

# Audio & Control Systems 2018



# WORK 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**



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# 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 MKII**

Audio over IP receiver (PoE).

BLR2 MKII is a 1 stereo channel Audio over IP receiver. The unit has 2 GPI inputs and 2 GPO outputs (fully programmable). 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  $\ensuremath{\mathsf{IP}}$  and MAC addresses and the configurable parameters.

- Control port to connect to remote control devices
- Audio format automatic detection: PCM, ADPCM and MP3.

# **BLR2 A PLUS MKII**

Audio over IP receiver with amplifier (PoE).

BLR2 A PLUS MKII is a 1 stereo channel Audio over IP receiver with 1 amplified stereo output. The unit has 2 GPI inputs and 2 GPO outputs (fully programmable). 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 Line 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: minimun 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.







## **BLR2 LITE MKII**

Audio over IP receiver (PoE).

BLR2 LITE MKII 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 trhough 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.



### **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 MKII

BlueLine

Audio over IP streamer (PoE).

BLS2 Lite MKII 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 (840mV rms).
- 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.









### **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.



## **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 4 x 24V DC outputs 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 19 AR accessory, resulting in a clean and tidy installation.

#### **Features**

- Universal power supply 110/220V AC.
- Output voltage 4 x 24V.
- Power supplied 60W.
- Chassis compatible with BL 19 AR accessory.
- Designed to power BlueLine equipment.



Front view.









### SPS 8

#### Smart Paging Station over IP

From the beginning, BlueLine Digital supports paging commands that make this function possible, making the system compatible with programmable external controllers.

The new SPS 8 (Smart Paging Station) is the result of the evolution of the BlueLine Digital associated hardware, creating a PoE device capable of paging within a multizone environment, in addition to providing other functionalities.

Within these functionalities we should highlight the possibility that the SPS 8 also acts as an audio streamer. In this working mode the device is able to transmit to the network the audio source connected to its auxiliary input, in addition to continuing to perform paging when the user requires it. Therefore, in this working mode (AUX mode) the SPS 8 is able to adopt a double functionality: paging microphone and audio streamer, being an excellent solution for those scenarios that do not imply a high complexity.

On the other hand, the SPS 8 is not only an audio paging and streamer microphone, but it is also an alarm manager since it has a GPI that can be programmed for this purpuse, being activated when the contact is closed.

Finally, it should be mentioned that the SPS 8 is a completely programmable device, so that it can also serve as a control station. In this way we can have access to the multiple devices that we have included in our installation and which accept control by OSC, such as the rest of the BlueLine series devices and the LightMouse series devices.

#### **Features**

- Paging microphone for up to 32 zones.
- 4 PRESET buttons that can be configured by the user.
- CLR button to delete a selection.
- AUX button to enable input signal from auxiliar line.
- Alarm input (normally open contact through Euroblock) configurable by the user.
- RJ45 input for communication and PoE supply.
- Auxiliary input for power 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: 3-pin XLR Male.





DM 115 not included.





# 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 GPI0 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 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, 16xGPI, 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 optocoupled GPI galvanically insulated.
- 2 RS232 ports.
- 2 RS485 ports
- 6 outputs with IR control.
- 2 Ethernet (10/100) ports.



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.

GPO features:

- As an output, the device receives a prefixed GPO 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 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. Further more, thanks to the fact that OSC is an open protocol, LM Serial allows the integration with third-party control platforms.

### **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.



Front view.



Rear view.



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 used 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.



# 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.





## **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 up to ten receivers WDR 24.
- GFSK digital modulation/demodulation.
- 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.





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 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 ¼" Jack inputs.
- Working mode: stereo or mono.



Rear view.

INPUT



# 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 GPI 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.



Rear 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.



# 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.



Front view.



Rear view

### 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.

# 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 screen controller that can be fixed on wall. Fully compatible with WorkCAD3, the control layout created with this software can be loaded 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.





#### Ethernet (OSC) 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.

### Features

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



#### Ethernet (OSC) PoE programmable controller

BLC 1 is a wall-mounted controller that can be directly connected to any BlueLine receiver through CAT5 cable, and is able to control the volume and select the input source applied to this specific receiver. It has an auxiliary front input (stereo Mini-Jack) 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.

