INSTALLER'S GUIDE · 2015

We make your projects come true

New Smart Paging Station

Las Arenas Balneary & Resort

Mercure Hotel

SL Benfica Stadium Museum

Nou Gourmet Restaurant

WORK PRO

INSTALLER'S GUIDE · 2015

We make your projects come true

ABOUT EQUIPSON

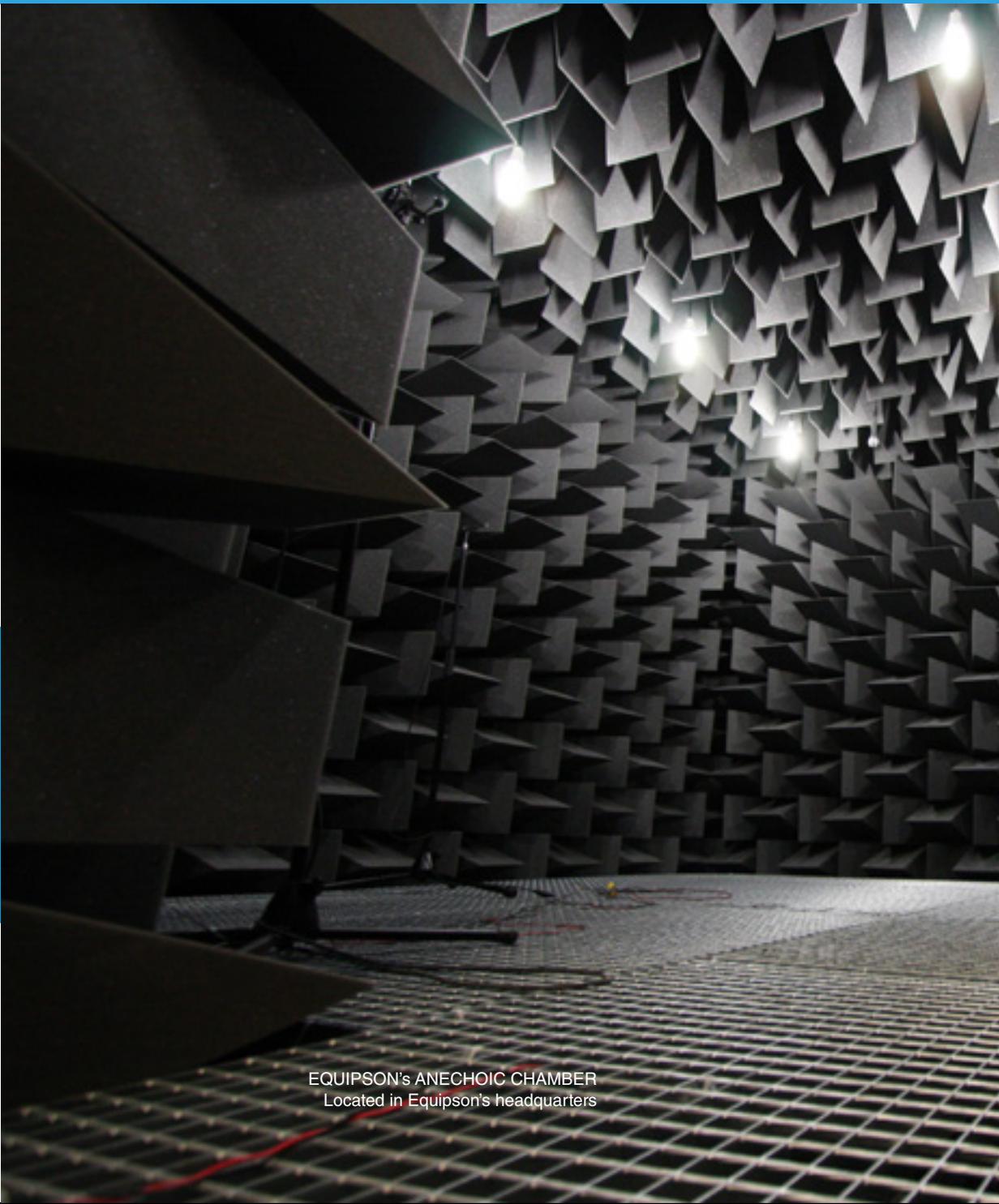Created in 1995, WORK is a company from Spain dedicated to the professional audio and lighting sector. Through its leading brand WORK PRO ®, it offers an exclusive range of products designed to meet real user needs.

Today Equipson s.a is one of the most important company of the sector in Spain. Its dynamism and experience allows it to grow stronger over the years, being internationally recognized.

Constant development of R&D department and WORK® brand

Over the last years, we have been investing on the R&D department. Day after day the company has developed this department, which has its own plant dedicated to WORK® product development

This huge investment has contributed to the strong development of the brand: its success on professional trade shows is the illustration of the company's know-how.

Quality process has also known deep changes. The company not only designs new products: it constantly upgrades existing ones, taking into account user commentaries. We take care of the overall design of products, from internal components to finishing. A complete revision of products is done when a new production starts.

As a recognition of this strategy of research and technological development, this company has received support from the Ministry of Industry, Energy and Tourism. The European Union recognizes company's contribution to the sector.

EQUIPSON's ANECHOIC CHAMBER
Located in Equipson's headquarters

Own R + D Department

PRODUCT HISTORIES
Check them out: www.makeitworkblog.com

NEW WEBSITE

Visit our online catalogue and all the useful resources at:
www.workproaudio.com

Bellas Artes Theatre, Madrid

Sofitel Hotel, Portugal

Benfica Stadium, Portugal

Royalton White Sand Montego Bay Resort, Jamaica

Royalton Punta Cana Resort, República Dominicana

Dolce&Gabbana Headquarters, Milan

La Mamounia Hotel, Marrakech

BLU Hotel, Albacete

Circo Wonderland

Canali Showroom, Milan

Ibiza Airport Lounge

Calypso Fitness Club, Poland

Valencia CF new store, Valencia

Nou Gourmet Restaurant, Valencia

Marina d'Or Resort, Castellón

Tommy Mels Restaurants

Mango outlet store

Volvo Ocean Race Musem, Alicante

MSC Cruiser, Italy

Old Wild West Restaurants, Italy

Los Olivos house in the country, Madrid

BlueLine
Digital

Blueline Digital is a distributed audio system based on streaming using Ethernet. It is possible to transmit several channels (+ control) via Ethernet as data and with very low latency. It can be a simple transmission from one point to another or to multiple points, but also a full multichannel system with control and alarm management.

Audio distribution over IP networks

Audio distribution is based on transmission over IP networks. It is a cost-effective concept, fast to install and easy to design. Thanks to the Plug&Play system, integrators do not need any technical knowledge about networks.

The central system is IP, so it is possible to monitor the network to know at anytime if a device of the system is not working properly. If something happens, a warning message is automatically sent to users in order to check the system.

A versatile, distributed audio system

BlueLine Digital is also compatible with other public address systems. It can be used to transport several channels through the network. It is possible to connect power amplifiers with high output power which are designed for 100 V line installations. This is an opportunity to manage low and high voltage installations in a same audio system.

Thanks to the channel modules, integrators can adapt Blueline Digital to the needs of the installations. This is very interesting because it gives integrators the opportunity to take advantage of an advanced system, without generating overcosts.

Possibility to manage the unit with mobile devices.

Thanks to the OSC protocol, it is possible to remotely control BlueLine Digital System using mobile devices such as smartphones and tablets. This innovative solution provides better mobility to users, who can control the system from any part of the installation.

SPS 8
Smart Paging Station

Paging Micro & Audio Server, everything just in one device.

From the beginning, BlueLine Digital support paging commands which makes possible this function and therefore makes the system compatible with programmable external controllers.
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 with which the device turns it into digital and sends it to the network, thus any BLR receiver can tune in this channel.

To sum up, the new Smart Paging Station SP S8 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 can be streaming input audio and, simultaneously, send messages recorded by the micro connected to the front XLR input.

Program the Paging zones just with one click.

SPS 8 is a unique device since this is the first paging micro and audio server available on the market. Thanks to its function as an audio server, it is not necessary anymore 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 much 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 the requirement of 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 provide users with a tidy console because the microphone signal, analogue audio information, power supply and signal data travel via just one Ethernet cable.

Features

- Paging microphone for 8 zones.
- 4 PRESET buttons that can be configurable by the user
- CLR button to delete a selection
- AUX button to enable input signal from auxiliar line.
- Alarm input (NA contact through euroblock) configurable by the user.
- RJ45 input for communication and PoE supply.
- Auxiliar input for supply through euroblock connector.
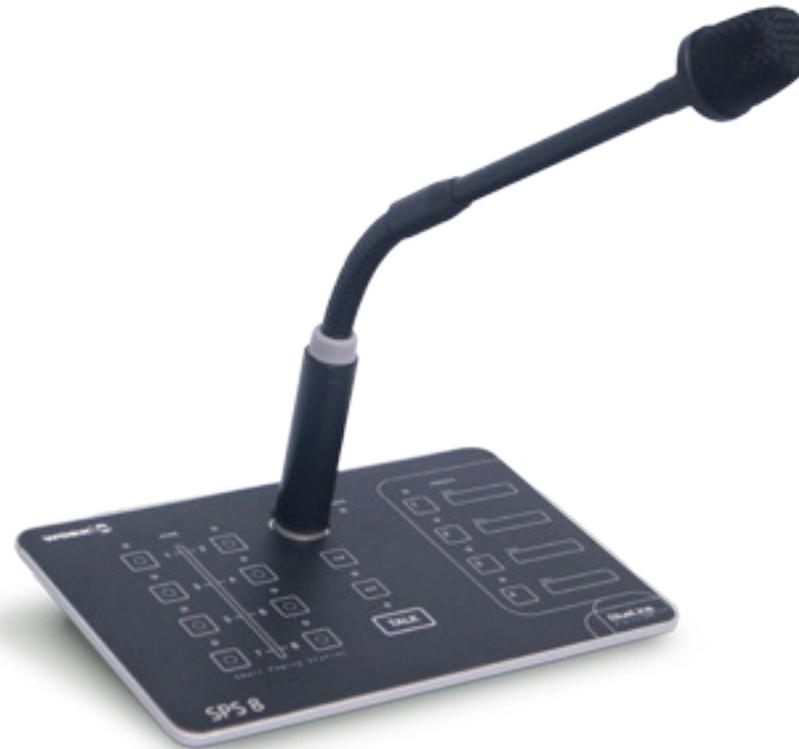
BlueLine
D i g i t a l

A modular system capable of evolve a long with the installation.

BLM
- Modular central unit of Blueline Digital.
- Composed of:
  - Main supply unit (BL PSU).
  - Two channel Ethernet streamer (BLS 2M) with 8 GPIO and contacts to communicate with the alarm system.
- 3U fully modular rack chassis.
- Possibility to add BLS modules (each module adds two audio channels in the network) and other modules (e.g. solid-state players, communication ports, etc.) to adapt Blueline Digital to the needs of the installation.

BL PSU
- Main supply unit of BLM system with Aux input for redundant supply.
- It supplies an Ethernet input and all the modules connected to the unit.

BLMP 1
- MP3 player (USB/SD) with built-in FM radio.
- Modular design, for its integration in BLM rack unit.
- Two analog inputs.

BLS 2M
- Two channel Ethernet streamer.
- 8 GPIO available to transmit its state over the network. It transmits/receives audio and GPIO contact states.
- One input is available to enter an alarm condition.

BLS 2
- Two channel Ethernet streamer.
- Contrary to BLS-2M, it does not features GPIO nor alarm contacts

BLS 2 lite

- Independent unit which adds two audio channels in the network.
- Affordable solution, ideal for small installations.
- Can be used as a simple unit to transport audio from one point to another or to several receivers.
- Can coexist with BLM unit, being another channel of the same network, that receivers can select (up to 16 channels in the network at the same time).
- PoE and/or external power supply unit.

BLR 2

- IP audio receiver.
- It selects and decodes one of the 16 available channels to provide an analog balanced output.
- Additional functions to connect BL-C1 (local control with 3 additional, local audio sources - Mic, Line and MP3 audio player).
- PoE and/or external power supply unit.

BLR 2 lite

- Simplified version of the IP audio receiver BLR-2.
- Connection with BL-C1 remote not included.
- RS485 commands remote control available, to control the selected channel, signal level, etc.
- Functions can be controlled vía Ethernet (from PC, smartphone or tablet).
- PoE and/or external power supply unit.

BLR 2A

- Stereo IP receiver with built-in amplifier of:
- 2x5W (connected by PoE).
- 2x15W (external power supply unit).
- RS485 commands remote control available, to control the selected channel, signal level, etc.
- Functions can be controlled vía Ethernet (from PC, smartphone or tablet).
- PoE and/or external power supply unit.

WNC 1

- Wall-mount Ethernet controller.
- Compatible with WorkCAD Designer.
- Intuitive control of audio of a determined output.
- Possibility to control output volume.
- Select output source.

BLC 1

- Wall-mount 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.

WGC 1

- Wall-mount controller for any GPI interface, like Digiline and BlueLine Digital Series.
- Composed of buttons that switch on/off contacts.
- Possibility to set up a configuration using Work-CAD Designer (e.g. mute all channels, fade, change audio source configuration for a determined output, etc.) and assign it to one of the buttons of WGC 1.
- Set of stickers to name each button.
- Easy-to-use and economical.

Main supply 24V - 1.7A (OPTIONAL)

Non-rackable outer main supply (BLS 2M, BLS 2 lite, BLR 2, BLR 2A and BLR 2 lite)

BlueLine Digital is also compatible with other public address systems. It can be used to transport several channels through the network. It is possible to connect power amplifiers with high output power which are designed for 100 V line installations. This is an opportunity to manage low and high voltage installations in a same audio system.

Thanks to the channel modules, integrators can adapt Blueline Digital to the needs of the installations. This is very interesting because it gives integrators the opportunity to take advantage of an advanced system, without generating overcosts.

Webserver each device for advanced configuration
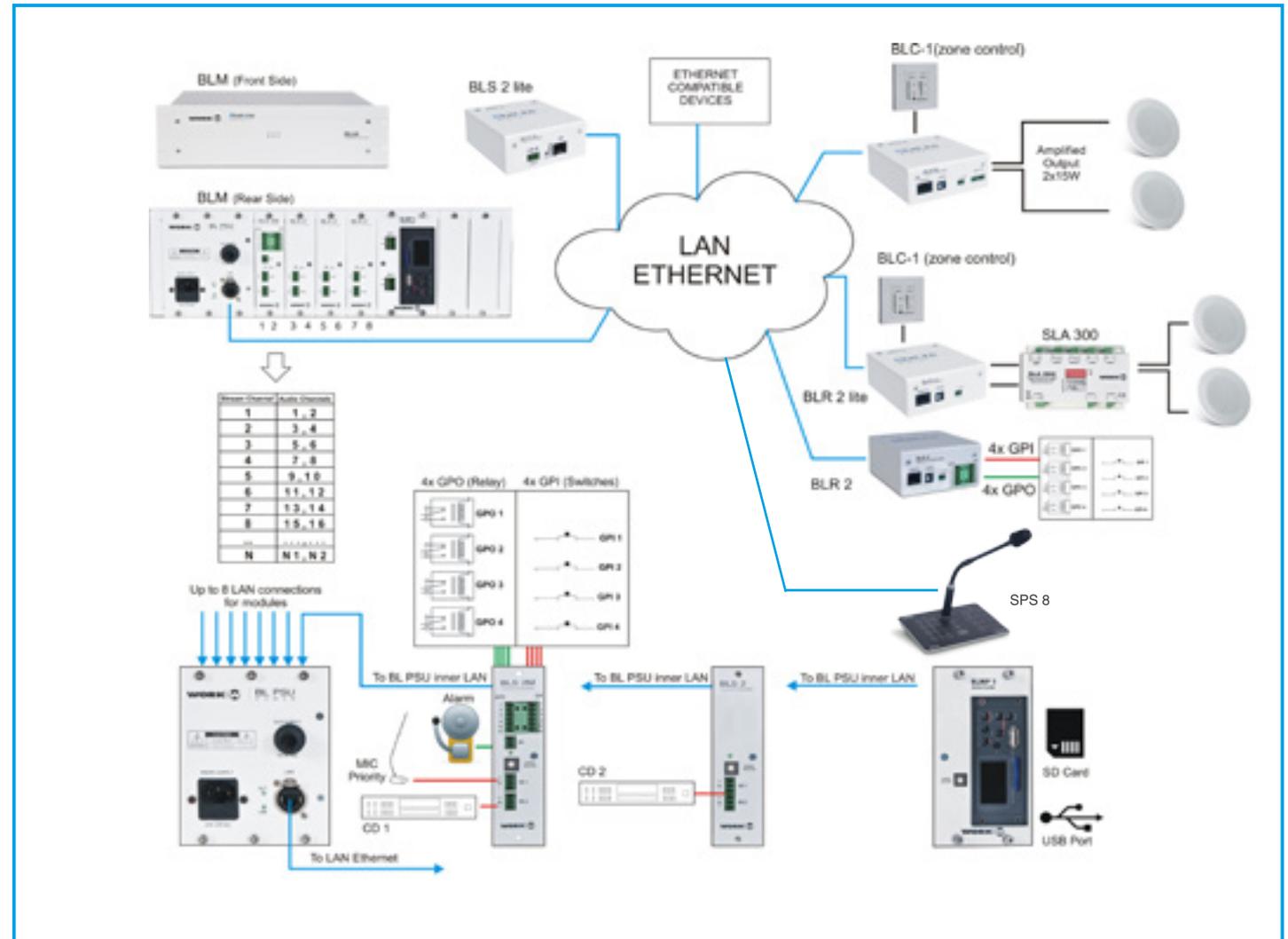
NOU GOURMET RESTAURANT

Digiline
series

Digiline series is composed of two digital mixers with signal processing, specially designed for small/medium size installations that require a powerful solution for audio processing. Their intuitive use make them very convenient for speeding up installations. The main features for the series are:

- Digital matrix mixer of 8 double inputs and 8 outputs,
- Independent digital processing for each output,
- TCP/IP device control managing all the Digiline units from the same computer,
- 8 x 150 W class D power amplifier with switching mode power supply (only for Digiline 8).

