



kramer

VP-558

Sistema Escalador/Selector de Presentación
en Sala 11x4:2

| HDMI | Speakers | HDCP Compliant | HDBaseT



El VP-558 es un escalador de presentación ProScale de altas prestaciones 11x4/matriz de conmutación que puede tener en la salida cuatro imágenes independientes escaladas. Cada salida incluye un conector HDMI y HDBaseT. El producto soporta audio analógico, digital y embebido. El VP-558 tiene las características de seis entradas HDMI, cuatro entradas HDBaseT, una entrada analógica VGA, y un selector 4x1 USB. El VP-558 también incluye una entrada de micrófono, salidas de audio estéreo independientes, una salida de monitor, una salida amplificada de altavoz, características de DSP en audio

FEATURES

Tecnología de Escalado Pix-Perfect™ - Tecnología Kramer con mapeo de precisión de píxel y alta calidad en completo escalado hacia arriba y hacia abajo

Compatible con HDTV

HDCP Compliance - The HDCP (High Definition Content Protection) license agreement allows copy-protected data on the HDMI input to pass to HDCP compliant outputs

Resoluciones de Salida - Hasta 1080p/WUXGA

Rango del Sistema - Para las entradas y salidas HDBT - hasta 70m (230 pies)

Cables - Para un rango y prestaciones óptimas utilizando HDBaseT™, utilice cable Kramer BC-UNIKat. Anote que el rango de transmisión depende de la resolución de la señal, fuente y dispositivo de imagen utilizado. La distancia si no se utiliza el cable Kramer CAT 6 puede no alcanzar esos rangos

Selector 4x1 USB - Se puede configurar para seguir la conmutación de la capa de vídeo o como un conmutador independiente

OSD (Menú en Pantalla) - Para una programación y ajuste fácil, accesible mediante los botones del panel frontal

Características de DSP en Audio

Ajuste del Nivel de Audio en Entrada/Salida

Selección de Micrófono Modos Hablar Sobre o Mezcla

Soporta Audio Analógico y Embebido - Para entradas y salidas

Amplificador de Potencia Incluido - Amplificador de potencia 2x10W con salidas de altavoz sobre un conector con terminal de bloqueo de 4 pines

Selecciones Múltiples Relaciones de Aspecto

ProcAmp Incluido - Color, textura, nitidez, ruido, contraste y grillo

Páginas Web Incluidas - Para una programación y control remoto fácil

Actualización de Firmware vía Ethernet

Opciones Múltiples de Control - Botones en panel frontal con OSD, RS-232, Ethernet y páginas Web incluidas

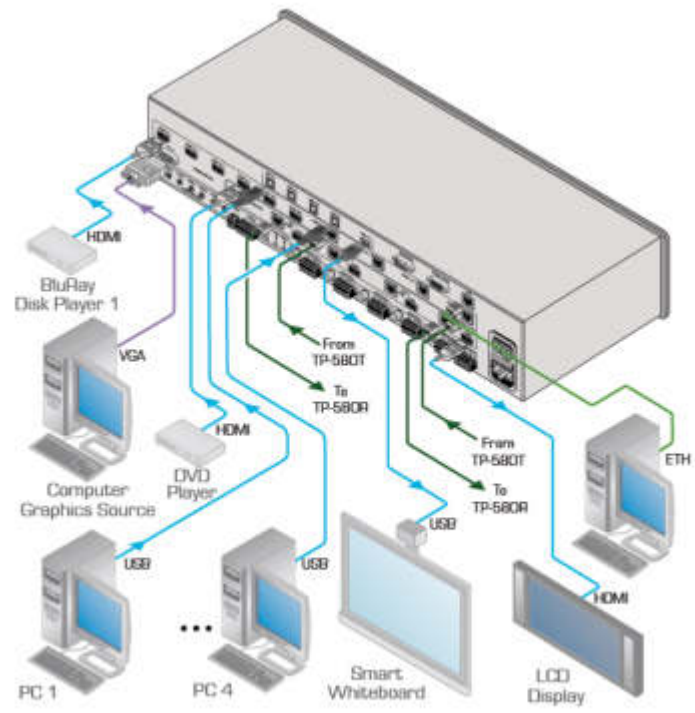


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TECHNICAL SPECIFICATIONS

ENTRADAS:	6 conectores HDMI, 1 VGA sobre un conector de 15 pines HD, 4 HDBT sobre conectores RJ-45, 4 puertos USB, 6 audio analógico mo balanceado sobre mini jack 3.5mm para HDMI, 1 audio analógico no balanceado sobre un mini jack 3.5mm para PC, 1 aux entrada/audio estéreo balanceado micrófono sobre un conector en terminal de bloqueo de 5 pines
SALIDAS:	4 HDBT sobre conectores RJ-45, 4 conectores HDMI, 1 puerto USB, 4 salidas audio estéreo balanceado sobre conectores con terminal de bloqueo de 5 pines, 4 salidas de audio S/PDIF sobre conectores RCA, salida de monitor estéreo balanceado sobre conector con terminal de bloqueo de 5 pines, salida de monitor S/PDIF sobre un conector RCA, 1 salida estéreo de altavoz, 2x10W sobre 4Ω, sobre un conector con terminal de bloqueo de 4 pines
RESOLUCIONES DE SALIDA NATIVA:	640x480@60, 800x600@60, 1024x768@60, 1280x768@60, 1360x768@60, 1280x720@60, 1280x800@60, 1280x1024@60, 1440x900@60, 1400x1050@60, 1680x1050@60, 1600x1200@60, 1920x1080@60, 1920x1200@60, 720x480p@60, 1280x720p@60, 1920x1080i@60, 1920x1080p@60, 720x576p@60, 1280x720p@50, 1920x1080i@50, 1920x1080p@50
CONTROLES:	Botones selector de entrada HDMI 1, HDMI 2, HDMI 3, HDMI 4, HDMI 5, HDMI 6, HDBT 1, HDBT 2, HDBT 3, HDBT 4, PC, USB 1, USB 2, USB 3, USB 4, menú, entrada, flechas de menú, reinicio a XGA/720p, SELECCIÓN OSD, 2 RS-232, Ethernet, selector conmutación línea/micro, selector conmutación cond/din (48V), conmutador selección mono/estéreo, REM para silencio de audio
CONSUMO DE ENERGÍA:	100-240V CA, 70VA máx
TEMPERATURA EN OPERACIÓN:	0° a +40°C (32° a 104°F)
TEMPERATURA EN ALMACENAMIENTO:	-40° a +70°C (-40° a 158°F)
HUMEDAD:	10% a 90%, RHL sin condensación
ACCESORIOS INCLUIDOS:	Cable de alimentación, "orejas" de rack
OPCIONES:	Cable Kramer BC-UNIKat
Product Dimensions	19" x 14.37 x 2U (43.6cm x 36.50cm x 8.80cm) W, D, H
Product Weight	5.0kg (11.0lbs) approx
Shipping Dimensions	52.60cm x 47.50cm x 18.40cm (20.71" x 18.70" x 7.24") W, D, H
Shipping Weight	6.3kg (13.9lbs) approx





ClickShare CX-20

Easy wireless conferencing for small meeting rooms and huddle spaces



- Full BYOD support
- Remote collaboration with Button or Desktop App
- Works with your device, conferencing platform & a wide range of solutions
- Enhanced security, connected and cloud managed

Organizations today requires smooth hybrid collaboration and flexibility, especially when it comes to team meetings in huddle rooms, and this is exactly what Barco ClickShare CX-20 provides. Encouraging creative innovation through seamless wireless conferencing, ClickShare CX-20 makes hybrid collaboration flow with one click..

Find out what's new in the latest ClickShare update

Start a huddle meeting from your device

ClickShare CX-20 brings seamless one-click wireless conferencing. It's easier than ever to start hybrid huddle meetings from your device. With our agnostic wireless room system, you start a hybrid huddle meeting from your laptop, using your preferred conference tool, in less than seven seconds. Walk in, connect automatically to room devices like cameras, mics, speakers, sound bars, saving time and maximizing efficiency. Make hybrid collaboration flow with only one click. For employees and guests.

Decide how you want to collaborate

ClickShare CX-20 provides you with exceptional flexibility and choice, enabling you to decide just how you want to collaborate. Plug & play with the ClickShare Button and choose for smart, intent-based meeting flows powered by the App to make your meetings intuitive and interactive. Both facilitate a user experience that's both straightforward and consistent. Enjoy useful features like local view of the room display and calendar integration.

ClickShare CX-20 is also tech-agnostic and fully compatible with your conferencing platform (UC) technology and a wide range of USB-peripherals. Additional features such as local view of the room display help you to optimize your one-click meeting experience.



Better hybrid meetings? Yes! With smart, intuitive meeting flows in the ClickShare App

Smart intent-based meeting flows make your meeting experience stress-free. Walk into the room, you immediately see if the room is available or booked. Automatically connect to the meeting room (PresentSense ultrasound proximity detection) or plug in a Button. ClickShare guides you as a host or participant (HostFlow). Start the meeting from your personal calendar with a single click (One-Click-Join).

Share your presentation, keep track of remote participant's video, side by side (ConferenceView). Share full screen or application window, while keeping your laptop screen private for note taking. When you end the call, the meeting room becomes a digital signage display.

Enhanced security and seamless integration

A set of IT friendly features makes ClickShare Conference a perfect fit to any enterprise environment. ClickShare Conference, excelling in enhanced security, seamlessly integrates in any IT- network. With the XMS (Cloud) Management Platform you enjoy easy management of units, intuitive user experiences and clear analytics to drive your digital workplace.

For practical questions on network deployment of the ClickShare Conference range, check our technical support or get in touch with your Barco contact.

You can have ClickShare in your meeting rooms without delay, thanks to strong inventory levels for all models.

PRODUCT SPECIFICATIONS**CLICKSHARE CX-20**

ClickShare Base Unit dimensions	
Dimensions (HxWxD)	34 mm x 135 mm x 135 mm
Power supply	Standard 110/220 V AC plug or USB-C (only Gen2)
Power consumption	Operational: 5-10W, 24W Max
Weight	900 gr
General specifications	
Operating system	Windows 10 and higher macOS 11 (BigSur) and higher Android v11 and higher (ClickShare App) iOS 14 and higher (ClickShare App)
System requirements	For a smooth experience with Microsoft Teams or Zoom Minimum: Intel i3 dual-core processor / 8GB RAM / OS: Windows 10 latest build or Mojave latest build Recommended: Intel i5 4-core processor / 8GB RAM / OS: Windows 10 latest build or Mac OS latest build
Video outputs	4K UHD (3840*2160) @ 30Hz. HDMI 1.4b or USB-C DisplayPort 1.2 (only Gen2)
Audio output	USB, HDMI
USB	1 X USB-A, 1 X USB-C
ClickShare Buttons	1
ClickShare App	Desktop & Mobile
Native protocols	Airplay, Google Cast, Miracast
Maximum number of simultaneous connections (with Buttons and/or App)	32
Noise Level	Max. 25dBA @ 0-30°C Max. 30dBA @ 30-40°C
Authentication protocol	WPA2-PSK in stand alone mode WPA2-PSK or IEEE 802.1X using the ClickShare Button in network integration mode
Wireless transmission protocol	IEEE 802.11 a/g/n/ac and IEEE 802.15.1
Reach	Max. 30m (100 ft) between ClickShare Button and ClickShare Base Unit Frequency band 2.4 GHz and 5 GHz (DFS)
Frequency band	2.4 GHz and 5 GHz (DFS channels supported in select number of countries)
Connections	1x Ethernet LAN 1Gbit 1x USB-C 2.0 (front); 1x USB-A 2.0 (front) -only Gen2: 1x USB-C 3.0 (front); 1x USB-A 3.0 (front)
Temperature range	Operating: 0°C to +40°C (+32°F to +104°F) Max: 35°C (95°F) at 3000m Storage: -20°C to +60°C (-4°F to +140°F)
Humidity	Storage: 0 to 90% relative humidity, non-condensing Operation: 0 to 85% relative humidity, non-condensing
Anti-theft system	Kensington lock
Certifications	FCC/CE
Touch screen support & Interactivity	/
Wireless conferencing	via App or Button
Local view	Local view of the room display only
Network connection	LAN & WiFi
Management and reporting	Yes
Warranty	1 year standard. 5 years coverage via SmartCare

Last updated: 15 Nov 2022

Technical specifications are subject to change without prior notice. Please check www.barco.com for the latest information.

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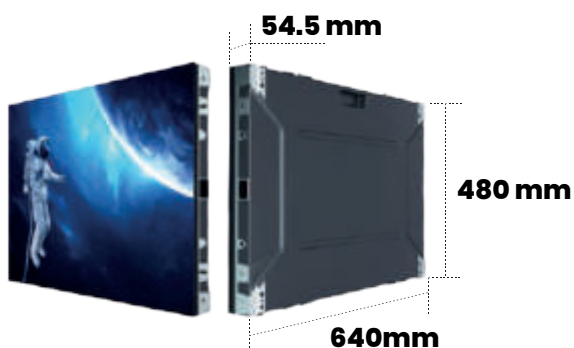
PANTALLA LED PARA INSTALACIONES INDOOR

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Pantalla LED para instalación fija indoor



- Pixel Pitch: 1.86mm, 2.5mm
- Tamaño del Cabinet: 640x480x60mm
- Material: Aleación de aluminio
- Peso del cabinet: 6.9+0.1KG

traulux - Qfix

HD & SMOOTH DISPLAY EFFECT

- Imagen HD, Alto contraste
- Frecuencia de refresco hasta 3840Hz integrado con IC de alta calidad con un alto nivel de escala de grises, garantiza colores de pantalla vivos.
- Pantalla de visualización ultra amplia
- Angulo de visión de 160 grados
- Pantalla de proporción áurea 16: 9 se puede lograr fácilmente.



CABINETS DE ALTA PRECISIÓN

Cabinets de aleación de aluminio CNC que asegura una alineación de alta precisión.

Cierres de conexión y diseño de pasador que permite un montaje eficiente, rápido y seguro.

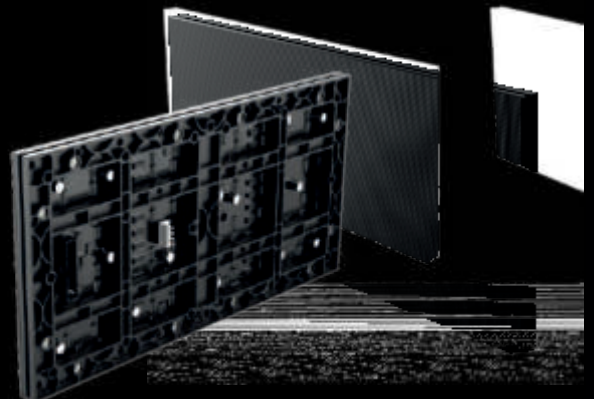
Cabinets ligero, con agarres que brinda una manejabilidad de operación que ahorra tiempo y trabajo de montaje

DESARROLLO ÚNICO Y CON MATERIALES DE ALTA DURABILIDAD

El estricto estándar de selección de materia prima garantiza un alto rendimiento de sellado, una calidad estable del producto y una vida útil más prolongada.

La estructura de la cubierta trasera de desarrollo propio es indeformable y contribuye a una correcta disipación de calor y a un funcionamiento duradero.

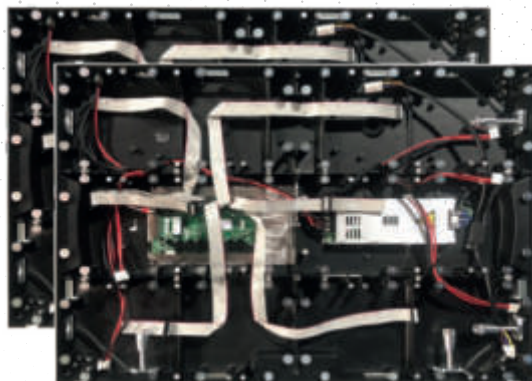
El diseño de la guía de posicionamiento de la cubierta trasera facilita la instalación precisa y rápida.



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ENSAMBLAJE ESTANDARIZADO Y PRODUCTO DE ALTA CALIDAD

Componentes del cabinet preensamblados.
Fabricación sometida a estrictos controles de calidad.



INSTALACIÓN EFICIENTE MANTENIMIENTOFRONTAL

Modo de instalación de montaje en pared sin estructura de acero adicional.

No es necesario reservar espacio trasero para instalación y mantenimiento.

Ideal para instalación en pared.

Gana espacio en tus instalaciones.
Herramienta para sustitución de módulos en tan solo 3 segundos

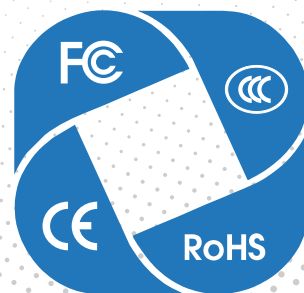
PRODUCTO CERTIFICADO DESTACADO CON RENDIMIENTO ECOLÓGICO Y ESTABLE

El diseño EMC aporta baja radiación y alta estabilidad, además de cumplir con la certificación clase A de EMC.

Libre de plomo, protección y seguridad del medio ambiente.

Cumple con los requisitos de protección ambiental Rohs, decretados por Unión Europea.

CE and FCC certificados.



ESCENARIOS DE APLICACIÓN

Centros comerciales, exposiciones, retail,
pequeños comercios, aeropuertos,
salas de reunión, hoteles, etc...



traulux **Qfix**

ESPECIFICACIONES DE PRODUCTO

Modelo	TRAULUX QFIX DA3118	TRAULUX QFIX DA3125
Pixel pitch	1.86mm	2.5mm
Resolución	344x258	256x192
Lámpara LED	SMD1515	SMD2121
Escaneo	1/43 Scan	1/32 Scan
Distancia de Visualización	≥3.7m	≥5m
Contraste	≥5000 : 1	≥3000 : 1
Frecuencia de refresco	3840Hz	3840Hz
Voltaje	3.8V-5V	
Peso	6.9±0.1KG	
Tamaño del cabinet	640mmx480mmx60mm	
Brillo	≥900 nit	
Angulo de vision	170°/H, 170°/V	
Vida Util	≥100000h	
Mantenimiento	Front	
Temperatura de trabajo	-20~40°C	
Condiciones de Humedad	10%RH~65%RH No condensation 无冷凝	

Especificaciones pueden estar sujetas a cambios sin previo aviso

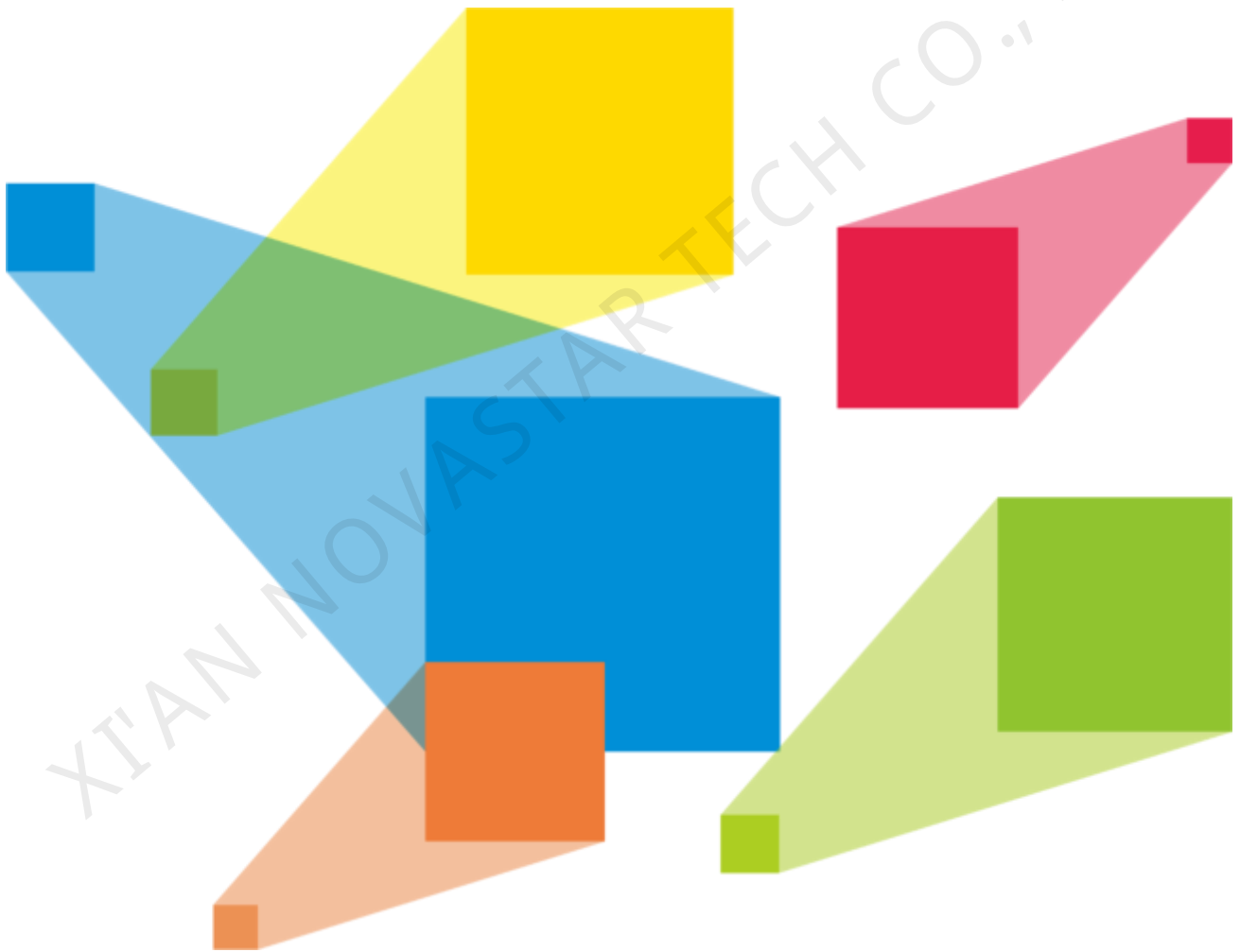
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VX600

All-in-One Controller

V1.1.0



Specifications

Change History

Document Version	Release Date	Description
V1.1.0	2021-06-18	Updated the silkscreen printings on the device rear panel.
V1.0.0	2021-05-30	First release

Introduction

The VX600 is NovaStar's new all-in-one controller that integrates video processing and video control into one box. It features 6 Ethernet ports and supports video controller, fiber converter and Bypass working modes. A VX600 unit can drive up to 3.9 million pixels, with the maximum output width and height up to 10,240 pixels and 8192 pixels respectively, which is ideal for ultra-wide and ultra-high LED screens.

The VX600 is capable of receiving a variety of video signals and processing high-resolution images. In addition, the device features stepless output scaling, low latency, pixel-level brightness and chroma calibration and more, to present you with an excellent image display experience.

What's more, the VX600 can work with NovaStar's supreme software NovaLCT and V-Can to greatly facilitate your in-field operations and control, such as screen configuration, Ethernet port backup settings, layer management, preset management and firmware update.

Thanks to its powerful video processing and sending capabilities and other outstanding features, the VX600 can be widely used in applications such as medium and high-end rental, stage control systems and fine-pitch LED screens.

Features

- Input connectors
 - 1x HDMI 1.3 (IN & LOOP)
 - 1x HDMI 1.3
 - 1x DVI (IN & LOOP)
 - 1x 3G-SDI (IN & LOOP)
 - 1x 10G optical fiber port (OPT1)
- Output connectors
 - 6x Gigabit Ethernet ports

A single device unit drives up to 3.9 million pixels, with a maximum width of 10,240 pixels and a maximum height of 8192 pixels.
 - 2x Fiber outputs

OPT 1 copies the output on 6 Ethernet ports.

OPT 2 copies or backs up the output on 6 Ethernet ports.
 - 1x HDMI 1.3

For monitoring or video output
- Self-adaptive OPT 1 for either video input or sending card output

Thanks to the self-adaptive design, OPT 1 can be used as either an input or output connector, depending on its connected device.
- Audio input and output
 - Audio input accompanied with HDMI input source
 - Audio output via a multifunction card
- Output volume adjustment supported
- Low latency

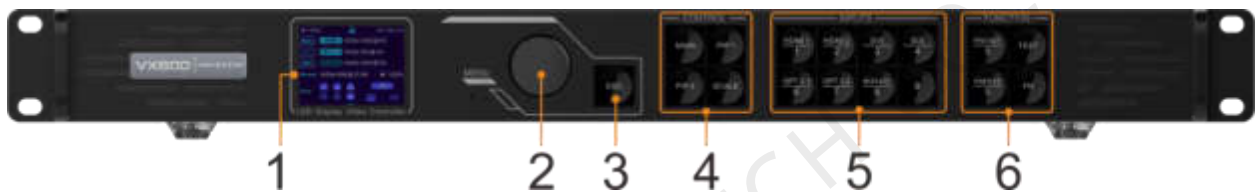
Reduce the delay from the input to receiving card to 20 lines when the low latency function and Bypass mode are both enabled.
- 3x layers
 - Adjustable layer size and position
 - Adjustable layer priority
- Output synchronization

An internal input source or external Genlock can be used as the sync source to ensure the output images of all cascaded units in sync.
- Powerful video processing
 - Based on SuperView III image quality processing technologies to provide stepless output scaling
 - One-click full screen display
 - Free input cropping
- Easy preset saving and loading
 - Up to 10 user-defined presets supported
 - Load a preset by simply pressing one button
- Multiple kinds of hot backup
 - Backup between devices
 - Backup between Ethernet ports
 - Backup between input sources

- Mosaic input source supported
The mosaic source is composed of two sources (2K×1K@60Hz) accessed to the OPT 1.
- Up to 4 units cascaded for image mosaic
- Three working modes
 - Video Controller
 - Fiber Converter
 - Bypass
- All-round color adjustment
Input source and LED screen color adjustment supported, including brightness, contrast, saturation, hue and Gamma
- Pixel level brightness and chroma calibration
Work with NovaLCT and NovaStar calibration software to support brightness and chroma calibration on each LED, effectively removing color discrepancies and greatly improving LED display brightness and chroma consistency, allowing for better image quality.
- Multiple operation modes
Control the device as you wish via V-Can, NovaLCT or device front panel knob and buttons.