### 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.







## **DIGILINE MX**

8x8 Digital matrix mixer with DSP

Digiline MX is an 8x8 digital matrix mixer with DSP and I/O control capabilities. Its 8 inputs are Line/mic ducked. The mic inputs are phantom power selectable and also can be configured with different input sensitivities. All outputs can have a different mix configuration from the 8 inputs. The internal 8 channels DSP allow to adjust every output with different adjustments of mixer, crossover, equalizer, compressor/limiter & gain, and all of them can be remotely set up through Ethernet, RS232 and/ or GPIO. The GPIO interface with 12 contacts available is fully configurable with the included command editor which allows to execute actions in any parameter on the device (GPI) and also to activate/deactivate a GPO triggered by a parameter. This functionality is also available in the Ethernet and RS323 interfaces, in fact, any action in an interface can trigger another action in another interface: an RS232 command can trigger a GPO, a GPI can trigger an Ethernet command, etc, This functionality makes the DIGILINE MX a tool not only for audio DSP applications but also for small control systems.

DIGILINE MX is compatible with the wall mount control panels like WGC-1, WNC-1, WSC series and WAC7 and also can be controlled by any OSC compatible control device like WorkCAD3 and third party ones.

#### Features

- 8x8 Digital mixer matrix with DSP and control capabilities.
- Ducked Mic/line inputs.
- Selectable Phantom power in the mic inputs.
- Selectable input sensitivity per channel.
- DSP in the outputs includes: Crossover, equalizer, compressor/limiter and gain.
- 12 GPIO.
- RS232 and Ethernet control.
- Built-in command editor to program actions macros.
- Compatible with a wide range of wall-mount panels.
- OSC commands compatible.



Front view.



Rear view.



# NETWORKED 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**

#### **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**

#### 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 Rear view.





WPE 44 Rear view.



WPE 24 Software.



WPE 44 Software.



### **WPE 48 N**

**Features** 

dently.

- 4-input, 8-output Ethernet DSP.
- Control via Ethernet and RS232.
- 110dB dynamic range.
- 48KHz / 24bit sampling.
- 108dB S/N ratio.

- Balanced inputs and outputs.

4-input, 8-output Ethernet DSP

WPE 48 N 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.

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 independence







App Screenshots of the WPE 48N configuration software.



Front view.





# POWER AMPLIFIERS

## HOME AMP

Wall-mounted and 2 x 20 W amplifier

HomeAMP is an ultra-compact amplifier of 2 x 20 W with volume control.

It features two audio inputs, so users (e.g. customers of an hotel) can choose between background music coming from the rear input and their personal audio player, which can be directly connected to the front panel input of the device (with priority).

The elegant shape of HomeAMP allows its integration in any environment. With its modern lines and LED colours, it is another element of the decoration. Its user-friendly encoder makes possible the overall control of the installation (push it to switch on/off the device and turn it to adjust volume).



WORK

#### **Features**

- Wall-mounted 2 x 20 W amplifier with volume control.

- Two audio inputs: one on rear panel for background music, one on front panel (Mini-Jack).
- Elegant shape for an easy integration in installations.
- User-friendly central encoder.
- Visual information: LED intensity changes to indicate current audio level.



Installation example.

## PBA60H

2x20W amplifier controlled via RS232

PBA60H is an ultra-compact 2x20W amplifier ( $@4\Omega$ ) 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 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  $\Omega$  or 1x40W (@ 8  $\Omega$  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.



Front view.

#### **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.





# PA 200

2x100W@4 Ω/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. 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 half-rack,1U.
- 2x100W @4 Ω/70-100V
- Switching power supply.
- 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 Ω/70-100V mixer amplifier with Bluetooth control

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-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 to control the PA 200 MX from a smartphone or tablet device (Android/iOS) with the downloadable app. On the rear side it incorporates a RJ45 connector, which supports RS485 commands from an external device to control several functions of the amplifier.

#### Features

- Compact amplifier half-rack, 1U .
- 2x100W @ 4 Ω or 200W 8 Ω / 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.



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, but also 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 many types of applications.

#### 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).



Front view.



Rear view.

### 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.





# PA 4120L & PA 4150L

4x120W (70/100V) & 4x150W (70/100V) amplifiers

PA 4120 L and PA 4150 L are installation amplifiers with 4 channels of 120W and 150W each, class D. Both 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).

