

# Products Preview 2018

Control • Audio over IP • Amplifiers • DSP

Specially issued for:

**Integrated  
Systems  
Europe**

Work**CAD** 

**BlueLine**  
Digital 

**Light****MOUSE**  
series



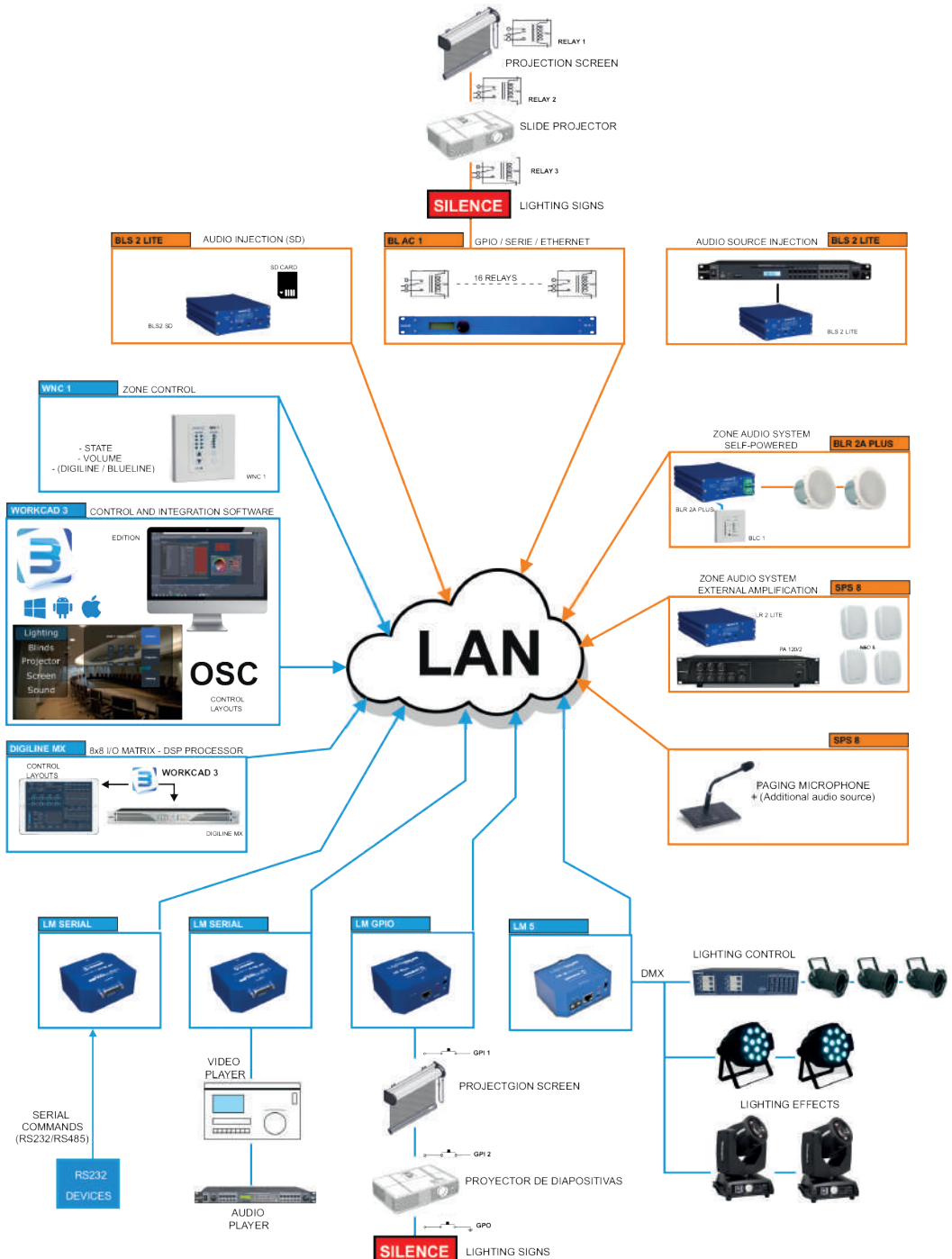
**WORK<sup>®</sup>** 

# WORK<sup>PRO</sup> **W** INTEGRATED AV PLATFORM

Audio over IP, Lighting control (DMX), RS232, RS485, GPIO, OSC, Ethernet....all these technologies are part of the solution proposed by the WORK PRO AV platform, a series of devices ready to be used and controlled by one solution: WorkCAD3, a complete software AV platform that is capable to control it all from one place and with any device.



# INTEGRATION DIAGRAM





# ABSOLUTE CONTROL PURE INTEGRATION

**WorkCAD3** is an application that runs under smart devices and controls audio, video, lighting devices providing the flexibility and configuration options that integrators need. Its step-by-step wizard and drag-and-drop philosophy offer a quick and easy working environment, where no programming or scripting knowledge is required.

**WorkCAD3** offers professional control and revolutionary automation capabilities. The look and functionality of your interfaces are only limited by your imagination, WorkCAD3 is the perfect tool for all your projects.

### Friendly and intuitive environment.

Tell WorkCAD3 what kind of touch device you are going to use, the devices you want to control, and the actions to perform using the configuration wizards, the drag-and-drop library and preconfigured parameters.

### Easy & Powerful.

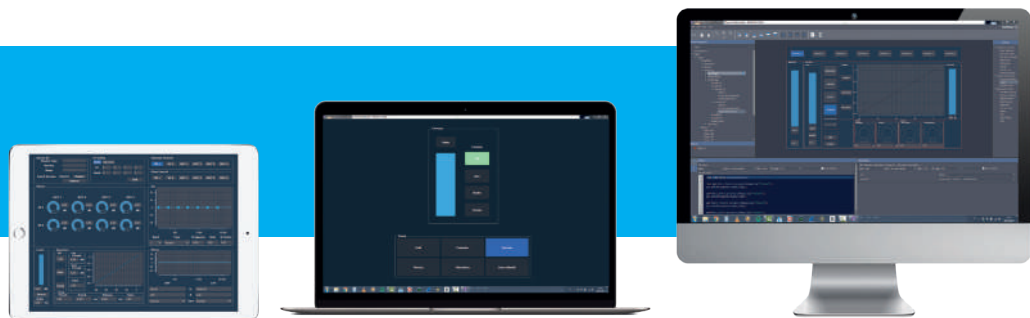
Use WorkCAD3 Editor to add buttons, devices, images and commands. Then, save your control interface and share it with smart devices. WorkCAD3 will control all your devices through WiFi, Ethernet, Serial Port, relay or IR.

### Responsive.

The control interfaces can be edited and extended in just a few minutes, at any time, allowing you to take advantage of all the features of an advanced system without incurring extra costs for installation.

### Customizable.

WorkCAD3 offers different graphic styles to customize the appearance of your control interface. It is also possible to create your own styles using the built-in styles editor, allowing the integrator to create a unique interface for each of your customers.