Appearance

Front Panel



No.	Area	Function
1	LCD screen	Display the device status, menus, submenus and messages.
2	Knob	<ul style="list-style-type: none"> • Rotate the knob to select a menu item or adjust the parameter value. • Press the knob to confirm the setting or operation.
3	ESC button	Exit the current menu or cancel an operation.
4	Control area	<ul style="list-style-type: none"> • Open or close a layer (main layer and PIP layers), and show the layer status. Status LEDs: <ul style="list-style-type: none"> – On (blue): The layer is opened. – Flashing (blue): The layer is being edited. – On (white): The layer is closed. • SCALE: A shortcut button for the full screen function. Press the button to make the layer of the lowest priority fill the entire screen. Status LEDs: <ul style="list-style-type: none"> – On (blue): Full screen scaling is turned on. – On (white): Full screen scaling is turned off.
5	Input source buttons	Show the input source status and switch the layer input source. Status LEDs: <ul style="list-style-type: none"> • On (blue): An input source is accessed. • Flashing (blue): The input source is not accessed but used by the layer. • On (white): The input source is not accessed or the input source is abnormal. Notes: <ul style="list-style-type: none"> • When a 4K video source is connected to OPT 1, OPT 1-1 has a signal but OPT 1-2 does not have a signal. • When two 2K video sources are connected to OPT 1, OPT 1-1 and OPT 1-2

No.	Area	Function
		both have a 2K signal.
6	Shortcut function buttons	<ul style="list-style-type: none"> • PRESET: Access the preset settings menu. • TEST: Access the test pattern menu. • Freeze: Freeze the output image. • FN: A customizable button

Note:

Hold down the knob and **ESC** button simultaneously for 3s or longer to lock or unlock the front panel buttons.

Rear Panel



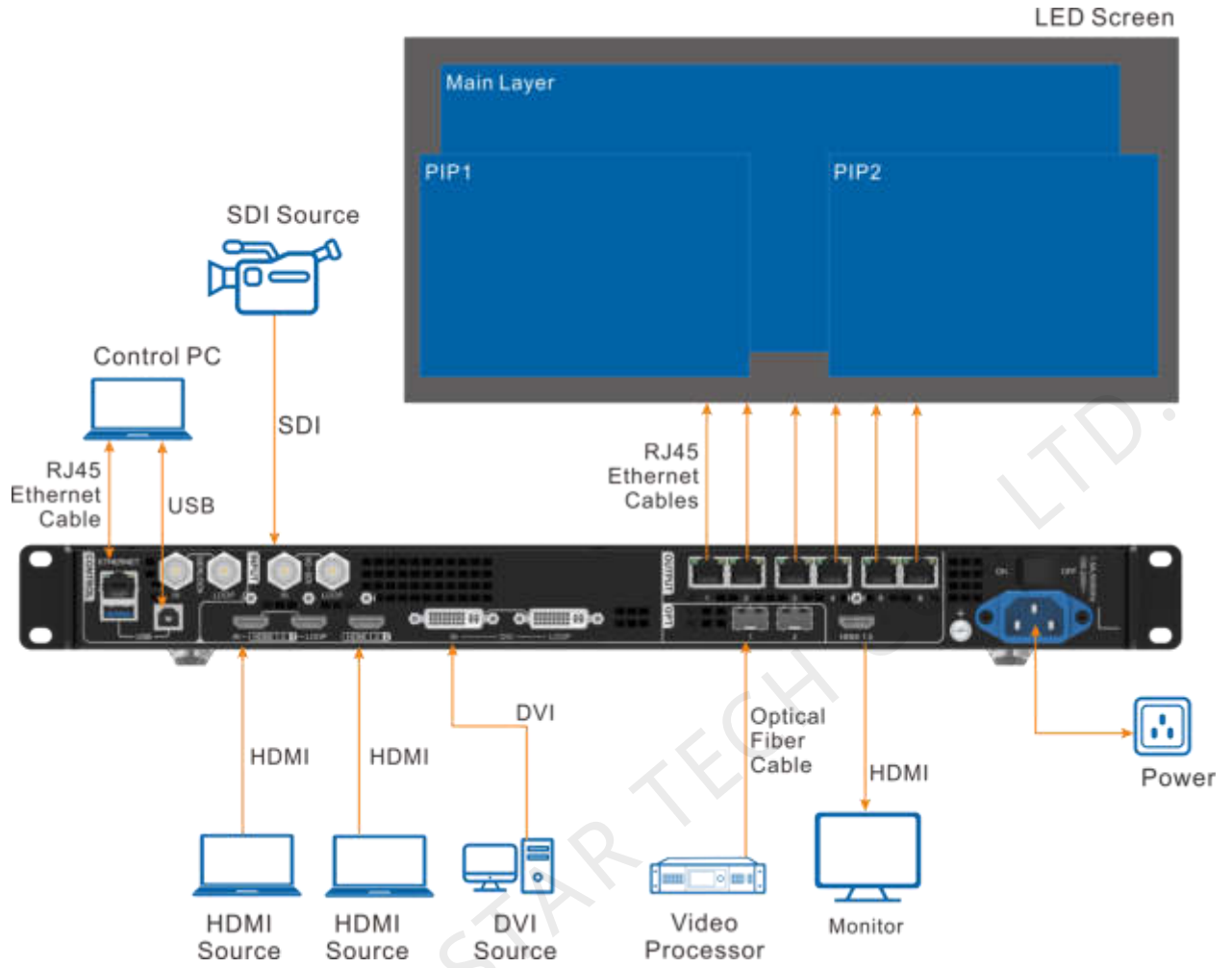
Input Connectors		
Connector	Qty	Description
3G-SDI	1	<ul style="list-style-type: none"> • ST-424 (3G), ST-292 (HD) and ST-259 (SD) standard video inputs supported • Max. input resolution: 1920×1080@60Hz • Deinterlacing processing supported • 3G-SDI loop output supported • DOES NOT support input resolution and bit depth settings.
HDMI 1.3	2	<ul style="list-style-type: none"> • Max. input resolution: 1920×1200@60Hz • HDCP 1.4 compliant • Interlaced signal inputs supported • Custom resolutions supported <ul style="list-style-type: none"> – Max. width: 3840 (3840×648@60Hz) – Max. height: 2784 (800×2784@60Hz) – Forced inputs supported: 600×3840@60Hz • Loop output supported on HDMI 1.3-1
DVI	1	<ul style="list-style-type: none"> • Max. input resolution: 1920×1200@60Hz • HDCP 1.4 compliant • Interlaced signal inputs supported • Custom resolutions supported <ul style="list-style-type: none"> – Max. width: 3840 (3840×648@60Hz) – Max. height: 2784 (800×2784@60Hz) – Forced inputs supported: 600×3840@60Hz • Loop output supported on DVI 1
Output Connectors		
Connector	Qty	Description
Ethernet ports	6	Gigabit Ethernet ports

		<ul style="list-style-type: none"> • Max. loading capacity: 3.9 million pixels • Max. width: 10,240 pixels • Max. height: 8192 pixels <p>Ethernet ports 1 and 2 support audio output. When you use a multifunction card to parse the audio, be sure to connect the card to Ethernet port 1 or 2.</p>
HDMI 1.3	1	<ul style="list-style-type: none"> • For output monitoring, the output resolution is fixed to 1920×1080@60Hz. • For video output, the output resolution is adjustable.
Optical Fiber Ports		
Connector	Qty	Description
OPT	2	<ul style="list-style-type: none"> • OPT 1: Self-adaptive, either for video input or for output <ul style="list-style-type: none"> – When the device is connected with a fiber converter, the port is used as an output connector. – When the device is connected with a video processor, the port is used as an input connector. – Max. capacity: 1x 4K×1K@60Hz or 2x 2K×1K@60Hz video inputs • OPT 2: For output only, with copy and backup modes OPT 2 copies or backs up the output on 6 Ethernet ports.
Control Connectors		
Connector	Qty	Description
ETHERNET	1	Connect to the control PC or router.
USB	2	<ul style="list-style-type: none"> • USB 2.0 (Type-B): <ul style="list-style-type: none"> – Connect to the control PC. – Input connector for device cascading • USB 2.0 (Type-A): Output connector for device cascading
GENLOCK IN-LOOP	1	<p>Connect to an external sync signal.</p> <ul style="list-style-type: none"> • IN: Accept the sync signal. • LOOP: Loop the sync signal.

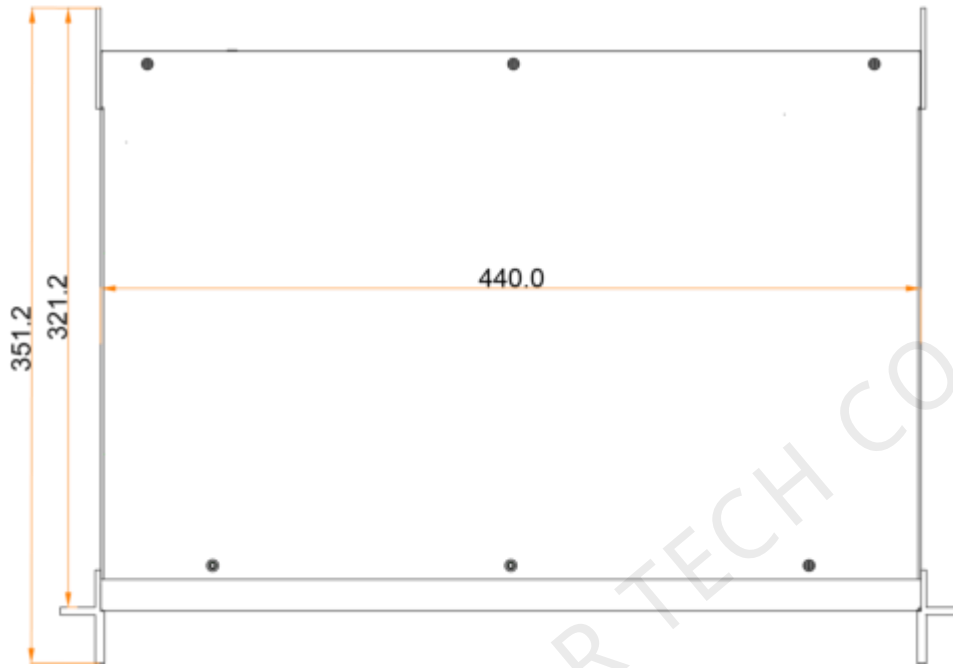
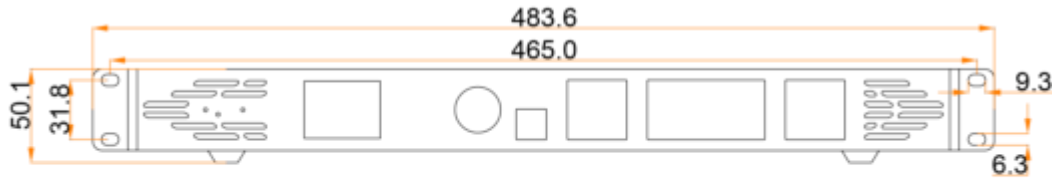
Note:

Only the main layer can use the mosaic source. When the main layer uses the mosaic source, PIP 1 and 2 cannot be opened.

Applications



Dimensions



Tolerance: ± 0.3 Unit: mm

Specifications

Electrical Parameters	Power connector	100–240V~, 1.5A, 50/60Hz
	Rated power consumption	28 W
Operating Environment	Temperature	–10°C to +60°C
	Humidity	20% RH to 90% RH, non-condensing
Storage Environment	Temperature	–20°C to +70°C
	Humidity	10% RH to 95% RH, non-condensing
Physical Specifications	Dimensions	483.6 mm × 351.2 mm × 50.1 mm
	Net weight	4 kg
	Gross weight	6.3 kg
Packing Information	Accessories	<ul style="list-style-type: none"> 1x Power cord 1x Power adapter 1x HDMI to DVI cable 1x USB cable 1x Ethernet cable 1x HDMI cable 1x DAC cable 1x Quick Start Guide 1x Certificate of Approval 1x Customer Letter 1x Safety Manual
	Packing box	565 mm × 175 mm × 450 mm
Certifications	<p>TBD</p> <p>Note:</p> <p>If the product does not have the relevant certifications required by the countries or regions where it is to be sold, please apply for the certifications yourself or contact NovaStar to apply for them.</p>	
Noise Level (typical at 25°C/77°F)	45 dB (A)	

Video Source Features

Input Connectors	Bit Depth		Max. Input Resolution
<ul style="list-style-type: none"> • HDMI 1.3 • DVI • OPT 1 	8-bit	RGB 4:4:4	1920×1200@60Hz (Standard)
		YCbCr 4:4:4	3840×648@60Hz (Custom)
		YCbCr 4:2:2	600×3840@60Hz (Forced)
		YCbCr 4:2:0	Not supported
	10-bit	Not supported	
	12-bit	Not supported	
3G-SDI	<ul style="list-style-type: none"> • Max. input resolution: 1920×1080@60Hz • DOES NOT support input resolution and bit depth settings. • Supports ST-424 (3G), ST-292 (HD) and ST-259 (SD) standard video inputs. 		

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Official website
www.novastar.tech

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support@novastar.tech

XI'AN NOVASTAR TECH CO., LTD.

DIGITAL MIXER X32

32-Channel, 16-Bus Total-Recall Digital Mixing Console for Live and Recording Applications

- 32-channel total recall digital mixer with fully programmable high-end mic preamps and 16 mix buses, configurable as subgroups
- Main LCR and all 16 mix buses featuring inserts, 6-band parametric EQ's and dynamics processing
- 16 analog XLR outputs plus 6 additional line in/outputs, 2 phones connectors and a talkback section with integrated or external mic
- 48-channel digital snake ready* via AES50 ports featuring KLARK TEKNIK's SuperMAC networking capability for ultra-low jitter and latency
- Built-in expansion port for Firewire/USB/ADAT card* featuring standalone 16-channel recorder or other networking interfaces
- Virtual FX rack featuring 8 true-stereo FX slots for high-end simulations of famous outboard gear such as KLARK TEKNIK DN780, EMT250 etc. (included)
- Ultra-high power 32-Bit floating-point DSP features "unlimited" dynamic range, no internal overload and near-zero latency between in and outputs
- 6 mute groups and 8 DCA groups on 8 dedicated 100 mm motorized faders
- Super-easy user interface and dedicated channel strip section with direct access controls for intuitive workflow



Ever since the "dawn of digital" audio engineers the world over have had a love-hate relationship with their consoles. The new BEHRINGER X32 digital mixing console lets you focus on your event, instead of navigating a vast sea of knobs, buttons and menus like most other live digital mixers. X32 is intuitive and powerful with 40 processing channels and 25 mix buses, all equipped with serious signal processing (dynamics, EQ and inserts), which can be configured quickly to meet the demands of virtually any gig, large or small.

Ready for your input

Use any combination of the local 32 console mic inputs or the networked digital snake inputs on stage—their audiophile quality



programmable preamps always ensure full control, purity and impeccable dynamics. The dedicated channel strip puts 17 backlit buttons and 13 rotary controls with LED-collars right at your fingertips for nuanced adjustment of each channel's compressor, 4-band parametric EQ and much more. Each input and output channel strip features its own color backlit 128x64 graphic LCD, which provides vital channel information at-a-glance.

Virtual FX Rack

The onboard virtual FX Rack provides access to eight true-stereo, multi-effects processors (16 mono) including delay, chorus, dynamics—and it can run 4 production quality true-stereo reverbs concurrently with 8 channels of 31-band graphic equalization, all without the need for expensive, space-consuming external hardware.

High-count I/O options

I/O abounds with 32 high-end programmable mic preamps; 6 Aux Inputs on ¼" TRS; 16 balanced XLR Outs, plus balanced Control Room outputs on both XLR and ¼" TRS connectors. A single CAT5 cable from FOH to the stage can receive up to 48 channels of audio input—and deliver all bus outputs, along with 16 individual monitor feeds for BEHRINGER's brand new P16 personal monitoring system.

Continued on next page

DIGITAL MIXER X32

- High-resolution 7" color TFT with associated controls and individual RGB backlit graphic LCD's in every channel
- 25 motorized 100 mm faders, extensive channel strip plus dedicated user-definable control section
- USB flash connector providing file storage for uncompressed recordings plus show presets and system updates
- Connectivity for BEHRINGER's P-16 Personal Monitoring System*, AES/EBU stereo digital output and MIDI
- 6 independent matrix mix buses featuring inserts, 6-band parametric EQ's and dynamics processing
- Adjustable line delays available on all physical in and outputs
- Networked remote control or show setups with remote editor software via USB and Ethernet ports (included)
- Powerful scene management for convenient handling of complex productions
- High-quality components and exceptionally rugged construction ensure long life
- Conceived and designed by BEHRINGER Germany

* Not included AES50 is a trademark of the Audio Engineering Society, NY

Vital information is just a click away

Thanks to the netbook-resolution, 800x480 high-contrast color TFT display, you are never more than one or two button presses away from any of X32's eight highly intuitive control screens. Once you select the desired function, dedicated rotary/push encoders allow you to set parameters and source I/O assignment, without the need to "drill down" through multiple layers of menus or page through a complex owner's manual.

Versatile signal and scene management

Signals can be assigned to eight DCA groups (Digitally Controlled Amplifier), which provides simultaneous group level control via dedicated 100 mm motorized faders. The audio engineer can communicate with the talent by means of the Talkback section's onboard mic or an external mic of their choosing. X32's scene management allows snapshots of high-level production mixes to be captured and recalled for future use (you can even save them to a USB stick). X32 even has a dedicated custom control section with user-definable knobs and buttons where you can create your own set of controls, making it easy to access frequently used functions "on-the-fly."

Powered by MIDAS & KLARK TEKNIK

When we began development on the X32, we called on our sister companies, MIDAS and KLARK TEKNIK, recognized the world over for their digital consoles and EQ/FX processing, for implementation support. The programmable, high-grade mic preamps found in the X32 are based on a genuine MIDAS design, all the way down to their A/D converters. The resulting design ensures superior common mode rejection (CMRR) and extremely low harmonic distortion (THD). The X32 is an amazingly clean amalgam of high technology merged with superb user-friendly features.

We received brilliant support from MIDAS and KLARK TEKNIK in designing X32's GUI (graphical user interface), a major advancement in digital mixing made easy, productive, and well... fun! They also drew on their extensive experience in FPGA (Field Programmable Gate Array) coding for rock-solid, ultra-low latency digital channel patching—giving the X32 the capacity to handle up to 168 sources on 168 destinations, including the two AES50 ports. You can expect to see more collaboration between BEHRINGER and MIDAS in the very near future.

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DIGITAL MIXER X32

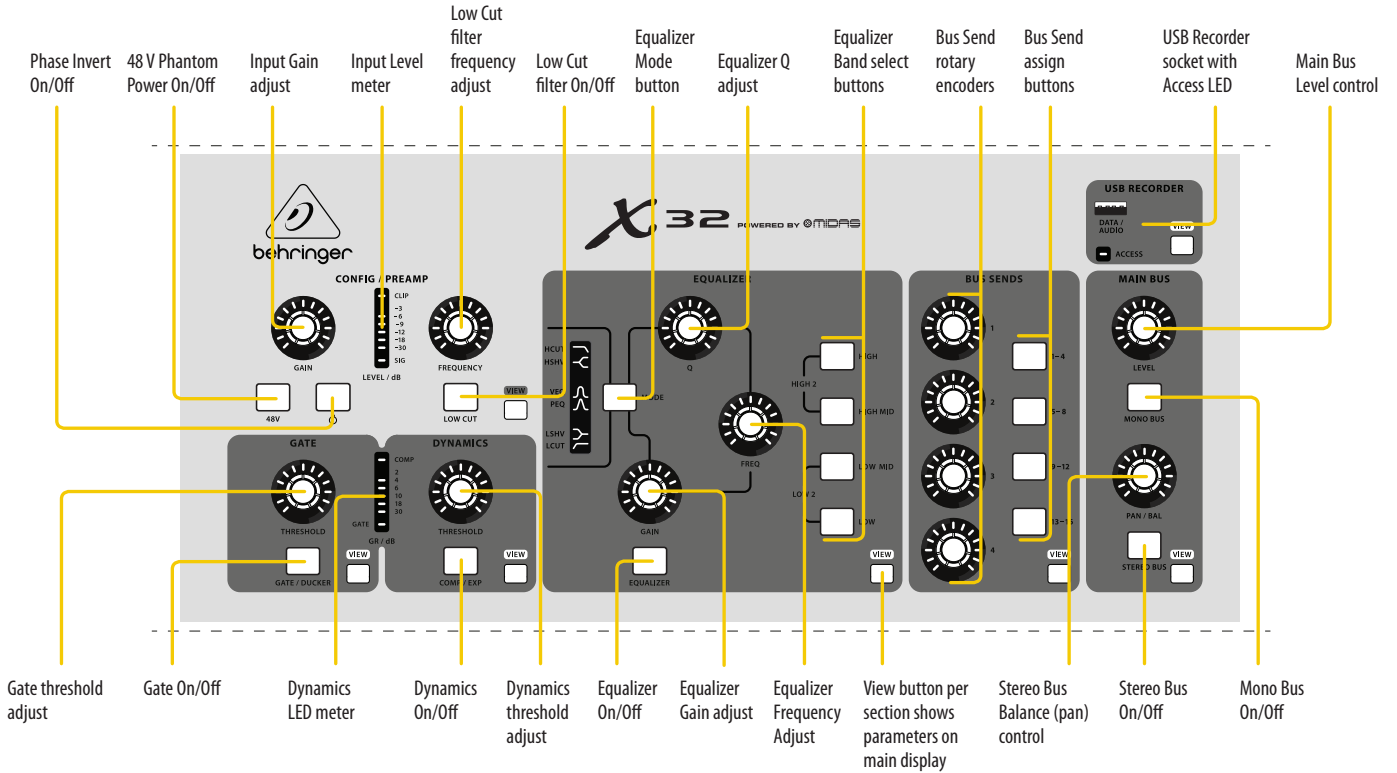
Bus and rear panel flexibility

X32 provides extensive output connectivity including 16 balanced XLR outputs, six balanced Line I/O on 1/4" TRS connectors; dual Phones outputs; Main LCR (Left, Center, Right)

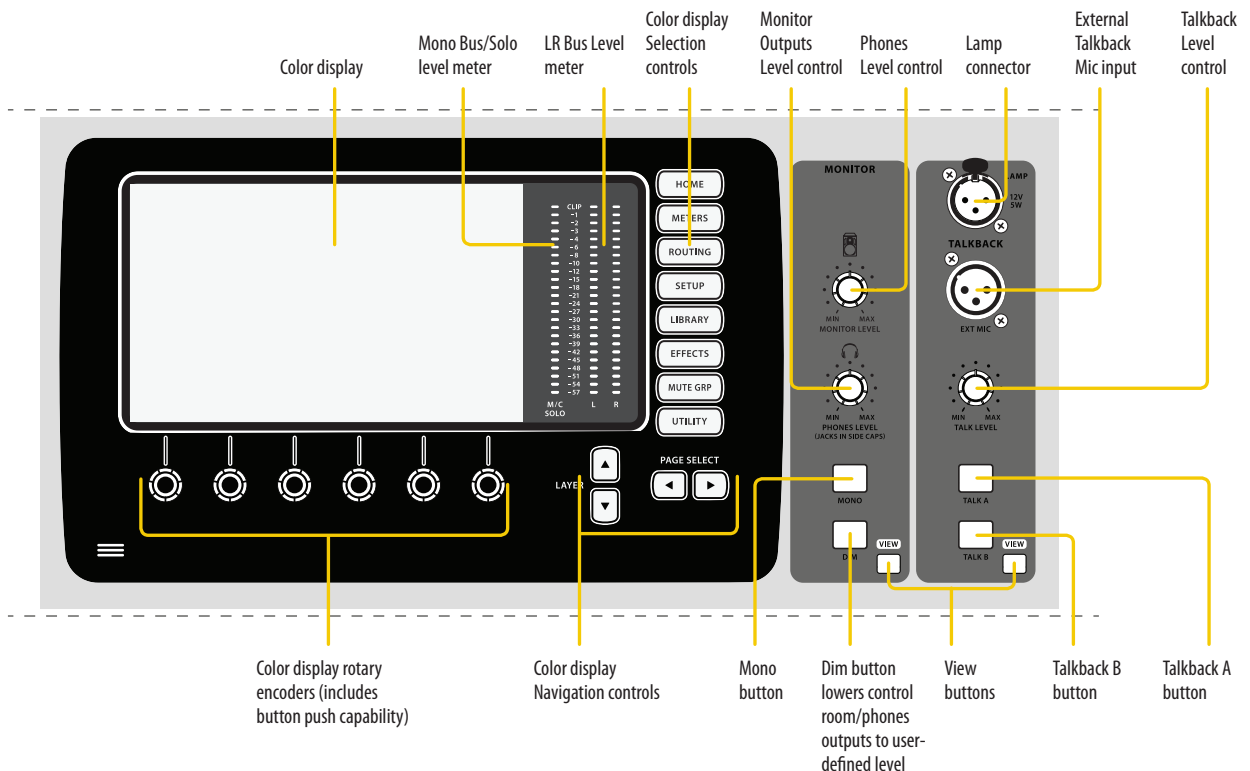
buses; 16 mix buses (also configurable as subgroups) with Inserts, 6-band parametric EQ and dynamics processing; plus six independent Matrix Mixes with Inserts, also with 6-band parametric EQ and dynamics processing.