Both devices integrate several protections such as short-circuit, thermal, ultrasonic and RF. Their inputs and outputs are connected by Euroblock terminals, and they have 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. (PA 4120L)
- Output power (70 / 100V): 4x150W. (PA 4150L)
- Volume control in each channel.
- 1 HU rack 19 " dimensions.
- Switching power supply, Class D amplifier.



Front view.



Rear view.

## PA 4500L

#### 4x500W (70/100V) amplifier

PA 4500L amplifier offers 4 channels of 500W each in high impedance (70/100V) without output transformers. The output voltage 70 or 100V is selectable by a switch on the rear panel.

PA 4500L integrates several protections such as short-circuit, thermal, ultrasonic and RF. Its inputs and outputs are connected by Euroblock connectors.

### Features

- 4x500W (70/100V) amplifier without output transformers.
- 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.





# PA 40/2 USB & PA 90/2 USB

Public address amplifiers

These compact mixers/amplifiers are designed for small size public address applications like warehouse and car parks. They feature a solid state USB/SD MP3 player in order to connect storage devices with up to 32 GB memory. The audio player includes the common functions (play/rewind/forward, volume, etc).

PA 40/2 USB and PA 90/2 USB feature two microphone inputs (Mic 1 with priority) and an Aux input to connect a CD player or tuner. Thanks to the preamp output with all the signal mixed together, these amplifiers allow to connect equalizers or additional power amplifiers in the installation.

They are suitable for low impedance speakers and high impedance Line outputs. It is also possible to connect batteries to the DC 12 V input and use them to build a car PA system.

#### Features

- Compact mixers/amplifiers designed for small size public address applications.
   M. output acutart (DA 40/2 LICP) or 20 W
- 15 W output power (PA 40/2 USB) or 30 W output power (PA 90/2 USB).
- Two Mic inputs with gain control.
- Aux input (Line) with gain control.
- Master channel control (only for PA 90/2 USB).
- Solid state USB/SD MP3 player.
- Possibility to connect storage devices with up to 32 GB.
- Plays any MP3 and WMA file.
- PRE OUT output.
- Direct AMP input.
- Suitable for low impedance speakers and high impedance Line outputs.



Front views.



Rear view.



## PA 60/2 & PA 60 USB/R

Mixing amplifiers with audio player/recorder

PA 60/2 and PA 60 USB/R are 60 W power amplifiers that feature a 5 input mixer. PA 60 USB/R features a solid state audio player/recorder (USB/SD) compatible with standard formats (MP3, WMA). It is possible to record voice messages. The device supports USB and SD storage devices with up to 32 GB memory.

Regarding audio control, both devices include all the functions required for full control of the 5 signal inputs: independent volume control, master control of level, bass and treble tone. The mixer also has a pre-out to send mixed signal to an external amplified system or to connect external devices like equalizers and processors.

Both models are suitable for low impedance speakers (8  $\Omega$ ) and high impedance loads (25/70/100 V). In addition, for maximum safety in the whole installation, they include a Chime On/Off switch and a Telephone/Emergency connection for emergency announcements. DC 24 V terminals are also available for emergency backup.

#### Features

- Installed sound power amplifiers and 5 input mixer.
- Solid state audio player/recorder (USB/SD) with standard formats (MP3, WMA) (Only PA 60 USB/R).
- Supports storage devices of up to 32 GB. (Only PA 60 USB/R).
- 2 Aux inputs + 3 Mic inputs.
- Mic 1 input with priority.
- Mixer with independent control of volume.
- Master control and treble/bass tone.
- Pre-out function.
- Suitable for low impedance speakers (8  $\Omega$ ) and high impedance loads (25/70/100 V).
- Chime On/Off switch.
- Telephone/Emergency connection for paging emergency announcements.
- Terminals for emergency supply (DC 24 V).



# PA 120/2 & PA 120 USB/R

Mixing amplifiers with audio player/recorder

These 120 W power amplifiers include two different outputs: Music/Speech and Priority only.

PA 120 USB/R includes a solid state audio player/recorder (USB/SD) compatible with standard formats (MP3, WMA). It is possible to record voice messages and then play them later. The device supports USB and SD storage devices with up to 32 GB memory.