## HOW IT WORKS



### 1. Use WorkCAD3 Editor and add the necessary controls and devices to create your own control interface.

All you need to create your interface is a computer with the WorkCAD3 App installed, tell WorkCAD3 what kind of touch device you are going to use, what type of devices and the actions you want to perform using the configuration wizards.

### 2. Share your interface with smart devices that you will use as a touch panel.

Install the WorkCAD3 App in your control panel and load the interface created with WorkCAD3 Editor. The software will detect the devices on the network.

### 3. Start the App to control all the devices.

And that's all, you can start to manage your devices, control the lighting, adjust the audio level, turn on a video projector. You can create a custom interface with specific controls for each user.



# CHANGING THE RULES OF DISTRIBUTED AUDIO

BlueLine is the brand new solution that reinvents the traditional concept of distributed audio systems, making them more powerful, highly versatile, easy to set up, fast upgradable and thanks to the low wiring consumption the installation becomes cheaper.

BlueLine changes the way to work with the traditional 70/100V system installation with an advanced state of the recent Audio over IP Technology, bringing digital audio transmission and quality to each zone directly. And all of this with a design based on simplicity and efficiency.

Other advantages over the traditional audio distribution systems are the ability to add more sources without any additional cable on the zones or the possibility of upgrading zones with just one CAT5 cable.

But the real power of the system is its control capabilities because it runs perfectly with the integrated AV platform WorkCAD3 and can be controlled together with other technologies like lights, projectors, curtains and many other devices, thanks to its total integration with WorkCAD3 AV platform.



# AoIP RECEIVERS

## BLR2

Audio over IP receiver (PoE).

BLR2 is a 1 stereo channel Audio over IP receiver. The unit has 2 GPI inputs and 2 GPO outputs. Due to its modular features it can be placed anywhere in the installation. For that purpose, it has different fixing elements. It can be powered either through PoE or with an external 12/24 V DC power supply.

### Features

- 1 stereo channel Audio over IP receiver.
- 1 output: unbalanced stereo or balanced mono.
- Output sensitivity -1.15 dBu (680mVrms).
- Power supply: 12/24V DC or through PoE.
- 2 GPI (Pull-Up) and 2 GPO (Open Collector).
- 10/100 Ethernet port (to connect to the LAN network and PoE).
- Configurable through web interface.
- OSC control.
- Static IP, Source and Master volume configurable through the front panel.
- Display to visualize the dynamic IP and MAC addresses and the configurable parameters.
- Control port to connect to remote control devices.
- Audio format automatic detection: PCM, ADPCM and MP3.



Front view.



Rear view.

## BLR2A PLUS

Audio over IP receiver with amplifier (PoE).

BLR2 A PLUS is a 1 stereo channel Audio over IP receiver with 1 amplified stereo output. The unit has 2 GPI inputs and 2 GPO outputs. Due to its modular features it can be placed anywhere in the installation. For that purpose, it has different fixing elements . It can be powered either through PoE or with an external 12/24V DC power supply.

### Features

- 1 stereo channel Audio over IP receiver.
- 1 output: unbalanced stereo or balanced mono.
- 1 amplified stereo output: 2x5W (PoE) or 2x15W (external 24V power supply).
- Output sensitivity -1.15 dBu (680mVrms).
- Bridge mode: 30W @ 8 Ω powered by 24V.
- Bridge mode: minimum load 8Ω.
- Parallel mode: minimum load 4Ω.
- Power supply: 12/24V DC or through PoE.
- 2 GPI (Pull-Up) and 2 GPO (Open Collector).
- 10/100 Ethernet port (to connect to the LAN network and PoE).
- Configurable through web interface.
- OSC control.
- Static IP, Source and Master Volume configurable through the front panel.
- Display to visualize the Dynamic IP and the MAC addresses and the configurable parameters.
- Control port to connect to remote control devices.
- Audio format automatic detection: PCM, ADPCM and MP3.



Front view.



Rear view.

## **BLR2 LITE**

Audio over IP receiver (PoE).

BLR2 LITE is a 1 stereo channel Audio over IP receiver. Due to its modular features it can be placed anywhere in the installation. For that purpose, it has different fixing elements. It can be powered either through PoE or with an external 12/24V DC power supply.

### **Features**

- 1 stereo channel Audio over IP receiver.
- 1 output: unbalanced stereo or balanced mono.
- Output sensitivity -1.15 dBu (680mVrms).
- Power supply: 12/24V DC or through PoE.
- 10/100 Ethernet port (to connect to the LAN network and PoE).
- Configurable through web interface.
- OSC control.
- Static IP, Source and Master volume configurable through the front panel.
- Display to visualize the Dynamic IP and MAC addresses and the configurable parameters.
- Control port to connect to remote control devices.
- Audio format automatic detection: PCM, ADPCM and MP3.



Front view.



Rear view.

# **AoIP STREAMERS**

## **BLS2 SD**

Streaming media player over IP (PoE).

BLS2 SD is an streaming media player over IP. The unit has one SD slot for audio files which can be triggered via OSC commands. Due to its modular features it can be placed anywhere in the installation. For that purpose, it has different fixing elements. It can be powered either through PoE or with an external 12/24 V DC power supply.

### **Features**

- 1 stereo channel Audio over IP streamer.
- Input sensitivity -2 dBFS.
- Power supply: 12/24V DC or through PoE.
- SD slot to play audio files triggered by OSC commands (e.g. emergency warnings).
- 10/100 Ethernet port (to connect to the LAN network and PoE).
- Configurable through web interface.
- OSC control.
- Static IP and Source configurable through the front panel.
- Display to visualize the dynamic IP and MAC addresses and the configurable parameters.
- Audio format selection: PCM, ADPCM and MP3.



Front view.



Rear view.



## **BLS2 LITE**

Audio over IP streamer (PoE).

BLS2 Lite is a 1 stereo channel Audio over IP streamer. Due to its modular features it can be placed anywhere in the installation. For that purpose, it has different fixing elements. It can be powered either through PoE or with an external 12/24 V DC power supply.