Continued on next page

Input Channel Preamp, Dynamics & EQ Panel



Main Display, Monitor & Talkback Panel



DIGITAL MIXER X32

The rear panel also sports two AES50* ports, each with KLARK TEKNIK's rock-solid SuperMAC 48-channel I/O networking capability (for addressing a total of 96 inputs and outputs). Stereo digital output and MIDI are also supported, as well as ultra-low jitter, ultra-low latency communication between the X32 and digital snakes, remote stage boxes and outboard recording devices. A convenient top panel USB port is available for recording an uncompressed two-channel "board mix" straight to any standard USB thumb drive or for playing background music.

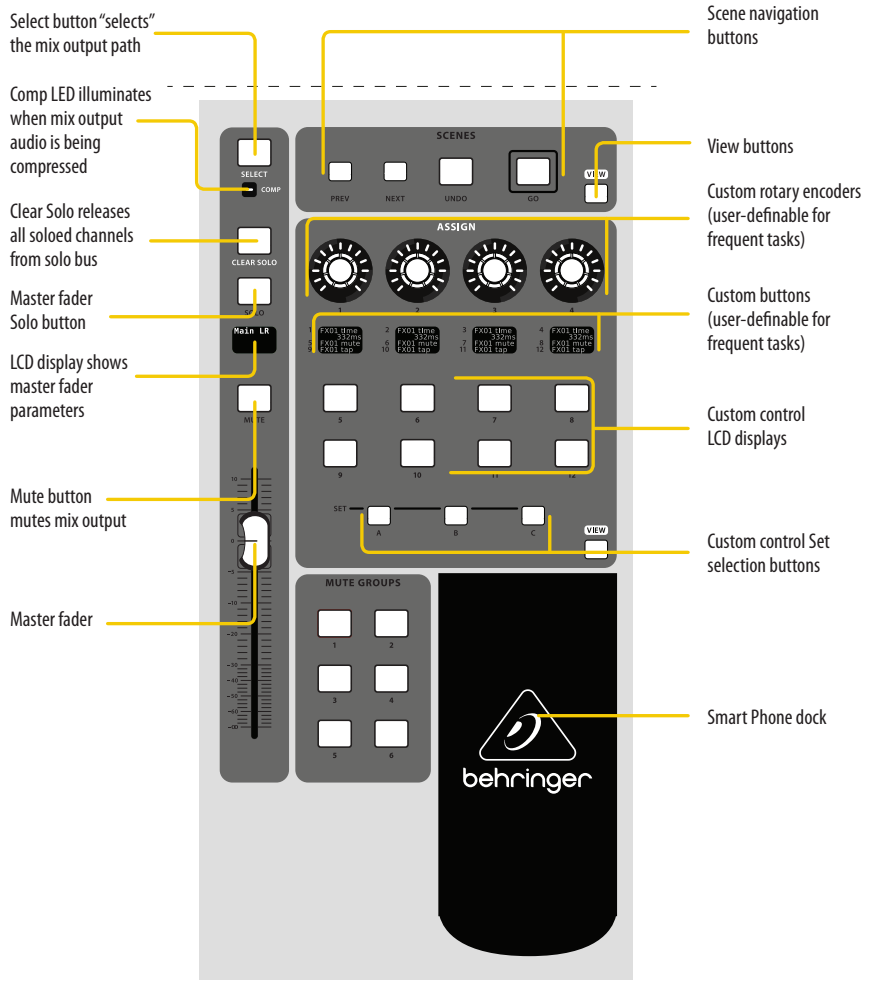
*The AES50 trademark is property of the Audio Engineering Society, NY

The future is here!

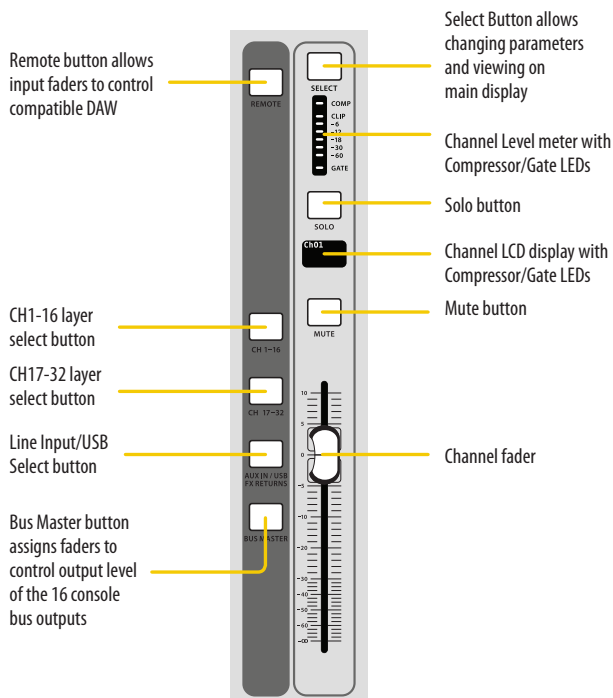
System expansion and connectivity capabilities are provided via an integrated card slot, which allows you to add up to 32 channels of digital audio I/O by way of IEEE1394 FireWire, ADAT TOSLINK or USB. It will even support standalone 16-channel uncompressed multi-track recording to an attached USB drive—without requiring a computer!

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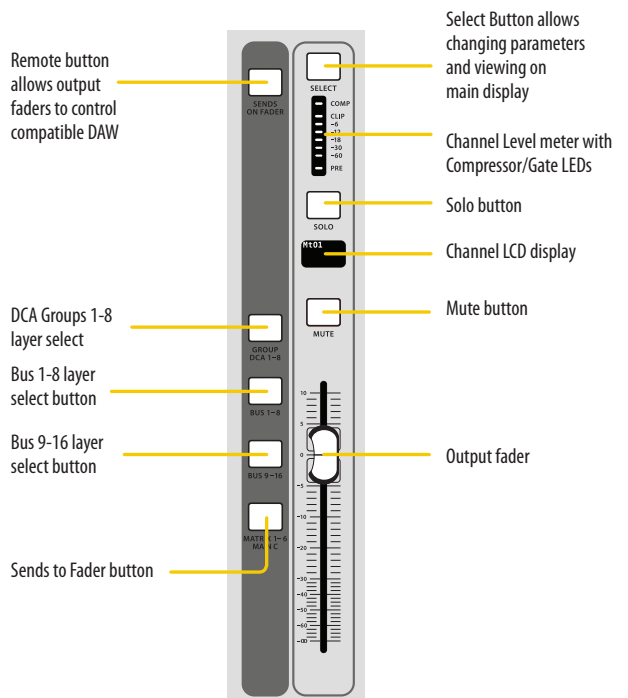
Main Out, Scenes & Custom Control Panel



Input Channel Strip



Output Channel Strip



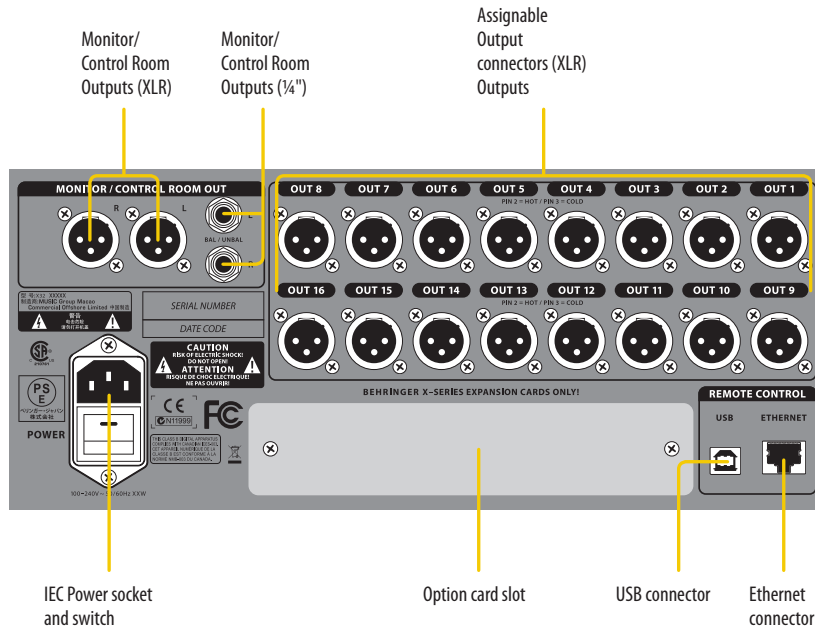
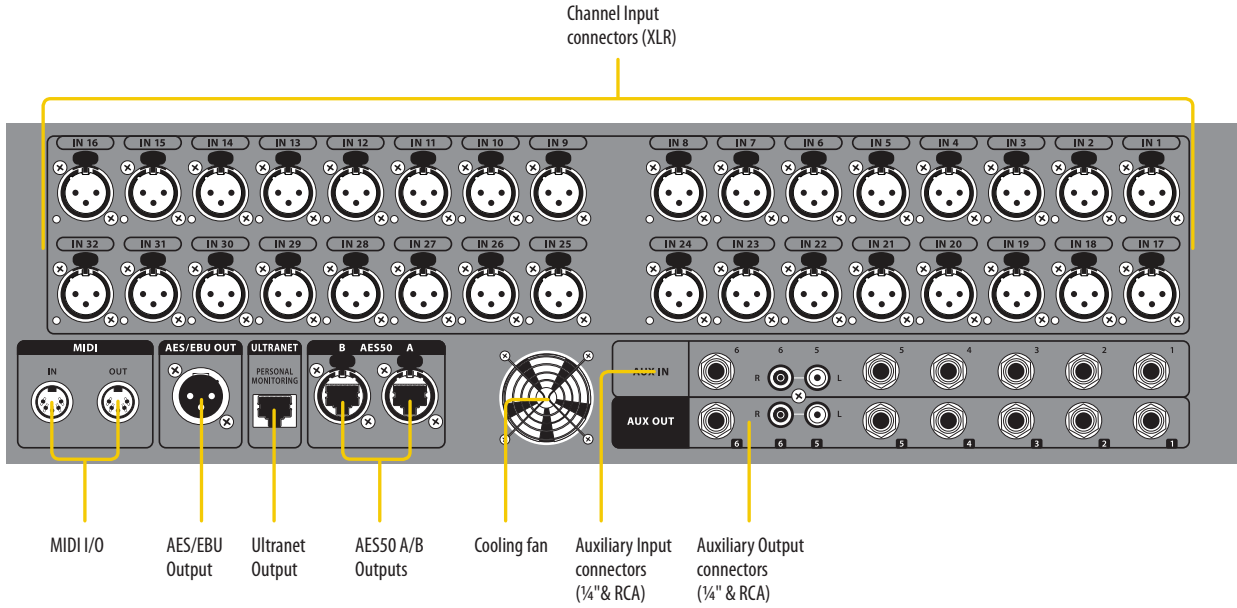
DIGITAL MIXER X32

Digital mixing—analog price

The BEHRINGER X32 digital mixing console sets a new benchmark for live sound mixing along with unprecedented value. BEHRINGER is proud to offer the full-featured X32 digital mixing console

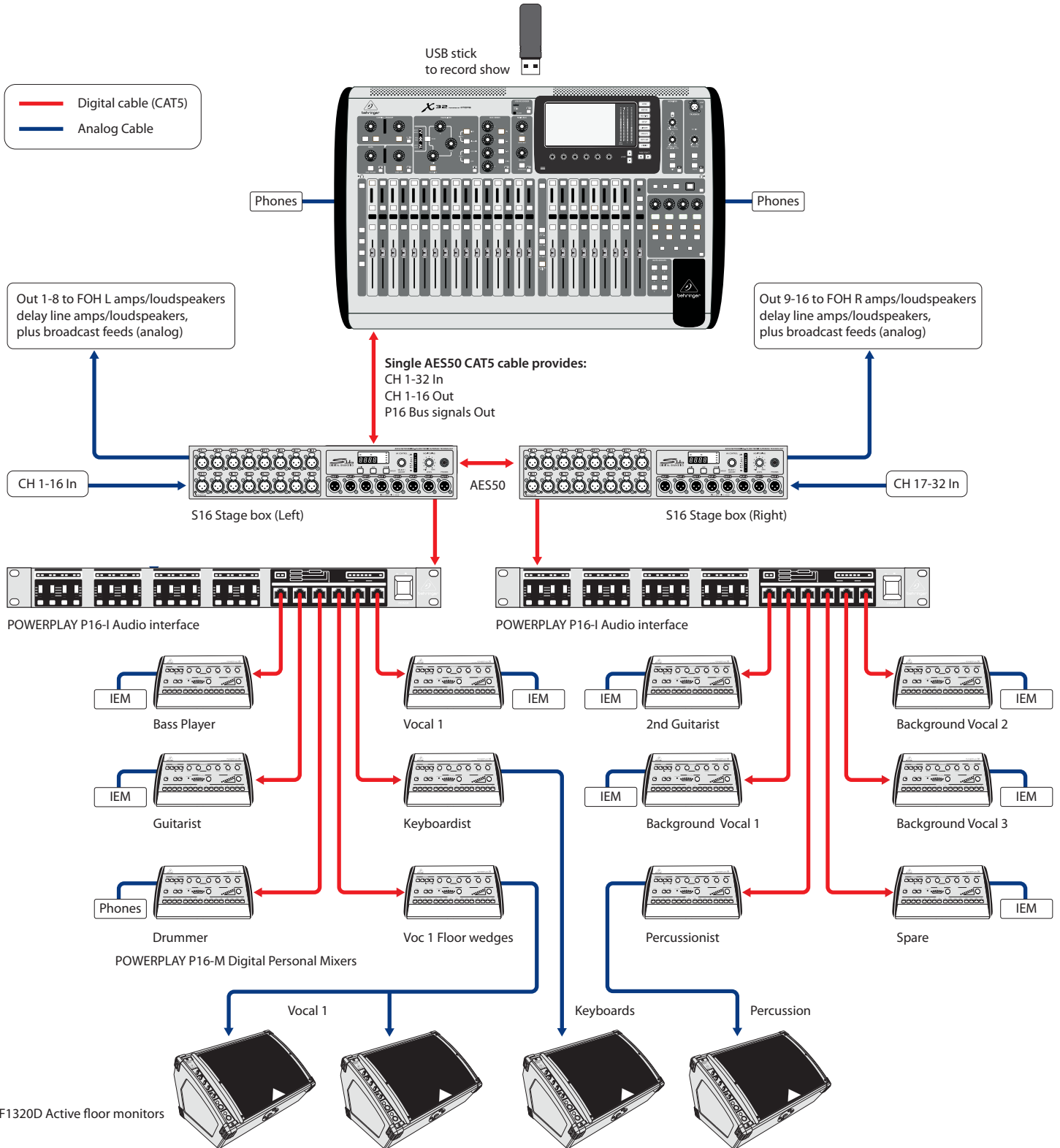
with its large input and output channel count, comprehensive processing, flexible expansion options and intuitive user interface—all at a price point that has the competition shaking in their boots!

Rear Panel Input Patchbay



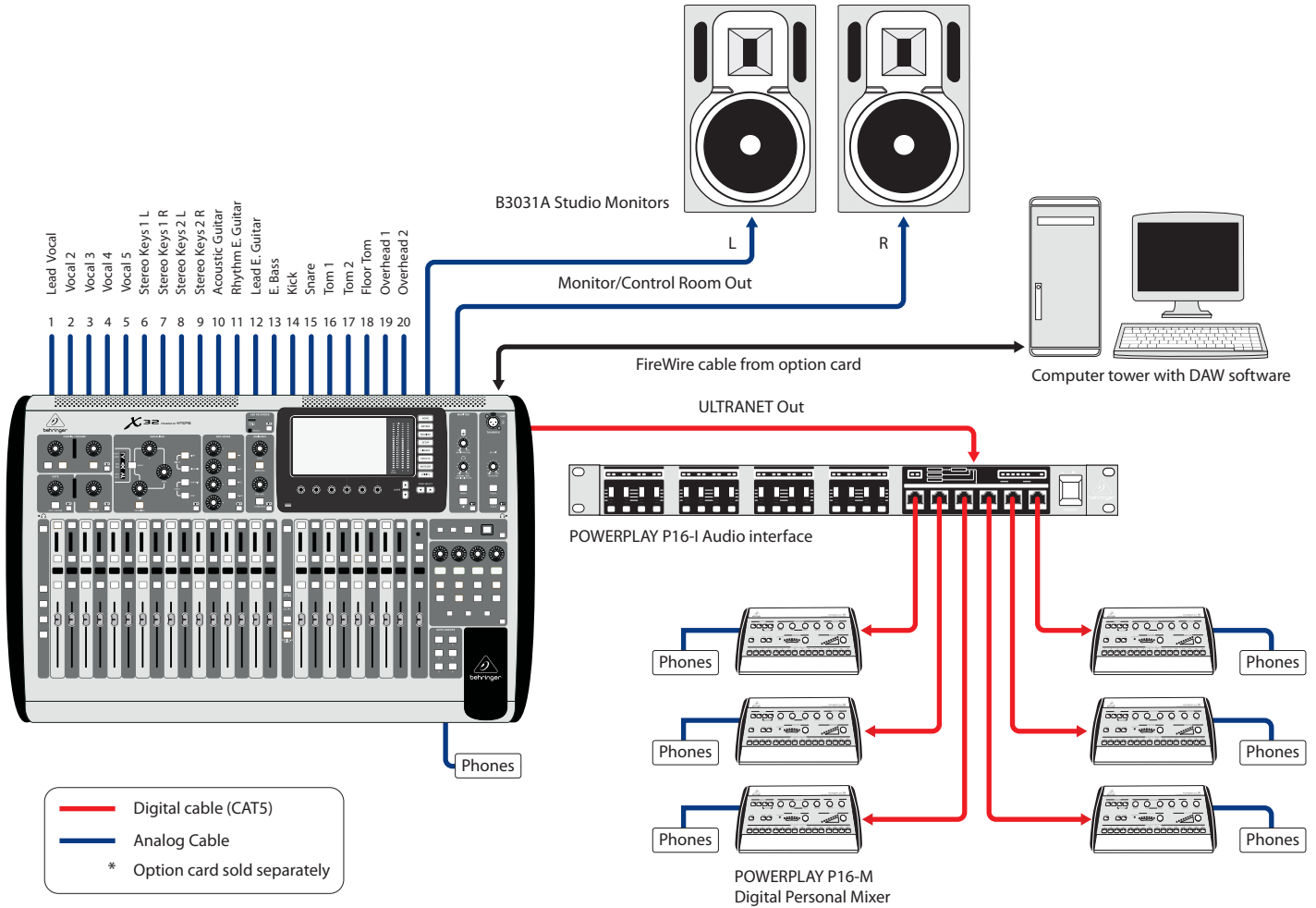
DIGITAL MIXER X32

X32 Live Performance Setup with S16 and P16 Monitor System



DIGITAL MIXER X32

X32 Recording Studio Setup (Option Card* Installed)



For service, support or more information contact the BEHRINGER location nearest you:

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VANTEC SERIES



VANTEC 20A

DAS Audio Group, S.L. - C/ Islas Baleares 24 - 46988
Fuente del Jarro - Valencia - Spain - Tel. +34961340860
Updated (DD/MM/YYYY): 05/06/2023



SOUND WITH SOUL

CARACTERÍSTICAS PRINCIPALES

- Line Array autoamplificado de curvatura constante
- Bi-amplificado Clase D 1500 Wpico
- Filtros FIR para una respuesta de fase lineal
- 1 x DAS 12F4C + 2 x M-60 motores de compresión
- Diseño compacto con gran rendimiento
- DAScontrol™ con preajustes y configuraciones
- DASlink™ para streaming y control remoto
- Zócalo para mástil con inclinación variable +/- 13.5°

APLICACIONES

- Conciertos y A/V corporativo
- Portable y clubes con música en vivo
- Salas de conciertos, teatros y auditorios
- Centros de culto

DESCRIPCIÓN

La VANTEC-20A es un line array “curved source” autoamplificado que incorpora una gran cantidad de soluciones tecnológicas diseñadas para proporcionar la máxima versatilidad a las empresas profesionales de sonido. Ya sea apilado sobre el subwoofer VANTEC-118A, volado como un compacto array o utilizado individualmente como satélite, la VANTEC-20A cubre un gran número de aplicaciones, desde eventos corporativos, refuerzo de sonido para espacios de tamaño medio o instalaciones permanentes.

Diseñado para ser usado en arrays de hasta 5 unidades, la VANTEC-20A es ideal para aplicaciones que requieren una potencia y tiro medio. La rapidez y facilidad de uso están garantizados gracias al sistema de volado que permite apilar sobre o volar desde el sistema VANTEC-118A. Individualmente la VANTEC-20A puede ser utilizada sobre un soporte y dispone de un mecanismo de angulación que permite hasta 13,5° de inclinación positiva o negativa.

La VANTEC-20A incorpora el interfaz DAScontrol™, el cual posibilita que de una manera rápida y sin complicaciones podamos configurar el sistema en array y alinear el sistema con VANTEC-18A y VANTEC-118A sin necesidad de un procesador externo. A través de la pantalla de LCD, DAScontrol™ permite seleccionar preajustes en función del número de unidades que conforman el line array y compensar la ecualización de las altas frecuencias dependiendo del tiro. El potente DSP de la VANTEC-20A incluye filtros FIR para conseguir una respuesta de fase lineal y una respuesta de impulsos precisa, que en término de prestaciones da como resultado más claridad, un ataque más definido en las percusiones y en general un sonido más natural.

Cuando usemos la VANTEC-20A individualmente podremos utilizar DASlink™ APP para transmitir música en estéreo de alta calidad, además de controlar y monitorear diferentes funciones del sistema. La VANTEC-20A cuenta con un amplificador Clase D de última generación de 1500W pico, que utilizado en una configuración bi-amplificada alimenta un altavoz DAS 12F4C y dos motores de compresión M-60.

VANTEC 20A

DATOS TÉCNICOS

Prestaciones

Rango de Frecuencia (-10 dB)	63 Hz - 20 kHz
Cobertura Horizontal (-6 dB)	90°
Cobertura Vertical	15°
SPL Máximo 1W/1 m (pico)	135 dB

ELECTRÓNICA Y CONECTORES

Potencia Nominal Amplificador (continuo)	750 W
Potencia Nominal Amplificador (pico)	1500 W
Impedancia de Entrada	20 kohms
Sensibilidad de Entrada	Line: 3 V (+12 dBu)
Conector de Señal de Entrada	2 x Female XLR
Conector Loop-Thru de Audio	1 x Male XLR
Control	DASlink™ DAScontrol™
Conector de Salida AC	powerCON NAC3FCB
Current Draw 230 V / 115 V	1.5 A/3.0 A

Recinto

Construcción del Recinto	Contrachapado de Abedul
Geometría del Recinto	Trapezoidal
Rigging	Captive Rigging System
Acabado	Pintura ISO-flex
Color	Negro

VANTEC 20A

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Dimensiones (Al x An x Pr)	335 x 625 x 440 mm 13,2 x 24,6 x 17,3 in
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Peso Neto	28,5 kg (62,8 lb)
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Componentes

Transductor LF	12F4C
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Transductor HF	M-60
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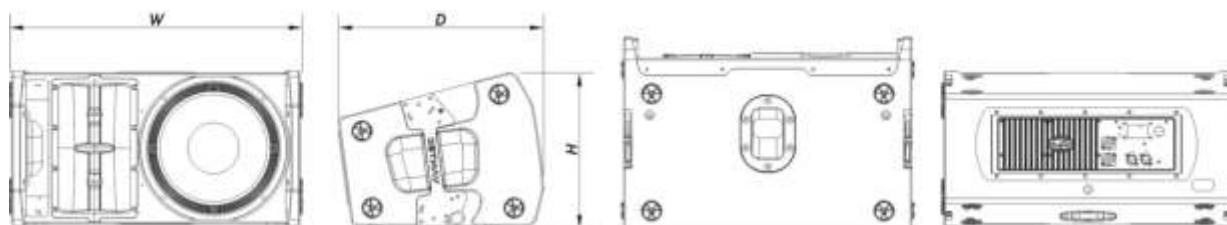
Difusor/Guía de Ondas	BC-915
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Envío

Dimensiones de Embalaje (H x W x D)	490 x 730 x 490 mm 19,3 x 28,7 x 19,3 in
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Peso de Envío	30,5 kg (67,2 lb)
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DIMENSIONES



INFORMACIÓN DE PEDIDOS

Modelo	Descripción	P/N
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Sistema

VANTEC-20A		10431095
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VANTEC 20A

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Piezas de Recambio

12F4C	Transductor	20208831
BC-915	Bocina	20301070
DSP-VANTEC-20A	Dsp	20406434
GM-12F4	Kit de Reconado	20208470
GM-M60N	Diafragma	20205090
M-60	Motor de Compresión	20208790
MP-VANTEC-20A	Power Module	30007048
PIN-6	Pin	30002878
S-PRO2	Amplifier	30006153

Accesorios

ANL-2	Accesorios de Suspensión	10101020
AX-VT20	Accesorios de Suspensión	10102852
AXS-VT20	Installation & Stacking Acc.	10104183
FUN-3-VT20	Accesorios de Transporte	10103742
PL-VT20S	Accesorios de Transporte	10113260
TRD-6	Installation & Stacking Acc.	10104470
TRD-7	Installation & Stacking Acc.	10104471
TRPD-S2-PAK	Installation & Stacking Acc.	10104011

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SOUND WITH SOUL

VANTEC SERIES



VANTEC 118A

DAS Audio Group, S.L. - C/ Islas Baleares 24 - 46988
Fuente del Jarro - Valencia - Spain - Tel. +34961340860
Updated (DD/MM/YYYY): 29/03/2023



SOUND WITH SOUL

CARACTERÍSTICAS PRINCIPALES

- Altavoz 18" DAS 18FW
- Amplificador Clase D 2000 Wpico
- Procesado digital de señal (DSP)
- Interruptor EQ graves "Deep-Loud"
- Filtro variable "pasa-bajos" 80 Hz-125 Hz
- Interruptor ON/OFF con LED en la placa trasera
- Rigging compatible con VANTEC-20A
- Zócalo para mástil en la parte superior

APLICACIONES

- Conciertos y A/V corporativo
- Portable y clubes con música en vivo
- Salas de conciertos, teatros y auditorios
- Centros de culto

DESCRIPCIÓN

VANTEC-118A es un sistema de graves autoamplificado de carga frontal diseñado específicamente para trabajar con el line array de fuente curva Vantec-20A, con un tamaño compacto, el sistema puede stakearse o volado en array, gracias al sistema de rigging compatible con VANTEC-20A.