Both models feature 6 inputs: 4 double Mic inputs with 5 pin DIN connectors (2 combo, 2 XLR3), 1 Aux and 1 CD. It is possible to play background music in a specific area and send priority messages to the overall installation.

The mixers include all the functions required for full control of the signal inputs: independent volume control, master control of level, bass and treble tone.

#### Features

- Installed sound power amplifier and 6 input mixer.
- Solid state audio player/recorder (USB/SD) with standard formats (MP3, WMA). (Only PA 120 USB/R).
- Supports storage devices with up to 32 GB. (Only PA 120 USB/R).
- 2 double Mic inputs with Combo and 5 pin DIN connectors.
- 2 double Mic inputs with XLR3 and 5 pin DIN connectors.
- 1 Aux input and 1 CD input.
- Cascading multi-level priority on mic inputs.
- Mixer with independent control of volume. Master control and treble/bass tone.
- Pre-out function. Monitor output (8  $\Omega,$  1 W). Chime On/Off switch.
- Suitable with low impedance speakers (8  $\Omega$ ) and high voltage line (100 V).
- Telephone/Emergency connection for paging announcements.
- Terminals for emergency supply (DC 24 V).





## PA 190 USB/R & PA 240 USB/R

Mixing amplifier with audio player/recorder

The PA 190 USB/R and PA 240 USB/R are powerful installed sound power amplifiers which deliver 180 W and 240 W output power. They can supply up to 4 different zones thanks to their front panel zone select buttons.

They both include a solid state audio player/recorder (USB/SD) compatible with standard formats (MP3, WMA). It is possible to record speechs and save them in a USB storage device. They support USB and SD storage devices with up to 32 GB memory.

Regarding audio control, their 5 input mixer (4 selectable Mic/ Line, 1 Aux/CD/Tuner/Tape) includes all the functions required for full control: independent volume control, master control of level, bass and treble tone. The mixer also has a pre-out to send mixed signal to an external amplified system or to connect external devices like equalizers and processors.

Designed for installed sound system installations, they are suitable for low impedance speakers (4, 8 and 16  $\Omega$ ) and high voltage lines (25/70/100 V). A monitor output is suitable for connecting up to 1W of load such as a control room monitor speaker. Additionally, they feature a Chime On/Off switch and a Telephone/Emergency connection for announcements.

#### Features

- Installed sound power amplifiers + 5 input mixer with 4 selectable zones.
- Solid state audio player/recorder (USB/SD) with standard formats (MP3, WMA).
- Support storage devices with up to 32 GB.
- 4 Mic inputs + 4 Line inputs.
- 1 Aux/CD/Tuner/Tape input.
- Monitor output.
- Mixer with independent control of volume, Master control and treble/bass tone.
- Pre-out function.
- Suitable with low impedance speakers (4, 8 and 16  $\Omega$ ) and high impedance (25/70/100 V).
- Chime On/Off switch.
- Telephone/Emergency connection for announcements.
- 2U rack enclosure.


## PA 4100

#### Installed sound amplifier

Suitable for almost any installation, this versatile installed sound amplifier features 4 independent outputs of 250 W with their own tone controls and independent volume. It supports low and high impedance loads.

PA 4100 features 4 audio inputs with volume control that can be independently set up as Line or Mic inputs with +48 V phantom power, phase inversion and High-pass filter functions (selectable by dip-switch blocks). The first Mic input has a selectable priority circuit. It also features two Aux inputs, remotely triggerable chime, siren and telephone paging.

### Features

- Installed sound amplifier with 4 independent zones (250 W each).
- 4 configurable input sources (Line/Mic+48 V, Phantom supply, phase inversion, high-pass filter).
- 2 Aux inputs (Line), chime, siren and tel. paging.
- 3U rack enclosure.



## PA 5506

Multizone amplifier and mixer

PA 5506 is a distributed power amplifier designed for low impedance (8  $\Omega$ ) and constant voltage (70 / 100 V) lines. It features five independent outputs, with a maximum of 50 W per channel.

Each output includes an input source selector (8 sources available), including microphones (one of them with priority), high level and auxiliary inputs. Input channels have gain and low/ high tones. It is possible to assign the priority Mic input to any outputs.

It is possible to select input sources and distribute them in any of the five outputs. This is a convenient and efficient solution for hotels and auditoriums, in order to control the output of each zone using the individual input source selector. Additionally, a 24 V input is available for installations with emergency power supply.