### **Features**

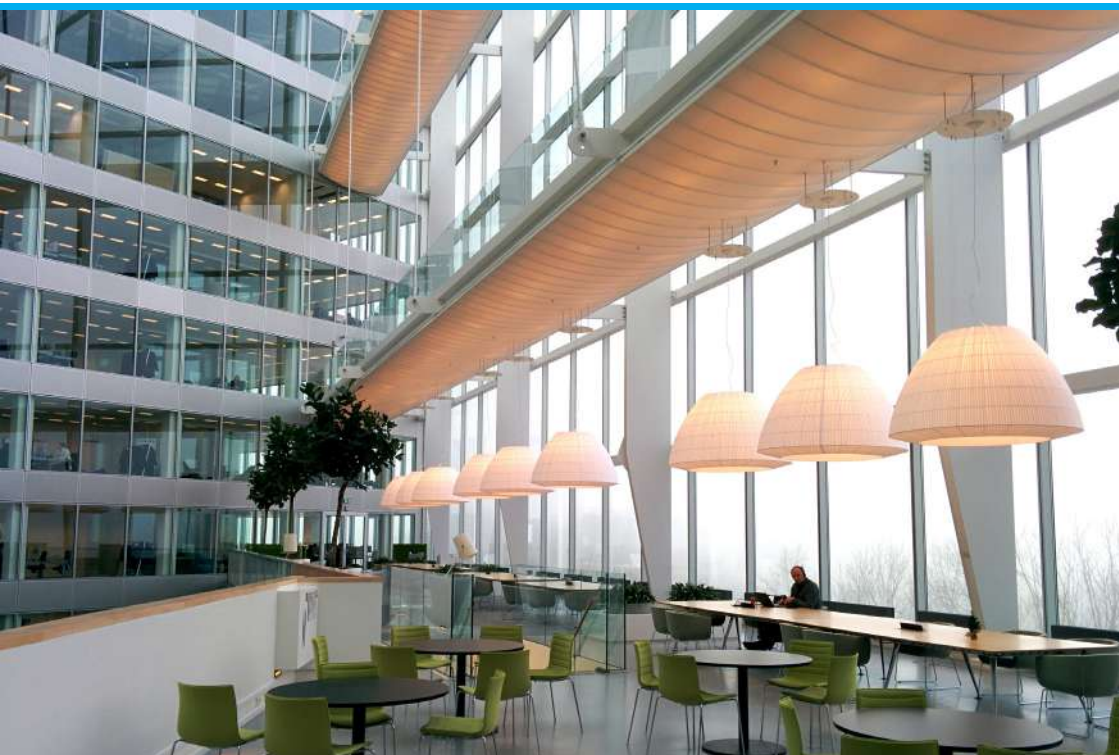
- 1 stereo channel Audio over IP streamer.
- Input sensitivity 0.7 dBu (840mVrms).
- Power supply: 12/24V DC or through PoE.
- 10/100 Ethernet port (to connect to the LAN network and PoE).
- Configurable through web interface.
- OSC control.
- Static IP and Source configurable through the front panel.
- Display to visualize the Dynamic IP and the MAC addresses and the configurable parameters.
- Audio format selection: PCM, ADPCM and MP3.



Front view.



Rear view.

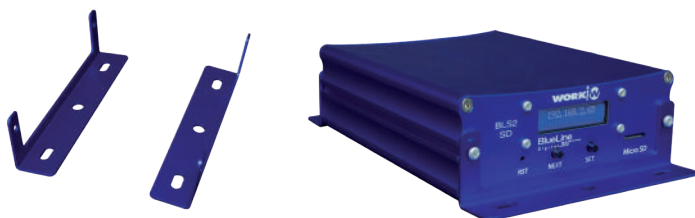


## **MKII new enclosure**

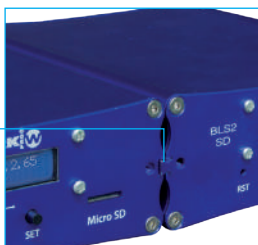
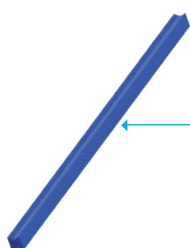
The new enclosure allows all the devices in the BlueLine series to be wallmounted or placed in a rack.

## **BL Wings and BL Rail (included)**

Wings to fix the device on surfaces and fixing rail for BlueLine devices are included with each device of the series.



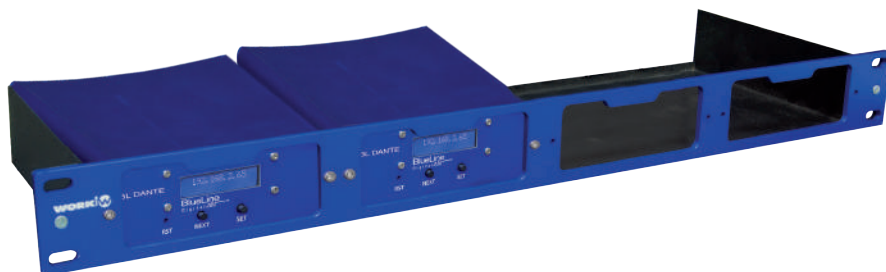
Wings mounted on a BlueLine device.



Fixing rail for BlueLine devices.

## **BL AR 19**

1 HU rack 19" for the BlueLine series.  
With the possibility of housing up to 4 devices.



## BL PS60

24V DC / 60W power supply

BL PS60 is a universal power supply (110/220V AC) that supplies 24VDC output and is built with the same chassis as the other BlueLine products, since its creation has been designed to feed BlueLine devices that can not be fed via PoE in the installation. Therefore, the installer can use this power supply that is capable of feeding up to 60W and its chassis, being the same as the rest of BlueLine equipment, can be racked with them in the BL 19AR accessory, resulting in a clean and tidy installation.

### Features

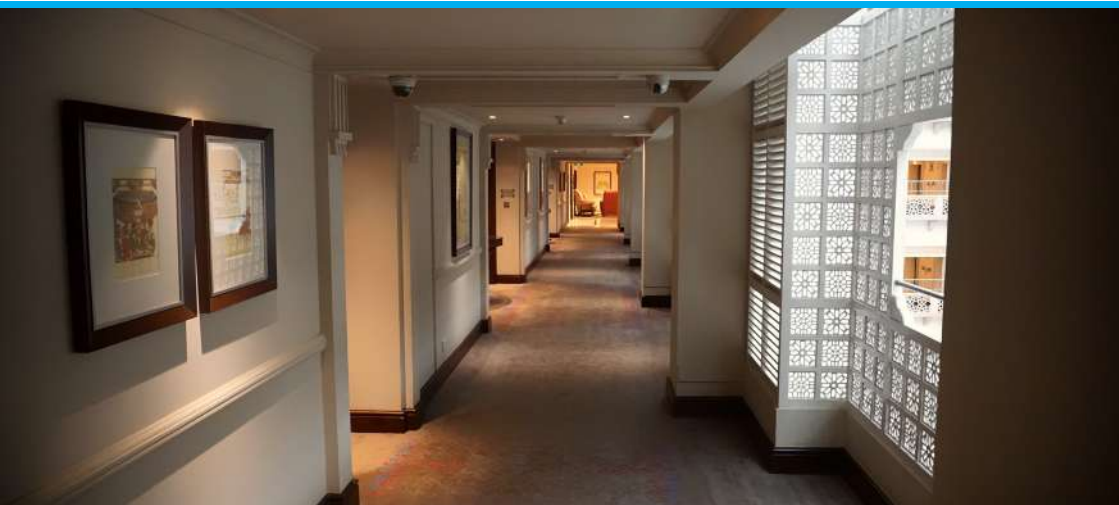
- Universal power supply 110/220V AC.
- Output voltage 24V.
- Power supplied 60W.
- Chassis compatible with BL 19AR accessory.
- Designed to power BlueLine equipment.