Electrónicamente, VANTEC-118A cuenta con un amplificador de 2000 Wpico de Clase D y un DSP 24-bit de alta calidad para una reproducción de audio excepcional, un singular conmutador de ecualización permite al usuario personalizar la respuesta de las bajas frecuencias para conseguir un sonido tipo "subwoofer" utilizando la posición "Deep" o cambiar a una respuesta con más pegada en la posición "Loud". En la parte trasera, encontramos los controles de ganancia, polaridad y un filtro pasa bajos que permite variaciones en un rango de entre 80 Hz hasta 125 Hz. VANTEC-118A tiene una respuesta de fase coherente con VANTEC-20A permitiendo un alineamiento preciso sin la necesidad de utilizar un DSP externo.

VANTEC 118A

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SOUND WITH SOUL

DATOS TÉCNICOS

Prestaciones

Rango de Frecuencia (-10 dB)	35 Hz - 125 Hz
SPL Máximo 1W/1 m (pico)	134 dB

ELECTRÓNICA Y CONECTORES

Potencia Nominal Amplificador (continuo)	1000 W
Potencia Nominal Amplificador (pico)	2000 W
Tipo de Entrada	Balanced
Impedancia de Entrada	20 kohms
Sensibilidad de Entrada	3 V (+12 dBu)
Conector de Señal de Entrada	2 x Female XLR
Conector Loop-Thru de Audio	2 x Male XLR
Conector de Salida AC	powerCON NAC3FCB
Current Draw 230 V / 115 V	2.2 A/4.4 A

Recinto

Construcción del Recinto	Contrachapado de Abedul
Geometría del Recinto	Rectangular
Rigging	M10 Rigging Points
Acabado	Pintura ISO-flex
Color	Negro
Dimensiones (Al x An x Pr)	490 x 615 x 785 mm 19,3 x 24,2 x 30,9 in
Peso Neto	44,0 kg (97,0 lb)

VANTEC 118A

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SOUND WITH SOUL

Componentes

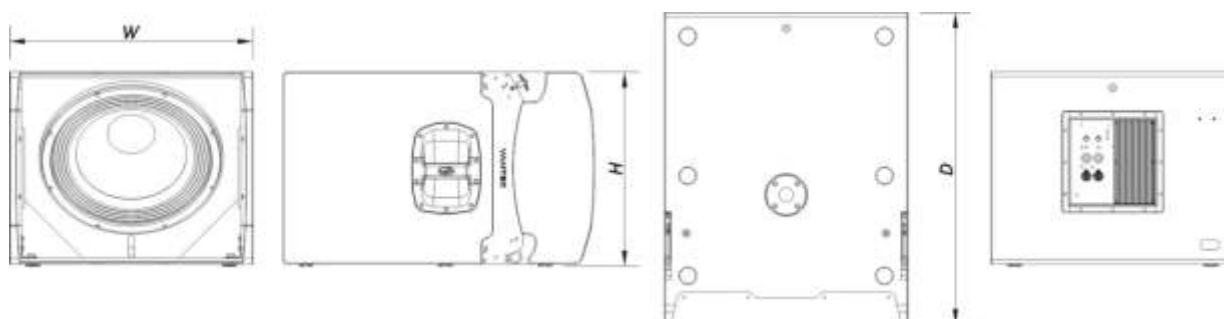
Transductor LF	18FW
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Envío

Dimensiones de Embalaje (H x W x D)	730 x 660 x 880 mm 28,7 x 26,0 x 34,7 in
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Peso de Envío	48,0 kg (105,6 lb)
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DIMENSIONES



INFORMACIÓN DE PEDIDOS

Modelo	Descripción	P/N
Sistema		
VANTEC-118A		10431140
Piezas de Recambio		
18FW	Transductor	20208981
DSP-VANTEC-118A	Dsp	20406433
GM-18FW	Kit de Reconado	20208531

VANTEC 118A

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MP-VT118A	Power Module	20405090
S-PRO2	Amplifier	30006153
Accesorios		
ANL-2	Accesorios de Suspensión	10101020
AX-VT20	Accesorios de Suspensión	10102852
FUN-2-VT118	Accesorios de Transporte	10103743
PL-VT118S	Accesorios de Transporte	10113270
TRD-6	Installation & Stacking Acc.	10104470
TRD-7	Installation & Stacking Acc.	10104471

VANTEC 118A

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artec 500 series



ARTEC 506A 230

DAS Audio Group, S.L. - C/ Islas Baleares 24 - 46988
Fuente del Jarro - Valencia - Spain - Tel. +34961340860
Updated (DD/MM/YYYY): 29/03/2023



SOUND WITH SOUL

CARACTERÍSTICAS PRINCIPALES

- Amplificador ultra-ligero Clase D
- Fuente de alimentación conmutada
- Reducido tamaño y bajo peso
- Posicionamiento vertical u horizontal
- Utilizable sobre trípode

APLICACIONES

- Sistemas A/V y eventos corporativos
- Salas de reuniones, aulas y zonas de exposición
- Instalaciones en bares y clubes

DESCRIPCIÓN

El sistema ARTEC-506A incorpora un altavoz de 6" para reproducir las bajas frecuencias. Un motor de compresión M-34 es responsable de la brillante reproducción de agudos. Su amplificador Clase D de 720 W de potencia pico ofrece un rendimiento poco común en cajas de este segmento. Un altavoz 6P de DAS reproduce fielmente las bajas frecuencias. En la vía de agudos, el motor M-34 ofrece un rendimiento excelente. Los recintos ultra-compactos están fabricados con tablero contrachapado de abedul y disponibles en color negro o blanco.

ARTEC 506A 230

DAS Audio Group, S.L. - C/ Islas Baleares 24 - 46988
Fuente del Jarro - Valencia - Spain - Tel. +34961340860
Updated (DD/MM/YYYY): 29/03/2023



SOUND WITH SOUL

DATOS TÉCNICOS

Prestaciones

Rango de Frecuencia (-10 dB)	65 Hz - 20 kHz
Cobertura Horizontal (-6 dB)	80°
Cobertura Vertical	80°
SPL Máximo 1W/1 m (pico)	118 dB

ELECTRÓNICA Y CONECTORES

Potencia Nominal Amplificador LF (continua)	360 W
Potencia Nominal Amplificador LF (pico)	720 W
Potencia Nominal Amplificador HF (continua)	180 W
Potencia Nominal Amplificador HF (pico)	360 W
Tipo de Entrada	Balanced
Impedancia de Entrada	20 kohms
Sensibilidad de Entrada	1.95 V (+8 dBu)
Conector de Señal de Entrada	1 x Female XLR
Conector Loop-Thru de Audio	1 x Male XLR
Current Draw 230 V / 115 V	1.2 A/-

Recinto

Construcción del Recinto	Contrachapado de Abedul
Geometría del Recinto	Trapezoidal
Rigging	M10 Rigging Points
Acabado	Pintura ISO-flex
Color	Negro

ARTEC 506A 230

DAS Audio Group, S.L. - C/ Islas Baleares 24 - 46988
Fuente del Jarro - Valencia - Spain - Tel. +34961340860
Updated (DD/MM/YYYY): 29/03/2023



Dimensiones (Al x An x Pr)	385 x 195 x 260 mm 15,2 x 7,7 x 10,2 in
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Peso Neto	9,0 kg (19,8 lb)
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Componentes

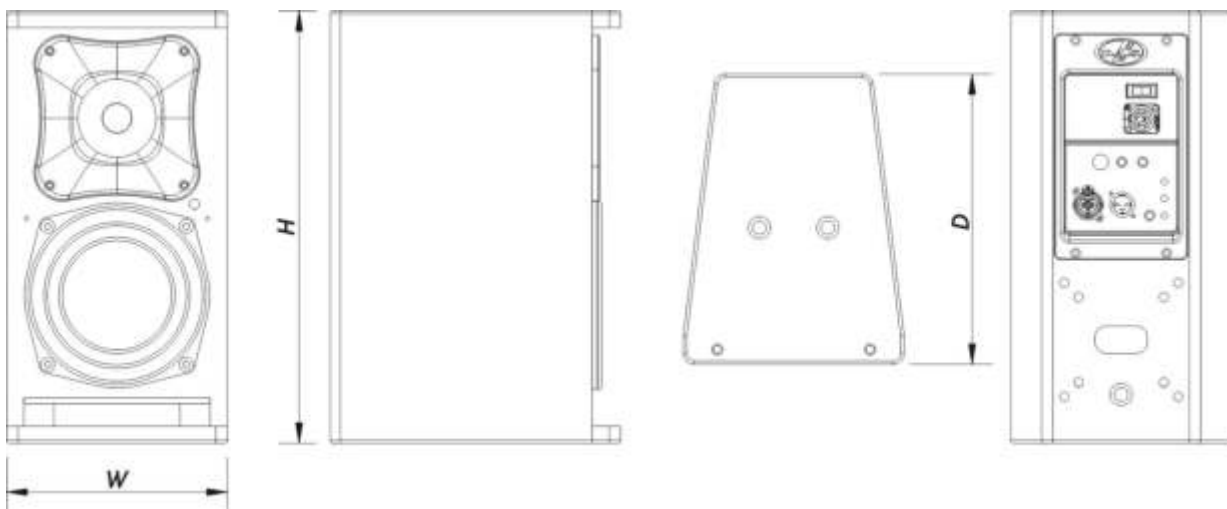
Transductor LF	6P
Transductor HF	M-34
Difusor/Guía de Ondas	BC-88

Envío

Dimensiones de Embalaje (H x W x D)	471 x 266 x 330 mm 18,5 x 10,5 x 13,0 in
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Peso de Envío	11,4 kg (25,1 lb)
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DIMENSIONES



ARTEC 506A 230

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Updated (DD/MM/YYYY): 29/03/2023



INFORMACIÓN DE PEDIDOS

Modelo	Descripción	P/N
Sistema		
ARTEC-506A-230		10423330
Piezas de Recambio		
6P	Cono Transductor	20208730
BC-88	Bocina	30003945
DSP-ARTEC-506A	Dsp	20406330
GM-M34	Diafragma	20205060
M-34	Motor de Compresión	10207080
MP-ARTEC-506A- 230	Power Module	30005292
Accesorios		
ANL-2	Accesorios de Suspensión	10101020
AX-SPG1	Installation & Stacking Acc.	10105050
AX-SPG2	Installation & Stacking Acc.	10105060
AXC-AT	Installation & Stacking Acc.	10104310
AXC-ZT	Installation & Stacking Acc.	10104320
AXR-AR5	Installation & Stacking Acc.	10104870
AXU-AR506	Installation & Stacking Acc.	10104500
AXW-1	Installation & Stacking Acc.	10104140
TRD-6	Installation & Stacking Acc.	10104470
TRD-7	Installation & Stacking Acc.	10104471

ARTEC 506A 230

DAS Audio Group, S.L. - C/ Islas Baleares 24 - 46988
Fuente del Jarro - Valencia - Spain - Tel. +34961340860
Updated (DD/MM/YYYY): 29/03/2023



ARTEC 506A 230

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Fuente del Jarro - Valencia - Spain - Tel. +34961340860
Updated (DD/MM/YYYY): 29/03/2023



SOUND WITH SOUL

ACTION 500 *series*



ACTION M512A

DAS Audio Group, S.L. - C/ Islas Baleares 24 - 46988
Fuente del Jarro - Valencia - Spain - Tel. +34961340860
Updated (DD/MM/YYYY): 07/12/2022



SOUND WITH SOUL

CARACTERÍSTICAS PRINCIPALES

- Monitor de escenario activo biamplificado
- Amplificador Clase D 1000 W pico doble canal
- Recinto de contrachapado de madera de Abedul
- Acabado ISO-flex altamente resistente
- Interfaz DAScontrol™ para facilitar el montaje y ajuste
- DSP con 3 presets y pantalla LCD

APLICACIONES

- Refuerzo de sonido en directo
- Bandas, grupos y DJ's
- Mensajes de voz y música vocal
- Música playback en espectáculos
- A/V, conferencias, y presentaciones

DESCRIPCIÓN

ACTION-M512A es un monitor de escenario activo diseñado para aportar una gran versatilidad de uso, desde instalaciones fijas a su aplicación más común de monitor portátil. Gracias a su difusor rotable de 80° x 50° este sistema puede utilizarse también como sistema PA.

Como parte de nuestra cultura de empresa, todos nuestros sistemas están desarrollados bajo la misma filosofía, aplicar la máxima calidad posible tanto en los materiales como en el diseño del sistema en su conjunto. En la serie ACTION-500A utilizamos el mismo contrachapado de madera de abedul, que utilizamos en nuestros sistemas de touring, consiguiendo una calidez en el sonido y una robustez difícilmente igualable en el segmento. Además todos los cabezales activos de la serie cuentan con un mezclador de 2 entradas XLR balanceadas de micro y línea, una entrada adicional de 3,5 mm Mini Jack y conexión powerCON.

El sistema cuenta con un altavoz 12MI4 para las bajas frecuencias y un motor M-34 para las altas frecuencias que en conjunto con el amplificador clase D de 1000W de potencia pico consigue un rendimiento excepcional. La interfaz DAScontrol™ permite a los usuarios configurar los presets, modos de EQ, retardo, control de ganancia y mezcla de las fuentes de señal, por medio de un DSP de 24-bit de alta gama, y una pantalla LCD situada en la parte trasera.

ACTION M512A

DATOS TÉCNICOS

Prestaciones

Rango de Frecuencia (-10 dB)	60 Hz - 20 kHz
Cobertura Horizontal (-6 dB)	80°
Cobertura Vertical	50°
SPL Máximo 1W/1 m (pico)	130 dB

ELECTRÓNICA Y CONECTORES

Potencia Nominal Amplificador (continuo)	500 W
Potencia Nominal Amplificador (pico)	1000 W
Tipo de Entrada	Balanced
Impedancia de Entrada	20 kohms
Sensibilidad de Entrada	1.95 V (+8 dBu)
Conector de Señal de Entrada	2 x Female XLR
AUX Input	1 x 3.5 mm Mini Jack
Conector Loop-Thru de Audio	2 x Male XLR
Control	DAScontrol™
Conector de Salida AC	powerCON NAC3MPB
Current Draw 230 V / 115 V	1.1 A/2.2 A

Recinto

Construcción del Recinto	Contrachapado de Abedul
Geometría del Recinto	Trapezoidal
Acabado	Pintura ISO-flex
Color	Negro

ACTION M512A

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Dimensiones (Al x An x Pr)	335 x 650 x 450 mm 13,2 x 25,6 x 17,7 in
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Peso Neto	19,5 kg (43,0 lb)
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Componentes

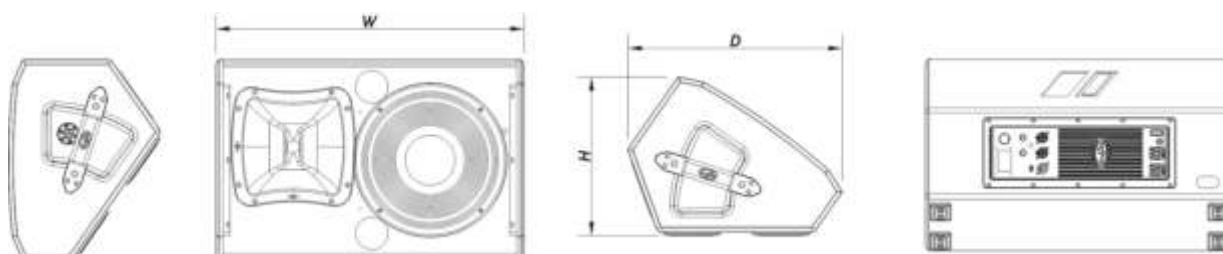
Transductor LF	12M14
Transductor HF	M-34
Difusor/Guía de Ondas	BC-85

Envío

Dimensiones de Embalaje (H x W x D)	383 x 747 x 503 mm 15,1 x 29,4 x 19,8 in
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Peso de Envío	21,5 kg (47,4 lb)
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DIMENSIONES



INFORMACIÓN DE PEDIDOS

Modelo	Descripción	P/N
Sistema		
ACTION-M512A		10427244

ACTION M512A

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Fuente del Jarro - Valencia - Spain - Tel. +34961340860
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Piezas de Recambio

12MI4	Cono Transductor	10214320
BC-85	Bocina	30003946
DSP-ACTION-M-512A	Dsp	20406592
GM-12MI4	Kit de Reconado	20208300
GM-M34	Diafragma	20205060
M-34	Motor de Compresión	10207080
MP-ACTM512A	Power Module	20406582
ORBIT300+100UM	Amplifier	30007231

Accesorios

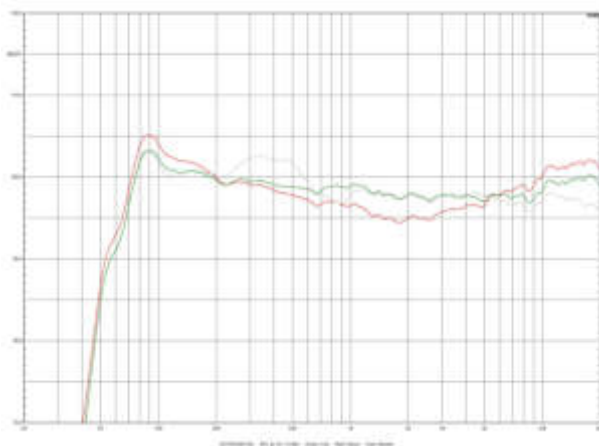
FUN-ACTM12	Accesorios de Transporte	10103530
TRD-6	Installation & Stacking Acc.	10104470
TRD-7	Installation & Stacking Acc.	10104471
TRPD-S2-PAK	Installation & Stacking Acc.	10104011

DATOS DE RENDIMIENTO

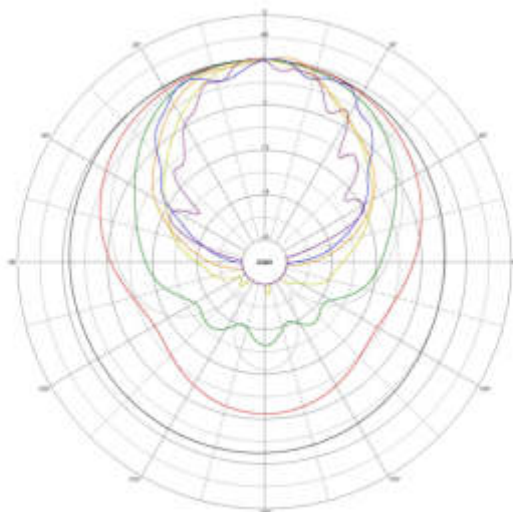
ACTION M512A

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Respuesta en Frecuencia



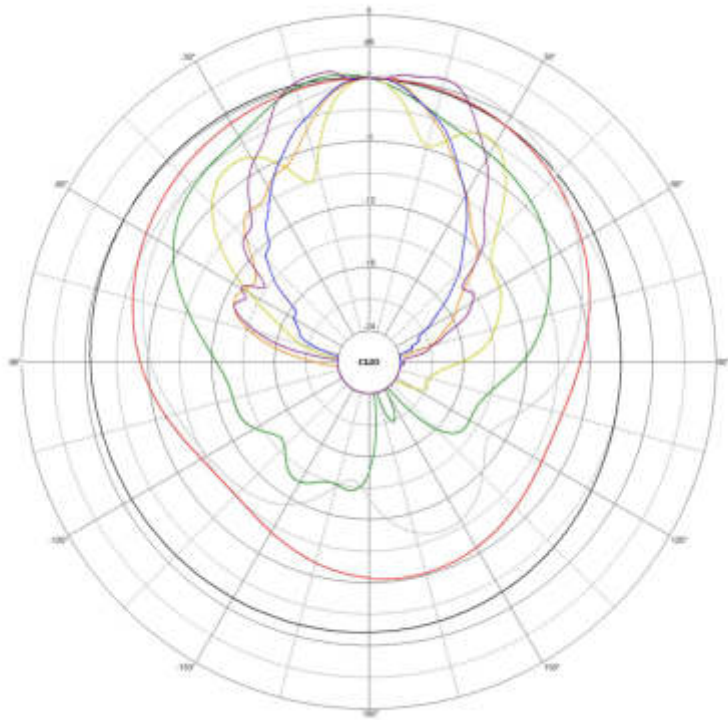
Polares Horizontales

ACTION M512A

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120Hz
100Hz
80Hz
60Hz
40Hz
20Hz



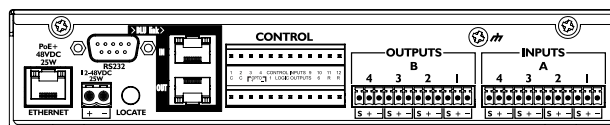
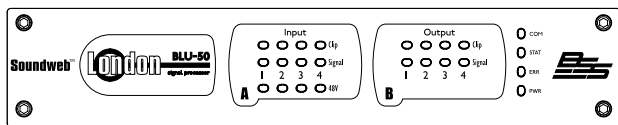
ACTION M512A

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SOUND WITH SOUL

Soundweb™ London BLU-50



OVERVIEW:

The Soundweb London BLU-50 offers a fixed configuration of four inputs and four outputs, configurable signal processing, logic processing and a high bandwidth, fault tolerant digital audio bus.

The BLU-50 has open architecture which is fully configurable through HiQnet™ London Architect. A rich palette of processing and logic objects and a “drag and drop” method of configuration provide a simple and familiar design environment.

This processor features a low latency, fault tolerant digital audio bus of 48 channels which uses standard Category 5e cabling giving a distance of 100m between compatible devices. Fiber media converters can be used to increase the distance between devices to over 40km.

The BLU-50 is compatible with the entire Soundweb London family and its 48 channel digital audio bus represents channels 1-48 of the larger 256 channel digital audio bus when integrated with the BLU-806, BLU-805, BLU-800, BLU-326, BLU-325, BLU-320, BLU-160, BLU-120, BLU-102, BLU-101, BLU-100, BLU-BIB and BLU-BOB devices.

Analog Inputs provide software configurable gain in 6dB steps up to +48dB per channel and software selectable Phantom Power per channel.

Phantom Power, Signal Present and Clip information per channel is easily accessible, without the requirement for a PC, from clear front panel LED indication. A bi-directional locate function allows devices to be identified both from and within HiQnet London Architect.

12 Control Inputs and 6 Logic Outputs and an RS-232 port allow the BLU-50 to be integrated with GPIO compatible devices. The Soundweb London Interface Kit, comprehensive documentation which details how Soundweb London systems can be integrated with third party control systems, is included within the installation of HiQnet London Architect.

The chassis is a half rack wide and can be rack mounted using the BSS Audio 1U Rack-Mount Kit. It can also be undertable mounted or wall mounted using the included mounting brackets.

The device can be powered with the included 12VDC power supply, but can accept 12-48VDC via a terminal block connector. The BLU-50 can also be powered with PoE+ via the Ethernet port, allowing the device to be powered, configured, controlled and monitored using a single Cat 5e cable.

The BLU-50 and the other members of the Soundweb London family provide the building blocks of the perfectly tailored system solution.

KEY FEATURES:

- 4 Analog Inputs (with 48v Phantom Power per Channel)
- 4 Analog Outputs
- Configurable Signal Processing
- Rich Palette of Processing and Logic Objects
- 48 Channel, Low Latency, Fault Tolerant Digital Audio Bus
- Clear Front Panel LED Indication
- Bi-Directional Locate Functionality
- 12 Control Inputs and 6 Logic Outputs for GPIO Integration
- Soundweb London Interface Kit for Third Party Control System Integration (Documentation)
- HiQnet Device
- Configuration, Control and Monitoring from HiQnet London Architect
- 12-48VDC or PoE+ Powering Options (12VDC Power Supply Included)
- Rack Mount, Surface Mount and Desk Mount Installation Options



Soundweb™ London BLU-50

TECHNICAL SPECIFICATIONS:

Front Panel Led Indicators:

Per Input: Signal Present, CLIP, 48V (Input only)

Other: COM, STAT, ERR, PWR

Analog Inputs: 4 electronically balanced on Phoenix Mini Combicon removable screw connectors

Mic/Line Inputs: Nominal gain 0dB, electronically switchable up to +48dB, in +6dB steps

Input Impedance: 3.5k Ω

Maximum Input Level: +20dBu with 0dB input gain, +8dBu with 12dB gain

CMRR: >45dB at 1KHz

Input Noise (E.I.N.): <-128dBu typical with 150 Ω source

Phantom Power: 48V nominal, selectable per input

A/D Latency: 37/Fs [0.77ms@48k]

Analog Outputs: 4 electronically balanced on Phoenix Mini Combicon removable screw connectors

Maximum Output Level: +20dBu

Frequency Response: 20Hz-20KHz (+0.5dB/-1dB)

THD: 0.005% typical at +4 dBu, 1kHz, 0 dB input gain

Dynamic Range: 110dB A-weighted, >107dB unweighted

Crosstalk: <-100dB

Output Impedance: 120 Ω

D/A Latency: 29/Fs [0.60ms@48k]

Control Ports: 12 inputs and 6 outputs

Control Input Voltage: 0 to 4.5v

Control Input Impedance: 4.7k Ω to +5V (2-wire mode), >1M Ω (3-wire mode)

Logic Output Voltage: 0 or +5V unloaded

Logic Output Impedance: 440 Ω

Logic Output Current: 10mA source, 60mA sink

Watchdog Output: Phoenix/Combicon connector for failsafe control

Opto Output Current: 14mA maximum

Withstanding Voltage: 80V maximum (Off)

Series Impedance: 220 Ω (isolated)

Control Network:

Connectors: RJ45 Ethernet connector

Maximum Cable Length: 100m/300ft on Category 5 cable between device and Ethernet switch

BLU link:

Connectors: 2 x RJ45 Ethernet connectors

Maximum Cable Length: 100m/300ft on Category 5e cable between devices

Max. Number of Nodes: 60

Latency: 11/Fs [0.23ms@48k]

Pass Through Latency: 4/Fs [0.08ms@48k]

Power and Dimensions:

Power Requirements: 12-48VDC

Power Adapter: 100-240VAC 50/60 Hz, 12VDC output

Power Consumption: <55VA

BTU Rating: <188 BTU/hr

Operating Temp. Range: 0 $^{\circ}$ to 45 $^{\circ}$ C (32 $^{\circ}$ to 113 $^{\circ}$ F)

Dims: (H(U) x W x D): 1.625" (41mm) x 8.63" (219mm) x 7.75" (197mm)

Weight: 2.82 lbs / 1.28 kg



Características principales

- **Limitador frecuencial por control del nivel de presión sonora**
- **No corta la música. Con la opción ENOS (Extraneous Noise Override System) la reproducción musical en pubs y bares musicales, es posible**
- **Equipo limitador controlador registrador, según especificaciones del Reglamento de Calidad del Aire publicado en BOJA 30,1996-03-07 y BOJA 105, 1998-09-17**
- **Control por nivel en emisión y recepción (aislamiento)**
- **Margen de corrección de 50 dB**
- **Registra parámetros sonométricos acústicos LAeq, LAeq1'max, LAeq1'min, LFmax, y percentiles (intervalos y sesiones)**
- **Registra las incidencias acaecidas: desconexiones de red, manipulaciones del sensor**
- **Totalmente precintable**
- **Ajustable a cualquier tipo de normativa**
- **Sistema interno de autoverificación continua del sensor**
- **Diferentes algoritmos de control**
- **Almacenamiento masivo de datos para periodos superiores a 1 mes**
- **Configuración y obtención de datos mediante software**

El limitador registrador frecuencial **LRF-05** mide, registra y controla el nivel de presión acústica existente en el local donde está instalado. El **LRF-05** se intercala en la cadena de reproducción, entre la mesa de mezclas y la etapa de potencia, interviniendo en la totalidad de la cadena de sonido.