Digiline series brings the power of digital mixing to small multizone installations integrating independent DSP processing for each output. Thanks to the new software WorkCAD Designer, it is possible to control any Digiline units included in an Ethernet network from a unique computer.

Their GPI (General Purpose Input) interface allows to trigger any function (configured through software) from a simple wall-mount switch. Users can configure the independent signal processing of each channel with parameters like Crossover, Equalizer and Dynamics. Digiline MX and Digiline 8 are adequate for fixed installations like business offices, restaurants, small shopping centres, etc.

Features
- Digital matrix mixer of 8 x 8 (each input is composed of 2 inputs: 1 Mic and 1 Line).
- Independent processing of signal for each output.
- Controllable through TCP/IP protocol, in order to control from a unique computer all the units connected to an Ethernet network.
- Third party controllers can be connected to control Digiline by TCP/IP and RS232 (RS232 only available in Digiline MX) thanks to the command reader incorporated by its firmware.
- All MIC inputs are phantom powered.
- Powerful software WorkCAD Designer for Digiline connection through TCP/IP.
- GPIO triggering mode to launch actions, presets, etc from a simple controller.
- Only for Digiline 8: Built-in power amplifier (8 x 150 W RMS).

Digiline 8

Digiline 8 is the most complete unit: in addition to processing features, it includes a powerful amplifier with 8 independent channels of 150 W each.

To maximize S/N ratio in audio signal, it features a double switching mode power supply: one for amplification and another for DSP. It has a small size (2U rack enclosure) and ensures maximum efficiency, thanks to the class D advanced amplifier system.

Digital processor to each output.
Each input is a double one: 1 Line + 1 Mic for Phantom powered microphone. Both inputs are balanced and summed in a same channel, providing 16 inputs possibilities distributed in 8 input channels.

RS 232 port (only for Digiline MX).
Digiline MX features a RS232 port in order to receive ASCII orders from external devices that use this protocol. It is possible to program automatic actions like preset changes, mute for all channel except one, etc.

Optimum control through Ethernet.
Thanks to the advanced TCP/IP control system, these powerful networked units can be remotely controlled from the same computer and at the same time. It is possible to use an Ethernet controller for all the parameters of Digiline units but it also admits ASCII orders by TCP/IP being able to be managed by third party controllers.
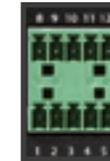

Digital signal processing on each output.
The engine system of Digiline MX and 8 includes a complete independent digital signal processing on each output, featuring Crossover, Equalizer and Dynamics. They are remotely configurable using WorkCAD Designer.

GPIO triggering (easy remote control).
In addition to traditional inputs, 12 GPIO inputs (4 GPIO in the Digiline 8) with TTL level (DC 0-5 V) are available to launch preset from a simple controller. Users can program several actions on the Digiline. For example, it is possible to set up alarm parameters (e.g. select one Micro as warning) and launch this preset with a signal. Thanks to the monitoring system, Digiline detects if contacts are closed or opened (these inputs can be used for output configurations with Digiline MX).

Programmable Mic input.
An additional Mic input detects the acoustic level of the installation. Users can set up actions to be launched depending on acoustic level. For example, it is possible to set up an action which increases volume output when acoustic level is exceeded.

Digiline MX

Digiline MX by itself is exclusively dedicated to processing uses, it means it doesn't include amplifier, such Digiline 8 does. In only 1 HU 19" rack unit, it is a very interesting alternative for those who already have a power amplifier or for others who need more power at the outputs.
The remote control can be operated through ASCII orders by RS 232 or TCP/IP. Thus, it is possible to program automatic actions like preset changes, mute for all channels except one, etc. It also features 12 GPI inputs (against 4 GPI inputs for Digiline 8), providing further configuration possibilities.

Digiline
series

Technical data	Digiline 8	Digiline MX
Inputs:	8 double MIC inputs (with phantom) + LINE balanced and one additional MIC input. All of them have Euroblock connector.	
Outputs:	8 outputs with Euroblock connector.	
Control interface:	TCP/IP and GPIO.	TCP/IP, RS232 and GPIO.
Control connections:	RJ45 (Ethernet TCP/IP) and Euroblock (GPIO).	RJ45 (Ethernet TCP/IP) , DB9 (RS232) and Euroblock (GPIO).
Control software:	WorkCAD Designer (included).	
Control indicators:	Frontal LED for signal presence.	Frontal LEDs for signal presence, input & output clip.
Frontal controls:	Gain control.	------------
GPIO inputs:	4 GPIO (normally opened TTL inputs) for direct control.	12 GPIO (TTL inputs software selectable).
Input sensitivity:	0 dBu	0 dBu (20 dB PAD).
Phantom supply:	24 V MIC inputs.	24 V MIC inputs (selectable).
THD+N:	< 0.1 %.	< 0.1 %.
DSP features		
Matrix mixer:	8 mixers of 8 channels with reverse signal and mute for any channel.	
Crossover:	Butterworth type filters, Linkwitz-Riley and Bessel up to 4° order with up to 7 filters per output.	
Equalizer:	Equalizations with peak type curves, low pass, high pass, notch, low shelving, high shelving and band pass with up to 7 filter per output maximum.	
Dynamic control:	Common Limiter compressor for first 7 channels and an independent one for the last one.	
Output channel volume control:	Selectable by software and frontal potentiometer (36 dB to -109 dB range). 48 bit processing architecture with 76 bits of precision for most audio processing features.	
Presets memory:	10 program memories available.	
DSP Architecture:	32 bit processing with 40 bits of precision.	
Oversampling:	8 x Oversampling with fifth order noise shaping @ 32-48 kHz; 4 x Oversampling @ 88.2 and 96 kHz; 2 x Oversampling @ 176.2 kHz and 192 kHz.	
Digital De-emphasis:	For 32,44.1 and 48 kHz.	
Physical Features		
Power requirement:	1300 W.	50 W.
Main supply:	AC 120 or 230 V (internally selectable).	AC 90-264 V (automatic).
Dimensions (WxHxD):	483 x 88 x 449 mm.	483 x 44 x 229 mm.
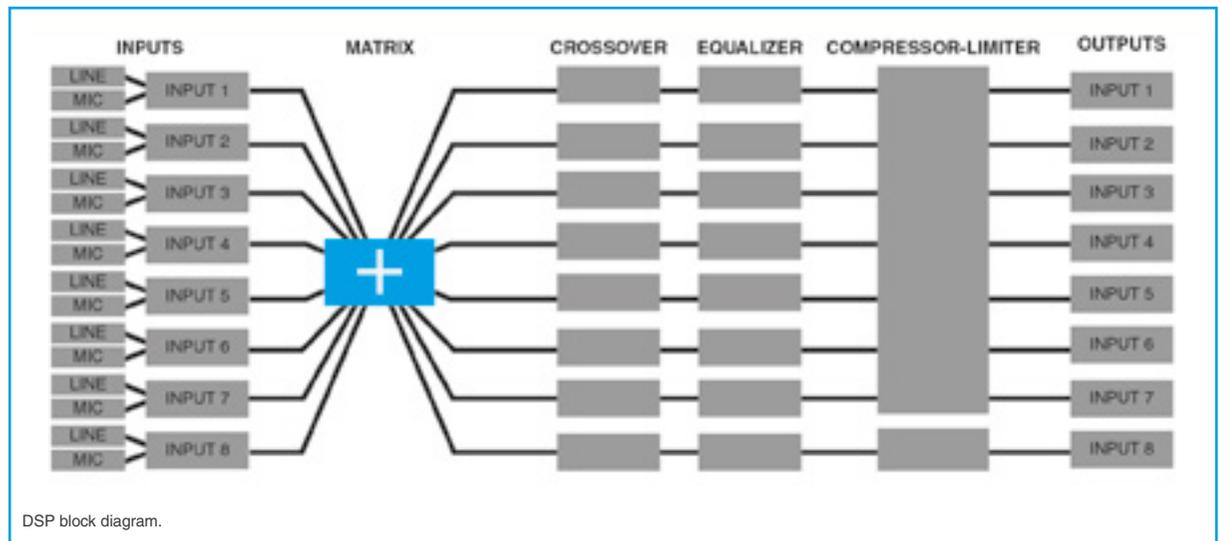
DSP block diagram.

WNC 1
WGC 1

Digiline controllers

WGC 1 and WNC 1 are two controllers designed for the Digiline series. They both provide an intuitive and convenient control of the audio installations but their respective functions are very different from each other.

WNC 1

Features
- Wall-mount Ethernet controller.
- Compatible with WorkCAD Designer.
- Intuitive control of audio of a determined output.
- Possibility to control output volume.
- Select output source.

WGC 1

Features
- Wall-mount controller for any GPI interface, like Digiline series.
- Composed of buttons that switch on/off contacts.
- Possibility to set up a configuration using Work-CAD Designer (e.g. mute all channels, fade, change audio source configuration for a determined output, etc.) and assign it to one of the buttons of WGC 1.
- Set of stickers to name each button.
- Easy-to-use and economical.

D 4T
4 channels 100 V transformer

This 4 channels 100 V transformer is designed for fixed installations. It is composed of four transformers that make possible the use of 4 Ω impedance amplifiers in 100 V Line installations.

D 4T is an interesting solution for installations that use multi-channel, low-impedance power amplifiers. These installations usually have many zones, each one with a few number of speakers. Nevertheless, biggest zones like hallways usually require a larger number of speakers. Thanks to D 4T, it is now possible to transform up to four channels into high-impedance lines, in order to drive their respective speaker system with much lower current than is required for a low-impedance system. As a consequence, a larger number of speakers can be connected to each power amplifier output.

Features
- 4 channels 100V transformer unit.
- Designed to adapt low impedance amplifiers to high voltage 100V lines.
- Compatible with Digiline 8 (same aestethics design) and other amplifiers.
- Each transformer has a load capacity of 200 W.
- Each ouput has an independent input.
- 2U rack enclosure.

DIGITAL MIXERS AND DSP

WPE 26N
Loudspeaker management system

WPE 26N is a loudspeaker management system with two inputs and six outputs. It can be remotely controlled thanks to its powerful
DSP processor and the internal architecture. It is also compatible with third party controllers.

Advanced control of the processor with WorkCAD Designer.

Users can connect WPE 26N to a computer using the USB port on front panel or LAN connector, in order to control the processor with WorkCAD Designer. This powerful software provides many advanced functions for audio processing:
8 band equalizer fully configurable, available for each input (including EQ type, frequency, gain and Q-factor).
13 band equalizer fully configurable, available for each output.
Individual input gain control, available for each output.
Crossover with easy edition of high-pass and low-pass filters (frequency, type, range).
Limiter, with the possibility to edit one of the following parameters (limiter, compressor, lineal and noise gate) with individual control.
Visualization, at any time, of the response curve of the processor.

Using WorkCAD Designer, users also have the possibility to store their different configurations (15 presets available), create networks between digital units and link them.

Possibility to manage the unit with mobile devices.

Thanks to the OSC protocol, it is possible to remotely adjust the processor through WiFi networks, using smartphones and tablets. This innovative solution provides better mobility to users, who can control the processor from any part of the installation.

Processing

- Input and output gain adjustment.
- Input mixer.
- 13 BIQUAD filters for each output, for equalization and crossover.
- 8 BIQUAD filters for each input, for equalization.
- Dynamics control for each output.
- Input delay.

Features

- 2 balanced Line inputs.
- 6 balanced Line outputs.
- S/N ratio: > 100 dB.
- THD+N: < 0.03%.
- RJ45 LAN connection.
- Compatible with third-party controllers for remote control.
- USB and LAN ports for direct access (advanced processing functions available using WorkCAD Designer).
- OSC protocol available to control the processor using mobile devices and WiFi networks.
- 2x16 display for menu access.
- Digital encoder for menu selection.
- LED Clip and Signal available for each input/output.
- Main supply: AC 86-264 V / 40-70 Hz.
- Dimensions (WxHxD): 483 x 44 x 202 mm.
- Weight: 4.7 kg.
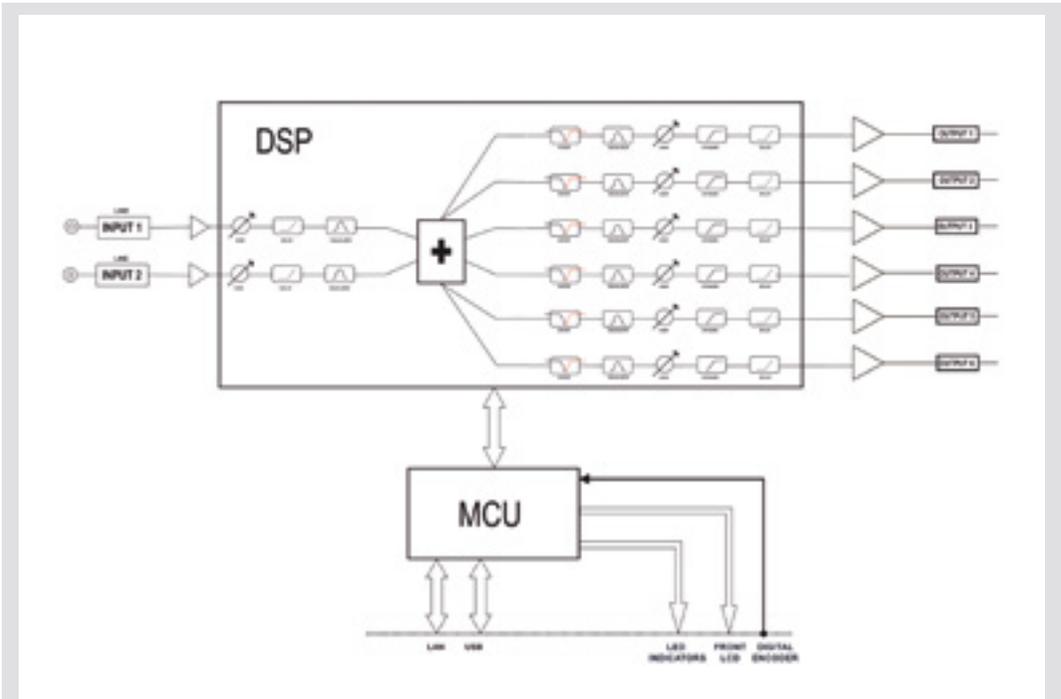
Block diagram.

Edit the parameters of the mixer using WorkCAD Designer, the advanced software of WORK PRO.

WPE 26N

It is possible to control WPE 26N from your mobile devices.

Watch the exclusive video tutorial about "How to program WPE 26N using WorkCAD Designer".

WorkCAD Designer

The software for digital audio control and processing.