Front view.



Rear view.



## SPS 8

### Smart Paging Station over IP

The new SPS 8 (Smart Paging Station) is the result of the hardware evolution of BlueLine Digital, creating a multifunction device capable of working as a paging micro, as well as an audio server thanks to its RCA analogue stereo input, which is converted into digital and is sent to the network so that any BLR receiver can tune in that channel.

The new Smart Paging Station SPS 8 is a device that allows, at the same time:

- to send warning messages through streaming to different zones previously selected (Paging).
- to act as an audio server thanks to its RCA analogue inputs. The device is able to simultaneously stream input audio and send the messages recorded by the microphone connected to the XLR input.

SPS 8 is a unique device since this is the first paging micro and audio server available on the market. Thanks to its audio server function it is not necessary to use a device that works as a server, such as BLM or BLS, for a simple installation. It is enough to install a SPS 8 device along with the BLR receivers required (as many as paging zones). For instance, a small company with 6 different meeting rooms or offices can have ambient sound and paging service with one SPS 8, six BLR 2 A and one PoE switch, without any additional amplifiers or power supplies.

The new SPS 8 station is also a PoE device, thus this can be powered through the same Ethernet cable. This provides users with a tidy console since the microphone signal, analogue audio information, power supply and signal data travel via just one Ethernet cable.



Front view.



Rear view.

## Features

- Paging microphone for 8 zones.
- 4 PRESET buttons that can be configured by the user.
- CLR button to delete a selection.
- AUX button to enable input signal from auxiliary line.
- Alarm input (normally open contact through Euroblock) configurable by the user.
- RJ45 input for communication and PoE supply.
- Auxiliary input for supply through euroblock connector.

## DM 115

### Gooseneck microphone

DM 115 is a gooseneck microphone designed to offer an awesome response to the big demand about speech quality microphones, public address systems and discourse acts. It is a smart solution for the audio reinforcement.

This microphone has a dynamic pattern and a wide frequency response.

## Features

- Elements: Dynamic Capsule.
- Polar Pattern: Unidirectional.
- Sensivity: -52 +/- 3dB/Pa(0dB=1V/Pa a 1kHz).
- Frequency Response: 50 Hz - 5 kHz.
- Output Impedance: 500  $\Omega$  +/-30%.
- Output Connection: Integral 3-pin XLR Male.



# CONTROL GATEWAYS

## BL AC 1

Multiprotocol Gateway with internal clock and relays.

BL AC 1 is an ultra-versatile gateway that facilitates the control of many installations that require to interact with different devices either via Ethernet, RS232, RS485, relays, infrared or GPIO contacts. BL AC 1 can perform multiples functions such as:

1) Multiprotocol Gateway, that is, it is able to capture a message from an input protocol and stream it, in another protocol, into another output. For example, capturing a message via RS232 and stream it via Ethernet or vice versa.

2) To execute macros/commands pre-saved in memory. For example, allowing to trigger a specific command when one of the included GPIO is activated.

3) Translator between protocols. For example, converting a command from a specific manufacturer into another command saved in the memory. This function is very useful when replacing an old equipment of a manufacturer (suppose a projector controlled by RS232) by another manufacturer. In this way, the same command sent by the main controller can be "translated" into the command compatible with the new projector without the need to reprogram the main unit.

4) Commands executor with embedded schedule due to the BL AC 1 device allows to execute the commands stored in memory Ethernet commands at certain moment thanks to the embedded calendar.

5) BL AC 1 is able to capture Ethernet commands via UDP and to send them through any of its other RS232/485 ports or vice versa. Therefore, it is also a solution for the remote transmission / reception of RS232/485 commands via UDP (Ethernet).

6) The RS485 port can be configured as DMX and, in this way, the luminaires controlled by this protocol can be managed. BL AC1 incorporates the following ports: 2xRS485, 2xRS232, 2xEthernet, 16xGPIO, 6xIR.

Being able to be controlled by OSC, BL AC 1 is compatible with all WORK PRO network devices, such as the BlueLine range, LM-GPIO, etc., as well as with the WorkCAD3 control platform. Furthermore, thanks to the fact that OSC is an open protocol, BL AC 1 allows the integration with third-party control platforms.

## Features

- Multiprotocol gateway.
- Programmable internal schedule that allows to trigger commands at a certain moment.
- Internal memory to store commands that can be sent via RS232/485, UDP(Ethernet).
- Remote control of the product via UDP using OSC protocol.
- Protocol translator.
- 8x 5A/230V relays with manual control.
- 8x 1A/30V relays.
- 16x GPIO optocoupled GPI galvanically insulated.
- 2 RS232 ports.
- 2 RS485 ports.
- 6 outputs with IR control.
- 2 Ethernet (10/100) ports.



Front view.



Rear view.



## LM GPIO

Ethernet-GPIO programmable Gateway

LM GPIO is a gateway that allows to remotely activate GPIOs via UDP (Ethernet) commands or vice versa. From a change of state of a GPIO the device can be configured to send a specific command. It allows up to 10 configurable GPIO ports.

Thanks to the LM GPIO, users can send activation/deactivation signals from remote contacts via Ethernet (UDP) using the well-known open OSC protocol, which is also compatible with the WorkCAD3 control software.

### Features

- Programmable Ethernet-GPIO Gateway
- It works in both directions:

GPI features:

- As an input, they work as an internal Pull-Up resistor that turns on when the contact goes to GND. In this case, the device sends two types of messages:
  - A prefixed message for the devices registered in the system.
  - A bulk message, which can be an OSC command or a group of data, whose content and IP address destination are configurable by the user.
- It is possible to send several configurable messages to different devices since each message has an specific IP address destination attached to it. The messages are generated in both activation and deactivation processes.

GPIO features:

- As an output, the device receives a prefixed GPIO through an OSC command with information about the selected port and its status (activated or deactivated). In GPO conditions, the unit behaves like Open Collector.
- SUBD-15 connector for input-output interfaces. A PCB with terminal connectors is supplied for an easy installation.
- Ethernet connector.
- Power supply via Jack or microUSB.



Front view.



Rear view.



LM GPIO connector (included).