El **LRF-05** corrige, automáticamente, excesos en el nivel de señal musical de hasta 50 dB. Si se sobrepasan estos 50 dB, el **LRF-05** penaliza con una atenuación de 60 dB durante un intervalo de tiempo programable. El gran rango dinámico de atenuación permite al usuario del equipo musical disponer de un amplio margen de maniobra en el cual el **LRF-05** corrige los excesos de nivel de señal sin atenuaciones restrictivas. El **LRF-05** dispone de distintos algoritmos predictivos de respuesta para esta actuación, desde el más estable, basado en el parámetro Leq10s (recomendado), hasta el más restrictivo, basado en el Leq125 ms.

El **LRF-05** dispone de la opción **ENOS** (Extraneous Noise Override System) especialmente diseñada para la reproducción musical en locales con alto nivel de ruido ambiente: bares, pubs, bares musicales, etc. No corta la música. Además el **LRF-05** dispone de salidas con nivel mínimo de ruido (ultra-low noise). Ideal para conciertos acústicos, monólogos, recitales, etc.

El **LRF-05** actúa según los niveles sonoros medidos en el local por un sensor diseñado a partir de las últimas tecnologías desarrolladas por **CESVA** en el campo de la sonometría y/o según los niveles de presión sonora de una vivienda colindante al local, calculados a partir de los niveles medidos por el sensor por bandas de octava (centradas en 31'5 Hz, 63 Hz, 125 Hz, 250 Hz, 500 Hz, 1 kHz, 2 kHz, 4 kHz y 8 kHz) y de los niveles de aislamiento por bandas de octava existentes entre el local y la vivienda. Esta actuación espectral permite obtener el máximo nivel de presión sonora en el local sin que se supere el límite admisible de nivel sonoro en las edificaciones colindantes a este.

El **LRF-05** también dispone de una función registradora que permite guardar la información de los niveles sonoros medidos y de las incidencias acaecidas (manipulaciones del equipo), como mínimo durante 1 mes (tiempo de Leq superior a 6 minutos). El **LRF-05** permite programar la periodicidad con que se almacena esta información (de 2 min. a 1 h en pasos de 1 min.). Esta información también se guarda para cada sesión; de esta manera se mantiene un registro de los niveles sonoros generados por la actividad. Para facilitar la inspección de la información guardada, esta se puede obtener directamente del **LRF-05** con un ordenador personal mediante puerto usb o vía módem. El **LRF-05** funciona conectado a la red eléctrica. Cuando el **LRF-05** se desconecta de la red, registra esta incidencia y se apaga automáticamente ofreciendo una atenuación de 60 dB hasta la próxima conexión a la red. La información almacenada no se pierde. Cuando se restablece la conexión a la red eléctrica, el **LRF-05** sigue con su funcionamiento normal. Es posible conectar al **LRF-05** un visualizador luminoso externo que permite observar, desde otro punto del local y en tiempo real, el nivel de presión sonora medido junto con el nivel de atenuación aplicado por el **LRF-05**. El **LRF-05** incorpora un sistema interno de autoverificación continua que le permite detectar y registrar posibles manipulaciones tanto del equipo de medida como de la cadena de emisión musical.



ENTRADAS Y SALIDAS

Entradas y salidas de audio

Conectores E/S Asimétricas (no balanceadas):

RCA

Conectores E/S Simétricas (balanceadas):

Entrada: XLR hembra

Salida: XLR macho

Impedancia de entrada:

100 kΩ

Impedancia de salida:

100 Ω

Carga mínima a la salida:

47 kΩ

Distorsión armónica

total (THD):

< 80 dB

Nivel máximo absoluto a la entrada:

±25 V

Nivel máximo a la entrada sin distorsión:

±13.5 V

Respuesta frecuencial (± 0,5 dB):

20 a 20.000 Hz

Ruido típico (20 – 20.000 Hz):

Balanceada: -93 dBu

No Balanceada: -90 dBu

Salida para conexión del display externo DL-3E

XLR macho de 3 contactos

Salida para conexión de módem

DB-9 macho

Salida para alimentación del módem

Conectores: jack DC de alimentación

Tensión de alimentación: 5Vdc/800mA

Salida para conexión USB

Tipo B macho. Cumple con USB 2.0

Atenuador

Rango atenuador:

0 – 50 dB

Atenuación de penalización:

60 dB

Error típico de atenuación:

0 dB

Error máximo de atenuación (0 – 50 dB):

1 dB

ACCESORIOS INCLUIDOS

LXM-8	Sensor
CNOMX9	Cable (9 m)
SFTL05	Aplicación Software (disponible gratuitamente en www.cesva.com)

Sensor

Rango de medida:

60 – 120 dB

Rango de frecuencias:

20 a 20.000 Hz

Filtros de octava

Filtros de octava normalizados tipo 1 según norma IEC-1260 (1995).

Frecuencias centrales según recomendación ISO-266 (1975).

El margen frecuencial comprende las bandas de octava centradas en las frecuencias: 31.5, 61, 125, 250, 500, 1.000, 2.000, 4.000 y 8.000 Hz y estas cubren las recomendadas por la CTE DB-HR para la descripción del aislamiento acústico de los edificios (frecuencias preferentes: 125, 250, 500, 1.000, 2.000 y 4.000 Hz).

Display externo (opcional)

Display LEDs externo DL-3E: indica, en tiempo real, el nivel de presión sonora en dBA y la atenuación del LRF-05 en dB. El display se actualiza cada 2 segundos.

Dimensiones y peso

440x 226x 95 mm

2 u. de rack de 19"

4 kg

Alimentador de red

220V — 50-60 Hz

Consumo máximo

13W

Capacidad de almacenamiento (existe la posibilidad de realizar una ampliación)

10 días (TLeq = 2 min)

34 días (TLeq = 7 min)

48 días (TLeq = 10 min)

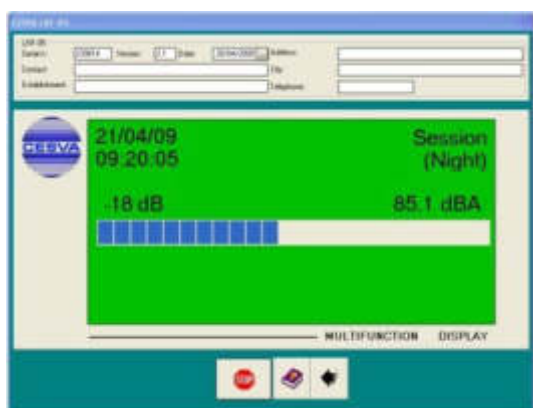
9 meses (TLeq = 1 h)

ACCESORIOS OPCIONALES

CB004	Calibrador Sonoro
DL-3E	Display externo
ALIC-1	Alicates para precinto
PLOM-1	Precinto de plástico de Ø9 mm (100 unidades)
ALAMB-1	Alambre para precintar (rollo 10 m)
DL100	Display externo gigante (61x32x8 cm)

La aplicación software del **LRF-05**, disponible gratuitamente en www.cesva.com, permite:

- Visualizador de los niveles sonoros e incidencias en tiempo real
- Generar gráficos. Evolución temporal de los niveles sonoros
- Obtención de datos en formato electrónico
- Programación de los parámetros vía módem
- Creación de informes en 6 idiomas distintos
- Única herramienta para la programación del LRF-05



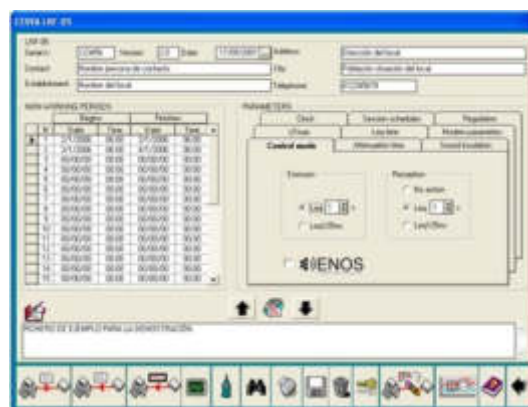
Visualización de datos en tiempo real mediante módem



Test



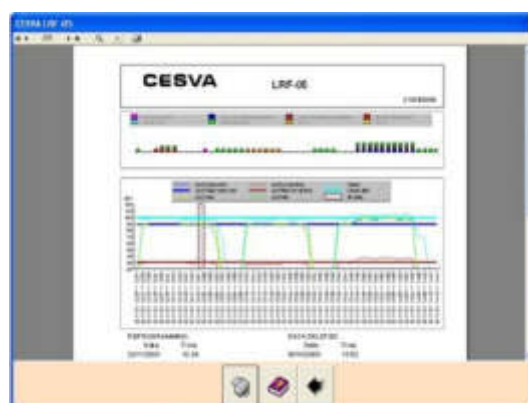
Configuración módem



Programación del LRF-05



Visualización gráfica de datos (niveles sonoros e incidencias)



Generación de informes

Transmisor INT-TX Integrus

www.boschsecurity.es



BOSCH

Innovación para tu vida



El transmisor constituye el elemento principal del sistema Integrus. Admite entradas analógicas o digitales, modula estas señales en ondas portadoras y transmite dichas ondas a radiadores ubicados en la sala.

Funciones básicas

- Modo auxiliar para distribuir música a todos los canales durante una pausa
- Modo esclavo para distribuir señales de otro transmisor que permite el uso de varias salas
- Modo de prueba que produce un tono de frecuencia diferente para cada entrada o canal, con un aumento gradual del tono a medida que se pasa de un canal a otro
- Ajuste de la sensibilidad de cada entrada para establecer los niveles de sonido con precisión
- Minirradiador de infrarrojos incorporado para supervisar el audio
- Indicación del estado de los radiadores y del sistema en la pantalla
- El instalador puede asignar a cada transmisor un nombre exclusivo para poder identificarlo fácilmente en un sistema con varios transmisores
- Además, el instalador puede asignar un nombre exclusivo a cada canal de audio. Estos nombres se pueden seleccionar en una lista de opciones o escribir de forma manual

- ▶ Puede distribuir un máximo de 4, 8, 16 o 32 canales de audio
- ▶ Se puede utilizar con el sistema DCN Next Generation, o con sistemas analógicos como CCS 900
- ▶ Configuración flexible de los canales y sus modos de calidad para lograr una distribución eficaz
- ▶ La configuración del transmisor y del sistema se realiza mediante una pantalla y un único botón giratorio

- Distribución automática de mensajes de emergencia a todos los canales
- Función automática de espera/activado
- Sincronización automática con el número de canales en uso en un sistema DCN
- Sincronización automática de nombres de idiomas en uso en un sistema DCN Next Generation
- Dispositivo de alimentación eléctrica universal para utilizarlo en todo el mundo
- Elegante carcasa de 19 in (2U) para montaje en rack o en sobremesa
- Asas para facilitar el transporte

Controles e indicadores

- Pantalla LCD de 2 líneas de 16 caracteres para mostrar información de estado y la configuración del transmisor
- Botón giratorio para desplazarse por los menús y realizar ajustes
- Interruptor de encendido/apagado en el panel frontal

Interconexiones



Interconexiones (en la parte posterior del transmisor)

- Enchufe europeo macho para la conexión a la red eléctrica
- Ranura con conector de bus de datos de audio (H 15, hembra) que admite el módulo de intérpretes y entrada de audio simétrica LBB 3422/20
- 4, 8, 16 o 32 conectores tipo Cinch para la entrada de señales de audio asimétricas
- Dos tomas XLR para la entrada de señales simétricas de la sala, mensajes de emergencia o música
- Un conector de bloque de terminales para la distribución de mensajes de emergencia a todos los canales
- Toma para auriculares estéreo de 3,5 mm (0,14 in) para la supervisión de las entradas y los canales
- Un conector BNC para aceptar una señal de alta frecuencia de otro transmisor
- Seis conectores BNC para transmitir la señal de alta frecuencia a un máximo de 30 radiadores
- Dos conectores de red óptica para la conexión en un sistema DCN Next Generation*

* Se necesitan los cables de red óptica LBB 4416/xx

Piezas incluidas

Cantidad	Componente
1	Transmisor INT-TX Integrus
1	Se incluyen los soportes de montaje en rack de 19 in, las patas extraíbles y los accesorios de montaje de los módulos
1	Manual de instalación y funcionamiento del sistema en CD-ROM
1	Cable de alimentación

Especificaciones técnicas

Especificaciones eléctricas

Tensión de alimentación	De 100 a 240 VCA, 50/60 Hz
Consumo de energía	
En funcionamiento, máximo	55 W
En espera	29 W

Entradas de audio asimétricas	+3 dBV nominal, +6 dBV máximo (±6 dB) +15 dBV nominal, +18 dBV máximo (±6 dB)
Entradas de audio simétricas	De +6 a +18 dBV nominal
Conector de conmutación de emergencia	Entrada de control de emergencia
Salida de auriculares	De 32 ohmios a 2 kilohmios
Entrada de alta frecuencia	Nominal de 1 Vpp, mínimo de 10 mVpp, 75 ohmios
Salida de alta frecuencia	1 Vpp, 6 VCC, 75 ohmios

Especificaciones mecánicas

Dimensiones (Al. x An. x Pr.)	
Uso para sobremesa (con pies)	92 x 440 x 410 mm (3,6 x 17,3 x 16,1 in)
Uso en rack de 19 in (con soportes)	88 x 483 x 410 mm (3,5 x 19 x 16,1 in)
Delante de los soportes	40 mm (1,6 in)
Detrás de los soportes	370 mm (14,6 in)
Peso sin soportes y con patas	6,8 kg (15,0 lb)
Montaje	Soportes para montaje en rack de 19 pulgadas o de sobremesa Patas extraíbles para utilizar como componente autónomo en sobremesa
Color	Carbón (PH 10736) con plata

Información sobre pedidos

Transmisor de 4 canales INT-TX04

Transmisor de 4 canales Integrus.
Número de pedido **INT-TX04**

Transmisor de 8 canales INT-TX08

Transmisor de 8 canales Integrus.
Número de pedido **INT-TX08**

Transmisor de 16 canales INT-TX16

Transmisor de 16 canales Integrus.
Número de pedido **INT-TX16**

Transmisor de 32 canales INT-TX32

Transmisor de 32 canales Integrus.
Número de pedido **INT-TX32**

INT-TX04-US Transmisor de 4 canales (US)

Transmisor de 4 canales Integrus. Versión para EE. UU.
Número de pedido **INT-TX04-US**

INT-TX08-US Transmisor de 8 canales (US)

Transmisor de 8 canales Integrus. Versión para EE. UU.
Número de pedido **INT-TX08-US**

INT-TX16-US Transmisor de 16 canales (US)

Transmisor de 16 canales Integrus. Versión para EE. UU.

Número de pedido **INT-TX16-US**

INT-TX32-US Transmisor de 32 canales (US)

Transmisor de 32 canales Integrus. Versión para EE. UU.

Número de pedido **INT-TX32-US**

Accesorios de hardware

Módulo de intérpretes y entrada de audio simétrica

LBB 3422/20

Módulo de intérpretes y entrada de audio simétrica para interconectar el transmisor Integrus con los sistemas de debate CCS 900 y el pupitre de intérprete LBB 3222/04 de 6 canales.

Número de pedido **LBB3422/20**

Representada por:

Spain:
Bosch Security Systems, SAU
C/Hermanos García Noblejas, 19
28037 Madrid
Tel.: +34 914 102 011
Fax: +34 914 102 056
es.securitysystems@bosch.com
www.boschsecurity.es

Americas:
Bosch Security Systems, Inc.
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 800 289 0096
Fax: +1 585 223 9180
security.sales@us.bosch.com
www.boschsecurity.us

America Latina:
Robert Bosch Ltda
Security Systems Division
Via Anhanguera, Km 98
CEP 13065-900
Campinas, Sao Paulo, Brazil
Phone: +55 19 2103 2860
Fax: +55 19 2103 2862
latam.boschsecurity@bosch.com
www.boschsecurity.com

Pupitre de intérprete LBB 3222/04

www.boschsecurity.es



BOSCH

Innovación para tu vida



- ▶ Cuenta con 6 canales de idiomas diferentes, más el idioma de sala
- ▶ Gracias a la tecla de selección del canal de entrada, no es necesario buscar de forma manual por todos los canales de idioma disponibles
- ▶ El cambio rápido entre el idioma de sala y el canal definido en el selector de canales reduce la posibilidad de que el operador cometa un error
- ▶ La función de bloqueo electrónico de canal evita que los intérpretes de distintas cabinas utilicen el mismo canal de salida

Funciones básicas

- Altavoz integrado
- Es posible conectar en bucle 12 pupitres de intérprete en y/o entre cabinas de traducción
- Puede haber un máximo de tres pupitres de intérprete por cabina
- La función de activación del relé automático permite que el intérprete proporcione el idioma de relé automático (OR2) para la interpretación de relé
- Con la función de desactivación del canal B, el intérprete puede desactivar el canal B y, al mismo tiempo, asegurarse de que el pupitre permanezca conectado al canal A

Controles e indicadores

- El micrófono acoplado a una varilla flexible dispone de un anillo luminoso que se enciende cuando el micrófono está activado
- Controles de volumen y de tonos agudos y bajos de los auriculares
- Tecla de selección de canal A-B con indicadores de canal seleccionado
- Seis teclas de selección de canal B de salida con indicadores de canal seleccionado
- Indicador de "OR2" (relé automático) de salida
- Indicadores de "canal ocupado" que muestran qué canales están en uso por parte de otros intérpretes.

- Tecla de silencio del micrófono
- Tecla de activación del micrófono con indicador LED de estado
- Tecla de selección con indicadores LED para cambiar rápidamente entre el idioma original de la sala y el canal definido en el selector de canales
- Indicador de "OR2" (relé automático) del canal de entrada que muestra que el idioma de sala ha sido sustituido por un canal de interpretación de transferencia, cuando la función de relé automático está activada
- Selector del canal de idioma de entrada para monitorización de los auriculares
- Tecla de llamada (voz) para establecer una comunicación bidireccional entre el intérprete y el presidente/operador
- Tecla de mensaje saliente
- Indicador de mensaje entrante
- Interruptor giratorio para preestablecer el canal de salida a través de la salida A

Interconexiones

- Cable de 3 m terminado con un conector de tipo sub-D de 25 patillas
- Enchufe de tipo sub-D de 25 patillas para las conexiones en bucle
- Conectores de auriculares con clavija estéreo de 6,3 mm

- Conector tipo DIN de 15 polos y 180° para conexión de los auriculares del intérprete con el micrófono, junto con un interruptor para silenciar el micrófono incorporado
- Conector auxiliar (mensaje) para la función de mensajes del pupitre

Certificados y homologaciones

Región	Certificación
Europa	CE

Especificaciones técnicas

Especificaciones eléctricas

Respuesta de frecuencia	De 125 Hz (-10 dB) a 12,5 kHz (-2 dB)
Presión de sonido equivalente nominal debido al ruido inherente	< 32 dB
Distorsión armónica total en sobrecarga	< 5%
Atenuación de diafonía	> 66 dB

Especificaciones físicas

Montaje	Montaje de sobremesa o empotrado
Dimensiones (Al[parte frontal]- -Al[parte posterior] x An. x Pr.)	20-58 x 250 x 189 mm (0,79-2,28 x 9,84 x 7,44 pulg.)
Peso	1,75 kg (3,85 lb)
Color	gris claro

Información sobre pedidos

Pupitre de intérprete LBB 3222/04

Pupitre de intérprete que cuenta con 6 canales para idiomas diferentes, así como el idioma de sala.

Número de pedido **LBB3222/04**

Representada por:

Spain:
Bosch Security Systems, SAU
C/Hermanos García Noblejas, 19
28037 Madrid
Tel.: +34 914 102 011
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Fairport, New York, 14450, USA
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Campinas, Sao Paulo, Brazil
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BRITEQ BT-TEATRO 250EZ MK2 Fresnel LED 250W 3200K Zoom 14º a 54º



Proyector Fresnel con LED de 250W y Zoom motorizado de 14º a 54º. BT-TEATRO 250EZ MK2

- Excelente refrigeración con muy poco ruido
- Con LED 3200K blanco cálido de 250W produce una salida de luz increíble que incluso supera fácilmente a los proyectores de teatro y TV halógenos tradicionales de 1 kW
- Excelentes características fotométricas: CRI / Ra > 97, TLCI > 98, CQS > 94, Rf > 93, Rg > 100
- Grabaciones de TV sin parpadeos y sin ruidos de atenuación de tono alto, gracias a la atenuación HF PWM: ¡hasta 20 kHz!

Referencia B06038

Unidad: Precio por 1 Pieza
Embalaje completo: 1 Unidad
Apertura haz: Zoom motorizado de 14º a 54º
Potencia: 260W
Voltaje / Tensión: Alimentación: AC 100 - 240 V, 50/60 Hz

Temperatura de color: 3200K
Rango IP: IP20
Color: Negro
Tamaño: Ver dibujo en galeria de fotos
Certificacion: CE
Peso: 8,25 kg
Marca: Briteq

- Porta gelatinas incluido para el uso de filtros de color y visera de ocho hojas también incluida
- No se necesita dimmer de regulación para su control
- Sistema de enfriamiento reelaborado para un funcionamiento extremadamente silencioso, baja temperatura del LED y salida de luz muy estable
- Pantalla LCD para navegar fácilmente a través del menú de configuración rediseñado
- Controlado por DMX: 6 modos de canal diferentes (8 bits y 16 bits) para una máxima flexibilidad
- Preparado para DMX inalámbrico: simplemente conecte un DONGLE WTR-DMX opcional! (Código Briteq: 4645)
- Control manual de dimmer y zoom/enfoque: alineación sencilla del proyector en el escenario + uso en stands de exhibición
- El comportamiento de la lámpara se puede ajustar continuamente de LED a halógeno
- Cuatro curvas de atenuación: lineal, cuadrada, cuadrada inversa, curva en S
- En caso de falla de DMX, puede elegir entre el modo de apagón y el modo de congelación
- Funcionalidad **RDM** para una fácil configuración remota: direccionamiento DMX, modo de canal,...
- Función de bloqueo para evitar alteraciones no deseadas de la configuración
- La configuración predeterminada de fábrica + la configuración del usuario se pueden guardar / cargar
- Entrada y salida de señal DMX mediante conectores XLR de 3 y 5 pines
- Entrada y salidas de alimentación mediante conectores Neutrik PowerCON para una fácil conexión en cadena

• Características

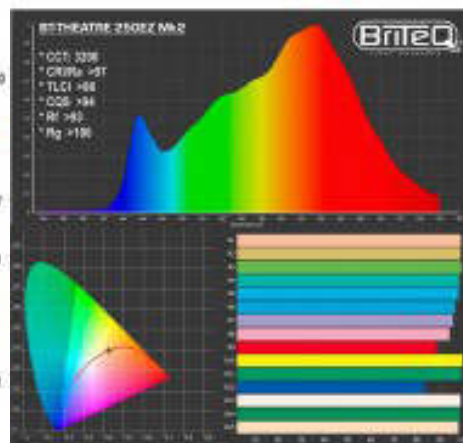
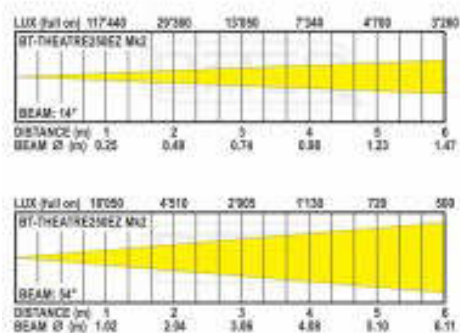
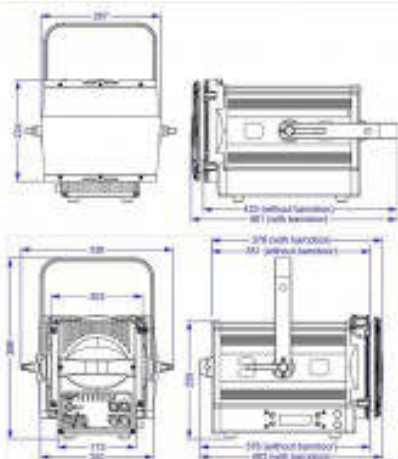
- Pantalla de control: LCD
- Control: Autónomo, manual, DMX maestro / esclavo
- Canales DMX: 4
- Función RDM
- Zoom motorizado de 14º a 54º
- Temperatura de color: 3200K
- Luminosidad: 4.700 a 5 metros con haz a 14º
- Alimentación: AC 100 - 240 V, 50/60 Hz
- Consumo de energía: 260W
- Color del cuerpo: Negro
- Tamaño del agujero en el pomo para fijación: M12
- Peso: 8,25 kg

• ¿Que incluye el paquete?