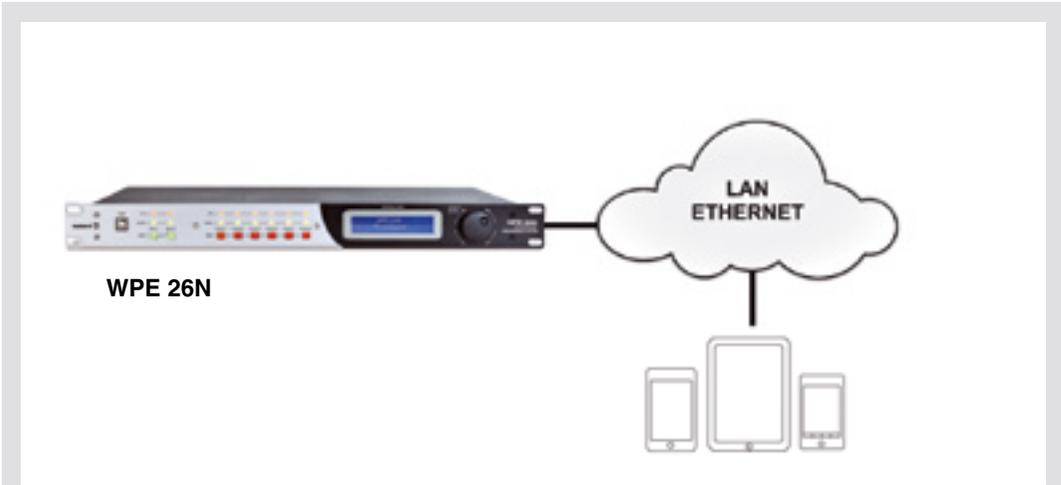*WorkCAD Designer is the sofware of WORK PRO® designed to manage audio through TCP/IP and USB. It is suitable for many devices like the Digiline series and allows the independent control of each unit.*

WorkCAD Designer in action.

The exclusive design of **WorkCAD Designer** provides great benefits for users. Units connected through Ethernet are visualized in a unique computer: users can create a schematic visualization of the installation which is very useful to have a general view and understanding of the installation design. User can group devices in projects (each one with different zones) and name inputs and outputs, taking advantage of an intuitive management and visualization of the overall installation. It is also possible to select a device and edit its parameters (e.g. IP address, name, preset, filters, etc.). Programming operations can be done online and offline. Changes are instantaneously saved when **WorkCAD Designer** is connected. On the other hand, users can use the offline mode to prepare and save a show without affecting current process.

Opening doors for future innovations.

Day after day, engineers of WORK PRO team design new products and improve existing ones. For this reason, **WorkCAD Designer** software makes possible the integration in the same interface of all the devices of the brand, even those which will be launched to the market in the future. And because it is free, anyone can get and use the latest versions.

Firmware updating from the software.

Improvements not only concern the software. Indeed, WorkCAD Designer is capable of finding firmware updates online and upgrade the device firmware. It ensures maximum reliability and compatibility of WORK PRO devices with next systems coming out.

The software for digital processing and audio control.

WorkCAD Designer is the ultimate software designed by WORK PRO to control devices of the brand connected by Ethernet. It creates a virtual version of each unit and generates an interface for the control of its specific parameters. Using it along with Digiline units, users can edit all the following parameters:

- Control of presets (both visualization and execution).
- Control of the input matrix (8x8) with balance of each input. It is possible to edit the input level to be sent at each output.
- Control of output channel volume (36 dB to -109 dB) as well as Master volume.
- Crossover and equalization with seven BIQUAD filters independently configurable.
- Bessel, Linkwitz-Riley and Butterworth types.
- Adjustment of limitation and compression for the outputs.
- Name edition for inputs and outputs.

Equalizer.

Crossover.

Limiter.

Matrix.

LM 5

control interface for audio, lighting and AV

lightmouse series

AV and lighting control within everyone´s reach!

In spite of the many improvements of the industry, lighting control has always been complicated for non specialized users. Conventional lighting consoles have been replaced by lighting software but both options offer an intuitive interface that can be easily managed by end-users. This is precisely why WORK Pro engineers have designed LM 5, to put lighting control but also audio control within everyone´s reach...

LM 5

LM5 allows the professional to integrate every device compatible with DMX into the same installation. With LM5 it is possible to control audio (amplifiers, mixers, self-powered loudspeakers, etc...) and lighting devices (dimmers, lighting effects and LED), from a tablet or smartphones thanks to the multiplatform software OSCillation.

The Swiss knife for audio, AV and lighting control.

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. It is also a fully compatible ArtNet node (Ethernet to DMX interface) and it can be controlled by OSC protocol to create DMX data. LM 5 is without doubt the most intuitive tool to manage audio and lighting control in commercial installations, bars, small clubs and events.

AR 5N

AR 5N is the device from where it is possible to control LM 5 locally. It is a wall mount controller that allows to select scenes previously stored in LM 5 and trigger them, as well as to control the master channel level. It is an IP device that requires the free software WORKCAD Designer developed by WORK Pro to link AR 5N to LM 5.

Control any installation using your smartphone or tablet without previous technical knowledge.

Lightmouse series

The overall installation can be controlled with a smartphone, a tablet or a computer. It is very intuitive so everyone can use it without any technical knowledge. Thanks to the OSC open protocol (www.opensoundcontrol.org), it is suitable for mobile devices (iOS and Android) and PC&MAC computers: LM 5 turns your smartphone/tablet/computer into an intuitive console for audio and lighting purposes. With OSCillation, the free software developed by WORK Pro, it is possible to edit layouts and create your own interface, totally adapted to the features of your installations. That is precisely the strength of LM 5: you can design your own interface to suit your needs!

Let´s imagine you are the owner of a restaurant and you want the waiters to control lighting (typical RGB installation). In this case, you can easily add 3 faders (R, G, B) to the interface, as well as a master and a blackout. You can also control audio volume in a DMX compatible amplifier (like SLA amps by WORK Pro). It is easy to understand that another kind of installation (e.g. a small club, with moving lights and LED fixtures) would need another visual interface.

OSCillation

SOFTWARE

OSCillation app together with LM 5 will allow you to design your AV installation as well as your control console. This means that there is no more physical limits because with this combination you can extend and adapt the control of your installation just editing the layout. This scalability and adaptability, which does not imply an increment of the cost of the installation, is one of the highlights of the LM 5 working along with OSCillation app.

GET IT ON Google play

Use this QR code to download the software

OSCillation
Software

OSCillation is a professional control application for any software or hardware compatible with OSC. Its modular interface allows the creation of costumized interfaces for any kind of device or installation, from a simple volume control to an advanced multizone control, OSCillation fits any project.

OSCillation is avalaible for Android, Mac (OSX 10.10 Yosemite) and Windows, helping us to make easy its integration in all applications.

FEATURES
- Control of multiple OSC servers simultaneously (Multitarget).
- Different control formats: Push buttons / Faders / Toggle buttons / Labels / Rotary / Encoders...
- Safety configuration with password.
- Built-in layouts for WORK PRO devices and customized layouts load.
- Layouts compatible with TouchOSC software by Hexler.net.
- Auto discover function for devices compatible with Zero con.
- Layouts load directly from SD card or hard drive.
- Full screen display for a best control with touch screens (desktop versions).
- Control DJ software, studio production software, Vj software, lighting control…
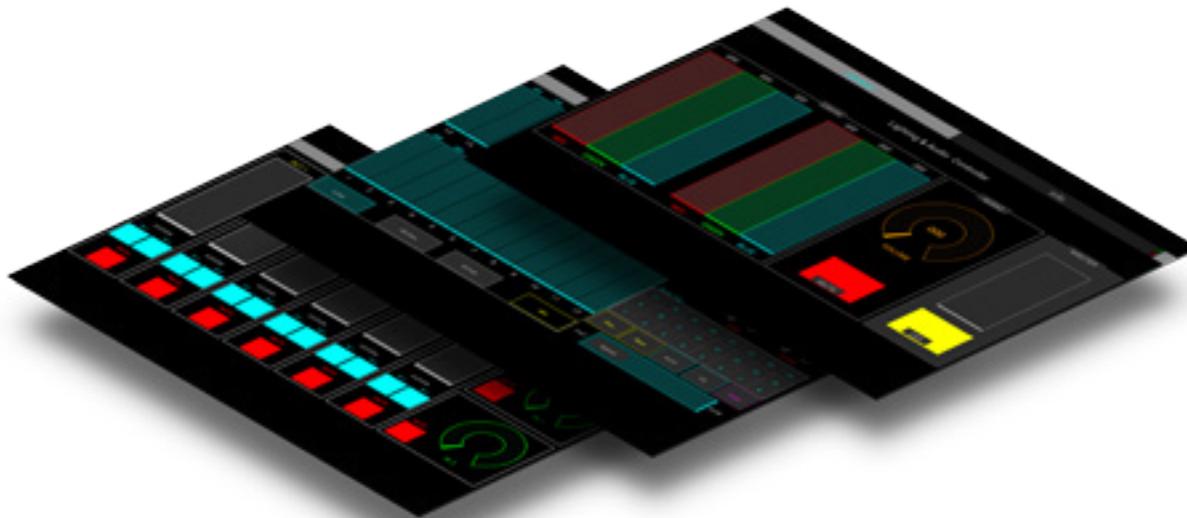
Visit the official OSCillation website and download for free the app with multiple layouts available.

Use this QR code to visit the web.

Do you want to get the most out of OSCillation app? Visit OSCillation official web site (www.workproaudio.com/OSCillation) and find out a wide range of useful and interesting resources such as manuals, videotutorials, layouts ready to be downloaded and installed and, of course, the free OSCillation app itself. This application is available for Android, Windows PC and Mac (OSX 10.10 Yosemite) and is also compatible with third-party layouts like those designed by TouchOSC (app developed by Hexler.net).
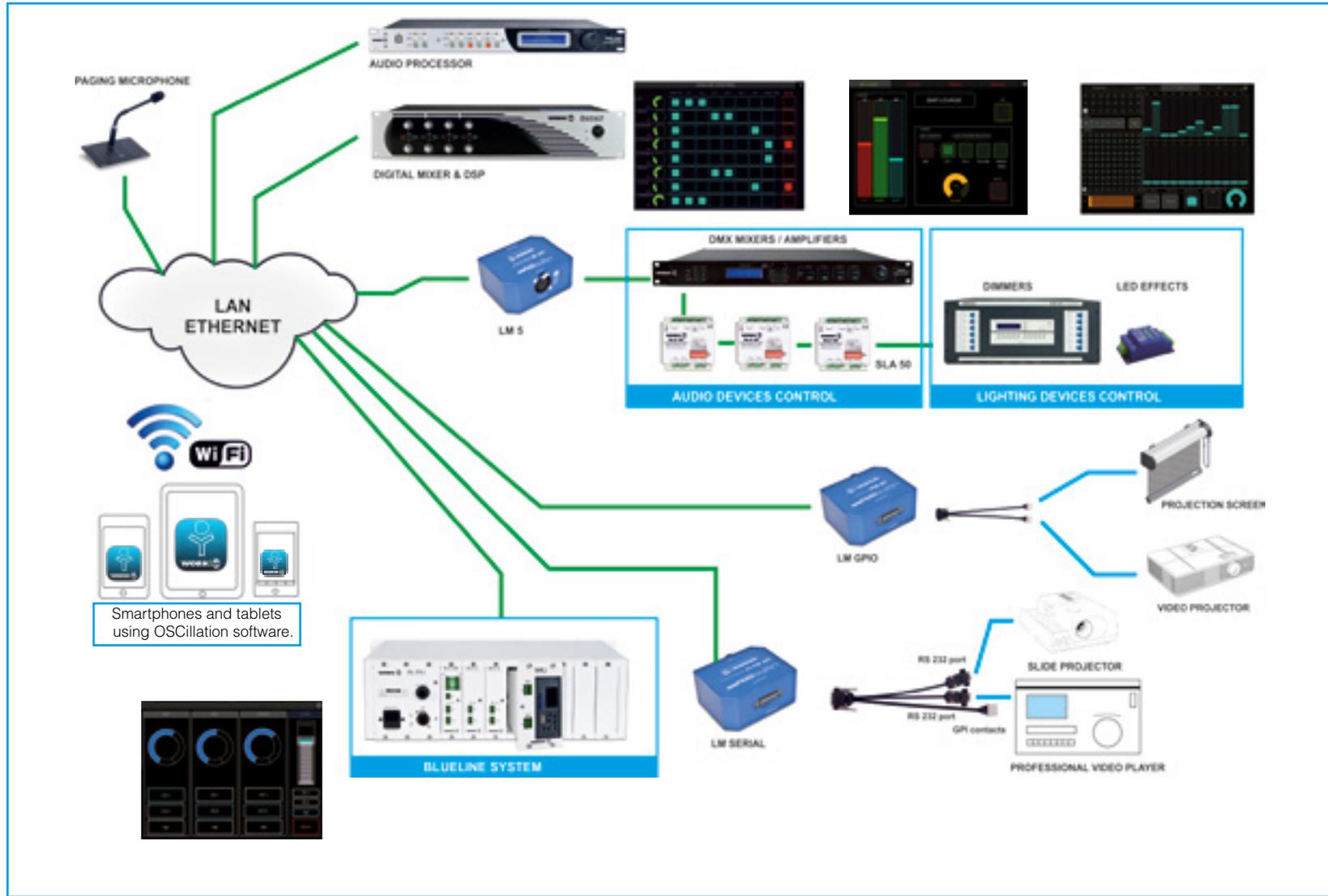

PAGING MICROPHONE

AUDIO PROCESSOR

DIGITAL MIXER & DSP

LAN ETHERNET

LM 5

WiFi

Smartphones and tablets using OSCillation software.

DMX MIXERS / AMPLIFIERS

DIMMERS   LED EFFECTS

SLA 50

AUDIO DEVICES CONTROL

LIGHTING DEVICES CONTROL

PROJECTION SCREEN

LM GPIO

VIDEO PROJECTOR

RS 232 port

RS 232 port

GPI contacts

SLIDE PROJECTOR

LM SERIAL

BLUELINE SYSTEM

PROFESSIONAL VIDEO PLAYER

OSCillation APP is the perfect example of integration because it allows users to control and program a wide range of elements from just one mobile device in a very simple and intuitive way.

OSCillation + LM 5
Every device compatible with DMX signal can be controlled using this combination; from audio devices, controlling the volume or input source, to lighting elements, such as LED or dimmers.

OSCillation + Digiline Series / WPE 26N
These two combinations make really easy the audio processing thanks to the compatibility of these devices with OSC protocol.

OSCillation + BlueLine Digital System
Users can control the multizone and multichannel distributed audio system over IP using OSCillation APP from a mobile device, like a tablet or smartphone.

OSCillation + LM Serial, LM GPIO
These two new interfaces that have joined LM Series allow to control devices compatible with RS 232 (LM Serial) or to program commands executed by closed contact (LM GPIO).

LM GPIO y LM SERIAL

LightMouse Series, one of the most innovative range of products developed by WORK PRO, has been, so far, focused on solutions that were linked to DMX signal through Ethernet. The most innovative function was to turn OSC commands into DMX commands and therefore to be able to integrate the remote control of the devices through Smartphones, tablets and computers thanks to the great number of applications available on the market. Among these, it is possible to find OSCillation, the new free and owner software for Android, Windows PC and Mac (Yosemite 10.10), developed by WORK PRO.

Now, two new devices join the LightMouse series. These two new additions turn the serie into a group of linked system that can work at the same time and, therefore, can work as an integrated control base of a whole installation. These two new products are: LM GPIO and LM Serial.

With them as part of the LightMouse Series, it is now possible to control lights, as well as audio, projectors, curtains, switches and several systems that can be controlled or activated through serial port o GPIO contacts. The system can be compatible with third-party controllers and with OSC applications such as OSCillation.

Thanks to its control base via OSC it is possible to integrate LightMouse Series with BlueLine Digital System and/or Digiline Series thus it is possible to control the audio distribution and the remote control of third-party devices, everything under the same system.

LM GPIO
control interface for audio, lighting and AV

Thanks to LM GPIO users can send GPIO signal (input and output) through an Ethernet network and activate contacts (GPO) as well as receive signal from other devices (GPI). Nevertheless, what makes LM GPIO different of other similar products on the market is its compatibility with OSC, which allows to remotely control other applications compatible with this protocol, like OSCillation app. Also because of its compatibility with OSC, it is really easy to integrate it with other WORK PRO products, such as BlueLine Digital System, Digiline Series and, of course, LM 5. LM GPIO offers a good connectivity with up to 10 inputs-outputs configurable by users. Its main features are the followings:

Interface device between OSC-Ethernet commands and general purpose inputs-outputs (GPIO)

-10 ports. Each one of them is fully configurable by the user as input or output.
-SUBD-15 connector for input/output interface
-Power supply connector via jack and MicroUSB.
-RJ45 connector for Ethernet.
-LAN and ACTIVITY connection LED signal.