## LM SERIAL

Ethernet/RS232/RS485/GPIO gateway with internal clock

LM Serial is an ultra-versatile device due to it is able to perform multiple actions:

- 1) Multiprotocol Gateway, that is, it is able to capture a message from an input protocol and stream it into another protocol, in another output. For example, capturing a message via RS232 and send it via Ethernet or vice versa.
- 2) To execute macros/commands pre-saved in memory. For example, allowing to trigger a specific command when one of the included GPIO is activated.
- 3) Translator between protocols. For example, converting a command from a specific manufacturer into another command saved in the memory. This function is very useful when replacing an old equipment of a manufacturer (Suppose a projector controlled by RS232) by another manufacturer. In this way, the same command sent by the main controller can be "translated" into the command compatible with the new projector without the need to reprogram the main unit.
- 4) Commands executor with embedded schedule due to the LM Serial device allows to execute the commands stored in memory commands at a certain moment thanks to the embedded calendar.
- 5) LM Serial is able to capture Ethernet commands via UDP and to send them through any of its other RS232 / 485 ports or vice versa. Therefore, it is also a solution for the remote transmission/reception of RS232/485 commands via UDP (Ethernet).
- 6) The RS485 port can be configured as DMX and, in this way, the luminaires controlled by this protocol can be managed. LM Serial incorporates the following ports: 4GPIO, 1 RS232, 1 RS232/485, 1 Ethernet.

Being able to be controlled by OSC, LM serial is compatible with all WORK PRO network devices, such as the BlueLine range, LM-GPIO, etc., as well as the WorkCAD3 control platform. Furthermore, thanks to the fact that OSC is an open protocol, LM Serial allows the integration with third-party control platforms.



Front view.



Rear view.

## Features

- Full duplex multiprotocol gateway.
- Programmable internal schedule that allows to trigger commands at a certain moment.
- Internal memory to store commands that can be sent via RS232 / 485, UDP (Ethernet).
- Remote control of the product via UDP using OSC protocol.
- Protocol translator.
- 4 GPIO for the control of any programmable function.
- 2 serial ports: 1 RS232 port + 1 configurable RS232/RS485 port (full duplex ports).
- Ethernet network interface that accepts UDP commands and allows it to be controlled by OSC.
- Optional DMX output through the RS485 port.



LM GPIO connector (included).

## LM 5

Ethernet-DMX gateway

LM 5 is an Ethernet-DMX gateway that can be used in many kind of applications. It can be us as an standard ArtNet node but also can work as an OSC to DMX converter, that is, the lighting control commands sent through OSC via Ethernet are converted into DMX signals by the LM 5. The OSC capability makes possible to build customized common interfaces by the common OSC control apps available in iOS, Android and PC/MAC.

LM 5 goes much further and includes an internal memory to store 99 cues (with independent speed and fade time) and 24 cue lists, with up to 512 DMX channels.



Front view.



Rear view.

## AR 5N

Wall-mounted show trigger for LM 5

AR 5N is a wall-mounted controller that can be associated to a LightMouse device (LM 5) on a common LAN, being able to control two basic parameters such as scene selection (up to 8), previously recorded in the LM 5, and general dimmer.

Through WorkCAD3 software, you can configure and link an AR 5N to control a specific LM 5. It is possible to associate several controllers to a single LM 5.



# Wireless Audio Streaming

## WRB 2

Professional Bluetooth audio receiver

WRB 2 is a stereo Bluetooth receiver which can be paired with smartphones, tablets or PC Bluetooth adapters. Its robust and metallic enclosure and its optimized antenna for a better coverage make it suitable for professional use.

### Features

- Stereo Bluetooth receiver.
- Bluetooth V2.1+EDR.
- LED display.
- PRE, NEXT, PLAY/PAUSE, VOL-, VOL+, PAIR remote control keys.
- 5 dBi external antenna to increase the transmission distance.
- Transmission distance higher than 20 meters in open places.
- Unbalanced ¼" jack output.
- Robust enclosure.



Front view.



Rear view.

## WIR 1

Professional WiFi audio receiver

WIR 1 is a WiFi audio receiver in the operating free band ISM 2.4 GHz which has two modes of operation: AP (Access Point) or STA (Station). Its XLR balanced output, its robust and metallic enclosure and its optimized antenna for a better coverage make it suitable for professional use.

### Features

- WiFi audio receiver.
- Operating Band ISM 2.4GHz (free band).
- AP (Access Point) and STA (station) modes supported.
- UPnP, DLNA and Airplay supported.
- 5dBi external antenna to increase the coverage area.
- Streams the audio from external devices (smartphones, tablets, PC, ...).
- Supports up to 24bit 192 kHz sample rate stream audio.
- Coverage area higher than 15 meters in AP mode. In STA mode it depends on the existing Wi-Fi network coverage.
- Balanced XLR and unbalanced ¼" jack outputs.
- Robust enclosure.



Front view.



Rear view.

## WDR 24

Professional wireless digital audio receiver

WDR 24 is a wireless receiver in the operating free band ISM 2.4 GHz, which has been designed to work with the transmitter WDT 24, creating a digital audio wireless system.

The transmitter WDT 24 can work with one receiver, or with up to 10 receivers WDR 24, covering a distance of more than 30 metres in open places

### Features

- Wireless Digital Audio Receiver System.
- Operating Band ISM 2.4GHz (free band).
- One transmitter WDT 24 paired with one receiver WDR 24, or one transmitter WDT 24 paired with up to ten receivers WDR 24.
- GFSK digital modulation/demodulation.
- External antenna can help to increase the transmission distance.
- Intelligent Frequency Hoping can help to avoid interference effectively and to ensure the channel quality.
- Automatic mute in bad channel quality conditions or high error code rate.
- Transmission distance higher than 30 meters in open places.
- Up to three transmitters WDT 24 in a zone.
- Balanced XLR and unbalanced 1/4" jack outputs.
- Working mode: stereo or mono.



Front view.



Rear view.

## WDT 24

Professional wireless digital audio transmitter

WDT 24 is a wireless transmitter in the operating free band ISM 2.4 GHz, which has been designed to work with the wireless receiver WDR 24, creating a digital audio wireless system.

The transmitter WDT 24 can work with one receiver, or with up to 10 receivers WDR 24, covering a distance of more than 30 metres in open places.

### Features

- Wireless Digital Audio Transmitter System.
- Operating Band ISM 2.4GHz (free band).
- One transmitter WDT 24 paired with one receiver WDR 24, or one transmitter WDT 24 paired with up to ten receivers WDR 24.
- GFSK digital modulation/demodulation.
- External antenna can help to increase the transmission distance.
- Intelligent Frequency Hoping can help to avoid interference effectively and to ensure the channel quality.
- Automatic mute in bad channel quality conditions or high error code rate.
- Transmission distance higher than 30 meters in open places.
- Up to three transmitters WDT 24 in a zone.
- Balanced XLR and 1/4" jack inputs.
- Working mode: stereo or mono.



Front view.