- 1 proyector fresnel LED BT-TEATRO 250EZ MK2
- 1 Visera de 8 palas color negra
- 1 Porta filtros
- 1 Cable de alimentación (PowerCon - Schuko)
- 1 Manual usuario

• Identificación

- Marca: Briteq
- Modelo: BT-TEATRO 250EZ MK2
- Código Briteq: B06038
- Código EAN: 5420025660389





BRITEQ PROFILE 250/LED ENGINE 3200K



Motor LED COB 250W para recorte Teatro.
3200°K compatible con ópticas ETC

- Este motor combinado con lentes (linterna) esta diseñado para Teatro, auditorios y empresas de alquiler de equipamiento de iluminación para eventos
- Es el reemplazo perfecto de proyectores de recorte halógenos con alto consumo de energía, no necesita dimmers
- Control DMX512
- Para su comodidad, el proyector se suministra sin ópticas. Solo tienes que elegir la óptica fija apropiada de 19°, 26°, 36°, 50° ó en versión Zoom 15°-30° y/o Zoom 25°-50°

Referencia B06023

Unidad: Precio por 1 Pieza
Embalaje completo: 1 Unidad
Apertura haz: Dependiendo de la óptica empleada
Potencia: 250W
Voltaje / Tensión: AC 110-240V. 50/60Hz
Temperatura de color: 3200K
Gama: Motor LED recorte para lente
Tipo: Recorte LED

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Rango IP: IP20
Tamaño: 310 x 250 x 350 mm
Peso: 5,26 kg
Marca: Briteq

- Estes motor esta equipado con un LED COB de alta potencia de 250W con una temperatura de color de 3200K.
- Sistema de enfriamiento extremadamente silencioso que utiliza tecnología de tubería de calor.
- Compatible con ópticas ETC Source Four-óptica.
- Pantalla LCD para configuraciones fáciles.
- Modos de trabajo: manual, DMX
- Diferentes curvas de dimmer: lineal, ley cuadrada, ley cuadrada inversa, curva en S
- Dispone de un asa trasera aislada muy practica para que el técnico de iluminación pueda enfocar cómodamente

- **Acerca de las ópticas (no incluidas)**

- Óptica especialmente revestida para proyecciones nítidas y definidas.
- Cuatro cuchillas de perfil, especialmente recubiertas para mínimos reflejos.
- Puede reemplazar por ópticas del fabricante ETC Source Four
- El cuerpo óptico se puede girar y bloquear en cualquier posición.
- Diferentes unidades ópticas opcionales disponibles : 19°, 26°, 36°, 50°, Zoom 15-30°, Zoom 25° -50°
- Compartimento con cierre mecánico desplegable para el uso de los disponibles accesorios opcionales:
 - Porta GOBOs : Para Gobos de diámetro exterior: 86 mm, diámetro óptico: 48 mm
 - IRIS : diámetro de apertura: ajustable de 5 mm a 74 mm

- **Contenido del paquete**

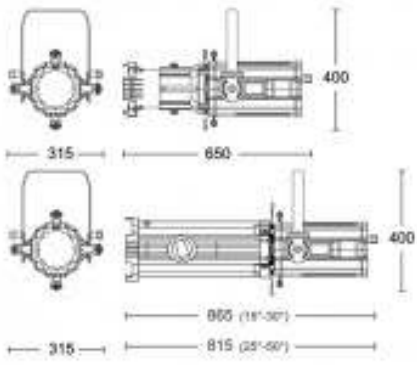
- 1 Motor LED 250W para óptica recorte
- 1 Cable alimentación
- 1 Manual usuario

- **Características**

- Entrada de alimentación: AC 110-240V. 50/60Hz
- Consumo de energia a maxima potencia: 270W
- Fusible: 250V 3A retardado (cristal 20mm)
- Conexión eléctrica: Entrada y salida mediante conector Powercon
- Conexiones de señal DMX: XLR de 3 pin para entrada y salida
- Canales DMX
 - 1 canal (8 bits)
 - 2 canales (16 bits)
- LED: LED 250W COB blanco 3200K. CRI >96
- Tamaño: 310 x 250 x 350 mm (sin contar la lira y la lente)
- Peso: 5,26 kg

- **Identificación**

- Marca: Briteq
- Familia Briteq: Proyector LED Teatro
- Tipo: Proyector LED recorte
- Descripción: Motor LED 250W COB blanco 3200K, CRI >96 para ópticas
- Modelo: BT-PROFILE250 MOTOR LED
- Código: B06023
- Código EAN: 5420025660235



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BRITEQ PROYECTOR BT- COLORAY 18FCR 18 LED 8W



PROYECTOR BT-COLORAY 18FCR 18 LED 8W

- Proyector para exterior con 18 LED RGBW de 8W, ángulo de haz de 20° y conectores Neutrik TRUE1 Powercon y 3P XLR y refrigeración por ventilador IP.
- Clasificación IP65.
- Tres modos DMX diferentes: 4, 6 y 7 canales.

Referencia B05512

Unidad: Precio por 1 Pieza
Embalaje completo: 1 Unidad
Gama: Proyector
Rango IP: IP65
Color: Negro
Número de LED: 18
Colores LED: RGBW
Potencia LED / Lampara: 8W

Características

- Este elegante proyector RGBW de 18x8 W con un ángulo de haz de 20° es una poderosa herramienta para todo tipo de eventos (escenario, programa de televisión, botas de exhibición, iluminación

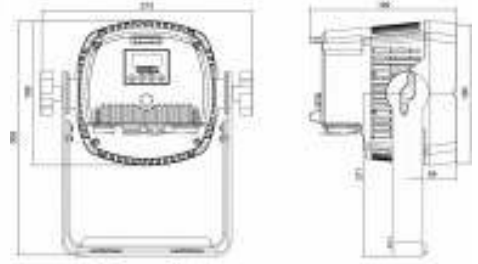
arquitectónica, ...)

- Funcionalidad RDM para una fácil configuración remota: direccionamiento DMX, modo de canal, ...
- La pantalla LCD asegura una fácil navegación en los diferentes menús de configuración.
- Listo para TV-Studio: frecuencia de actualización de LED de 1200Hz sin parpadeo.
- Comportamiento de la lámpara seleccionable: lámpara halógena (lenta) o LED (rápida).
- Dimmer: lineal, cuadrado, cuadrado inverso, curva en S
- En caso de fallo de DMX, puede elegir entre el modo de bloqueo y frece.
- Función de bloqueo para evitar alteraciones no deseadas de la configuración.
- Ajuste de balance de blancos para combinar perfectamente con los colores de varios proyectores.
- La configuración predeterminada de fábrica + la configuración del usuario se pueden guardar / cargar.
- Entradas / salidas DMX de 3 pines y entradas / salidas Neutrik® TRUE1 PowerCON® para un fácil encadenamiento.
- Kit de modificación opcional disponible para modificar IP 3pin XLR a 5pin (BT-XLR3TO5 - código: B05523)
- Refrigeración por ventilador IP para una mayor vida útil del LED.

Especificaciones

- Aplicaciones: Arquitectura, Escenario y Alquiler, Teatro
- Peso: 5.28 kg
- Entrada alimentación: CA 100 - 240V, 50 / 60Hz
- Etiqueta energética: no
- Consumo: 123 W
- Color negro
- Pantalla táctil
- Fijación soporte omega opcional
- Clasificación IP: exterior
- Control maestro / esclavo: sí
- Control SMART-DMX: No
- Control independiente: automático, fijo
- Control programable: no
- Software actualizable: sí
- Canales DMX máximos: 7
- Lámpara: LED
- Colores: rojo, verde, azul, blanco, RGB, RGBW
- Mezcla de colores: sí
- Mín. ángulo del haz (°): 20
- Máx. ángulo del haz (°): 20
- Mín. frecuencia de actualización (kHz): 1.2
- Máx. frecuencia de actualización (kHz): 1.2
- Entrada de conexiones: 3 pin XLR, TRUE1 powerCON
- Salida de conexiones: 3 pin XLR, TRUE1 powerCON





LUX (full on)	19777	4944	2197	1228	791	549
ST-COLORA2 18FCR						
BEAM- 28°						
DISTANCE (m)	1	2	3	4	5	6
BEAM Ø (cm)	28	78	111	150	184	233



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ChamSys

Inspiring Performance



QuickQ

ChamSys QuickQ Lighting Console

Quick is the keyword for this easy-to-use, intuitive console, perfect for smaller lighting systems and programmers of all skill levels.

QuickQ 10



QuickQ 20



QuickQ 30



Quickly Learn.

There's no need to have any experience with lighting. With a large 9.7-inch touch screen, helpful prompts and videos, and a smart phone-like interface, you can learn the console quickly, design a light show, save it and play it again and again.

Quickly Program.

The console has easy-to-understand buttons and faders, simple colour selection and intensity control tools, a large touch screen with zooming and scrolling at your fingertips, as well as a simple cue/chase system for playback. The QuickQ interface easily leads you through setup, programming and operation of the console.

The console has free downloadable offline programming software available for Mac and Windows that includes the fully rendered MagicVis visualiser. You can program your show using the QuickQ Designer software on your computer, save it onto a flash drive and load it onto the QuickQ console.

Quickly Connect.

The console can automatically detect and patch RDM compliant fixtures and features in-built WIFI capabilities enabling remote connection to the free QuickQ app available on iOS, Android and Windows tablets and phones. Easily connect the app by simply scanning the QR code on the console display.

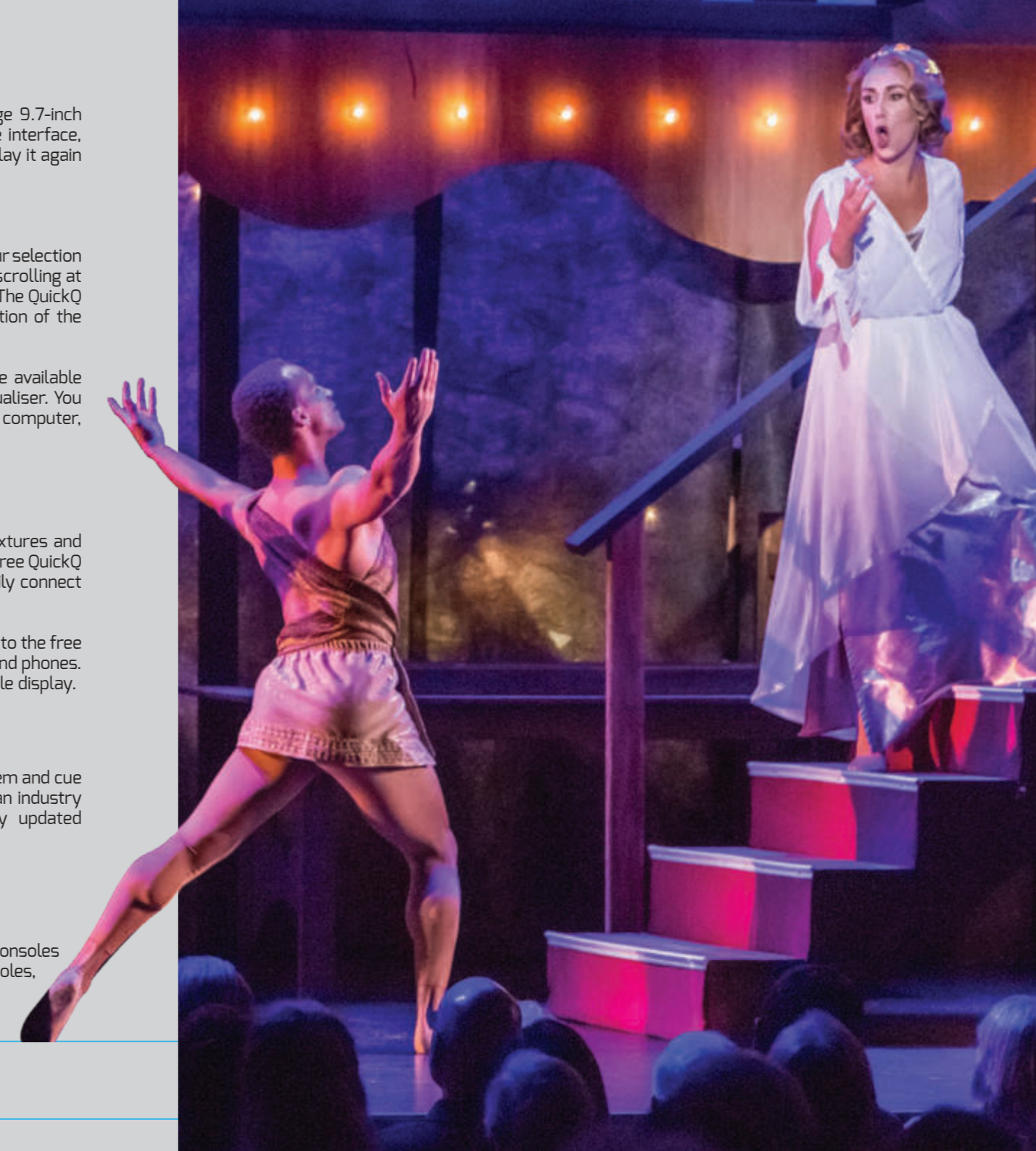
QuickQ features in-built wifi capabilities enabling remote connection to the free QuickQ Remote app available on iOS, Android and Windows tablets and phones. Begin to plug and play by simply scanning the QR code on the console display.

Quickly See The Quality.

QuickQ is powered by the world renowned ChamSys operating system and cue engine, and comes with the support you've come to expect from an industry leader. The console uses ChamSys' extensive and continuously updated personality library with over 30,000 personalities.

Quickly Progress.

With core ChamSys philosophies at the heart of the product, QuickQ consoles are show compatible with our more advanced MagicQ line of consoles, enabling users to progress freely throughout the ChamSys range.





QuickQ Key Features

Design

- Simple user interface
- Easy navigation
- Large touch screen with easy to understand and intuitive graphical interface
- User prompts through setup, programming and operation



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**NEW
PRODUCT
AWARDS**
WINNER

User Interface

- Modeled on smart phone icon interface and gesture support
- Intuitive interface allowing simple control of all fixture attributes
- Supports pinching for zooming and scrolling
- The remote app is identical to that on the console display so that you can easily swap between the two

Playback Faders

- Dedicated Grand Master fader
- Dedicated Cue Stack Control section
- QuickQ 10 has one Cue Stack and two Chase faders
- QuickQ 20 and QuickQ 30 have 10 multi-purpose Cue Stack/Chase faders
- Playbacks compatible with and aid progression towards MagicQ

Fixture Faders

- Fader for Intensity Control
- Flash button
- Fixture, Group and Cue modes
- RGB LED shows current mode/state
- 20 fixture faders on QuickQ 10 and QuickQ 20
- 40 fixture faders on QuickQ 30

Networking

- QuickQ supports output of DMX over network via ArtNet/sACN/Pathport

Colour Control

- A dedicated "colour control area" with Hue and Saturation encoders, and a pair of additional buttons for colour control
- Select from in-built palettes and gel libraries using the touch screen

Console Output Capacity

- No limit on number of fixtures, only by number of universes supported

Ports

- 2 USB ports for loading and saving shows
- Audio input
- In-built WIFI port for simple connection of tablets and smart phones

Software Features



QuickQ 10, QuickQ 20 and QuickQ 30

- RDM Autopatch
- HSV Colour Mixing
- Colour Picker
- Built-in FX
- Chase and Cue Support
- Execute Window
- Audio Triggering
- Tap to Time
- Software Upgrade/Downgrade
- Easy Fixture Personality Update

QuickQ 20 and QuickQ 30

- Attribute Encoders
- Multiple Cue Stacks
- MIDI Notes
- MIDI Timecode Input
- Pixel based FX

Android and Apple iOS App

Plug and play by taking a picture of the console display QR code to get started.



Offline Software

- Offline editor available for both Windows and Mac
- Easy Upgrades
- Includes MagicVis visualiser
- Replicates entire QuickQ console software excluding output



Visit Chamsyslighting.com to download the offline software

QuickQ Compare

	QuickQ 10	QuickQ 20	QuickQ 30
Touch Screen	9.7"	9.7"	9.7"
Universes Supported	1	2	4
DMX Outputs 5-Pin XLR	1	2	3
Fixtures Supported	512	1024	2048
Fixture Faders	20	20	40
Bump Buttons	Y	Y	Y
Dedicated Hue/Saturation Encoders	Y	Y	Y
Attribute Encoders	0	4	4
Master Faders	2 Chase 1 Cue Stack	10 Multiple Function Playbacks	10 Multiple Function Playbacks
Cue Stacks	1	Multiple	Multiple
Dedicated Home Button	Y	Y	Y
USB	2	2	2
Network	Y	Y	Y
External Monitor	1920x1080 HDMI	1920x1080 HDMI	1920x1080 HDMI
Audio In/Out	Y	Y	Y
sACN	Y	Y	Y
ArtNet	Y	Y	Y
Pathport	Y	Y	Y
OSC	N	Y	Y
MIDI	N	Y	Y
MIDI Timecode	N	Y	Y
Fixture Types Supported	LEDs and Dimmers	LEDs, Dimmers and Moving Lights	LEDs, Dimmers and Moving Lights
Size (WDH)	520x350x106	560x350x106	760x350x106
Weight	4.7 kg	5.2 kg	6.1 kg
Product Code (U.S.)	CHAMQUICKQ10	CHAMQUICKQ20	CHAMQUICKQ30
Product Code (International)	100-710	100-720	100-730

For complete specifications, visit chamsysquickq.com. Specifications are subject to change without notice.

QuickQ Rack

QuickQ Rack is a small rack mountable version of the QuickQ console designed for installations. It features the same operating system as QuickQ series consoles, but is designed to operate as a remote system without physical user control.

Supporting four universes, QuickQ Rack is ideal for installations, control rooms and bars. The unit can be used as a desktop box or rack mounted with the included rack ears.

- Ten Scene Buttons
- Four Universes
- Two RDM 5-pin DMX Outputs
- Inbuilt Wi-Fi for programming and remote control
- Four 10Scene ports for connection of up to forty 10Scene wall plates
- Four remote input ports
- Same software as QuickQ Consoles
- Simple Hot-Takeover mode allowing external console to take control of connected fixtures
- Front USB for Loading/Saving shows
- Network port for Art-Net/sACN output
- MIDI and Audio in/out ports
- HDMI port for optional display
- TrueCon Power Input: 90-250v AC



Shown with included rack ears.

QuickQ Spotlight

Where will you put QuickQ in control?

Check out venues ideal to put QuickQ in control.

Small Theatres

Small theatres choose QuickQ consoles for intuitive setup with even quicker programming and operation for a variety of performances.



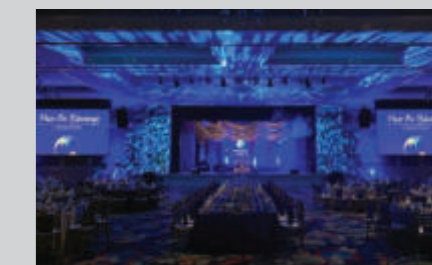
Houses of Worship

Churches in need of simple looks that can be triggered with the push of a button by volunteers of all skill levels turn to QuickQ.



Corporate Events

Corporate events need a quick-to-program console with fluid workflow, and find it in QuickQ, with its large, intuitive touch screen and easy cue/chase playback system.





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For complete specifications, visit chamsyslighting.com
Specifications are subject to change without notice.

PRODUCT CATALOG



Let's create a story!

ABOUT AVONIC

With over fifteen years of experience in the ProAV field, Avonic is a leading manufacturer of PTZ cameras and has been innovating in the industry to bring unique, high quality audio-visual capture solutions to many hundreds of different applications.

Based in the beautiful city of Delft, the Netherlands, we set ourselves apart by developing products marked by their pristine image quality, outstanding reliability, ease of integration and affordability. Furthermore, we recognize that clients are not merely looking for a bag of camera tricks, but a full support service that will help them to pick the right tool for their application. We are able to guide clients in the purchase decision, installation process, and act as an ongoing support service throughout their video capture activities. It is our quality of service that sets us apart just as much as our innovative product development. We specialize in the provision of PTZ cameras for markets including education, healthcare, worship, video conferencing, webcast studios and webinars. However, we recognize that the limit of PTZ application is only a lack of imagination, and our engineers and support staff pride themselves on the ability to deliver responsive, in-depth and flexible solutions for almost every PTZ application. Whatever story you want to tell, we have a way for you to tell it.

Represented by a worldwide network that stretches across Europe, the Americas, Africa, Australia and Asia, we maintain the warmth of a local company, and the expertise and reach of an international one.

Our DNA

UNIQUE PRODUCT DESIGN
IN-HOUSE DEVELOPMENT
DEDICATED SUPPORT
DUTCH ORIGIN

...and when we're not busy delivering industry-leading innovation and service in the PTZ market? Well, you'll probably find us having a little lego competition in the offices, or wandering the peaceful waterways and cobbled squares of beautiful Delft.

MARKETS



Education

The future lecture and classroom



Large Conferencing

Accessible and Accountable



Video Conferencing

Easy and high quality interaction



Worship

Broadcast of ceremonies and services



Webcast

Easy and high end production



Broadcast

Streamlined and Agile

VIDEO CONFERENCING

CM22, 4K USB3.0 Huddle Camera with HDMI Output

The Avonic CM22-VCU boasts a 4K, wide angle lens up to 120 degrees FOV that makes sure you can capture all attendees. Its smart automatic and fully user configurable modes guarantee crystal clear video even under the most challenging light conditions. Built in user configurable dual microphones allow for easy audio capture. A true integration product with a discrete design and mount developed for PRO-AV installations. It can be easily mounted either on top of or below a screen for optimal line of sight during a meeting. The mount can be used in combination with modern thin-bezel screens.

Lens	Fixed focus lens with 120° Horizontal Field of View (FOV).
Crystal Clear Image	4K Progressive CMOS sensor 2160P ultraHD.
Output	HDMI and USB3.0 up to 4K30 or 1080p30 on USB 2.0.
Audio	Built-in dual noise-cancelling microphones with 4-meter pickup range.
Control	Control the camera via any UVC based videoconference application or the included IR remote control.
Presets	10 user-definable presets with Digital Pan Tilt and Zoom including startup preset.
Mount	Detachable integration mount with the ability to secure and mount the camera above and below thin-bezel screen.



HIGH SCHOOL GETS HYBRID CLASSROOM WITH CM22 AND PTZ CAMERAS

Hyperion High School in Romania was looking for a hybrid solution in order to meet the Covid-19 restrictions. The setup needed to give a natural experience for the students and should be able to cope with challenging light conditions since they were changing during the day.

What setup was being used?

For this setup our they've used 6 x CM70-IP-B PTZ cameras, 8 x CM22-VCU, 1 x CON300-IP and 8 x AV-UEX150. One pair of classrooms was setup with CM-70-IP-B – USB out to videoconference platform combined with an audio capture solution and a 50" monitor for video return from video

conference for the teacher. In order to cope with social distancing for the students the counterpart classroom has a CM22-VCU with the correspondent laptop for video conference. For controlling the CM70-IP-B they have installed a monitoring room for all the cameras to a single local IP infrastructure in order to switch the camera preposition from the teachers to the blackboard and an overview position. Combined with BlueJeans Meetings which complies with the audio/video setup and security requirements. The only platform that is using Dolby audio. In this case providing the best experience from teacher to its students and the other way around.

A TV-like experience

Bringing the, as we like to call it, "TV-like experience" is becoming the new standard. A teacher giving class to both students who are physically attending and in the back of the room and screens that show those who are participating from home. Getting the teacher to interact with both audiences and also the students to feel involved is the challenge of today's installations.



VIDEO CONFERENCING

CM40 Video Conference Camera Series

The Avonic CM40 Video Conference Camera series exists from high-quality USB video conferencing PTZ camera with a discrete design. The extreme silent cameras obtain pristine video quality even under challenging light conditions. With IP control and plug & play design, these cameras take video conferencing to a higher level.

Low light	High SNR CMOS combined with digital noise reduction, the picture is clear even under low illumination (0.5 lux @ F1.8) conditions.
Full HD 1080p30	With 1/2.8" high-quality CMOS sensor (2.07 Megapixel) the camera has a resolution of 1920 x 1080p30 and achieves a picture of great quality.
Output	USB 2.0 up to 1080p30.
Control	Control the camera with common protocols: VISCA over IP (RJ45), Visca and Pelco-D/P (RS232/RS485) or IR remote control (included).
Presets	Up to 255 presets with 0.1° accuracy.



CM41

Lens High-quality glass lens, 12x optical zoom and 70.4° horizontal field of view.

CM44

Lens High-quality glass lens, 5x optical zoom and 83.7° horizontal field of view.

A FLEXIBLE, MULTIDISCIPLINARY CRYSTAL CLEAR SOLUTION

The all-in-one solution

When seeking new AV solutions to enhance its work in the field of Human Rights research, the National Council for Human Rights (NCHR) looked for a comprehensive suite of high-level solutions which would allow them to record, broadcast and videoconference their activities with a global team of academics and professionals.

