	-
RS232	Yes	Yes	Yes	Yes	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
IR	Yes	Yes	Yes	-	-	-	-	Yes		Yes	Yes	Yes	-	-	-	-	-	-	-	-
GPI	Yes	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
EclerNet Manager	ENM Integrable	ENM Integrable (ETH232AD)	ENM Integrable	ENM Integrable (ETH232AD)	-	-	-	ENM Integrable		ENM Integrable	ENM Native	ENM Native	-	-	-	-	-	-	-	-
DIMENSIONS																				
Height	44 mm / 1,76"	12 mm / 0,47"	34 mm / 1,34"	44 mm / 1,76"	17 mm / 0,67"	17 mm / 0,67"	15 mm / 0,59"	28 mm / 1,10"		28 mm / 1,10"	30 mm /1,18"	30 mm /1,18"	20 mm / 0,79"	25 mm / 0,98"	20 mm / 0,79"	20 mm / 0,79"	86 mm / 3,39"	15 mm / 0,59"	29 mm / 1,14"	21,5 mm / 0,85"
Lenght	220 mm / 8,66"	180 mm / 7,09"	216 mm / 4,13"	220 mm / 8,66"	248 mm / 9,76"	150 mm / 5,90"	94 mm /3,70"	119 mm / 4,68"		119 mm / 4,68"	160 mm / 6,30"	160 mm / 6,30"	140 mm / 5,51"	105 mm / 4,13"	140 mm / 5,51"	140 mm / 5,51"	42 mm / 1,65"	60 mm / 2,36"	105 mm / 4,13"	129 mm / 5,08"
Width	150 mm / 5,90"	85 mm / 1,77"	105 mm / 8,50"	150 mm / 5,90"	110 mm / 4,33"	65 mm/ 2,56"	61 mm / 2,40"	80 mm / 3,15"		80 mm / 3,15"	104 mm /4,09"	104 mm /4,09"	67 mm / 2,64"	71 mm / 2,79"	67 mm / 2,64"	67 mm / 2,64"	146 mm / 5,75"	60 mm / 2,36"	65 mm / 2,56"	77 mm / 3,03"
Weight	1250g / 2,75lbs	300g / 0,66lbs	720g / 1,59lbs	1250g / 2,75lbs	610g / 1,34lbs	245g / 0,54lbs	120g / 0,26lbs	280g / 0,62lbs		280g / 0,62lbs	470g / 1,04lbs	470g / 1,04lbs	700g (pair) / 1,54lbs (pair)	700g (pair) / 1,54lbs (pair)	700g (pair) / 1,54lbs (pair)	700g (pair) / 1,54lbs (pair)	294g / 0,64lbs	300g (pair) / 0,66lbs (pair)	175g / 0,39lbs	244g / 0,538lbs

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All product characteristics are subject to variation due to production tolerances. ECLER - NEEC AUDIO BARCELONA S.L. reserves the right to make changes or improvements in the design or manufacturing that may affect these product specifications.