GPI features
- As inputs, they work as inner PULL-UP resistor switching on when the contact pass to GND. In this case, the device send two types of messages:
    · A prefixed message for those devices registered into the system.
    · A message block, which can be OSC commands or a group of data, which content and IP address destination are configurable by users.

- It is possible to send several configurable messages to different devices because each message has attached a specific IP destination address. Messages are generated in activation as well as deactivation processes.

GPO features
- As output, the device receives a prefixed GPIO through an OSC command with the information about the selected port and its status (activated or deactivated).

Interconnecting cable (included).

Each interface allows to integrate 10 GPIO.

GPI offers the possibility to trigger any programmed command for any of all third-party previously installed controllers.

Regarding GPO, it is possible to generate commands from mobile devices compatible with OSC protocol. Their activation will close the relay contact.

For instance, users can remotely turn on the device installed in a rack with an iPad, activate or deactivate motors, etc.

LM Serial is an important step forward in the integration of many devices availables on the market which are controlled via serial port (RS 232, RS 485), because with this products it is possible to control third-party devices through Ethernet. In addition, it is possible to control the devices remotely through OSC, with applications compatible with this open protocol, such as OSCillation, by WORK PRO. Also because of its compatibility with OSC, it is really easy to integrate it with other WORK PRO products, such as BlueLine Digital System, Digiline Series and, of course, LM 5.

LM Serial provides a wide range of possibilities with two bi-directional full duplex RS232 serial ports and/or RS485 serial port. Besides, it allows to configure the baud rate for each port independently, which makes possible to connect it with more than one device with different transmission speed.

Thanks to its bi-directional functionality it is possible to send serial commands from any compatible device to a LM Serial interface, which converts them to OSC protocol. In this way, it can control devices such as audio processors, video projectors, slide projectors, etc.

On the other hand, it is possible to generate OSC commands and trigger them from mobile devices. LM Serial will convert them to send commands.

It adds 4 GPIO which make possible to integrate wall-mount controllers with function assigment.

LM SERIAL
control interface for audio, lighting and AV

Interface device between OSC-Ethernet commands and serial port with general purpose inputs-outputs (GPIO)

-SUBD-15 connector for input/output interface
-Power supply input via jack and MicroUSB.
- RJ45 connector for Ethernet.
- LAN and ACTIVITY connection signal.
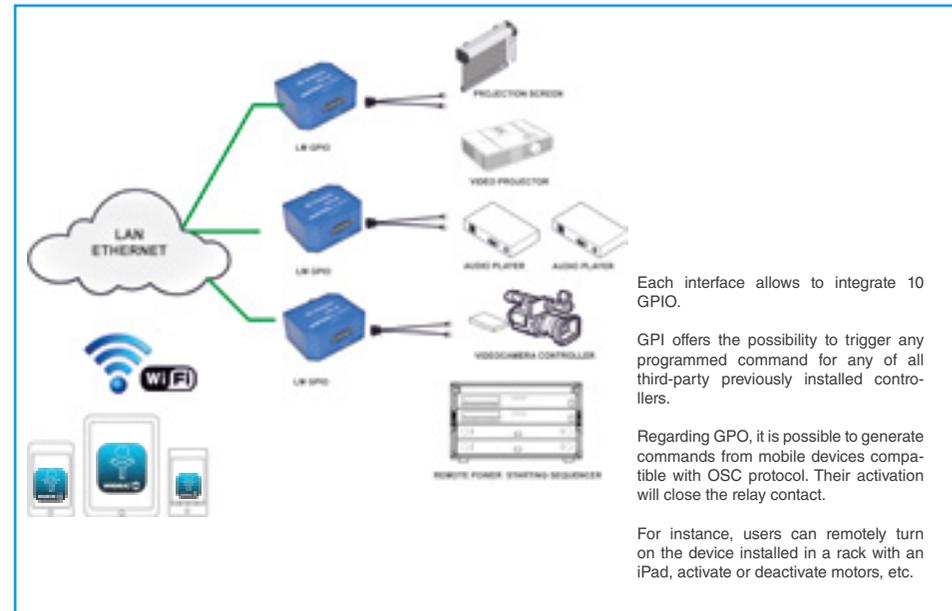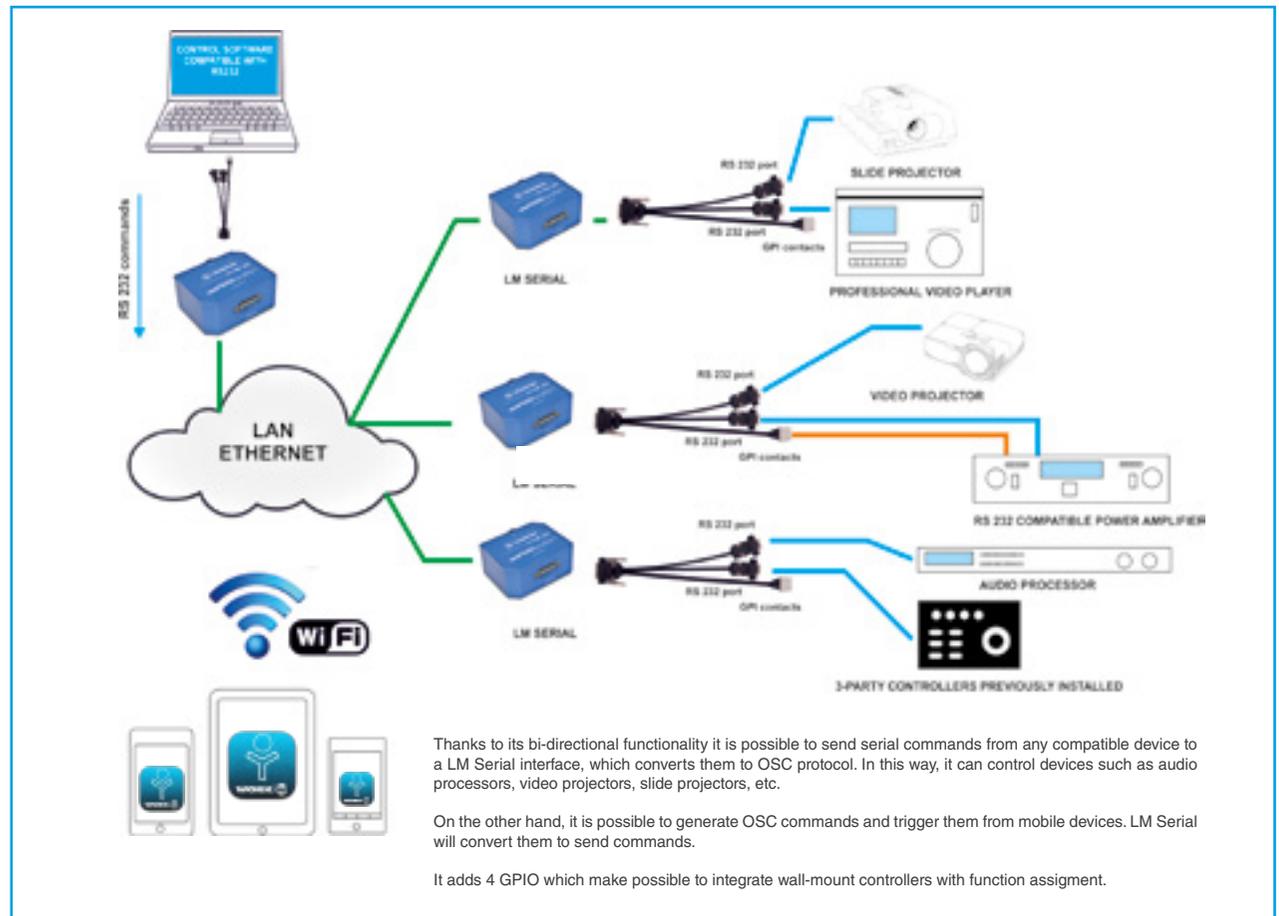- Two bidirectional RS232 series FULL-DUPLEX ports. One of these two ports is shared with a RS485 port. (Configurable baud rate for each port independently).

Transmission:
It is possible to process two types of commands:

The first one sets the output port (one of those available) and the data to transmit (any kind of data frame).

The second command sets the output port and number of memory (this has been previously completed by the user with the data to transmit through the port). This makes possible to send different data frames with one input OSC command in a very simple way.

Reception:
Data received at the serial ports are sent to the system in two different ways:

- Through prefixed OSC commands to the devices registered by the LM Serial.
- Through prefixed OSC commands to an IP selected by the user.

- 4 inputs/outputs (GPIO) configurable by the user.
      -As inputs, they work as inner PULL-UP resistor switching on when the contact pass to GND. In this case, the device send two types of messages:
      -A preset message for those devices registered into the system.
      -A message block, which can be OSC commands or a group of data, which content and IP address destination are configurable by users.

It is possible to send several configurable messages to different devices because each message has attached a specific IP destination address. Messages are generated in activation as well as deactivation processes.

      -As output, the device receives a prefixed GPIO through an OSC command with the information about the selected port and its status (activated or deactivated).
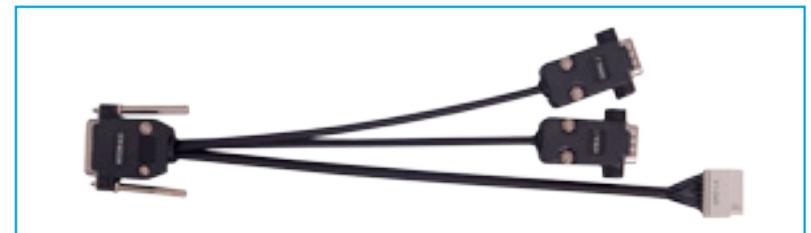
Interconnecting cable (included).

YOOM

Software

YOOM is a flexible lighting control application, easy to use with 3 modes (RGB, 6 CH and 512 CH). YOOM is the easiest way to program scenes and positions from any system with Windows OS. YOOM includes an event generator to create programmed tasks to trigger cue lists and play multimedia files (audio and video) according to a specific calendar. Its compatibility with LightMouse devices (really easy to configurate and use) make easier the lighting system integration in all applications.

Features

- Simple and easy interface.
YOOM's learning curve is fast and short. Everyone who did use a simple DMX console is capable of using YOOM in 5 minutes.

- Creation and edition of cues and cue lists with stand and fade time.
When using YOOM along with LM 5, cues and cue lists can be created and saved (100 cues, 24 cue lists) with their stand and fade time.

- Trigger in stand-alone mode.
When starting YOOM, the system can trigger a cue list independently, without the user's intervention.

- Support for 512 channels.
YOOM manages a DMX universe, which means that it is capable to manage up to 512 DMX channels via 512 faders in a very simple interface.

- Compatible with all the LightMouse devices.
YOOM has been created to complete the LightMouse series. LightMouse is also compatible with the standard technologies available on the market (openDMX, Artnet, etc.) but YOOM is a tool designed to offer an additional function to those devices, providing them with an easy and powerful tool. In addition, with YOOM it is possible to update the firmware version of all LightMouse devices interfaces (except LM 2 MK II).
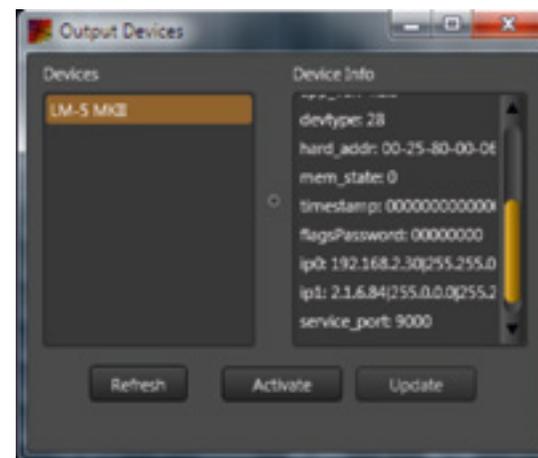
- Control of any device compatible with DMX, including: LEDs, robotic equipment and traditional dimmer channels.
Thanks to its 512 faders of DMX channel, it is possible to control any light. When used in RGB mode it is very simple to find the desired color thanks to the RGB Picker.

LightMouse connection data(IP, name, subnet) and firmware update function.

- 3 different interfaces to use depending on the requirements.

YOOM is in fact 3 different consoles designed to fit in different kind of applications. The interface changes according to the selected mode in order to provide a more specific working mode:
- Full mode: with 512 DMX faders. Simple, direct and powerful at the same time.
- RGB Architectural mode: designed for 1 RGB zone where exist different presets, cues and/or cue lists to trigger at the right time with emulated buttons.
- 6 channels Architectural mode: basically it is the same interface as in the RGB mode but with 6 channels. This product emulates with a software our old hardware AR-6 controller with 6 channels.

< 512 DMX channels controller.
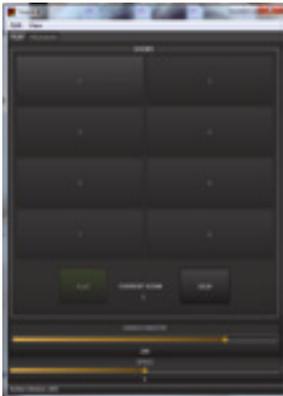
< 6 DMX channels controller.

< RGB mixer.

- Play audio and video files with geometry and position adjustments, really useful to use with LED screens.

This player together with the events creator is the secret tool of YOOM, that mutiplies the utility of this software tool. This consist of a media player that can trigger any video or audio on the PC or to trigger cue lists previously stored in the LM 5. When playing video, it is possible to configure the size and the position on the playback window. This feature is really useful in instalations when it is necessary to store the size and the position of the video played with LED screens.

- Trigger synchronization of lighting events, audio and video.

The other secret tool of YOOM is the events editor which makes possible to configurate the media files (video,audio), cues and DMX cue lists launching time, using the system timer that allows to trigger one or several events on specific dates, days of the week, hours of the day, etc. For example, it is possible to trigger a video for a LED screen, a DMX cue list and one audio file at the same time.
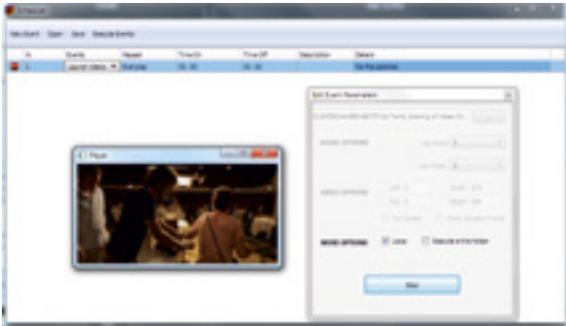
Timer setup.

Trigger events.
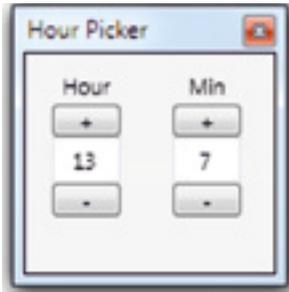
Use this QR code to download YOOM software from our website

DCA 1
Mixing amplifier with digital audio matrix

DCA 1 is a versatile mixing amplifier with digital audio matrix (8in-2out). It can be remotely controlled from a third party controller (RS 232/485 via ASCII or DMX).

It features two amplified output zones (120 W RMS per channel) and eight mono inputs. Thanks to its microprocessor, it is possible to set up a digital matrix-mixer and control each zone independently or be used as a 2 zone amplifier with remote control input and volume.

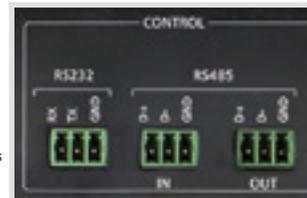Thanks to the RS 485 port, it is possible to use 4 DMX channels to set up the output gain and select the audio source of each output. This all-in-one solution is especially adapted to installations like restaurants or small shops, taking into account that it can be easily integrated itself into an existing network managed by a third-party controller.

Features

- Mixing amplifier with digital audio matrix (8 in / 2 out).
- 2 independent zones (120 W RMS per zone).
- 8 mono inputs, one of them with selectable mic priority.
- 4 DMX channels to set up the output gain and select the audio source of each output.

- Full integration in existing networks managed by a third-party controller (RS 232/485 via ASCII or DMX).
- Additional output available for monitor (Line).
- Large LCD display and controls available on front panel.
- Password protection to avoid unwanted handling.