High-quality for everyone to use

Core to the solution was the integration of high-quality PTZ cameras which would be able to capture crystal clear footage of the speeches, debates and classes which took place within the main NCHR auditorium. All of the cameras in the Avonic range demonstrate an exceptional level of image quality that ensures client satisfaction every time, bringing high professionalism to the productions of research institutes. The strong interoperability and compatibility offered by Avonic products mean that integrators (and end-users) can be sure they will work effectively with other components of fully bespoke solutions, and can be integrated without undue complication.

The ease-of-use and reliability of Avonic PTZ cameras mean that the end user will not need significant levels of post-installation support, and are thus suitable for use by those with only modest AV experience.

What setup was being used?

The installation covered two meeting rooms and a lunch and meeting space, as well as the main auditorium. The main auditorium added a further layer of complexity, because the room could function either as one large venue, or be subdivided into two smaller rooms. Within the meeting rooms and meeting space, individual CM44 series PTZ cameras were integrated along with Panasonic displays, ceiling microphones and a Biamp Devio collaboration tool, all of which was controlled using a simple touch panel user interface on the table. Internal meetings also made use of AV-over-IP – again demonstrating the flexibility of network type and data transfer offered when Avonic products are integrated into AV solutions.

The National Council for Human Rights (NCHR) is a Norway human rights organization established in 2003 with a mission of **promoting and maintaining human rights** in Norway. The NCHR publishes annual reports concerning the current status of human rights within the country.





BOX CAMERA

CM60-IPX-BOX

The Avonic AV-CM60-IPX-BOX is a high-quality Box camera with 20x optical zoom and 60.7° horizontal field of view. A camera designed for fixed installations with the ability to deliver outstanding quality under low light conditions, thanks to its high SNR CMOS sensor. The camera delivers Full HD 1080p60 video and comes with simultaneously IP and 3G-SDI output. Control the camera over IP or RS485 with any controller with VISCA or PELCO support.

Low light	High SNR CMOS combined with digital noise reduction, the picture is clear even under low illumination (0.05 Lux @ F1.8) conditions.
Full HD 1080p60	With 1/2.7" high quality CMOS sensor (2.07 Mega pixel) the camera has a resolution of 1920 x 1080p60 and achieves a picture of great quality.
IP-features	The camera can be accessed by webGUI. Controlled by VISCA over IP and stream the video.
DUAL IP-Stream	H265, H264 and MJPEG compression at a bitrate up to 8Mbit enabling Full HD video stream by ultra low bandwidth over RTSP, RTMP and Multicast.
Outputs	3G-SDI and IP simultaneously.
Control	Control the camera with common protocols: VISCA , Pelco-D/P, RS485, IP (VISCA).
Presets	Up to 255 presets with 0.1° accuracy.



Lens High quality TAMRON glass lens, 20x optical zoom and 60.7° horizontal field view.

CM-WMW-BOX: Wall Mount for Box series

Sturdy aluminium wall mount which can be used in combination with the CM60-IPX-BOX. The adjustable mount is easy to install and allows for the box camera to be positioned in the correct angle.



PTZ CAMERAS

CM40 Avonic PTZ Camera 20x Zoom

The Avonic AV-CM40 is a high-quality PTZ camera with 20x optical zoom and a 54.7° horizontal angle view. Its High SNR CMOS combined with digital noise reduction makes this camera extremely silent and delivers a pristine video quality even under very low light conditions. The camera is designed for fixed installations and has the ability to install up to 255 presents with 0.1° accuracy.

Low light	High SNR CMOS combined with digital noise reduction, the picture is clear even under low illumination (0.5 lux @ F1.8) conditions.
Full HD 1080p30	With 1/2.8" high-quality CMOS sensor (2.07 Megapixel) the camera has a resolution of 1920 x 1080p30 and achieves a picture of great quality.
Output	USB 2.0 up to 1080p30.
Control	Control the camera with common protocols: VISCA over IP (RJ45), Visca and Pelco-D/P (RS232/RS485) or IR remote control (included).
Presets	Up to 255 presets with 0.1° accuracy.



CULTURAL CENTER INSTALLS CM40 PTZ CAMERAS

capacity to attend these meetings live. In pursuit of transparency, openness, democracy and cultural access, the DRU Cultuurfabriek recognized that there was a need to be able to broadcast these proceedings to those within the municipality, and further afield. By using Avonic CM40 PTZ cameras, viewers enjoy optimum image quality and thus feel more directly involved in the proceedings.

The DRU Cultuurfabriek – located in the beautiful old ironworks of Ulft is a central meeting place for cultural and creative activities. There is a council chamber, along with theatre hall, pop venue, grand café, library, music school, archaeological association and Turkish cultural centre. With 250,000 visitors, it is a key cultural resource to its municipality.

What setup was being used?

Key was the need for a product that had high levels of third-party interoperability: specifically, with the VMix software for live registration.

By using the VMix software and an Avonic CON300-IP PTZ controller with a number of Avonic CM40 PTZ cameras in an SDI setup with serial control, the integrator was able to deliver a system that gave the video director easy command, allowing for a quick selection of presets, easy switching, and the provision of appropriate titles.

The answer to a hybrid interaction

One of its key functions is public meetings, but the DRU recognized that not everybody has the



PTZ CAMERAS

High-quality PTZ cameras with endless possibilities

The Avonic CM70 series consists of high-quality PTZ cameras, with concurrent HDMI, 3G-SDI, USB 2.0 and IP stream ethernet outputs. The camera is designed for fixed installations in less than optimal light conditions. The PTZ cameras within the CM70 range include a rich featureset usually found on broadcast-grade cameras, including a user-adjustable Colour Matrix and SRT streaming (licensed premium functions). All with the ability to deliver outstanding quality under low light conditions, thanks to its high SNR CMOS sensor. The sensor delivers Full HD 1080p60 video.

Low light	High SNR CMOS combined with digital noise reduction for a clear picture even under very low light conditions.
Full HD 1080p60	The camera has a Full HD resolution of 1920 x 1080p60 and achieves a pristine image quality.
IP-features	The camera can be powered using PoE (802.3af) and can be accessed by webGUI, controlled by VISCA over IP/ Onvif and stream the video.
DUAL low latency IP-Stream	H265, H264, optional SRT and MJPEG compression at a bitrate up to 40Mbit enabling Full HD video stream by ultra-low latency over RTSP, RTMP, UDP, Unicast and Multicast.
Outputs	3G-SDI, HDMI, USB 2.0 (1080p30) and IP.
Control	Control the camera with common protocols: VISCA, Pelco-D/P via RS232, RS485, IP(VISCA), Onvif or IR. Supports up to 255 presets with 0.1° accuracy and High Speed Pan Tilt function.
Audio embedding	Balanced audio input with embedding into IP stream, SDI and HDMI outputs. Includes configurable audio offset.
Optional Premium features	SRT streaming, Tally light, configurable Color Matrix. License AV-LC70-1 sold separately.



FIXED INSTALLATIONS

Avonic PTZ cameras are specially designed for fixed installations markets including:

Large Conferencing Education Broadcast Webcast Video Conference Worship Esports

CAMERA LINEUP



CM22



CM41



CM44



CM40



CM60-IP-BOX



CM70-IP



CM71-IP



CM73-IP



CM70-NDI



CM93-IP*

COMING SOON



CM93-NDI*

NDI | IX

QUICK SPECIFICATIONS OVERVIEW

Resolution	4Kp30	1080p30	1080p30	1080p60	1080p60	1080p60	1080p60	1080p60	1080p60	1080p60	4Kp60	4Kp60
Zoom	8x (digital only)	12x	5x	20x	20x	20x	12x	30x	20x	20x	30x	30x
Horizontal Field of View	120°	70.4° - 6.6°	83.7° - 20°	57° - 3.3°	60.7° - 3.36°	55.2° - 3.2°	70.4° - 6.6°	58.9° - 2.11°	55.2° - 3.2°	59.2° - 1.9°	59.2° - 1.9°	59.2° - 1.9°
Vertical Field of View	67.5°	42.4° - 3.7°	53° - 11°	36.5° - 1.9°	34.1° - 1.89°	42.1° - 2.4°	42.4° - 3.7°	45.3° - 1.61°	42.1° - 2.4°	34.6° - 1.1°	34.6° - 1.1°	34.6° - 1.1°
H&V image flip	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Minimal illumination	0.05 LUX	0.5 LUX	0.5 LUX	0.5 LUX	0.05 LUX	0.05 LUX	0.05 LUX	0.05 LUX	0.05 LUX	0.05 LUX	0.05LUX @F1.6	0.05LUX @F1.6
Pan speed range	-	1.7 - 120°/s	1.7 - 120°/s	1.7 - 120°/s	-	1.7 - 120°/s	1.7 - 120°/s	1.7 - 120°/s	1.7 - 120°/s	1.7 - 120°/s	0.15° - 120° p/sec	0.15° - 120° p/sec
Tilt speed range	-	1.7 - 70°/s	1.7 - 70°/s	1.7 - 70°/s	-	1.7 - 70°/s	1.7 - 70°/s	1.7 - 70°/s	1.7 - 70°/s	1.7 - 70°/s	0.15° - 70° p/sec	0.15° - 70° p/sec
High Speed PTZ mode, ideal for conferencing	-	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓
Power	5V USB	12V Power Adapter	12V Power Adapter	12V Power Adapter	12V Power Adapter	12V & PoE 802.3af	12V & PoE 802.3af	12V & PoE 802.3af	12V & PoE 802.3af	12V & PoE 802.3af	12V & PoE 802.3af	12V & PoE 802.3af
HDR	-	-	-	-	-	-	-	-	-	-	HDR 12-bit up to 4K30	HDR 12-bit up to 4K30
Webinterface with Live Preview	-	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓
Presets	Up to 10	Up to 255	Up to 255	Up to 255	Up to 255	Up to 255	Up to 255	Up to 255	Up to 255	Up to 255	up to 255	up to 255
Sensor	4K Progressive CMOS	Panasonic CMOS	Panasonic CMOS	Panasonic CMOS	Panasonic CMOS	Panasonic CMOS	Panasonic CMOS	Panasonic CMOS	Panasonic CMOS	Panasonic CMOS	Sony CMOS	Sony CMOS

INPUT/OUTPUT INTERFACE

HDMI	HDMI 1.4 (VIDEO ONLY)	-	-	HDMI 1.4	-	HDMI 1.4	HDMI 1.4	HDMI 1.4	HDMI 1.4	HDMI 1.4	HDMI 2.0 up to 4K60	HDMI 2.0 up to 4K60
3G-SDI	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓ (1080p60 max)	✓ (1080p60 max)
USB2.0 Streaming	✓ MAX 1080P30	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓
USB3.0 Streaming	✓	-	-	-	-	-	-	-	-	-	-	-
IP Streaming (H.264 & 265)	-	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓
Audio Input	-	-	-	✓ (Unbalanced)	✓ (Unbalanced)	✓ (Balanced)	✓ (Balanced)	✓ (Balanced)	✓ (Balanced)	✓ (Balanced)	✓ (Balanced)	✓ (Balanced)

IP PROTOCOLS & SUPPORTED CODECS

H.264	-	-	-	-	✓ (Main, Base and High Profile)	✓ (Main, Base and High Profile)	✓ (Main, Base and High Profile)	✓ (Main, Base and High Profile)	✓ (Main, Base and High Profile)	✓ (Main, Base and High Profile)	✓ (Main, Base and High Profile)	✓ (Main, Base and High Profile)
H.265	-	-	-	-	✓ (Main Profile)	✓ (Main Profile)	✓ (Main Profile)	✓ (Main Profile)	✓ (Main Profile)	✓ (Main Profile)	✓ (Main Profile)	✓ (Main Profile)
HTTP API	-	-	-	-	-	HTTP API	HTTP API	HTTP API	HTTP API	HTTP API	HTTP API	HTTP API
MJPEG	-	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓
NDI-HX	-	-	-	-	-	-	-	-	✓	-	-	✓
ONVIF (Compatible with BOSCH)	-	-	-	-	✓	✓	✓	✓	✓	✓	✓	✓
Supported Protocols	-	-	-	-	RTSP, RTMP, UDP, Multicast	RTSP, RTMP, ONVIF, SRT, Multicast, Unicast	RTSP, RTMP, ONVIF, SRT, Multicast, Unicast	RTSP, RTMP, ONVIF, SRT, Multicast, Unicast	RTSP, RTMP, ONVIF, SRT, Multicast, Unicast, NDI-HX	RTSP, RTMP, ONVIF, SRT, Multicast, Unicast, NDI-HX	RTSP, RTMP, ONVIF, SRT, Multicast, Unicast, NDI-HX	RTSP, RTMP, ONVIF, SRT, Multicast, Unicast, NDI-HX
Bitrate range	-	-	-	-	-	64 - 40960 Kbps	65 - 40960 Kbps	66 - 40960 Kbps	67 - 40960 Kbps	67 - 40960 Kbps	67 - 40960 Kbps	67 - 40960 Kbps
Tally light control via IP	-	-	-	-	-	✓ (optional license)	✓ (optional license)	✓ (optional license)	✓ (optional license)	✓ (optional license)	✓ (optional license)	✓ (optional license)

FEATURES

Tally light control via IP	-	-	-	-	-	✓ (optional license)	✓ (optional license)	✓ (optional license)	✓ (optional license) + over NDI	✓ (optional license)	✓ (optional license) + over NDI	✓ (optional license) + over NDI
SRT Streaming (Encryption and internet distribution)	-	-	-	-	-	✓ (optional license)	✓ (optional license)	✓ (optional license)	✓ (optional license)	✓ (optional license)	✓ (optional license)	✓ (optional license)
User-adjustable Color Matrix	-	-	-	-	-	✓ (optional license)	✓ (optional license)	✓ (optional license)	✓ (optional license)	✓ (optional license)	✓ (optional license)	✓ (optional license)
Configurable, independable PTZ preset speed	-	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓
PTZ Control over NDI	-	-	-	-	-	-	-	-	✓ (enable via WebGui)	-	✓ (enable via WebGui)	✓ (enable via WebGui)
Enable/ disable IR receiver	-	-	-	-	-	✓	✓	✓	✓	✓	✓	✓

CONTROL & SPECS

Control	UVC, Remote	UVC, Remote, IP, Serial	UVC, Remote, IP, Serial	UVC, Remote, IP, Serial	IP, Serial	UVC, IR remote, IP, Serial	UVC, IR remote, IP, Serial	UVC, IR remote, IP, Serial	UVC, IR remote, IP, Serial	UVC, IR remote, IP, Serial	UVC, IR remote, IP, Serial	UVC, IR remote, IP, Serial
Control Protocol	UVC, IR	VISCA, IR	VISCA, IR	VISCA, IR	VISCA, IR	VISCA, IR, ONVIF, HTTP API	VISCA, IR, ONVIF, HTTP API	VISCA, IR, ONVIF, HTTP API	VISCA, IR, ONVIF, HTTP API	VISCA, IR, ONVIF, HTTP API	VISCA over serial, Visca over IP, IR, ONVIF, HTTP API	VISCA over serial, Visca over IP, IR, ONVIF, HTTP API
Color	Black	Black	Black	Black & White	White	Black & White	White	Black & White	Black & White	Black & White	Black & White	Black & White
Dimensions product	219 x 52 x 61-205 mm (adjustable)	133 x 180 x 153 mm	133 x 180 x 153 mm	240 x 125 x 120 mm	147 x 78 x 60 mm	133 x 180 x 153 mm	133 x 180 x 153 mm	133 x 180 x 153 mm	133 x 180 x 153 mm	133 x 180 x 153 mm	166 x 225 x 186 mm	166 x 225 x 186 mm
Weight product	0,5 kgs	1,6 kgs	1,6 kgs	1,6 kgs	0,65 kgs	1,6 kgs	1,6 kgs	1,6 kgs	1,6 kgs	1,6 kgs	2 kgs	2 kgs



HIGH-PROFILE EVENT WITH CM70-IP PTZ CAMERAS

Pristine image quality with silent operation

Avonic cameras became a fundamental part of the AV solutions provided for the NATO Military Committee conference. Avonic cameras proved to be ideal for temporary conference installation. The high image quality combined with exceptional usability and easy integration, which is of obvious importance in a temporary installation where setup needs to be achieved quickly and without risk of failure. The installation had cameras placed right in front of delegates, so silent operation and sleek design were also important considerations. The conference saw NATO Chiefs of Defense from across the world meet to discuss key issues of global military strategy and defense. Held at the Grand hotel UNION – Grand Union hall in Ljubljana, a temporary conference installation was required to facilitate communication both within the conference, but also to allow for AV capture and external distribution during and after the event.

What setup was being used?

Five Avonic's CM70-IP PTZ cameras with full IP streaming, POE and IP control were provided. A core principle of Avonic PTZ technology is interoperability, and Avonic products integrate a range of hardware and software connectivity, which can include IP, HDMI, 3G-SDI and CVBS outputs, and control over IP, RS232 or RS485 using any controller with VISCA or PELCO support. This meant that integrating Avonic cameras with the wider Bosch conference system could be done quickly and with a minimum of technical fuss – both on a hardware and software level.

The second key requirement was the ability to exercise complete and precise control over camera movement, using preset values to automate movement and ensure that all details of the conference were recorded smoothly. The five PTZ cameras were designed with exactly this level of automation and presetting in mind, and are fully controllable through third party software systems such as MVI Engineering. With full IP streaming, POE and IP control, the entire setup was achieved over IP, thus reducing cabling clutter and complexity.

CM70-IP ● ●

Lens High-quality glass lens, 20x optical zoom and 55.2° horizontal field of view.

CM71-IP ●

Lens High-quality glass lens, 12x optical zoom and 70.4° horizontal field of view.

CM73-IP ● ●

Lens High-quality glass lens, 30x optical zoom and 58.9° horizontal field of view.



CM70-NDI

The CM70-NDI is a high-quality PTZ camera with concurrent HDMI, 3G-SDI, USB 2.0 and IP stream ethernet outputs. The CM70-NDI is equipped with high-efficient IP technology called NDI®|HX.

This all-in-one PTZ camera from Avonic allows the move to an all IP infrastructure even for mobile applications. With IP deployment on existing networks all cameras detected within your network become directly available for use without complex configuration. Video, audio, control and power all with PoE connecting your CM70-NDI camera to hundreds of systems, devices and applications that support NDI®.

The CM70-NDI includes a rich feature set known from the CM70 series and has the ability to deliver outstanding quality even under low light conditions. The combination of a high-quality PTZ camera with a protocol that improves every live production give the CM70-NDI endless possibilities.

The CM70-NDI is also capable of receiving and processing PTZ controls over NDI®.

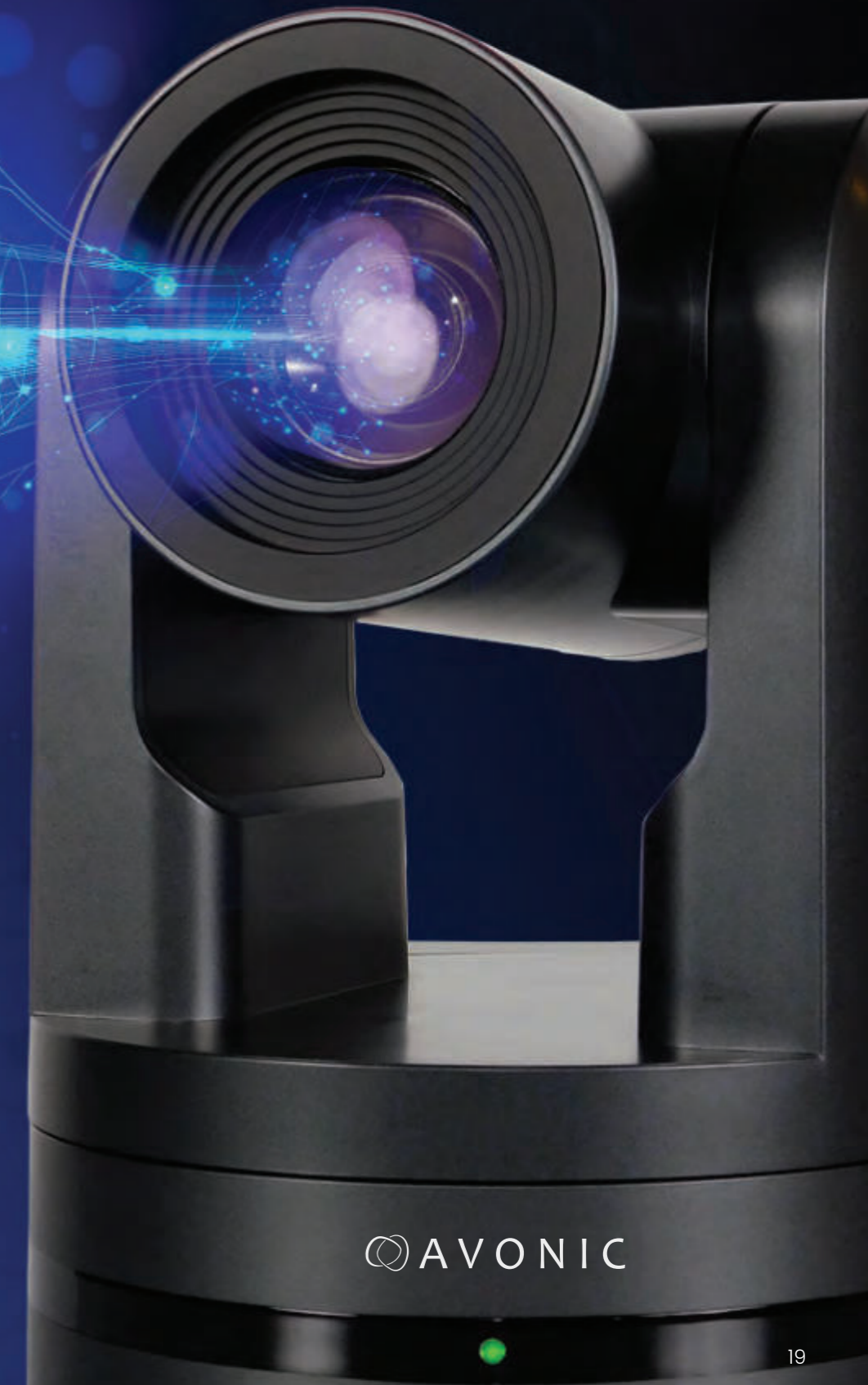
NDI®|HX



CM70-NDI

NDI®|HX

Endless possibilities!



CamDirector®

Teacher Tracker Software

Avonic's CamDirector® Teacher Tracker is a **unique** tracking solution that creates automatic multi camera video registrations of lectures.



Plug & Play



Ai Powered



TV-like experience



Privacy



All room sizes
up to 55 meters



Over-the-air
updates

CamDirector® Teacher Tracker Software

Avonic's CamDirector® Teacher Tracker is a unique tracking solution that creates automatic multi camera video registrations of lectures. It can automatically find the teacher in a room with students and provides elegant close-ups of the teacher, even in large lecture halls and auditoriums.

The live video output automatically switches between overview shots of the classroom and close-ups of the teacher. With the CamDirector® Teacher Tracker Software Avonic sets the new standard for automated lecture recordings.



FEATURES



Hassle-free lectures

The system runs automatically when a lecture starts without the need to wear distracting equipment. Let teachers focus on teaching instead of technology.



Consistent and accurate tracking

By harnessing the strength of the two-camera approach, the CamDirector® 99% of the time provides an accurate and consistent tracking solution.



Privacy Guaranteed

The CamDirector® Teacher Tracker is built around privacy. All image processing is done locally without the need to be connected to the internet. We give you the tools to set privacy settings according to your own standards.



An ever-evolving AI solution

Avonic's patented machine learning algorithms let the teacher tracker improve over time by learning from every lecture it records.

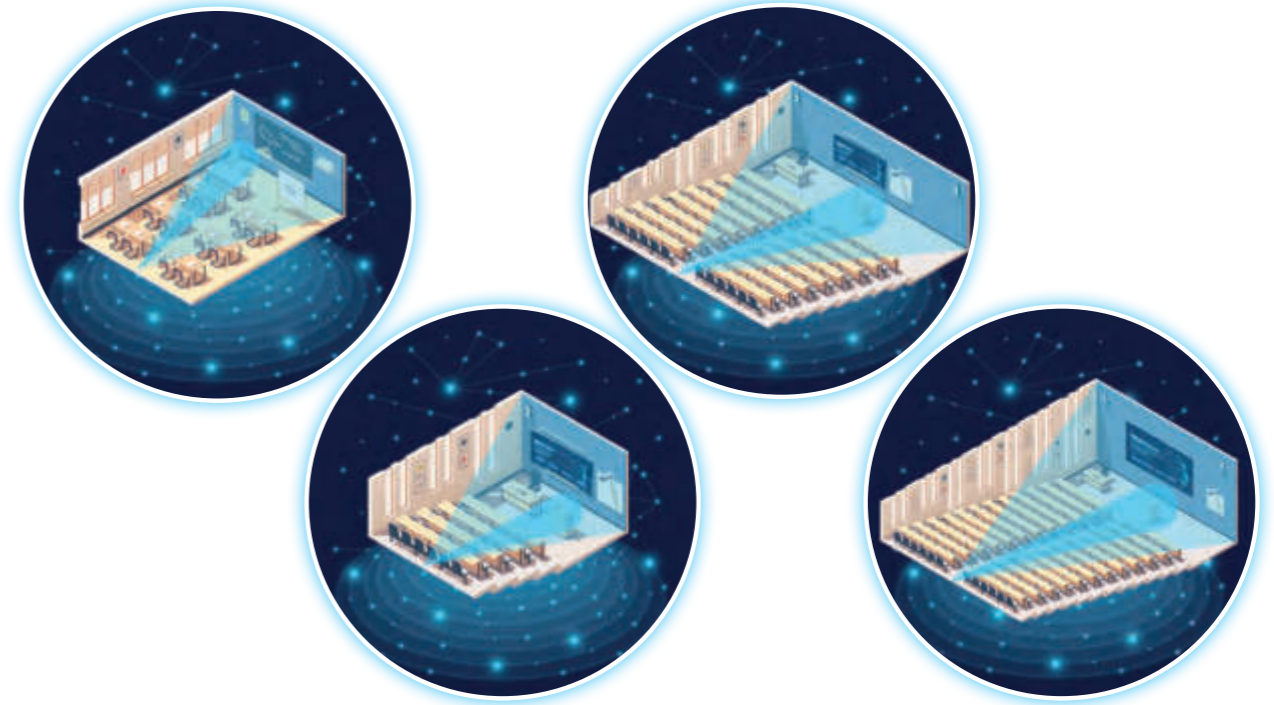


Track and Switch TV-like experience

CamDirector® Teacher Tracker's close-up camera follows the teacher's movement in a calm and natural way, while the overview camera provides shots of the room to give the viewers the experience of being present.