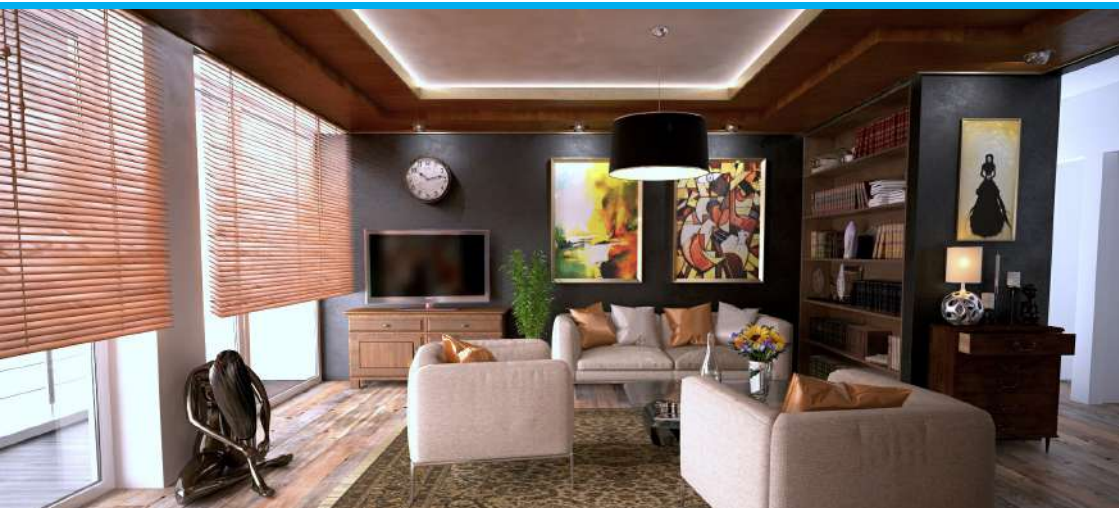


Rear view.



# EASY CONTROL FAST MANAGEMENT

The WORK PRO wall-mounted controllers offer fast, easy and intuitive control, providing an extraordinary use over the installation. These devices are linked to the desired receiver using WorkCAD3, thus controlling input sources and volumes, as well as the ability to create presets with different configurations between outputs and inputs.



## WGC1 MKII

Wall-mounted touch panel controller

WGC1 MKII is a wall-mounted controller for any GPIO interface. Each button in its touch panel can activate/deactivate a contact. It is compatible with any device that incorporates a GPIO TTL interface as well as with WORK PRO devices that incorporate a GPIO interface such as Digiline, BlueLine, LM Serial, LM GPIO etc., serving as a remote controller to activate functions in these devices.

The touch panel can be customized with adhesive labels on each button to name their function indications.



Front view.

### Features

- Wall-mounted controller with touch panel.
- Backlit buttons when activated.
- Powered with 5V.
- Connector with terminals for contacts and power supply.
- Power supply included.
- Compatible with European universal box (Not included).
- Available in black and white colours.

## BLC1 MKII

Touch panel for BlueLine receiver

BLC1 MKII is a wall-mounted touch controller that integrates 1 volume control and 8 backlit touch buttons. Each button is a selection of BlueLine audio server to listen to the BLR receiver which the controller is connected to.

The RJ45 connector that connects the BLC1 MKII to any of the BLR receivers (BLR2, BLR2 Lite or BLR2A +) powers the controller from the power supply of these devices. Therefore, BLC1 MKII does not need an auxiliary power supply.



Front view.

### Features

- Controller for source selection in BlueLine receivers (BLR).
- 8 source selection buttons.
- 1 auxiliary analog audio input (mini jack 3,5").
- Rotary volume control.
- Powered by the BLR Receiver to which it is connected.
- Compatible with European universal box.
- RJ45 connector on the rear side.
- Available in black and white colours.



Rear view

## WSC 1S

Ethernet(OSC) PoE programmable controller

WSC 1S is a wall-mounted touch controller that integrates 1 fader and 8 fully configurable backlit touch buttons. Each button and the fader can be programmed with a different command. This configuration is done through the WorkCAD3 control platform. Thanks to this controller, the user is able to execute any function, or set of functions, on any device that supports OSC control such as all the WORK PRO network devices (Digiline, BlueLine, LM GPIO, LM Serial, etc.). Being a PoE controller, its power is supplied directly via the Ethernet connector, improving the ease of installation.

The touch panel can be customized with adhesive labels on each button to name their function indications.

### Features

- Programmable touchscreen controller.
- 8 programmable backlit buttons.
- Programmable touch fader.
- Powered by PoE.
- Compatible with European universal box.
- Ethernet connector on the rear side.
- Available in black and white colours.



Front view.



Rear view

## WSC 1

Ethernet(OSC) PoE programmable controller

WSC 1 is a wall-mounted touch controller that integrates 8 fully configurable backlit touch buttons. Each button can be programmed with a different command. This configuration is done through the WorkCAD3 control platform. Thanks to this controller, the user is able to execute any function or set of functions on any device that supports OSC control such as all the WORK PRO network devices (Digiline, BlueLine, LM GPIO, LM Serial, etc.). Being a PoE controller, its power is supplied directly via the Ethernet connector, improving the ease of installation.

The touch panel can be customized with adhesive labels on each button to name their function indications.

### Features

- Programmable touchscreen controller.
- 8 programmable backlit buttons.
- Powered by PoE.
- Compatible with European universal box.
- Ethernet connector on the rear side.
- Available in black and white colours.



Front view.



Rear view

## WSC 4

4-zone Ethernet (OSC) PoE wall-mounted programmable controller

WSC-4 is a wall-mounted PoE controller, fully programmable with WorkCAD3, that allows the control of 4 zones.

It integrates 8 selection buttons and 4 zone buttons, all of them tactile and backlit, 4 rotary potentiometers of small format for each zone and a rotary for Master. Each touch button can be programmed with a different command. This configuration is carried out using the WorkCAD3 control platform.

Thanks to this controller, 4 audio zones can be configured in combination with any WORK PRO Ethernet processor such as the Digiline range. The dimming of these 4 zones can also be controlled with LM 5 or LightShark systems, since all the WORK PRO Ethernet products communicate using the OSC protocol.

WSC 4 can be used for audio, lighting or control of any AV system.



Front view.



Rear view

## Features

- 4-zone OSC programmable touchscreen controller.
- 8 + 4 programmable backlit buttons.
- Powered by PoE.
- Compatible with European universal box (not included).
- Ethernet connector on the rear side.
- Available in black and white colours.

## WAC 7

Ethernet (OSC) PoE programmable controller

WAC 7 is a touch panel controller that can be fixed on wall. Fully compatible with WorkCAD3, the control layout created with this software can be load in the controller, allowing to control the installation thanks to Ethernet compatibility.

## Features

- Wall-mounted Ethernet controller.
- Compatible with WorkCAD3.
- 7" full color touch screen.
- 1024 x 600 screen resolution.
- Powered by PoE.



## WNC 1

Ethernet (OSC) PoE programmable controller

WNC 1 is a wall-mounted controller that can be associated with compatible WorkCAD3 devices (BlueLine, Digiline) in a common LAN, being able to control two basic parameters such as matrix of input source selection and output gain.