Restaurant.

Background sound installation example for a restaurant. Two separated zones (restaurant & bar area) amplified with 120W each. Several audio sources and two controllers: DMX conventional controller or RS323/485 third party controller.

Reception interface to control commands with RS 232 and RS 485 protocols.
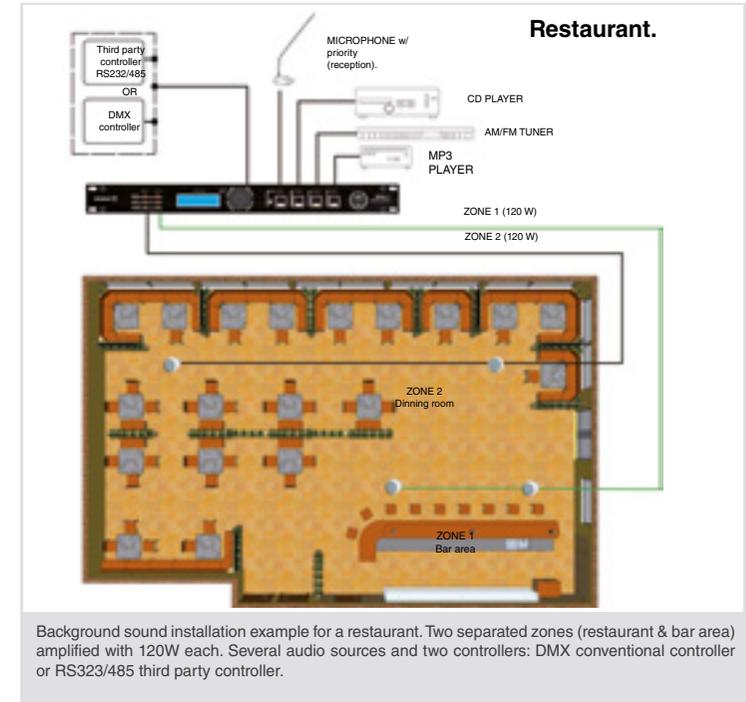
Technical data	DCA 1
Number of input channels:	1 Mic/Line (stereo) + 3 stereo Line.
Number of output channels:	2 (monitor and powered).
Line inputs sensitivity:	775 mV / 0 dBu.
Mic input sensitivity:	7.7 mV / -40 dBu.
Input impedance:	20 kΩ.
Frequency response:	20 Hz - 20 kHz.
S/N ratio:	> 96 dB.
THD+N:	<0.01%.
Protections:	Overheat, short circuit, DC protection, CLIP.
Output power:	2 x 120 W RMS (4 Ω).
Operation modes:	Stereo, Parallel, Zone.
Connectivity:	RS232/RS485-DMX.
DMX channels:	4.
Display:	Blue backlight 2x16 alphanumeric LCD.
Rear panel connectors:	4 x RCA double (line inputs), 1x XLR3(mic input), 3x Euroblock_3 pin(connectivity), 2 x euroblock_2 pin (powered output), 1x RCA double (monitor output), 1x IEC (Main supply).
Front panel controls:	1x Encoders (Variation,Navigation), 4 x push switch (direct input selection).
Indicators:	LCD display, 4 x green led (direct selection), 6 x led (power amplifier status).
Main supply:	AC 120 or 240 V, 60/50 Hz.
Power consumption:	250 W.
Dimensions (WxHxD):	483 x 44 x 262 mm.
Weight:	2.5 kg.

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 connecting 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.
- 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.

Technical data	PA 40/2 USB	PA 90/2 USB
Output Power (RMS):	15 W.	30 W.
Output Power (Peak):	30 W.	60 W.
Audio inputs:	2 MIC, 1 AUX level.	2 MIC, 1 AUX level.
USB/SD interface:	MP3/WMA formats.	MP3 / WMA formats.
MIC inputs (Impedance/Sensitivity):	250 Ω / 1.1 mV / - 56.95 dBu.	250 Ω / 1.1 mV / -56.95 dBu.
AUX (Impedance/Sensitivity):	47 kΩ / 500 mV / -3.80 dBu.	47 kΩ / 500 mV / -3.80 dBu.
Power IN (Impedance/Sensitivity):	47 kΩ / 1 V / 2.21 dBu.	47 kΩ / 1 V / 2.21 dBu.
Low Impedance Output :	4, 8, 16 Ω.	4 Ω.
High Impedance Line Output:	100 V.	25 / 70 / 100 V.
Pre-out:	600 Ω /1 V.	600 Ω /1 V.
Frequency Response:	80 Hz - 18 kHz +/- 3 dB.	80 Hz - 18 kHz +/- 3 dB.
S/N Ratio:	>75 dB (Line), >65 dB (MIC).	>75 dB (Line), >65 dB (MIC).
THD:	Less than 0.5% at 1 kHz, rated power.	Less than 0.5 % at 1 kHz, rated power.
Priority:	MIC 1.	MIC 1.
Main supply AC Power:	115 / 230 V - 50 / 60 Hz.	115/230 V - 50/60 Hz.
Main supply DC Power:	12 V - 2.5 A.	12 V - 2.5 A.
Consumption:	36 W.	60 W.
Dimensions (WxHxD):	240 x 75 x 190 mm.	280 x 75 x 190 mm.
Weight:	3.2 kg.	4.5 kg.

PA 60/2
PA 120/2

Mixing amplifiers with audio player/recorder

PA 60/2 and PA 120/2 are installed sound amplifiers with built-in mixer. Depending on the model, they feature 5 or 6 signal inputs with their own gain control, Master volume and high/low tone controls.

PA 60/2 is suitable for low impedance speakers (8 Ω) and high impedance loads (25/70/100 V). PA 120/2 differentiates itseft from the other model with its two different outputs: Music/Speech and Priority only.

For maximum safety, they also include a Chime On/Off switch, Tel/Emerconnection for emergency announcements and DC 24 V terminals for emergency backup.
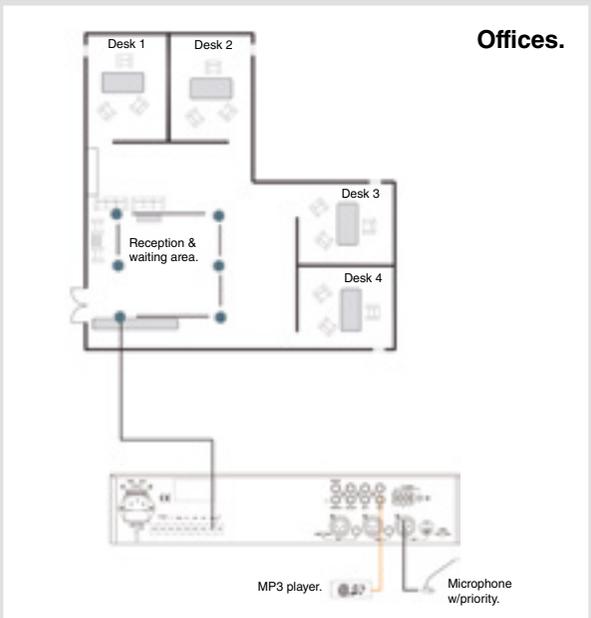
Features

- Installed sound amplifiers with built-in mixer.
- 5 and 6 signal inputs depending on model, with individual gain control, Master volume and high/low tone controls.
- Suitable for low impedance speakers (8 Ω) and 25/70/100 V Line installations.
- Only PA 120/2: Two different outputs (Music speech and Priority only).
- Telephone/Emergency connection for paging announcements.
- Terminals for emergency supply (DC 24 V).
- 2U rack enclosure.

Technical data	PA 60/2	PA 120/2
Output Power (RMS):	60 W.	120 W.
Output Power (Peak):	90 W.	180 W.
Audio inputs:	3 MIC, 1 LINE, 2 AUX level.	4 MIC, 1 CD, 1 AUX level.
MIC inputs (Impedance/Sensitivity):	250 Ω / 1 mV / -57.78 dBu.	250 Ω / 1 mV / -57.78 dBu.
LINE (Impedance/Sensitivity):	47 kΩ / 200 mV / -11.76 dBu.	47 kΩ / 100 mV / -17.78 dBu.
CD (Impedance/Sensitivity):	--	47 kΩ / 500 mV / -3.80 dBu.
AUX (Impedance/Sensitivity):	47 kΩ / 200 mV / -11.76 dBu.	47 kΩ / 200 mV / -11.76 dBu.
Power IN (Impedance/Sensitivity):	47 kΩ / 1 V / 2.21 dBu.	47 kΩ / 1 V / 2.21 dBu.
Low Impedance Output:	8 Ω.	8 Ω (music/Speech output).
High Impedance Line Output:	25 / 70 / 100 V.	100 V (music/Speech output + priority only).
Tape:	4k7 Ω / 350 mV.	4k7 Ω / 350 mV.
Pre-out:	600 Ω / 1 V.	600 Ω / 1V.
Monitor:	--	8 Ω/1 W - 600 Ω / 1 V.
Frequency Response:	50 Hz - 20 kHz +/- 3 dB.	50 Hz - 20 kHz +/- 3 dB.
EQ Control: Bass: Treble:	(+/- 10 dB) / 31 Hz - 180 Hz / Centre freq. 100 Hz. (+/- 10 dB) / 2k5 Hz - 20 kHz / Centre freq. 10 kHz.	(+/- 10 dB) / 31 Hz - 180 Hz / Centre freq. 100 Hz. (+/- 10 dB) / 2k5 Hz - 20 kHz / Centre freq. 10 kHz.
S/N Ratio:	>75 dB (Line), >60dB (MIC).	>80 dB (Line), >60 dB (MIC).
THD:	Less than 1% at 1 kHz, rated power.	Less than 1% at 1 kHz, rated power.
Chime:	2 tone chime ('Ding-dong' pre-announcement chime).	2 tone chime ('Ding-dong' pre-announcement chime).
Priority:	Tel./Emer. - MIC1.	Tel./Emer. - MIC1-MIC2-MIC3-MIC4-AUX/CD-USB/SD.
Main supply AC Power:	115 / 230 V - 50 / 60 Hz.	115 / 230 V - 50 / 60 Hz.
Main supply DC Power:	24 V - 8 A.	24 V - 8 A.
Consumption:	170 W.	260 W.
Dimensions (WxHxD):	483 x 88 x 260 mm.	430 x 88 x 300 mm.
Weight:	8 kg.	10 kg.

PA 60 USB/R
Mixing amplifier with audio player/recorder

Offices.

Desk 1 | Desk 2

Desk 3

Reception & waiting area.

Desk 4

MP3 player.

Microphone w/priority.

Installation of a sound system in the reception and waiting areas of offices, with priority output source for announcements.

PA 60 USB/R is a 60 W power amplifier that features a 5 input mixer and 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, the mixer includes 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.

PA 60 USB/R is suitable for low impedance speakers (8 Ω) and high impedance loads (25/70/100 V). In addition, for maximum safety in the whole installation, it includes 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 amplifier and 5 input mixer.
- Solid state audio player/recorder (USB/SD) with standard formats (MP3, WMA).
- Supports storage devices of up to 32 GB.
- 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 Ω) 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).
- 2U rack enclosure.

Technical data	PA 60 USB/R
Output Power (RMS):	60 W.
Output Power (Peak):	90 W.
Audio inputs:	3 MIC, 1 LINE, 2 AUX level.
USB/SD interface:	MP3 / WMA formats.
MIC inputs (Impedance/Sensitivity):	250 Ω / 1 mV / -57.78 dBu.
LINE (Impedance/Sensitivity):	47 kΩ / 200 mV / -11.76 dBu.
AUX (Impedance/Sensitivity):	47 kΩ / 200 mV / -11.76 dBu.
Power IN (Impedance/Sensitivity):	47 kΩ / 1 V / 2.21 dBu.
Low impedance:	8 Ω.
High impedance Line:	25 / 70 / 100 V.
Tape:	4k7 Ω / 350 mV.
Pre-out:	600 Ω / 1V.
Frequency Response:	50 Hz - 20 kHz +/- 3dB.
EQ Control: Bass: Treble:	(+/- 10 dB)/ 31 Hz - 180 Hz / Centre freq. 80 Hz. (+/- 10 dB)/ 2k5 Hz - 20 kHz / Centre freq. 10 kHz.
S/N Ratio:	>75 dB (Line), >60 dB (MIC).
THD:	Less than 1% at 1kHz, rated power.
Chime:	2 tone chime ('Ding-dong' pre-announcement chime).
Priority:	Tel./Emer. - MIC1.
Main supply AC power:	115 / 230V - 50 / 60 Hz.
Main supply DC power:	24 V - 8 A.
Consumption:	170 W.
Dimensions (WxHxD):	483 x 88 x 260 mm.
Weight:	8 kg.

PA 120 USB/R
Mixing amplifier with audio player/recorder

This 120 W power amplifier differentiates itseft from the other models of the PA USB/R series with its two different outputs: Music/Speech and Priority only.

It 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.

The PA 120 USB/R features 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 mixer includes all the functions required for full control of the signal inputs: independent volume control, master control of level, bass and treble tone. It also has a pre-out to send mixed signal to an external amplified system or to connect external devices like equalizers and processors. A monitor output allows connecting up to 1W of load such as a control room monitor speaker.

PA 120 USB/R is suitable for low impedance speakers (8 Ω) and 100 V Line installations. In addition, for maximum safety in the whole installation, it includes a Chime On/Off switch and a Telephone/Emergency connection for announcements. DC 24 V dc terminals are also available for emergency backup.
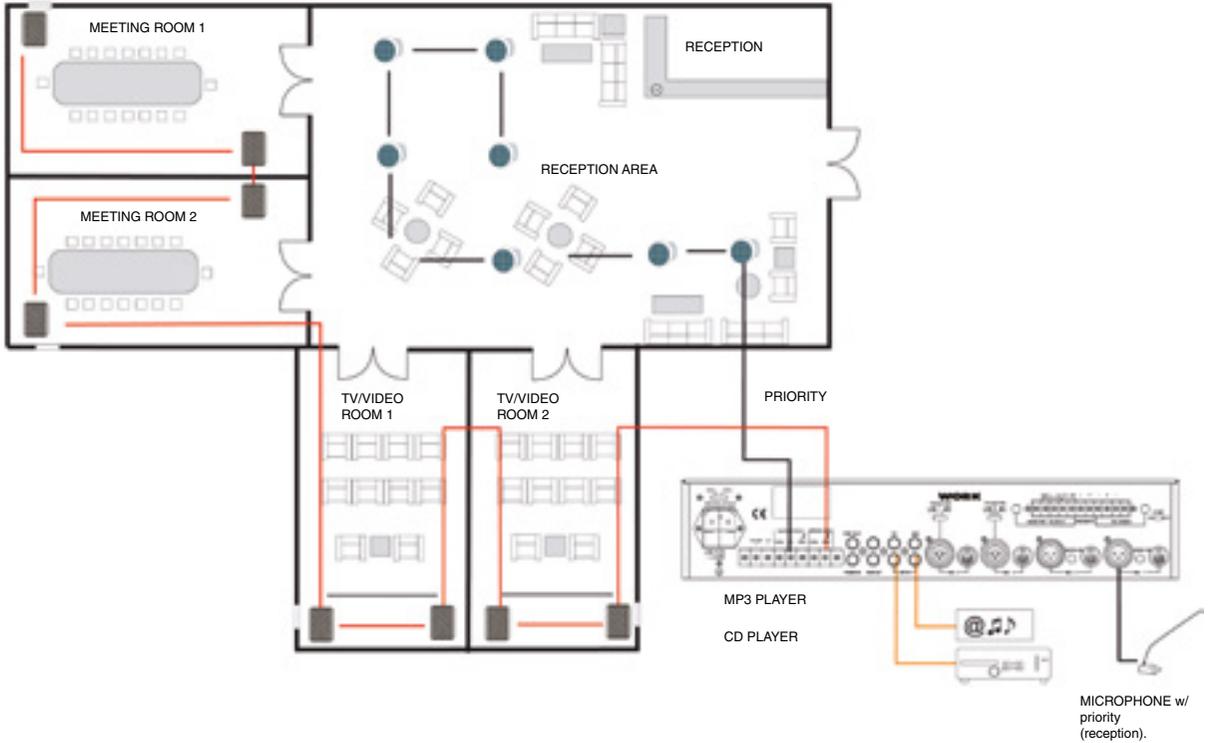
Features
- Installed sound power amplifier and 6 input mixer.
- Solid state audio player/recorder (USB/SD) with standard formats (MP3, WMA).
- Supports storage devices with up to 32 GB.
- 2 double Mic inputs with Combo and 5 pin DIN connectors.
- 2 double Mic inputs with XLR3 and 5 pin DIN connectors.
- 1 Aux input.
- 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.
- Suitable with low impedance speakers (8 Ω) and high voltage line (100 V).
- Monitor output (8 Ω, 1 W).
- Chime On/Off switch.
- Telephone/Emergency connection for paging announcements.
- Terminals for emergency supply (DC 24 V).
- 2U rack enclosure.