### Features

- Multizone amplifier and mixer.
- 5 independent zones (50 W each one).
- 8 input sources (2 MIC + 4 AUX + 2 HL).
- 1 microphone input with priority.
- Gain and tone control per channel.
- Independent source input selector.
- Protection against short-circuits, overload and temperature.



Front view.



## **ZENITH Series**

Power amplifiers with switching mode power supply

The Zenith series is composed of five lightweight amplifiers with elevated output power. The switching mode power supply technology reduces the weight of the amplifiers and the LLC resonant circuit prevents from undesirable frequencies coming from the main supply. The ultra-fast response time technology with high slew-rate protects the amplifier from electrical load fluctuations.

Zenith power amplifiers are suitable for almost any installation, thanks to the sensitivity input selector and the possibility to work with balanced and unbalanced signals. Additionally, they feature three operating modes available (Stereo, Bridge or Parallel) and a low-frequency enhancer.

### **Features**

- Lightweight power amplifiers with switching mode power supply.
- LLC resonant circuit prevents from undesirable frequencies coming from the main supply.
- Operating modes selector: Stereo, Bridge and Parallel.
- Input sensitivity selector: 26 dB/32 dB.
- Low frequency enhancer.
- Excellent results with a 2  $\Omega$  load.
- Protection from short circuits, excessive temperature, DC and continuous high frequency signals.



Front view.



Rear views.



## **Technnical Data**

Technical data	ZENITH 600	ZENITH 1300	ZENITH 1800	ZENITH 2400	ZENITH 6000
8 $\Omega$ stereo output power:	200 W x 2.	310 W x 2.	450 W x 2.	600 W x 2.	1200 W x 2.
4 Ω stereo output power:	300 W x 2.	500 W x 2.	750 W x 2.	1000 W x 2.	2000 W x 2.
$2 \ \Omega$ stereo output power:	450 W x 2.	600 W x 2.	1000 W x 2.	1250 W x 2.	3000 W x 2.
8 Ω bridge output power:	600 W.	1000 W.	1500 W.	2000 W.	4100 W.
4 $\Omega$ bridge output power:	850 W.	1200 W.	2000 W.	2600 W.	6200 W.
8 $\Omega$ parallel output power:	200 W.	310 W.	450 W.	600 W.	1200 W.
Frequency response:	20 Hz – 20 kHz.	20 Hz – 20 kHz.	20 Hz – 20 kHz.	20 Hz – 20 kHz.	20 Hz – 20 kHz.
THD+N:	<0.05%.	<0.05%.	<0.05%.	<0.05%.	<0.1%.
S/N ratio:	>100 dB.	>100 dB.	>100 dB.	>100 dB.	>80 dB.
Damping factor:	>150.	>200.	>250.	>200.	>200.
Dynamic range:	>80 dB.	>80 dB.	>80 dB.	>80 dB.	>70 dB.
Voltage gain:	26 dB/32 dB.	26 dB/32 dB.	26 dB/32 dB.	26 dB/32 dB.	26 dB/32 dB/38 dB.
Input impedance:	20 kΩ balanced, 10 kΩ unbalanced.	20 kΩ balanced, 10 kΩ unbalanced.	20 kΩ balanced, 10 kΩ unbalanced.	20 kΩ balanced, 10 kΩ unbalanced.	20 kΩ balanced, 10 kΩ unbalanced.
Input sensitivity:	2.2 V / 1.05 V 9.06 dBu / 2.64 dBu.	2.48 V / 1.244 V 10.10 dBu / 10.65 dBu.	3.1 V / 1.55 V 12.04 dBu / 6.02 dBu.	3.46 V / 1.73 V 13 dBu / 6.97 dBu.	0.775 V / 1.0 V / 32 dB.
Rear panel connectors:	2 x ¼" Jack -XLR3 (Input) 2 x XLN4 (outpu- t)/1xIEC(supply).	2 x ¼" Jack -XLR3 (Input) 2 x XLN4 (outpu- t)/1xIEC(supply).	2 x ¼" Jack -XLR3 (Input) 2 x XLN4, 4 x Binding Post (output)/1xIEC(supply).	2 x ¼" Jack -XLR3 (Input) 2 x XLN4, 4 x Binding Post (output)/1xIEC(supply).	2 x ¼" Jack -XLR3 (Input) 2 x XLN4, 4 x Binding Post (output)/1xIEC(supply).
Protections:	Overheat, VHF, Short circuit, AC lower, DC Protection, CLIP/Limit.				
Main supply:	AC 180-260 V, 60/50 Hz.	AC 180-260 V, 60/50 Hz.	AC 180-260 V, 60/50 Hz.	AC 180-260 V, 60/50 Hz.	AC 220 V, 50 Hz.
Dimensions (WxHxD):	483 x 88 x 305 mm.	483 x 88 x 360 mm.	483 x 88 x 360 mm.	483 x 88 x 360 mm.	483 x 88 x 505 mm.
Weight:	6 kg.	8.75 kg.	11 kg.	11.1 kg.	14.3 kg.