Through the WorkCAD3 software, you can configure a WNC 1 to a one or several BlueLine receivers and remotely control their features. Due to all devices run over the same software, the integration and configuration of all the system is very quick and intuitive.

WNC 1 works with the "STATE" concept. STATE is defined as a preset where configure the inputs/outputs matrix. Therefore it is possible to create several and different configurations according to the needs, only navigating to the corresponding STATE. Additionally, WNC 1 integrates a volume control of the outputs saved in the selected STATE.

### Features

- Wall-mounted Ethernet controller.
- Compatible with WorkCAD3.
- Intuitive control of audio of a determined output.
- Possibility to control output volume.
- Select output source.



## BLC 1

Ethernet (OSC) PoE programmable controller

BLC 1 is a wall-mounted controller that can be directly connected to any BlueLine receiver through CAT5 cable (not Ethernet), and is able to control the volume and select the input source applied to this specific receiver. It has an auxiliary front input (stereo minijack) for the local audio source. This feature is very useful in several applications: in hotels, the guest can listen his own audio instead of background music through smartphone or MP3 player. In schools, the teachers can add podcasts.

### Features

- Wall-mounted controller.
- Connection to any receiver through CAT5 cables (not Ethernet).
- Possibility to control volume and to select output source.
- Auxiliary input for local source connection.





# POWER AMPLIFIERS

## PBA60 H

2x20W amplifier controlled via RS232

PBA60H is an ultra-compact 2x20W amplifier (@4Ω) that has several input sources: 2 stereo Line + 1 input that can be microphone or line. It includes tone control (low and high) and output gain controls. Both, the source selection and tone and output gain control, are performed either manually with the small buttons on the chassis, either via RS232 remote control or even via infrared thanks to the built-in IR input. It also has both remote and manual mute control. The mic input can be with selectable phantom power or it change its function to line input.

The mic input has priority and is mixed on one of the two selected line inputs. It has a stereo audio output with up to 2x20W @ 4 Ω or 1x40W @ 8 Ω in bridge mode. Additionally, it has a line output to feed another amplifier signal.

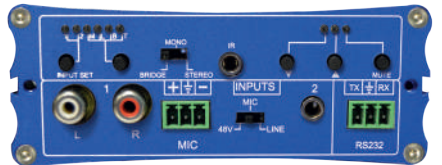
It is powered at 24V DC making it compatible with the BL PS60. The chassis is the same as the used by BlueLine devices, so it can be mounted on the wall or it can use the BL AR19 to rack up to 4 units in a single rack unit, forming a stack of amplifiers up to 8x20W.

## Features

- Compact amplifier 2x20W @ 4 Ω.
- Bridge mode function at output 1x40W @ 8 Ω.
- 2 Line inputs.
- 1 mic input or additional line selectable with talkover over the others by mixing the two signals.
- RS232 and IR remote control interfaces.
- Control of bass and treble tones and volume manually, IR or RS232.
- Manual controls with micro-buttons.
- Mute control.
- Selectable phantom power.
- Input power + 24V DC (compatible with BL PS60).
- Additional line output to power another amplifier.
- Chassis compatible with BlueLine installation accessories such as BL AR19.



Front view.



Rear view.

## PA 200

2x100W 4  $\Omega$ /70-100V power amplifier

PA 200 is an installed sound amplifier that can operate with low impedance or 70/100 V line loudspeakers. The operating mode is selected through a switch on the rear side and a dispswitch block which has some terminals reserved for future improvements. It incorporates switching power. It also incorporates an unbalanced LINE input with its own volume control and LEDs which mark the signal presence and limit state. On the rear side is allocated a RJ45 connector which admits RS485 commands from an external device in order to control some features.

### Features

- Compact amplifier 1/2 U rack 19".
- 2x100W @4  $\Omega$ /70-100V
- Switching power.
- Remote control by RS485 commands.
- LEDs for signal and limit.
- Can operate with low impedance or 70/100V line loudspeakers.



Front view.



Rear view.

## PA ACCESSORIES

Installation kit.  
Available for PA 200 and PA 200 MX devices.



## PA 200 MX

2x100W 4  $\Omega$ /70-100V power amplifier with mixer

PA 200 MX is a compact amplifier of 200W remotely controllable that features 3 LINE inputs (2 rear + 1 front) with selector and volume, 2 tone controls and LEDs that mark the presence of signal and peak. Additionally, the amplifier incorporates a microphone input with priority, providing a mixer function, which integrates a suppressor microphone coupling circuit with up to 3 levels of intensity. Its small size of half a rack unit allows, thank to the optional accessory ,to connect two amplifiers in a single 19 "rack unit or to rack a single unit.

This amplifier can operate both in low stereo impedance (2x100W @4  $\Omega$ ) and with line 70/100V speakers in mono (200W). The Bluetooth antenna allows you to control the PA 200 MX from a smartphone or tablet device (Android/iOS) with the downloadable app from the app store. Also on the rear side incorporates a RJ45 jack, which supports RS485 commands from an external device to control several functions of the amplifier.

### Features

- Compact amplifier 1 / 2U rack19 .
- 2x100W @ 4  $\Omega$  or 200W 8  $\Omega$  / 70-100V.
- Integrated preamp with selection of up to 3 stereo sources + 1 microphone input with priority functionality.
- Feedback suppressor circuit for the microphone with 3 intensity levels.
- Tone controls.
- Bluetooth remote control on Android / iOS devices with proprietary application or via RS485 through the integrated rear RJ45 connector.



Front view.

Rear view.



PA 200 MX control through IOS/Android application.



## PA 1254

4x150W amplifier

PA 1254 is a multichannel amplifier designed for low impedance installations. It is a versatile equipment for multiple applications due to its 4 channels of 150W each (@ 4Ω) and its several different operating modes. Its four channels can work independently with their own volume.

The amplifier can be configured as a 3-channel amplifier (2.1), that is, 2 independent stereo/parallel channels and 2 combined bridge channels to offer 300W to the subwoofer in bridge mode. In this mode as a 3-channel amplifier, PA 1254 integrates a crossover function with a low-pass filter for the subwoofer, and two high-pass filters with frequency adjustment for the other two channels. These possibilities offer a versatile device that can be used in more types of applications, from 4 independent rooms or controls in systems for AV rooms.

### Features

- 4x150W @4 Ω amplifier.
- 3-channel mode (2.1) delivering up to 2x150W @4 Ω + 1x300W @8 Ω.
- Built-in crossover with 1 low pass and 2 high pass filters (3 channel mode).



## PA 2120L

2x120W (70/100V) amplifier

PA 2120L is an installation amplifier with 2 channels of 120W each, class D. It can work both in 70V line and 100V line (selectable through dip-switches) without output transformers. Each channel has its own volume control and LED indicators (signal, clip and protection).

PA 2120L amplifier integrates several protections such as short-circuit, thermal, ultrasonic and RF. Its inputs and outputs are connected by Euroblock terminals, and it has dimensions of 1 HU rack 19".