Technical data	PA 120 USB/R
Output Power (RMS):	120 W.
Output Power (Peak):	180 W.
Audio inputs:	4 MIC, 1 CD, 1 AUX level.
USB/SD interface:	MP3 / WMA formats.
MIC inputs (Impedance/Sensitivity):	250 Ω / 1 mV / -57.78 dBu.
LINE (Impedance/Sensitivity):	47k Ω / 100 mV / -17.78 dBu.
CD (Impedance/Sensitivity):	47k Ω / 500 mV / -3.80 dBu.
AUX (Impedance/Sensitivity):	47 kΩ / 200 mV / -11.76 dBu.
Power IN (Impedance/Sensitivity):	47 kΩ / 1 V / 2.21 dBu.
Music/Speech:	8 Ω /100 V.
Speech only:	100 V.
Tape:	4k7 Ω / 350 mV.
Pre-out:	600 Ω / 1V.
Monitor:	8 Ω / 1W - 600 Ω / 1V.
Frequency Response:	50 Hz - 20 kHz +/- 3 dB.
EQ Control: Bass: Treble:	(+/- 10 dB) / 31 Hz - 180 Hz / Centre freq. 80 Hz. (+/- 10 dB) / 2k5 Hz - 20 kHz / Centre freq. 10 kHz.
S/N Ratio:	>80 dB (Line), >60 dB (MIC).
THD:	Less than 1% at 1kHz, rated power.
Chime:	2 tone chime ('Ding-dong' pre-announcement chime).
Priority:	Tel./Emer. - MIC1-MIC2-MIC3-MIC4-AUX/CD-USB/SD.
Main supply AC Power:	115 / 230 V - 50 / 60 Hz.
Main supply DC Power:	24 V - 12 A.
Consumption:	270 W.
Dimensions (WxHxD):	483 x 88 x 300 mm.
Weight:	10 kg.

Hotel lounge.

MEETING ROOM 1

RECEPTION

RECEPTION AREA

MEETING ROOM 2

TV/VIDEO ROOM 1

TV/VIDEO ROOM 2

PRIORITY

MP3 PLAYER

CD PLAYER

MICROPHONE w/ priority (reception).

Installation of enviromental sound system in the reception area. Several meeting rooms and TV/VIDEO rooms with priority output source for emergency and announcements.

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 Ω) 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 Ω) and high impedance (25/70/100 V).
- Chime On/Off switch.
- Telephone/Emergency connection for announcements.
- 2U rack enclosure.

PA 190 USB/R / PA 240 USB/R

School.

NORTH WING

OFFICE

PLAYGROUND

CORRIDORS AND COMMON AREAS

SOUTH WING

MICROPHONE w/
priority
(office).

MP3 PLAYER

CD PLAYER
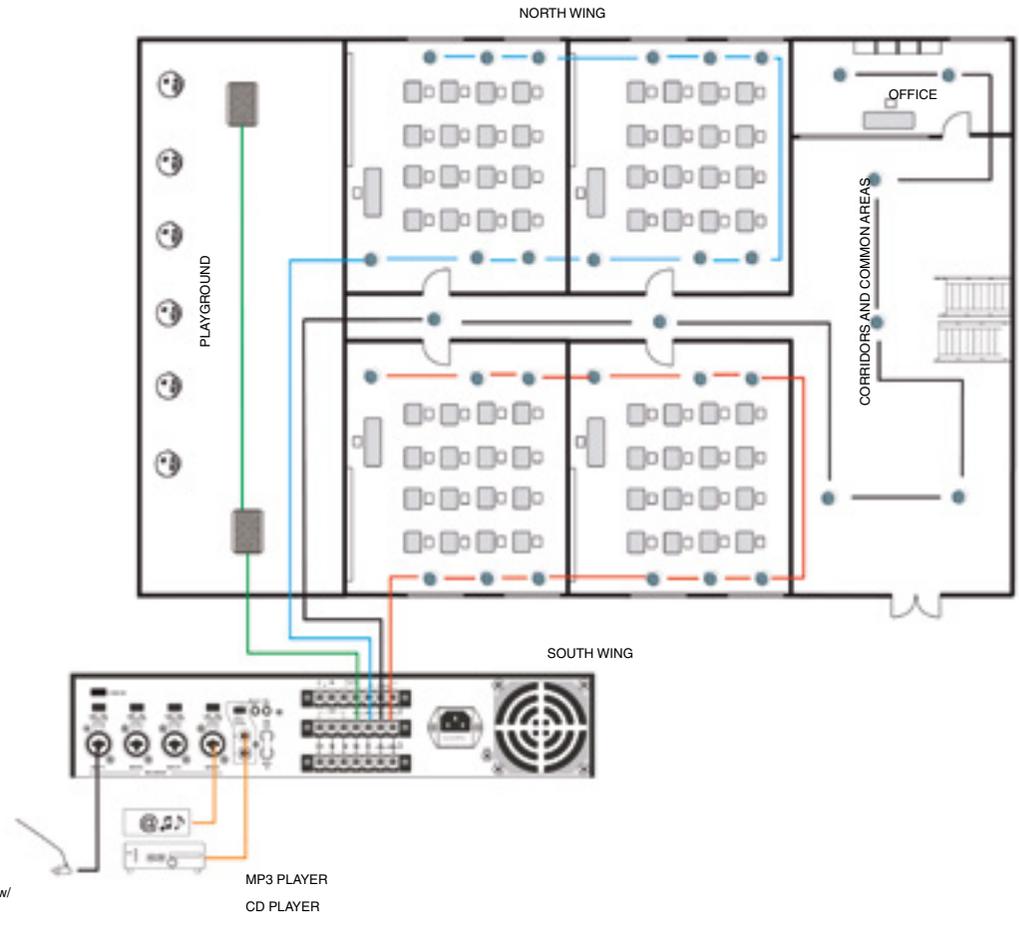
School.

Installation of environmental sound system in a school. 4 different zones (common areas, playground, north/south wing classroom). All zones with priority output source for emergency and announcements.

Technical data	PA 190 USB/R	PA 240 USB/R	Technical data	PA 190 USB/R	PA 240 USB/R
Output Power (RMS):	180 W.	240 W.	Pre-out:	600 Ω /1V.	600 Ω /1 V.
Output Power (Peak):	240 W.	300 W.	Frequency Response:	30 Hz - 20 kHz +/- 3dB.	30 Hz - 20 kHz +/- 3 dB.
Audio inputs:	4 Mic/Line, 1 LINE (CD,Tuner/Tape/Aux) level.	4 Mic/Line, 1 LINE (CD,Tuner/Tape/Aux) level.	EQ Control: Bass: Treble:	(+/- 10 dB)/ 25 Hz - 160 Hz/ Centre freq. 60 Hz. (+/- 10 dB)/ 4 kHz - 20 kHz/ Centre freq. 10 kHz.	(+/- 10 dB)/ 25 Hz - 160 Hz/ Centre freq. 60 Hz. (+/- 10 dB)/ 4 kHz - 20 kHz/ Centre freq. 10 kHz.
USB/SD interface:	MP3/WMA formats.	MP3/WMA formats.			
MIC inputs (Impedance/Sensitivity):	600 Ω/2.7 mV / - 49.15 dBu.	600 Ω / 2.7 mV / - 49.15 dBu.	S/N Ratio:	>80 dB (Line), >60 dB (MIC)	>80 dB (Line), >60 dB (MIC).
LINE (Impedance/Sensitivity):	47k Ω/100 mV / -17.78 dBu.	47k Ω / 100 mV / -17.78 dBu.	THD:	Less than 0.5% at 1 kHz, rated power.	Less than 0.5% at 1 kHz, rated power.
CD (Impedance/Sensitivity):	47k Ω/570 mV / -2.66 dBu.	47k Ω / 570 mV / -2.66 dBu.	Chime:	4 tone chime ('Ding-dong' attending signal preceding a call).	4 tone chime ('Ding-dong' attending signal preceding a call).
AUX (Impedance/Sensitivity):	20k Ω/100 mV / -17.78 dBu.	20k Ω / 100 mV / -17.78 dBu.	Priority:	Tel./Emer. - Input 5.	Tel./Emer. - Input 5.
Tuner (Impedance/Sensitivity):	56k Ω/300 mV / -8.23 dBu.	56k Ω / 300 mV / -8.23 dBu.	Main supply AC Power:	115/230 V - 50/60 Hz.	115/230 V - 50/60 Hz.
Tape (Impedance/Sensitivity):	1k Ω/1V / 2.21 dBu.	1k Ω/1V / 2.21 dBu.	Consumption:	395 W.	590 W.
Direct outputs:	4, 8, 16 Ω / 25, 70, 100 V.	4, 8, 16 Ω / 25, 70, 100 V.	Dimensions (WxHxD):	483 x 88 x 335 mm.	483 x 88 x 335 mm.
Zone outputs:	4 zones: 100 V (ONLY).	4 zones: 100 V (ONLY).	Weight:	11.6 kg.	13 kg.
Monitor:	8 Ω / 1W.	8 Ω / 1 W.			

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.
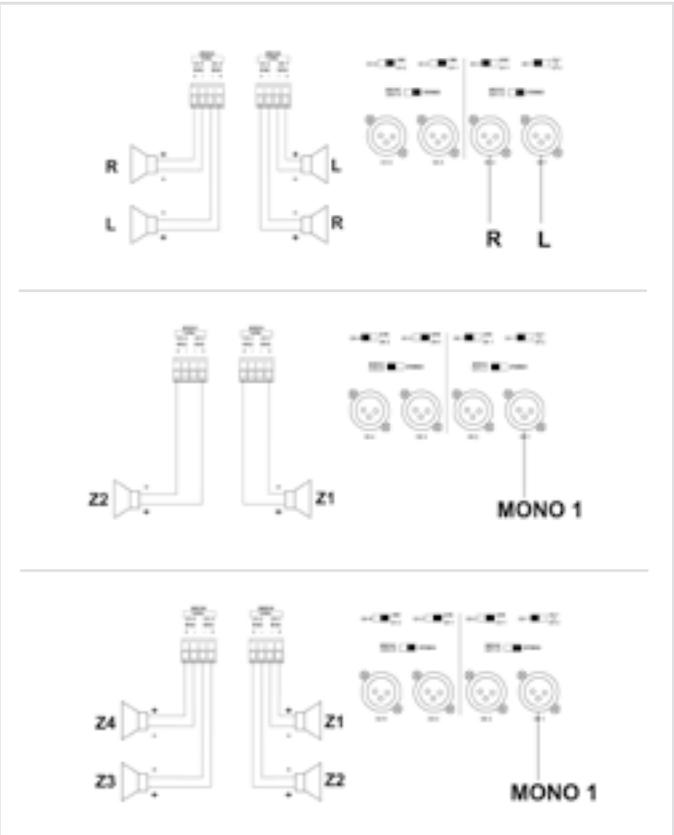- 3U rack enclosure.

Sport facility.

ZONE 1
WARDROBE 1
WARDROBE 2
ENTRANCE
ZONE 2
MP3 PLAYER
CD PLAYER
MICROPHONE w/ priority.
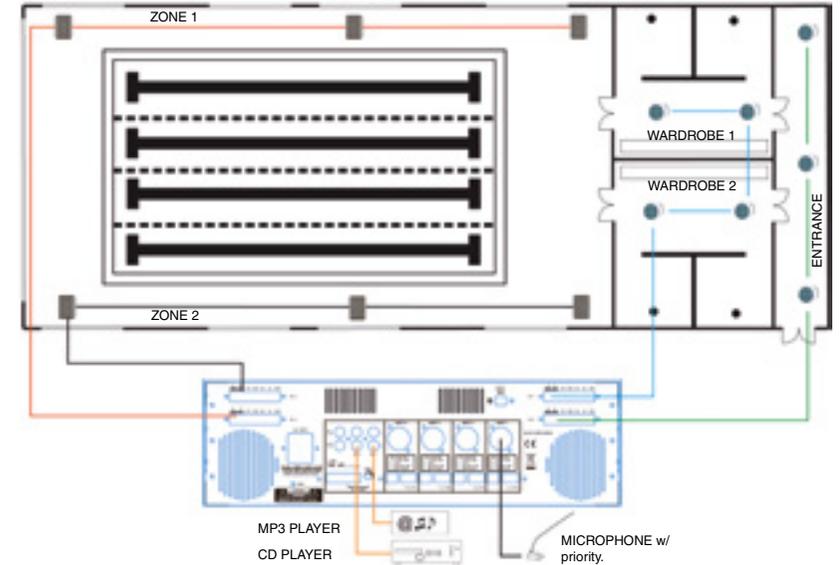
Installation of enviromental sound system in a sport facility. 4 different zones (entrance, wardrobes and 2 zones in the swimming pool). All zones with priority output source for emergency and announcements.

Technical data	PA 4100
Output Power (RMS):	4 x 250 W.
Audio inputs:	4 Mic/Line, 2 AUX level.
MIC inputs (Impedance/Sensitivity):	600 Ω /2.8 mV / -48.83 dBu.
LINE (Impedance/Sensitivity):	3 kΩ /316 mV / -7.78 dBu.
AUX (Impedance/Sensitivity):	50 kΩ / 316 mV / -7.78 dBu.
Low Impedance:	4, 8 Ω.
High Impedance Line:	25 / 70 /100 V.
Frequency Response:	50 Hz - 17 kHz +/- 3 dB.
EQ control: Bass: Treble:	(+/- 10 dB)/ 22 Hz - 180 Hz/ Centre freq. 50 Hz. (+/- 10 dB)/ 3k Hz - 20 kHz/ Centre freq. 12 kHz.
S/N Ratio:	>90 dB (Line), >80 dB (MIC).
THD:	Less than 1% at 1 kHz, rated power.
Chime:	2 tone chime ('Ding-dong' attending signal preceding a call).
Priority:	Tel./Emer. - MIC 1.
Main supply AC Power:	115/230 V - 50/60 Hz.
Consumption:	1100 W.
Dimensions (WxHxD):	483 x 132 x 410 mm.
Weight:	25.2 kg.

PA 1504
Multizone power amplifier

Depending on switch position, the amplification system changes audio distribution in the different areas.

Designed for multizone applications.
PA 1504 is a power amplifier featuring 4 channels of 150 W each. Using switches, users can easily combine inputs and edit configuration of the installation.

Depending on switch position, the amplification system changes audio distribution in the different areas (up to 4 audio sources available for each of the 4 areas).
PA 1504 can also be used as a sound reinforcement system for a concrete area (mono or stereo, for 1, 2 or 4 different outputs). It is also possible to select between stereo and bridge operating modes.

PA 1504 has individual gain controls on front panel and LEDs that indicate the state of each channel (signal, clip, protections or Bridge mode). The unit is protected from speaker short-circuits, thanks to its signal auto-compression function. Output signal automatically drops down if the temperature starts becoming too high. Overvoltage protection eliminates current fluctuations and starting current peaks.

Features
- 4 channel power amplifier (150 W each).
- 4 switches for input configurations (from 1 zone to 4 zones).
- Many configurations available.
- Individual control of volume for each channel.
- LED indicators on front panel (Fault, thermal, clip, signal, ready).
- Protections against overheat, short-circuit and DC at the output.

Technical data	PA 1504
Number of input channels:	4.
Number of output channels:	4.
4 Ω mono output power:	150 W x 4.
8 Ω bridge output power:	300 W x 2.
Frequency response:	20 Hz – 20 kHz.
THD+N:	<0.1%.
S/N ratio:	>100 dB.
Damping factor:	>200.
Dynamic range:	>105 dB.
Input impedance:	18 kΩ balanced, 15 kΩ unbalanced.
Input sensitivity:	1 V / 2.21 dBu.
Rear panel connectors:	4 x XLR3 (input), 2 x euroblock 4pin (output) /1 x IEC (supply).
Protections:	Overheat, short circuit, DC protection, CLIP.
Main supply:	AC 115-230 V, 60/50 Hz.
Dimensions (WxHxD):	483 x 88 x 400 mm.
Weight:	13.6 kg.