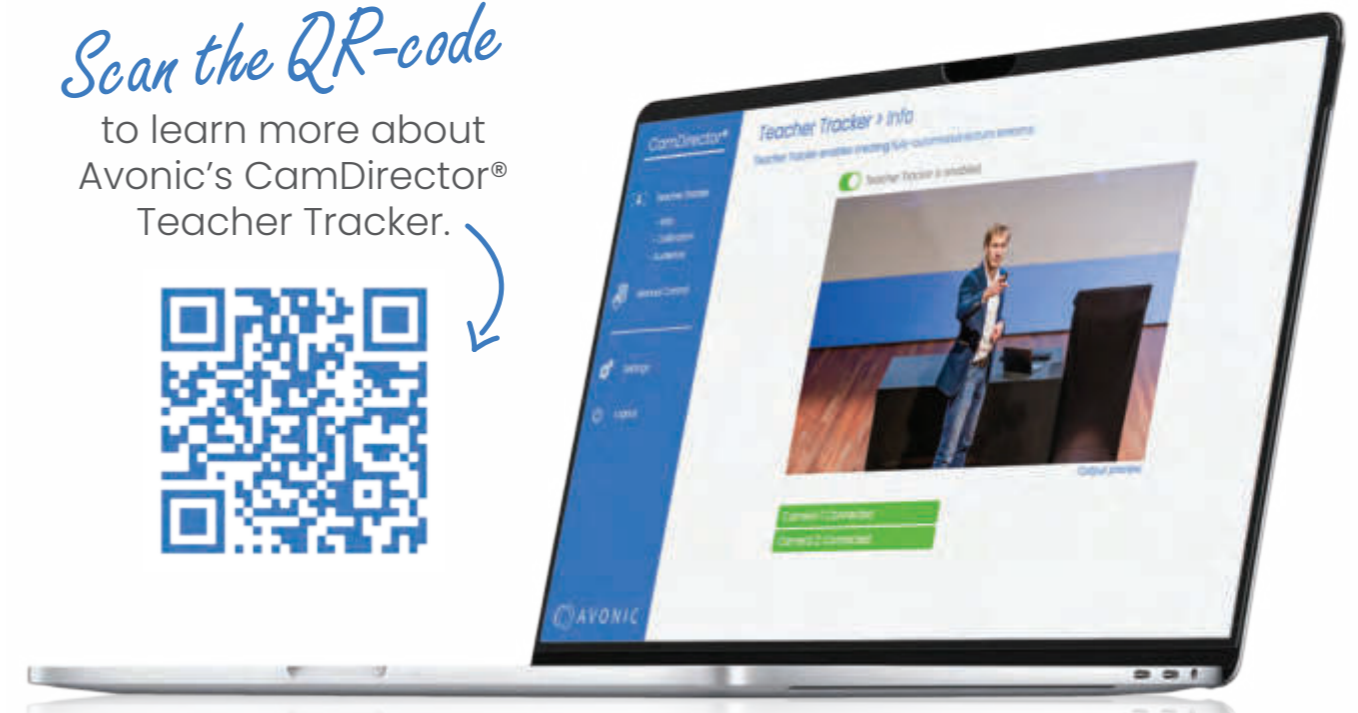
From small classrooms to large auditoria

The CamDirector® Teacher Tracker supports perfect tracking of a presenter even in the largest lecture halls and auditoriums up to a distance of 55 meters.



Scan the QR-code

to learn more about Avonic's CamDirector® Teacher Tracker.



CONTROLLERS

CON100: Avonic PTZ Camera Controller

The Avonic CM-CON100 is a compact PTZ camera controller. With this controller it is possible to control up to 255 camera's and using up to 255 presets.

The controller supports the Visca, Pelco-D and Pelco-P protocol and can be connected with RS232/485. The Avonic CM-CON100 is there fore compatible with the Avonic cameras as well with other brands that supports these protocols. Switch easily between auto and manual focus, save and load presets, and connect multiple controllers to multiple cameras.

Number of presets:

With this compact controller, it is possible to control up to 255 cameras and use up to 255 presets.

Connection:

Easy to connect with RS232 , RS485.

Control:

Every setting of the camera can be controlled by accessing the OSD of the camera through the controller. Directly control the camera's Pan, Tilt, Zoom and Focus.

CON300-IP: Avonic IP PTZ Camera Controller

The Avonic AV-CON300-IP is an advanced IP PTZ camera controller and compatible with the Avonic cameras as well with other brands that supports VISCA, Visca over IP, Pelco-D and Pelco-P protocols.

Switch easily between auto and manual focus, Aperture and white balance settings, save and recall presets and connect multiple controllers to multiple cameras.

Number of presets:

With this controller it is possible to control up to 255 cameras and up to 10 presets per camera.

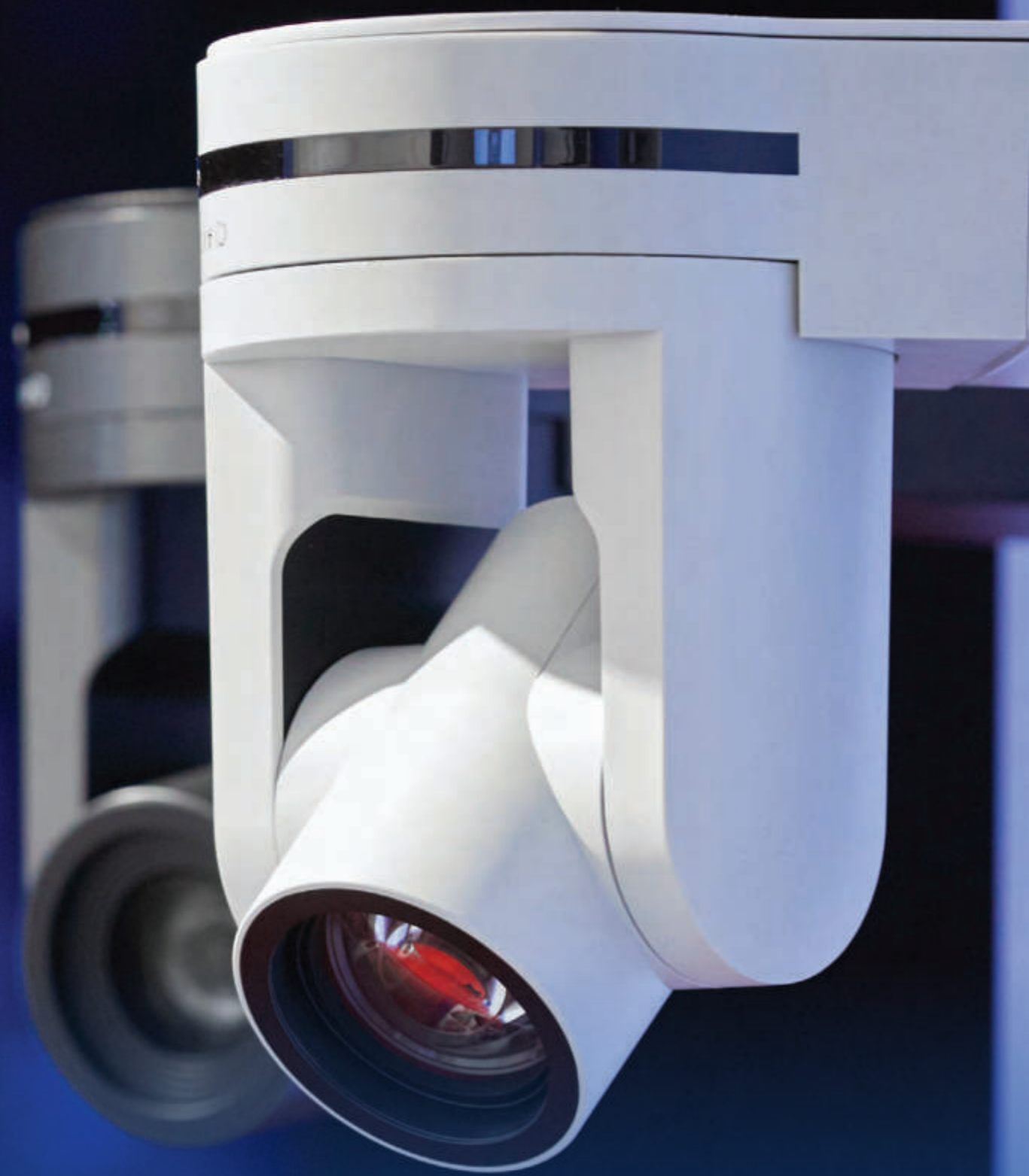
Connection:

The CON300-IP controller supports the VISCA, Visca over IP, Pelco-D and Pelco-P protocol and can be connected to RS232/485 or via LAN ethernet connection.

Control:

This controller gives you direct control over the most important camera settings like Pan, Tilt, Zoom. But also PTZ speed, Focus, Iris, Brightness, White Balance and R/B color correction can be controlled easily. Access all other settings of the camera easily through the OSD of the camera using the controller.





MOUNTS

MT200: **Wall Mount for CM40- and CM70-series**

The Avonic MT200-B is a solid wall mount suitable for the CM40 and CM70 series. Its discrete design matches the silent operation of Avonic PTZ cameras.

Accessories include a heavy-duty 30mm steel ring specifically designed to mount the MT-200 on a truss clamp. Available in black and white to match our PTZ cameras.



MT250: **Ceiling Mount for CM40 and CM70-series**

The Avonic MT250-W is a solid ceiling mount suitable for the CM40 and CM70 series. Its discrete design matches the silent operation of Avonic PTZ cameras. The MT250 is equipped with two VESA75 mounting possibilities. The double VESA75 holes serve a dual purpose; it ensures optimal compatibility with standard VESA mounts and it makes finding a suitable ceiling location to mount the MT250 easy. When mounted to the ceiling, the clever MT250 design allows to have your hands free for easy installation of the camera.

MT220: **Wall Mount for two CM40- and CM70-series**

The Avonic MT220 Double Wall Mount is a solid wall mount suitable for the support of two CM40 or CM70 series PTZ cameras. Its discrete design matches the silent operation of Avonic PTZ cameras. The double wall mount is a beautiful extension that not only ensures great and safe support of the PTZ cameras but also allows for all the cables to be hidden inside the mount.

Accessories include a heavy-duty 30mm steel ring specifically designed to mount the MT-220 on a truss clamp. For mobile applications the MT220-W can be mounted in a flight case or installed on a tripod. Also available in black to match our black PTZ cameras.



RECORDERS, CONVERTERS & EXTENDERS

REC200: Recorder & Encoder

The Avonic AV-REC200 is the ideal standalone USB/ SD Card recorder and web/streaming device. Users can simply connect an HDMI or SD/ HD-SDI input and in a few simple steps, they will be streaming and/or recording. With support for UDP/HLS/RTMP/RTSP live output and USB/SD card recording the REC200 it enables corporate streaming, live streaming to various platforms and live high bitrate full HD 1080P60 recording. A simple to use webinterface and IP control enable ease of use and full integration with 3rd party control systems.

Inputs: HDMI, 3G-SDI

Outputs: HDMI Out, USB storage, SD-card storage, RTSP via RJ45

UEX150: USB 2.0 extender

The Avonic AV-UEX150 is a convenient USB 2.0 Extender over CAT6a S/FTP cabling. The set exists of a transmitter and a receiver which is powered by the provided power supply. The small form factor allows for easy integration. This extender kit supports the full 480Mbps which is required for 1080p30 video over USB 2.0. Cameras and speakerphones over a minimum distance of 5 meters and a maximum of 50 meters are supported. The UEX-150 is plug & play and does not require any additional drivers.

Inputs: HDMI

Outputs: USB3.0

CAP100: Capture Device HDMI to USB3.0

The Avonic CAP100 is a HDMI to USB 3.0 converter, capable of capturing an HDMI source in 1080p 60fps resolution. The CAP100 is a quick, high-quality solution that converts any HDMI signal to USB 3.0. The CAP100 is compatible with the UVC and UAC standards. It's recognized by the computer as a video input without the need for installing additional drivers. The CAP100 captures uncompressed video with audio from an HDMI stream, ideal for quickly setting up a high quality recording, stream or video conference. Compatible with Windows, macOS and Linux operating systems.

Extension: Extend > 50 meters over Cat6a S/FTP.

USB Compliance: Full USB 2.0 480Mbps compliant.

Plug and Play: Does not require any drivers.

Extra USB port: Easy file sharing of USB thumbdrives (no HDD), KVM applications or connection of an USB 2.0 Speaker/microphone.

CV150: Converter 3G-SDI to HDMI

The Avonic AV-CV150 converts SD-SDI, HD-SDI and 3G-SDI signals to HDMI, while ensuring a fast signal transmission without any loss.

Resolutions up to 1080p60 are supported. Thanks to the loop-through 3G-SDI design it is not only a converter, but also a splitter.

Inputs: 3G-SDI

Outputs: HDMI, 3G-SDI



TECHNOLOGY PARTNERS

 **BOSCH** **SKAARHOJ**

biamp. **NDI|HX** 

Cmeets  **Roland**
Professional AV **hrt** 

 **Panopto™** **ARBOR**  **MEDIA**

BARCO   **m.** **mersive**
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 **UBICAST** **INOGENI**

Neets  **NEW MEDIA SYSTEMS**

LET'S
CREATE
A STORY!

 **AVONIC**



Exportweg 11a • 2645 ED Delfgauw • The Netherlands
+31(0)15 7112 712 • info@avonic.com • www.avonic.com

4-Series™ Control System



- 4-Series™ control system with 2 GB SDRAM and 8 GB flash memory
- Embedded 4-Series multicore CPU processor
- iPhone®, iPad®, and Android™ device control app support
- XPanel computer and web based control
- Modular programming architecture
- Onboard IR/serial, COM, I/O, relay, Cresnet® network, and high-speed gigabit Ethernet control ports
- High-speed USB 2.0 host port memory card slot
- Support for Crestron Fusion® software and XiO Cloud® service
- Enterprise-class network security and authentication
- SNMP V3 remote IT management support
- Native BACnet network/IP support
- Installer setup via software, web browser, or cloud
- IPv6 ready
- Integrates with Apple® HomeKit® technology
- Rack mountable

The CP4 is a secure, high-performance control processor with a powerful 4-Series™ control engine. The CP4 is designed to integrate and automate technology within any modern networked home, commercial building, or government facility.

4-Series Control Engine

4-Series control systems come equipped with an upgraded multicore CPU, delivering a sizable speed and performance increase compared to all Crestron 3-Series® control processors. The improved performance allows 4-Series control systems to handle the increasing demands of an advanced automated system. Crestron 4-Series delivers a dynamic and secure control system platform capable of managing a room full of disparate technologies.

Reliable networking and IP control afford seamless integration with other systems and devices, with add-on control capability using Crestron touch screens, wireless remotes, and mobile device apps, as well as remote management through Crestron Fusion® software and the XiO Cloud® service.

Modular Programming Architecture

The CP4 provides a modular programming architecture that allows the CP4 to run up to ten programs simultaneously. Programmers can develop and run independent, device-specific programs, enabling each program to be optimized for a specific function and allowing for changes to be made to one program without affecting the whole system.

Onboard Control Ports

Through a full complement of onboard control ports, the CP4 can be integrated with a wide variety of audio, video, lighting, motorized shades, thermostats, door locks, sensors, security systems, and other equipment.

- Gigabit Ethernet provides an interface for connecting to the building network and controlling Crestron AV switchers, audio processors, power controllers, and other IP controllable equipment.
- Cresnet® network connectivity provides support for Crestron lighting dimmers, motorized shades, sensors, thermostats, keypads, and more.
- Onboard RS-232, IR/serial, relay, and Versiport I/O control ports enable direct integration with all types of third-party equipment.

Expanded connectivity can be provided to the CP4 via Crestron [control port expansion modules](#), [Ethernet to Cresnet bridges](#), [wired Ethernet I/O modules](#), [wireless network I/O modules](#), or [infiNET EX® network wireless gateways](#) (all sold separately).

Crestron Fusion Room Monitoring and Scheduling

Crestron Fusion provides an integrated platform for creating smart buildings that save energy and enhance worker productivity. As part of a complete managed network in a corporate enterprise, college campus, convention center, or any other facility, the CP4 works with Crestron Fusion to enable remote scheduling, monitoring, and control of rooms and technology from a central help desk or mobile app. It also enables organizations to reduce energy consumption by tracking real-time usage and automating control of AV, lighting, shades, and HVAC. For more information about Crestron Fusion, visit www.crestron.com/fusion.

4-Series™ Control System

XiO Cloud Provisioning and Management

4-Series control systems leverage the power and flexibility of XiO Cloud services, enabling users to remotely provision, monitor, and manage Crestron devices across an enterprise network. XiO Cloud can be used to configure and load programs to the control system before it is received, making the control system fully functional as soon as it is connected to the network. XiO Cloud is built on the Microsoft® Azure® software platform and utilizes Microsoft's industry leading Azure IoT Hub technology. XiO Cloud enables installers and IT managers to deploy and manage thousands of devices in the time it previously took to manage just one. Unlike other virtual machine based cloud solutions, Azure services provide unlimited scalability to suit the ever growing needs of an enterprise. For more information, visit www.crestron.com/xiocloud.

Enhanced Enterprise-Grade Security

The CP4 is an enterprise-class control processor that can be deployed across hundreds of spaces and set up easily using a web browser, [Crestron Toolbox™ software](#), or XiO Cloud. It employs standard network security protocols, including 802.1X network access control, Active Directory® service authentication, SSH, TLS, and HTTPS to ensure reliability and compliance with your organization's IT policies.

The CP4 is configured to meet Crestron's enhanced security standards right out of the box. The CP4 ships with authentication enabled and requires that an administrator account be created before access is granted to device configuration and control interfaces.

SNMP V3 Support

Built-in SNMP V3 support enables integration with third-party IT management software, allowing network administrators to manage and control Crestron systems on the network in an IT-friendly format.

BACnet Support

Native support for the BACnet communication protocol provides a direct interface to third-party building management systems over Ethernet, simplifying integration with HVAC, security, and other systems. Using BACnet, each system runs independently but communicates together on one platform.¹

Apple HomeKit Integration

The CP4 supports integration with an Apple® HomeKit® technology system. Once the CP4 is paired with a HomeKit system via [SIMPL](#) programming, a Crestron [TSR-310](#) can be used to control supported Apple devices. A pairing QR code is affixed to the CP4 that makes it easy to pair the control system directly to the Apple Home app.²

Specifications

Control Engine

Crestron® 4-Series™; real-time, preemptive multi-threaded/multitasking kernel; Transaction-Safe Extended FAT file system; supports up to 10 simultaneously running programs

Communications

Ethernet	100/1000 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, industry-standard TCP/IP stack, UDP/IP, CIP, DHCP, SSL, TLS, SSH, SFTP (SSH File Transfer Protocol), FIPS 140-2 compliant encryption, IEEE 802.1xX, SNMP, BACnet and IP ¹ , IPv4 or IPv6, Active Directory® service authentication, HTTPS web server, HTTPS web browser setup and XiO Cloud® client, SMTP email client
Cresnet® Network	Cresnet master mode
USB	Supports USB mass storage class devices via the rear panel USB 2.0 host port, supports computer console via the front panel USB 2.0 device port
RS-232/422/485	For 2-way device control and monitoring, COM port supports RS-232 up to 115.2k baud with software handshaking, one port also supports RS-422 or RS-485 and hardware handshaking
IR/Serial	Supports 1-way device control via infrared up to 1.2 MHz or serial TTL/RS-232 (0-5 V) up to 115.2k baud

Memory

SDRAM	2 GB
Flash	8 GB
Memory Card	Supports SD and SDHC cards up to 32 GB
External Storage	Supports USB storage devices up to 1 TB

4-Series™ Control System

Connectors and Card Slots

RELAY OUTPUT 1-8	(2) 8-pin 3.5 mm detachable terminal blocks; Comprises (8) normally open, isolated relays; Rated 1 A, 30 VAC/VDC; MOV arc suppression across contacts
I/O 1-8	(1) 9-pin 3.5 mm detachable terminal block; Comprises (8) Versiport digital input/output or analog input ports (referenced to GND); Digital Input: Rated for 0–24 VDC, input impedance 20k Ω, logic threshold >3.125 V low/0 and <1.875 V high/1; Digital Output: 250 mA sink from maximum 24 VDC, catch diodes for use with real world loads; Analog Input: Rated for 0–10 VDC, protected to 24 VDC maximum, input impedance 21k Ω with pull-up resistor disabled; Programmable 5 V, 2k Ω pull-up resistor per pin
IR - SERIAL OUTPUT 1-8	(2) 8-pin 3.5 mm detachable terminal blocks; Comprises (8) IR output ports; IR output up to 1.2 MHz; 1-way serial TTL/RS-232 (0–5 V) up to 115.2k baud; IRP2 IR emitters sold separately
COM 1	(1) 5-pin 3.5 mm detachable terminal block; Bidirectional RS-232/422/485 port; Up to 115.2k baud; hardware and software handshaking support
COM 2-3	(2) 3-pin 3.5 mm detachable terminal blocks; Bidirectional RS-232 ports; Up to 115.2k baud; software handshaking support
MEMORY	(1) SD memory card slot; Accepts one SD or SDHC card up to 32 GB for storage of log files
USB	(1) USB Type A connector, female; USB 2.0 port for storage devices
LAN	(1) 8-pin RJ-45 connector, female; 100/1000Base-TX Ethernet port;

NET	(1) 4-pin 3.5 mm detachable terminal block; Cresnet master port; Outputs power to Cresnet devices only if the included power pack is connected to the 24 VDC power input jack; Alternately functions as a Cresnet power input to power the unit from a Cresnet power supply; See "Power" section below for additional details
24VDC 2.0A	(1) 2.1 x 5.5 mm DC power connector; 24 VDC power input; PW-2420RU power pack included; Passes through to the NET port to power Cresnet devices; See "Power" section below for additional details
G	(1) 6-32 screw; Chassis ground lug
COMPUTER (front)	(1) USB Type B connector, female; USB 2.0 computer console port; For setup only

Controls and Indicators

PWR	(1) Green LED, indicates operating power is supplied from the power pack or Cresnet power supply
NET	(1) Amber LED, indicates communication with Cresnet devices
MSG	(1) Red LED, indicates control processor has generated an error message
HW-R	(1) Recessed push button, initiates hardware reset
SW-R	(1) Recessed push button, initiates software reset
LAN (rear)	(1) Bicolor green/amber and (1) Amber LEDs; Green/amber LED indicates Ethernet link status and connection speed; Amber LED indicates Ethernet activity

Power

Power Source Options	Power pack or Cresnet (connect only one)
Power Pack (included)	Input: 100–240 VAC, 50/60 Hz; Output: 2.5 A @ 24 VDC; Model: PW-2420RU
Cresnet Power Usage	15 W (0.625 A @ 24 VDC) when powered by a Cresnet power supply only
Available Cresnet Power	24 W (1 A @ 24 VDC) when powered by the included power pack only

4-Series™ Control System

Power Consumption 15 W (not including any connected Cresnet devices)

Environmental

Temperature 41 to 113 °F (5 to 45 °C)
Humidity 10% to 90% RH (noncondensing)
Heat Dissipation 50 BTU/hr

Enclosure

Chassis Metal, aluminum, black finish
Faceplate Extruded metal, black finish, polycarbonate label overlay
Mounting Freestanding or 1 RU 19-in. rack mountable (adhesive feet and rack ears included)

Dimensions

Height 1.70 in. (44 mm) without feet
Width 17.28 in. (439 mm);
 19.00 in. (483 mm) with rack ears
Depth 6.56 in. (167 mm)

Weight

3.12 lb (1.42 kg)

Compliance

Regulatory Model: M201903003;
 UL® Listed for US & Canada, CE, IC, FCC Part 15 Class B digital device

Models

CP4
 4-Series™ Control System

Included Accessories

PW-2420RU
 Desktop Power Pack, 24 VDC, 2.5 A, 2.1 mm, Universal

Available Accessories

For supported accessories, visit the CP4 product page at www.crestron.com.

Notes:

1. A BACnet and IP license is required. A free license is available to support up to 50 BACnet objects on a single 4-Series control system. Enabling support for more than 50 BACnet objects requires the purchase of one [SW-3SERIES-BACNET-50+](http://www.crestron.com/sw-3series-bacnet-50+) license. The CP4 supports a maximum of 1000 BACnet objects when dedicated for BACnet use only. Actual capabilities are contingent upon the overall program size and complexity. To obtain the license, visit www.crestron.com/bacnetlicense.
2. This feature is only available when using the TSR-310. Other Crestron touch screens, handheld remotes, and keypads are not supported. For these interfaces, traditional IR or CEC control must be used to control supported Apple devices.

This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/How-To-Buy/Find-a-Representative or contact us for additional information by visiting www.crestron.com/contact/our-locations for your local contact.

This product is covered under the Crestron standard limited warranty. Refer to www.crestron.com/warranty for full details.

The specific patents that cover Crestron products are listed online at patents.crestron.com.

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

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Rev 10/05/21

CP4

4-Series™ Control System