### Features

- Amplifier of installation of 2 channels.
- Operation at 70 / 100V line (selectable) without output transformers.
- Output power (70 / 100V): 2x120W.
- Volume control in each channel.
- 1 HU rack 19" dimensions.
- Switching power supply, Class D amplifier.



Front view.

Rear view.

## PA 4120L

4x120W (70/100V) amplifier

PA 4120 L is an installation amplifier with 4 channels of 120W each, class D. It can work both in 70V line and 100V line (selectable through dip-switches) without output transformers. Each channel has its own volume control and LED indicators (signal, clip and protection).

PA 4120 L amplifier integrates several protections such as short-circuit, thermal, ultrasonic and RF. Its inputs and outputs are connected by Euroblock terminals, and it has dimensions of 1 HU rack 19".

## Features

- Amplifier of installation of 4 channels.
- Operation at 70 / 100V line (selectable) without output transformers.
- Output power (70 / 100V): 4x120W.
- Volume control in each channel.
- 1 HU rack 19" dimensions.
- Switching power supply, Class D amplifier.



Front view.



Rear view.

## PA 4300L

4x300W (70/100V) amplifier

PA4300L amplifier offers 4 channels of 300W each in high impedance (70/100V) without output transformers. The output voltage 70 or 100V is selectable by a switch on the rear panel.

PA4300L integrates several protections such as short-circuit, thermal, ultrasonic and RF. Its inputs and outputs are connected by Euroblock connectors.

## Features

- 4x300W (70/100V) amplifier without output transformers.
- 70V or 100V line output selectable.
- Volume controls on the front side.



Front view.



Rear view.



# NET WORKED DSP

## WPE 24 & WPE 44

### DSP Audio Processors

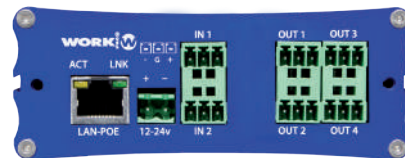
The new WPE Series offers the digital processing of the audio signal in a compact and reduced size, maximizing the versatility of any installation thanks to its compatibility with WorkCAD3 and OSC. Its internal DSP allows the equalization of the signal in 8 bands, configure the compression and the delay up to 8.6 ms.

Thanks to its internal electronic, the servo-balanced outputs of the WPE 24 and WPE 44 are able to automatically adapt the output signal according to the installation, between balanced or unbalanced.

These new DSP processors are available in two different configurations according to the number of inputs (WPE 24, 2 inputs) (WPE 44, 4 inputs).



WPE 24 Front view.



WPE 24 Rear view.

## WPE 24

### Features

- Audio processor.
- 2 Balanced inputs / 4 outputs.
- Max input level +8dBu.
- 4 Servobalanced outputs.
- Max output level +8 dBu.
- Xover in every output.
- 8 Band full parametric EQ per output.
- Compressor Limiter & Delay (up tp 8.6 ms).
- WebServer and OSC Control.
- WorkCAD3 compatible.



WPE 44 Front view.



WPE 44 Rear view.

## WPE 44

### Features

- Audio processor.
- 4 Balanced inputs / 4 outputs.
- Max input level +8dBu.
- 4 Servobalanced outputs.
- Max output level +8 dBu.
- Xover in every output.
- 8 Band full parametric EQ per output.
- Compressor Limiter & Delay (up tp 8.6 ms).
- WebServer and OSC Control.
- WorkCAD3 compatible.



WPE 24 Software.



WPE 44 Software.

## WPE 48 N

4-input, 8-output Ethernet DSP

WPE48N is a 4-input, 8-output DSP with a 32bit floating point processor and high-quality ADC and DAC converters (48KHz/24bit encoding), offering a dynamic range of 110dB, resulting in an S/N ratio above 108dB.

The control of the device can be done via Ethernet (configuration software included) or via RS232. Both interfaces, Ethernet and RS232, use RJ45 connectors.

The process modules of the device in both inputs and outputs are: expander, noise gate, crossover, parametric equalizer, delay, compressor, level and mute.

WPE48N is a processor designed especially for touring applications, but it also can be used in installations thanks to the remote control interface for both Ethernet and RS232.

The control software included with the equipment provides a wide range of possibilities allowing to control all the parameters of the processor.

### Features

- 4-input, 8-output Ethernet DSP.
- Control via Ethernet and RS232.
- 110dB dynamic range.
- 48KHz / 24bit sampling.
- 108dB S/N ratio.
- Process functions in inputs and outputs: expander, noise gate, crossover, parametric equalizer, delay, compressor, gain, mute.
- Routing and matrix mixing of the 4 inputs in the 8 outputs independently.
- Balanced inputs and outputs.



App Screenshots of the WPE 48N configuration software.



Front view.



Rear view.

# MD 82AX MKII

Digital automatic microphone mixer

MD 82 AX MK II is a digital automatic microphones mixer for installation with remote control capabilities via RS485 or via Bluetooth through an application for smart devices (iOS/Android). The system integrates a feedback suppressor with up to 4 levels. With 8 balanced inputs, it has individual control of input gain, three-band equalizer, automix target, HPF, LPF and feedback destroyer. The front encoder allows navigation within a configuration menu of the different channel parameters. Among the functions to configure, we can find three tone controls, high pass filter and low pass (with frequency settings) and anti-feedback control (with 4 levels). The LCD screen allows you to monitor manual changes and see the status of each parameter. All inputs have a switch for the connection of microphones with +48V phantom power. The system allows you to link another unit and, thereby, act as a 16-channel mixer.

The Bluetooth connectivity for control parameters is done by an own application in iOS and Android, in this way from a remote device the user can configure the levels of each one of the inputs and their equalization, activate the feedback suppressor, the operation of the automixer, etc.

The Automix function allows you to configure a value (TARGET) set as the maximum value of the channel, and another parameter (GAIN), which sets the amount of amplification needed to reach the TARGET value. This functionality allows several configurations according to the needs. One option would be to set the same target threshold to all the channels, therefore, all the microphones had the same level, on the other hand, different values could be established for each channel, therefore, those channels had a preponderance over the rest. This gain correction is done in real time, allowing autonomous control of the installation without having to worry about the controls once the desired configuration has been established.

## Features

- Automatic 8-channel digital mixer.
- 8 balanced inputs.
- Front gain control of all channels.
- Stackable up to 2 units to achieve automatic mixing of up to 16 channels.
- Digital equalization of each input and master.
- Remote control with Application for Android / iOS smart devices via Bluetooth.
- RS485 interface for remote control.
- Front master control and manual access to all parameters with the help of the LCD frontal display.
- Selectable +48V phantom power.
- HPF and LPF configurable on each input.
- Configurable feedback destroyer on all inputs.
- 3 presets can be stored on the devices.



M82 AX configuration and mixing control through iOS/Android application.



Front view.



Rear view.



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