Switch position to easily edit amplification system, taking advantage of the four audio sources available for each of the four zones.

PA 1000
Power amplifier

This intuitive, mono channel power amplifier features 120 W output power. It is compatible with low impedance speakers (4-8 Ω) and high impedance (70/100 V) installations.

Regarding connections, two inputs are available (balanced XLR / unbalanced RCA) with sensitivity trimmer adjustment. Additionally, it features a power ON delay to protect circuitry. This is definitively a relevant amplifier for installations on a budget that require a simple and above all efficient solution.

Features
- 120 W mono channel power amplifier.
- Suitable for low impedance speakers (4 and 8 Ω) and high impedance (70/100 V).
- Power ON delay to protect circuitry.
- 2U rack enclosure.
- Easy to use.

Car dealer.

100 V Line output

CD Player

GARAGE
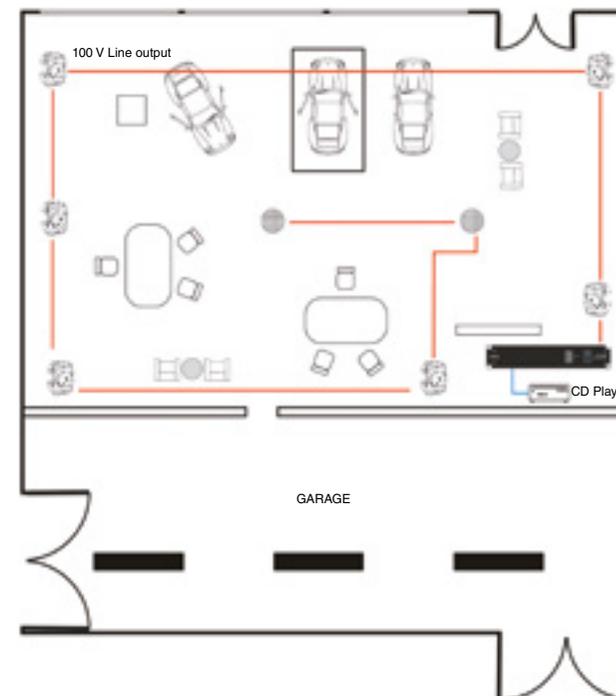
Installation of enviromental sound system in a car dealer using 100V line output.

Technical data	PA 1000	Technical data	PA 1000
Output power (8 Ω):	120 W.	Frequency response:	20 Hz - 20 kHz.
Output power (4 Ω):	220 W.	Input connection:	XLR.
Output power (70 V):	120 W.	Link connection:	RCA.
Output power (100 V):	120 W.	Output connection:	Euroblock.
S/N ratio:	>65 dB.	Soft start:	Yes.
Slew rate:	5 V/us.	Operating voltage:	185 - 245 V.
Damping factor:	300.	Limit:	Clipping at 0 dB.
Crosstalk:	>46 dB.	Dimensions(WxHxD):	483 x 88 x 277 mm.
Power ON delay:	7 sec.	Weight:	5.4 kg.
Input sensitivity:	700 mV / -0.87 dBu.		

PA 5000
Power amplifer

Warehouse installation.

MICROPHONE
w/priority
(office).
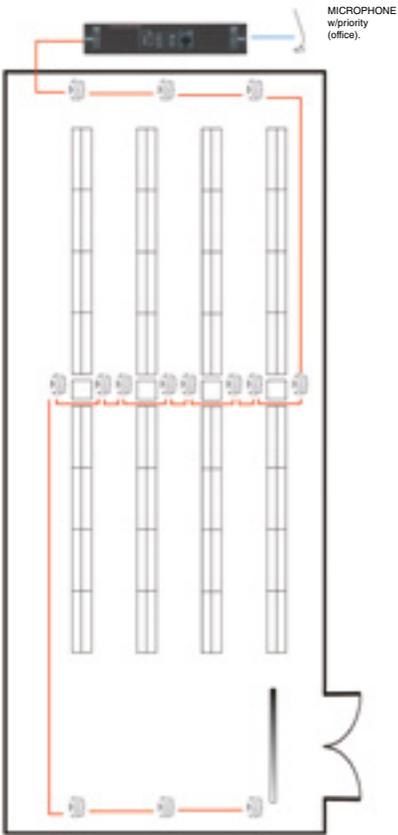
Warehouse installation. PA 5000 is used in a 100 V Line installation for announcement purposes. It allows controlling many loudspeakers in a wide area.

This 480 W power amplifier is designed for installed sound applications that explicitly require high power level and sound quality.

It features a 3 band equalizer, a balanced input with XLR and ¼" Jack connectors. It is compatible with low impedance speakers (4-8 Ω) and high impedance (70/100 V). It is possible to connect several units through the Link outputs (XLR and ¼" Jack).

The unit is protected from speaker short circuits, thanks to its signal auto-compression function. Output signal automatically drops down if the temperature starts becoming too high. The overvoltage protection eliminates current fluctuations and starting current peaks.

Features

- Designed for applications that require high power level and sound quality.
- 3 band equalizer.
- Balanced inputs (XLR3 - ¼" Jack connectors).
- Suitable for low impedance speakers (4 and 8 Ω) and high impedance (70/100 V).
- Link output for bridge connection between several units.
- Signal auto-compression function.
- Protection from current fluctuations, starting current peaks and short circuits.

Technical data	PA 5000
Output Power (RMS):	480 W.
LINE (Impedance/Sensitivity):	20k Ω/ 1V / 2.21 dBu.
Direct Outputs:	4, 8 Ω / 70, 100 V.
Frequency Response:	50 Hz - 22 kHz +/- 3 dB.
EQ Control: Bass: Middle: Treble:	(+/- 12 dB)/ 20 Hz - 80 Hz/ Centre freq. 30 Hz. (+/- 12 dB)/ 350 Hz - 2 kHz/ Centre freq. 800 Hz. (+/- 12 dB)/ 6.3 kHz - 20 kHz/ Centre freq. 16 kHz.
S/N Ratio:	>90 dB.
Main supply AC Power:	115 / 230 V - 50 / 60 Hz.
Consumption:	1100 W.
Dimensions (WxHxD):	483 x 88 x 400 mm.
Weight:	20 kg.

PA 5506
Multizone amplifier and mixer

PA 5506 is a distributed power amplifier designed for low impedance (8 Ω) 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
- Distributed power amplifier.
- 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.

Connection example.
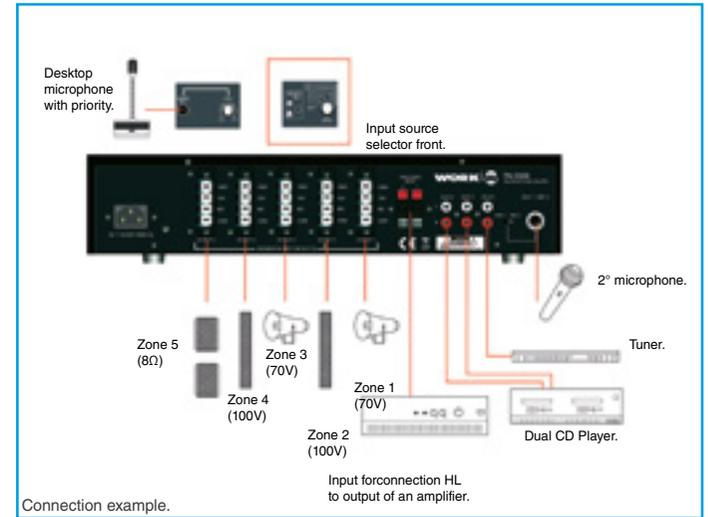
Technical data	PA 5506
Output:	70V / 100V / 8 Ω.
Output power:	5 x 50 W RMS.
Frequency response:	50 Hz - 15 kHz.
S/N ratio:	< 70 dB.
Damping factor:	> 200.
Main supply:	AC 115/230V 50/60 Hz DC 24 V.
Dimensions (WxHxD):	425 x 88 x 345 mm.
Weight:	15 kg.
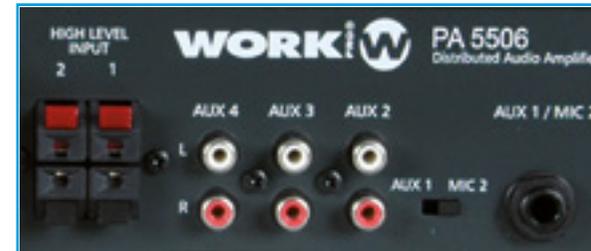
Rear input connections: Mic, Aux and high level inputs (HI-LV).

Individual controls on each channel. Tone control, gain, input source selection and implementation of priority microphone.

PA 6306
Multizone amplifer

Features
- 1 Mic input with priority.
- Included siren.
- Inputs 2 & 3: Mic/line/ phantom Mic.
- Input 4 : Aux&CD&Tape.
- Media input: AM/FM, SD/MMC, USB.
- Individual volume control.
- 5 memories for AM/FM stations.
- AUX Mini-Jack input.
- Paging of each input with each output (6 x 6 matrix).
- Output power: 30 W RMS x 6.
- Outputs: 70 / 100 / 4-16 Ω.
- Protections: Overload, short-circuit, excess of current.
- Fan with variable speed according to the internal temperature.

PA 6306 is a distributed sound amplifier with 6 inputs and 6 outputs. It features a 6x6 analog matrix in order to send any inputs to any of the outputs. Each input has its own output selector and independent volume control. It is possible to send several inputs in the same output.

PA 6306 is composed of several input sources: USB/SD interface, AM/FM tuner (5 memories), 2 Mic/Line/Mic with phantom power supply and a CD/AUX/TAPE input. An auxiliary input is also available on front panel to connect MP3 portable devices. In addition, PA 6306 features a Mic input with priority for emergency announcements (siren also available).

Each output has a terminal block to connect a loudspeaker system designed for low impedance (4-16 Ω) or constant voltage (70 / 100 V) lines. It is possible to monitor any outputs thanks to the headphone connection.

It is possible to control any parameters from the front panel. The LCD display provides a full information about the amplifier and the LEDs show the active outputs and if they reach the clip level.

Technical data	PA 6306
Output power:	30 W x 6 RMS.
Input: Mic sensitivity: Aux sensitivity: CD sensitivity:	- 50 dBV (2,5 mV). - 12 dBV (250 mV). - 0 dBV (1V).
Frequency response: Mic: Aux:	80 Hz to 15 kHz (-3 dB). 45 Hz to 18 kHz (-3 dB).
T.H.D.:	< 1 %.
S&N ratio:	Mic: > 65 dB, Aux/Line: > 75 dB.
Outputs:	6x 4-16 Ω / 70 V, 100 V.
Main supply:	230 V AC, 50/60 Hz.
Dimensions (WxHxD):	420 x 88 x 280 mm.
Weight:	12.7 kg.

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 Ω load.
- Protection from short circuits,excessive temperature, DC and continuous high frequency signals.

Lightweight power amplifiers, thanks to their switching mode power supply.

**ZENITH 600 /
ZENITH 1300**

**ZENITH 1800 /
ZENITH 2400**

ZENITH 6000

Technical data	ZENITH 600	ZENITH 1300	ZENITH 1800	ZENITH 2400	ZENITH 6000
8 Ω 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 Ω 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 Ω bridge output power:	850 W.	1200 W.	2000 W.	2600 W.	6200 W.
8 Ω 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 (output)/1xIEC(supply).	2 x ¼" Jack -XLR3 (Input) 2 x XLN4 (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).	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.

WXP series
## Power amplifiers with switching mode power supply

Features

- Power amplifiers with switching mode power supply.
- Balanced input to ensure noiseless wiring.
- Active distortion revision to reduce sub-frequency resonance.
- Audio control circuit for a high S/N ratio when signal is weak.
- External circuit breaker.
- Continuous fan operation.
- Protection from overload, overheat, short circuits and DC protection at the output.

Minimum weight thanks to their switching mode power supply.
WXP power amplifiers particularly stand out for their switching mode power supply and high quality components. Circuits have been carefully designed to ensure the best performance and a perfect linear frequency response.It provides a high S/N ratio when signal is weak. The active distortion revision reduces subfrequency response.

Best performances.
Thanks to their switching mode power supply, all the energy is dedicated to amplification: heat dissipation is better controlled for a longer lifetime in comparison with other amplifiers using conventional power supply systems.
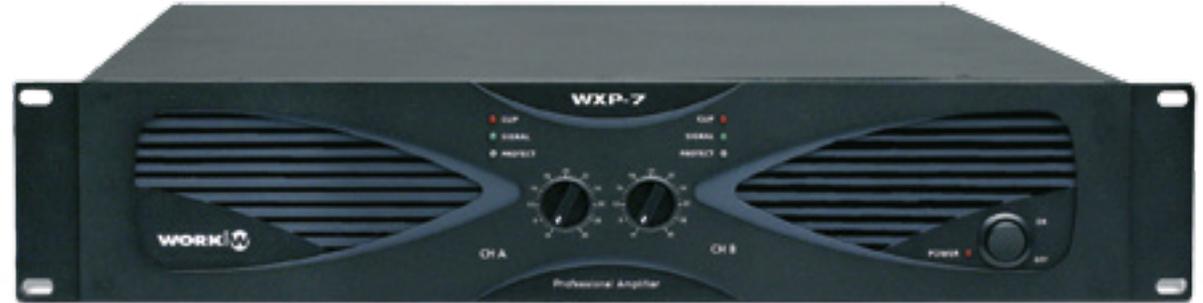
Technical data	WXP 3	WXP 5	WXP 7
8 Ω stereo output power:	300 W x 2.	500 W x 2.	650 W x 2.
4 Ω stereo output power:	500 W x 2.	750 W x 2.	1000 W x 2.
8 Ω bridge output power:	1000 W.	1500 W.	2000 W.
Frequency response:	25 Hz - 25 kHz.	25 Hz - 25 kHz.	25 Hz - 25 kHz.
THD+N:	< 0.04 %	< 0.04 %	< 0.04 %
S/N ratio:	> 100 dB.	> 100 dB.	> 100 dB.
Damping factor:	400.	400.	400.
Dynamic range:	100 dB.	100 dB.	102 dB.
Voltage gain:	33 dB.	35 dB.	36dB.
Input impedance:	47 kΩ (balanced/unbal.).	47 kΩ (balanced/unbal.).	47 kΩ (balanced/unbal.).
Input sensitivity:	1 V / 2.21 dBu.	1 V / 2.21 dBu.	1 V / 2.21 dBu.
Rear panel connectors:	2 x XLR3 (input) 2 x XLN4, 4 x Binding Post (output)/ 1 x IEC (supply).	2 x XLR3 (input) 2 x XLN4, 4 x Binding Post (output)/ 1 x IEC (supply).	2 x XLR3 (input) 2 x XLN4, 4 x Binding Post (output)/ 1 x IEC (supply).
Protections:	Overheat, Short circuit, DC Protection, CLIP.		
Main supply:	AC 220-240 V 60/50 Hz.	AC 220-240 V 60/50 Hz.	AC 220-240 V 60/50 Hz.
Dimensions (WxHxD):	483 x 88 x 495 mm.	483 x 88 x 495 mm.	483 x 88 x 495 mm.
Weight:	9.8 kg.	10.6 kg.	11.2 kg.

WXP 3 / WXP 5

WXP 7

WCE series
Power amplifiers with switching mode power supply

The WCE series is composed of two reliable power amplifiers. Thanks to their switching mode power supply, all the energy is dedicated to amplification, with a very high power conversion efficiency.

The class D amplifier provides a reduction in size and weight of the unit, as well as a reduced power waste. Smaller heat sink and compact circuitry lead to a reduction in cost, being very convenient for common audio installations.

Features
- Power amplifiers with switching mode power supply.
- Compact and lightweight design, thanks to the class D amplifier.
- Anti-clipping function.
- Bicolor LED to indicate operating mode.
- Balanced and unbalanced inputs available.