## WD 421

### Audio signal distributor

This audio distributor is very useful to supply several audio devices with only one audio source. Its 2 operating modes allow to work with mono or stereo signals. Output level can be controlled independently.

WD 421 adapts itself to work with different impedances, ensuring that output signal level is at least equal to input signal level. It avoids any undesired attenuation and features a LED vumeter to visualize the input signal level.

### Features

- Audio signal distributor with 2 inputs and 8 outputs.
- Two operating modes:
- 1 stereo input with 4 stereo outputs.
- 1 mono input with 8 mono outputs.
- Adjusting Output level.Balanced LINK output for interconnecting several units.
- Individual gain control of each channel.



#### Front view.



Rear view.



# **MMX 65**

#### Audio mixer

MMX 65 is an audio mixer composed of two independent output zones with their own equalizer.

This versatile device features 6 input channels with source selector and priority for the first Mic channel. Additional functions for voice channel (delay, equalizer, sensitivity adjustment) provide an optimum control of audio mix.

Each input channel can be assigned to zone 1, 2 (or both). This is particularly useful for installations like stores or museums.

### Features

- 6 input channel mixer with source selector.
- 6 Line inputs, 1 Phono, 3 Mic.
- Mic 1 input with attenuator, talkover, sensitivity adjustment, delay, EQ and gain control.
- Mute function available for all the inputs.
- Two output zones with gain, balance, EQ and mono/stereo selector.
- Headphone output with volume control.



Rear view.

## **MMX 62**

#### Audio mixer

MMX 62 is a mixer that features 6 mono Mic/Line channels with phantom power and 3 stereo channels, with 3 tone controls and stereo Master output. It is adequate for several types of installations, like conference rooms, bars, shops, hotels, etc.

MMX 62 has two types of balanced outputs: one for stereo configuration and other for mono configuration, both with XLR connectors. It also has an unbalanced (REC OUT) recording stereo output with RCA connectors. A priority channel is available on the first output. Users can set the priority input curve using a potentiometer located on the rear panel of the mixer.

Additionally, MMX 62 features a DC 24 V input power supply to protect the mixer from electric power failure.

### Features

- 6 input channel mixer with source selector.
- 6 Line inputs, 1 Phono, 3 Mic.
- 1 Mic input with attenuator, talkover, sensitivity adjustment, delay, EQ and gain control.
- Mute function available for all the inputs.
- Two output zones with gain, balance, EQ and mono/stereo selector.
- Headphone output with volume control.



Rear view.

WORK

# **MMX 60**

#### Audio mixer

Thanks to its 6 input channels and 3 tone controls in the Master section, MMX 60 provides the perfect control of audio parameters, being a great solution for installers.

Users can select and control different zones thanks to the Mic/ Line selector, separated Master outputs and talkover function (for channel 1, or both 1 and 2).

### Features

- 6 input mixer.
- Mic/Line selector for each channel.
- Gain control and balance for each channel.
- 3 tone controls for Master section.
- Talkover function with level control.
- Separate Left/Right Master outputs.
- Mono/Stereo function.
- Phantom supply (12 V) for microphones.
- LED vumeter with peak indicator.
- Suitable for large size installations.



#### Front view.



Rear view.

## MX 61

#### Audio mixer

MX 61 is a 6 channel mixer that allows to connect Mic and Line signals on each input channel.

It has been designed to be easily integrated in any installation, thanks to its 1U rack enclosure.

For an optimal control over audio, MX 61 features 2 tone controls on Master section, individual gain control on each channel and Master volume control. The rear panel inlcudes a voltage selector and a switch to select output level (Hi/Low).

## Features

- 6 Mic/Line input mixer.
- Balanced Mic/Line inputs for each channel.
- 2 tone controls for Master section.
- Individual gain control and Master.
- Voltage selector.
- Switch for output level selection (Hi/Low).
- Suitable for almost any commercial audio installation.



#### Front view.



Rear view.



# MULTIPLAYER 2 MKII

#### Multimedia Player

Designed to fit into a 1 HU 19" rack unit, this useful audio multiplayer has several input sources and is suitable for the new storage devices.

Beside the traditional CD players, this device can play MP3, from a CD-R to a CD-RW and any external device through USB or SD cards. Its versatility allows to increase the number of audio sources which can be played with this device.

MULTIPLAYER 2 MKII makes possible to easily manage the audio. It adds different operating modes (Random, Play all, Repeat, Prog. Mute, etc.) and an intuitive search system divided into folders and tracks. ID3 TAG visualization for MP3 offers all the information about the played tracks.

### Features

- Audio player with CD / CD-R / CD-RW / MP3.
- USB/SD interface.
- 40 seconds anti-shock for the CD player.
- Easy searching of files and folders.
- Operating modes: Random/Play all and Repeat
- Prog and Mute functions.
- ID3 TAG mode visualization.
- Dimensions: 483 x 44 x 214 mm.



## **MULTIPLAYER 3R**

Multimedia player / recorder

Multiplayer 3R is an MP3/WMA player with built-in recorder. It has a USB/SD input to connect external storage devices and record in MP3 format the audio content from the REC In Line input. This function is specially useful to record live events (conferences, meetings, presentations, etc.).

Multiplayer 3R differentiates itself from other players/recorders because it interprets RS232 commands. It is possible to remotely control the audio player with third party controllers that use this protocol.

Thanks to the operating modes available and the intuitive search mode, Multiplayer 3R is definitely a convenient and easy-to-use audio player. It is also possible to backup recorded files between memories (e.g. from USB to SD).

### Features

- Solid state player / recorder
- Playing format: MP3, WMA.
- Recording through the Line in is storage to a USB or SD Card directly.
- RS232 port for remote control.
- Infra-red remote control included.
- Replication function on USB and SD Card.
- Recording format: MP3.
- Capacity from 128MB to 16GB (USB or SDHC Card).
- Adjustable recording quality, provide choice between 128 and 192 Kbps with 44.1 KHz.
- Operating modes: Random/Play all, Repeat.
- Prog & Mute modes.





# **MULTIPLAYER 4**

Multimedia Player

MULTIPLAYER 4 is a versatile audio player featuring CD player (CD-R/-RW and MP3), USB/SD input (MP3 and WMA) and AM/FM tuner. The Anti-shock system protects the audio player from vibrations.

It interprets RS232 commands. It is possible to control remotely the audio player with third party controllers that use this interface. An infra-red remote control is also available.

MULTIPLAYER 4 is a convenient audio player. It provides several operating modes (Random, Play All, Repeat, Program, Mute) and an intuitive search mode (using the front display). It is possible to connect external storage devices (USB pendrives, SD cards) with up to 16 GB memory.

### Features

- Three devices in one: CD player, USB / SD and AM/FM tuner.
- Anti-shock memory system.
- Accepts 12 cm CD, CD-R, CD-RW and MP3.
- Plays MP3 and WMA.
- AM/FM tuner.
- RS232 port for third party remote control.
- Infra-red remote control included.
- Compatible with USB up to 16 GB, SD cards and SDHC.
- Operating Modes: Random/Play all, Repeat.
- Program and Mute functions.



## **MULTIPLAYER 5**

Multimedia player / mixer & AM/FM tuner

MULTIPLAYER 5 integrates in 1 HU rack 19" a CD player of several formats, AM/FM tuner and MIC/LINE mixer. This huge versatility provides a device suitable for fixed or mobile installations when it is not required to have all the elements separately to obtain the desired result. It also includes a built-in RS232 connection for the reception of control commands.

As an audio player, it allows to reproduce all audio CD types (CD,CD-R,CD-RW, CD with MP3 and WMA files). It has anti-shock function and built-in controls to navigate through files and folders, among other features.

In addition to the audio player, MULTIPLAYER 5 adds a built-in tuner, 2 MIC inputs on the rear panel with independent control of volume and an additional MIC input on the front panel (priority function). Moreover, it includes 2 independent LINE inputs and an additional AUX input.

### Features

- CD audio player (CD, CD-R, CDRW, MP3) with Anti-shock function.
- USB / SD Interface (up to 16GB).
- RANDOM and REPEAT functions.
- Program up to 10 tracks.
- AM / FM tuner with 10 memories.
- 3 MIC inputs (2 rear + 1 front).
- Priority function for front microphone.
- 2 LINE inputs (rear) + 1 AUX input.
- RS 232 interface for receiving commands.
- AM and FM antennas included.
- Power supply: 115/230V AC 50/60 Hz.
- Dimensions: 483 x 44 x 220 mm.
- Weight: 2.4 Kg.



## **MULTIPLAYER 12 WEB**

Multimedia Player and DAB / DAB+, AM / FM tuner

This is a full-featured audio player that offers the possibility to play different audio:

- $\cdot$  Thousands of streaming radio stations, thanks to the WiFi and LAN connection.
- $\cdot$  Conventional FM radio stations (BNC antenna connection).
- · DAB/DAB+ radio station with digital quality.
- · Audio files from Web servers, PC, etc.
- $\cdot$  Audio files from external storage devices, using the USB port.

Its LCD screen provides all the information about network configuration, playing modes, as well as information regarding the station or the played files. To select and navigate through the menu, users have at their disposal an encoder with a confirmation button, which makes this device much simpler and easier to handle. Multiplayer 12 WEB adds one RS232 port in order to control the unit via external commands, as well as an auxiliary input (LINE level) and headphones outputs. On the rear panel, the multiplayer incorporates emergency power supply terminals (DC 12V / 2A).

Users can search streaming radio stations using the many parameters available (country, genre, etc.). It is possible to save stations as favorite for a quick access. Conventional FM radio stations are also available and users can save up to 10 stations (direct access from the remote control). These functions are also available in the DAB/DAB+ digital stations. Thanks to the media operating mode (full integration in LAN or WiFi network), it is possible to connect Multiplayer 12 Web to a Web server or a PC and get access to their audio files. It is an opportunity to centralize all the audio files in a same place. In case there is no Internet connection, users can connect an external storage device to the USB port available on the front panel. In addition to clock/calendar, this device incorporates two versatile alarms fully configurable (schedule, frequency, mode, volume, etc.) and timer with several presets (up to one hour).

## Features

- FM tuner, radio streaming, DAB/DAB+ and media player.
- 2,4 GHz WiFi or LAN network connection.
- Media files player linked to the same network
- Frontal USB port to play external files.
- 8 equalization levels + one selected by the user.
- Encoder navigation.
- Several parameters for searching for radio stations (country, genre, historical, etc.).
- 10 setting FM conventional radio station memories
- Unbalanced RCA output.
- RS232 interface and AUX input.
- Headphones output.
- Emergency power supply terminals (DC 12V / 2A).



Front view.



Rear view.



## WPA 6600

#### Headphones amplifier

WPA 6600 is a headphones amplifier which allows to connect up to 6 headphones channels to the same audio source amplifier, useful in press conferences and radio stations.

Each channel can be individually controlled thanks to its gain control, local and general level control, mono/stereo switch and right/left channel switch.

A direct, balanced Aux input is also available on each channel.

### Features

- 6 channel stereo headphones amplifier.
- Each channel has independent control of: Individual gain control per channel.
  Local and general level control.

  - · Mono / stereo switch.
  - · Right and left channel switch.
  - · LED vumeter signal indicator.
- Duplicated connectors in frontal and rear panel.



Rear view.





# MD 82AX MKII

Digital automatic microphone mixer

MD 82 AX MKII is a digital automatic microphone 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 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 to link another unit and, thereby, act as a 16-channel mixer.

The Bluetooth connectivity to 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 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 in all the channels, in order that all microphones have the same level. On the other hand, different values could be established for each channel, so that those channels have 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.



MD 82 AX MKII configuation and mixing control through IOS/Android application.





Rear view.





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