WCE 200

WCE 400

WCE 200

WCE 400

| Technical data	WCE 200	WCE 400
8 Ω stereo output power:	150 W x2.	220 W x2.
4 Ω stereo output power:	220 W x2.	380 W x2.
8 Ω bridge output power:	500 W.	800 W.
8 Ω parallel output power:	440 W.	760 W.
Frequency response:	20 Hz – 20 kHz.	20 Hz – 20 kHz.
THD+N:	0.05%.	0.05%.
S/N ratio:	>65 dB.	>67 dB.
Damping factor:	300.	300.
Voltage gain:	32 dB.	32 dB.
Input impedance:	20 kΩ (balanced).	20 kΩ (balanced).
Input sensitivity:	700 mV / -0.87 dBu.	800 mV /0.28 dBu.
Rear panel connectors / controls:	2x XLR3 (balanced inputs), 1x bual RCA (unbalanced inputs), 1x IEC (main supply), 2x Dual Binding Post (outputs). Operating mode switch (PR/ST/BR).	
Protections:	Overheat, short circuit, DC protection, CLIP.	
Main supply:	AC 185-245V, 60/50 Hz.	AC 185-245V, 60/50 Hz.
Dimensions (WxHxD):	483 x 44 x 277 mm.	483 x 88 x 277 mm.
Weight:	3.2 kg.	4 kg.

HomeAMP
Audio controller and 2 x 20 W amplifier

Audio controller and 2 x 20 W amplifier.
HomeAMP is an ultra-compact amplifier of 2 x 20 W with audio controller.
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).

An elegant design and an intuitive device.
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).
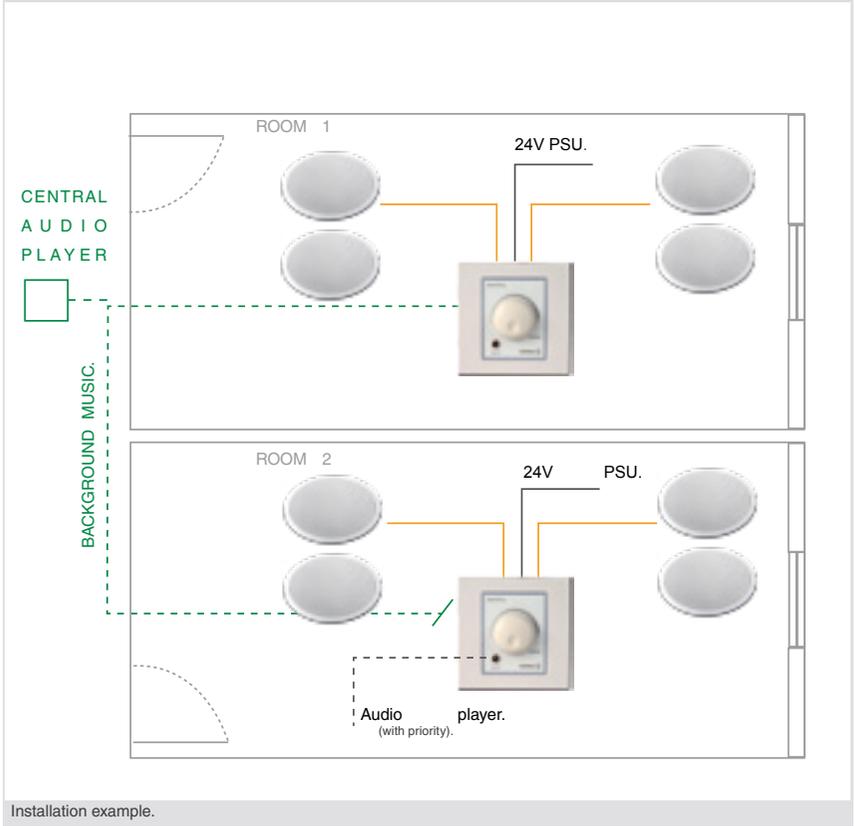
LED INDICATOR

LED intensity changes to indicate audio level.

A VERY REDUCED SIZE

It features a 2 x 20 W amplifier in a standard electrical box, for an easy integration in any installations.

2 INDEPENDENT AUDIO INPUTS

Listen to background music connected to the rear panel of HomeAMP. If you prefer, you can connect your audio player and listen to your favourite music.

USER-FRIENDLY ENCODER

Push it to switch on/off the device and turn it to adjust volume.

ROOM 1

24V PSU.

CENTRAL
AUDIO
PLAYER

BACKGROUND MUSIC.

ROOM 2

24V PSU.

Audio player.
(with priority).

Installation example.

FB1 (electrical box included)

Features
- Audio controller and 2 x 20 W amplifier.
- 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.

Technical data	HomeAMP
Output power (DC 27 V):	2 x 18 W.
Output power (DC 30 V):	2 x 20 W.
Minimum load:	4 Ω.
Input sensitivity:	1 V (30 V DC).
Gain:	20 dB.
S/R ratio:	99 dB.
THD + N (4 Ω /1 kHz / 10 W):	0.08%.
THD + N (8 Ω /1 kHz / 5 W):	0.08%.
Rear panel connector:	1x Euroblock 3 pin (L/R inputs), 2x Euroblock 2 pin (L/R outputs), 1x Euroblock 2 pin (DC voltage).1x Encoder (Volume gain),
Front panel connector:	1x Mini-Jack 3.5 mm (input).
Indicators:	Panel indicating light (LED).
Protections:	Thermal/short-circuit with auto-recovery, Polarity inversion.
Main supply:	DC 24 V - 30 V.
Power consumption:	25 W.
Dimensions (WxHxD):	86 x 86 x 55 mm.
Weight:	1 kg.

ULTRA-COMPACT AMPLIFIERS

SLA series
Installation ultra-compact amplifiers

These two ultra-compact amplifiers are designed for fixed installation that require high quality audio amplification. They feature a class D amplifier and respectively deliver 2x25 W and 2x150 W output power. Thanks to their reduced size and DIN-rail format, they go unperceived in the installation.

SLA amplifiers are controlled through RS 485/DMX or VCO (0-5 V). In DMX mode, the same channel controls volume and Standby. In Command mode, a set of commands is available to control each channel separately.

It is necessary to adapt the power supply of SLA amplifiers to the installation requirements. The two tables of the next page explain which power supply units are adapted to each amplifier.

Features

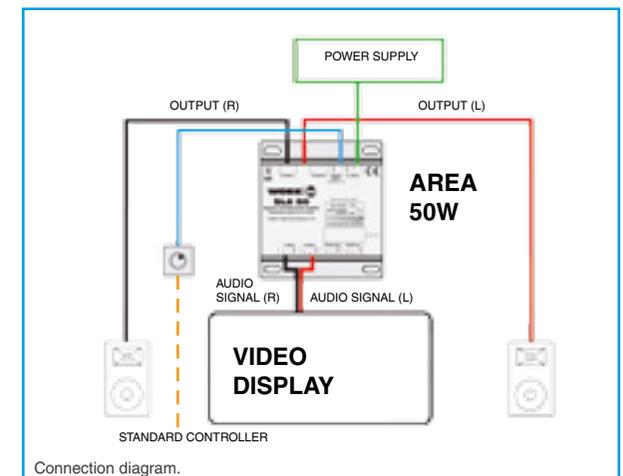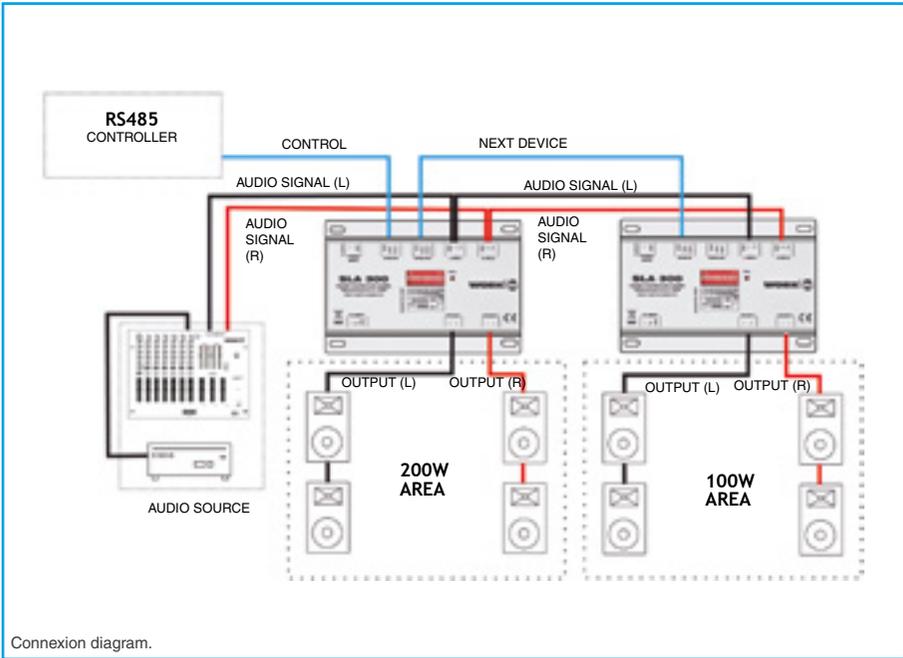- Ultra-compact amplifiers with Class D technology.
- Controlled through RS485/DMX or VCO (0-5 V).
- Gain and Standby mode controlled through a unique channel.
- Additional DIP switch for operating mode selection and DMX start up channel.
- Din-rail format to optimize its integration in any installation.

Optional accessory DR 1 for suiting Din-rail

SLA 50

SLA 300

One relevant advantage of the SLA series is that you can directly control volume with a simple 3 pin potentiometer.

POWER SUPPLY

OUTPUT (R)   OUTPUT (L)

AREA 50W

AUDIO SIGNAL (R)   AUDIO SIGNAL (L)

VIDEO DISPLAY

STANDARD CONTROLLER

Connection diagram.

Connexion diagram.

Technical data	SLA 50	SLA 300
Number of input channels:	2.	2.
Number of output channels:	2 (L+R).	2 (L+R).
8 Ω stereo output power:	2 x 12.5 W.	2 x 75 W.
4 Ω stereo output power:	2 x 25 W.	2 x 150 W.
DMX value:	0% - 10% (OFF-Standby) / 11% - 100% (Volume).	
Analog input:	DC 0-5 V.	DC 0-5 V.
Frequency response:	20 Hz - 20 kHz.	20 Hz - 20 kHz.
THD + N:	0.08%	0.08%.
THD (10 W):	0.08%.	0.05%.
Input impedance:	22 kΩ.	22 kΩ.
Input sensitivity:	1.6 V / 6.30 dBu.	1.6 V / 6.30 dBu.
Voltage gain:	20 dB.	23 dB.
Rear connectors:	5 x euroblock (3pin) DMX In/Out, L/R input, VC input; 3 x euroblock (2pin) power input, speaker L/R.	
Front panel controls:	1x DIP Switch Block (10 p) DMX address config.	
Indicators:	1x status (red LED).	
Protections:	Thermal/short-circuit with auto-recovery.	
Cooling:	Fanless.	
Main supply:	DC 24 V.	DC 48 V.
Power consumption:	60 W.	310 W.
Quiescent Power consumption:	0.6 W.	1.5 W.
Dimensions:	90 x 81 x 42 mm.	90 x 136 x 42 mm.
Weight:	500 g.	600 g.

RECOMMENDED POWER SUPPLY:

In order to get the best results with the SLA amplifiers, it is highly recommended to use the power supply MeanWell (available as option). The following tables explain which are the power supply more appropiate for any situation.

DRP-480-48

SLA model	Number of SLA units	Recommended power supply
SLA 50	1	MDR-60-24/RS-50-24
SLA 50	3	(1) S-150-24
SLA 50	4	(1) SP-200-24
SLA 50	9	(1) SP-480-24
(1) SLA 300	1	RC-150-48
(2) SLA 300	1	DRP-480-48

(1). This source is being calculated for 8 Ω (150 W in total).
(2). This source is being calculated for 4 Ω (300 W in total).

RS-150-48

MDR-60-24

MDR-50-24

	Technical data	DRP-480-48	RS-150-48	MDR-60-24	RS-50-24
OUTPUT	Output voltage:	48 V.	48 V.	24 V.	24 V.
	Current:	10 A.	3.3 A.	2.5 A.	2.2 A.
	Power:	480 W.	158.4 W.	60 W.	52.8 W.
	Voltage range:	48 - 53 V.	45.6 - 52.8 V.	24- 30 V.	22-27.2 V.
INPUT	Voltage range:	180-264 V CA.	88-132 V CA.	180-264 V CA.	88-264 V CA.
	Frequency range:	47 - 63 Hz.	47 - 63 Hz.	47 - 63 Hz.	47 - 63 Hz.
	Input current:	4 A / 230 V AC.	2 A / 230 V AC.	1 A / 230 V AC.	0,8 A / 230 V AC.
PROTECTIONS	Overload:	105 - 150 %.	110 - 150 %.	105 - 150 %.	110 - 150 %.
	Overvoltage:	54 - 60 V.	55.2 - 64.8 V.	31.2 - 36 V.	27.6 - 32.4 V.
	Over-temperature:	100°C ±5°C.	------------------	------------------	------------------
	Dimensions:	227 x 125.2 x 100 mm.	199 x 98 x 38 mm.	40 x 90 x 100 mm.	99 x 97 x 36 mm.
	Weight:	2.4 kg.	0.7 kg.	0.33 kg.	0.41 kg.

SLA series

SLA amplifiers are suitable for installations that require an impreceptible amplifing solution which includes multiple control possibilities.

WEQ 231
Equalizer with constant Q factor

WEQ 231 is the new stereo equalizer of 31 + 31 bands with constant bandwidth (constant Q) by WORK PRO. The main feature that makes WEQ 231 different of all the other equalizer available on the market is the addition of feedback alert function.

The feedback alert allows to check in real time if there is any signal peak on a specific frequency. This warning is visible through the lighting of the LED that belongs to the detected frequency. The system adds a general sensitivity adjustment control in order to hit the right frequency value in the hypothetical case of feedback detection on adjacent frequencies; thereby, the user is warned with greater accuracy about the feedback point and is able to modify the response curve removing the one-time feedback.

In addition to this main feature, WEQ 231 adds every single feature that are usually incorporated in this kind of devices, such as high-pass and low-pass filters, the possibility of adjusting the crossover frequency of these filters and the input gain level and bypass function. This equalizer has balanced inputs and outputs with different types of connections (through XLR-3, TSR ¼" and terminal block).

Its standard dimensions for 19" rack format (3 HU) makes possible to fit the device in a rack with the different elements that compose an installation, like signal processors, amplifiers, etc.
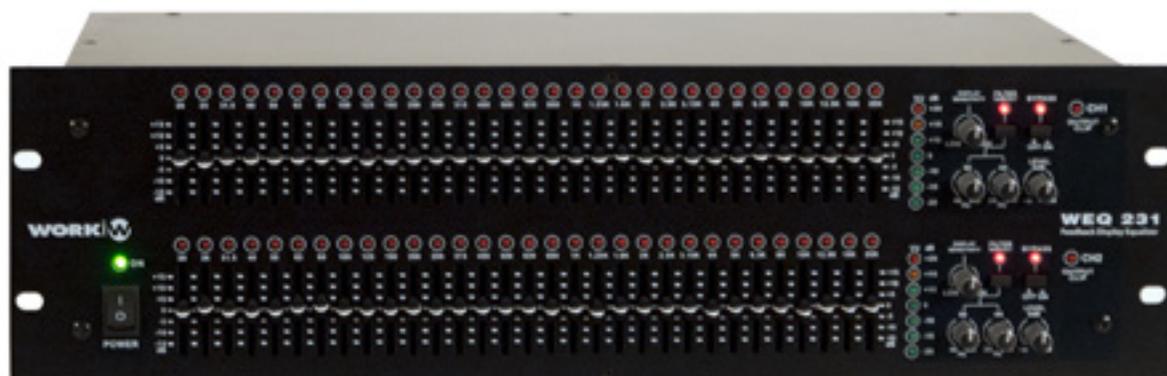
Features
- Equalizer with constant Q factor (constant bandwidth).
- 2 channels of 31 bands.
- Feedback monitorization on each of the 62 bands.
- Selectable range between ±15 dB.
- Bypass switch.
- Balanced/unbalanced inputs and outputs.
- Output gain indicators.
- Low-pass, high-pass filters fully configurable.

Technical data	WEQ 231
Frequency Bands:	2 x 31 bands.
Gain Range:	± 15 dB.
Center frequency accuracy:	<± 1.5%.
Filter center frequency:	Filter 2 steps.
Low Pass Filter:	40 Hz - 400 Hz.
High Pass Filter:	3 kHz - 20 kHz.
S / N ratio:	> 95 dB.
Frequency response:	20 Hz - 20 kHz (± 3dB).
THD:	<0.01%.
Dynamic Range:	118 dB.
Input Gain:	∞ - ± 6dB.
Input impedance:	Balanced 20 kohm / desbal. 10 kohm.
Output Impedance:	Balanced 300 ohm / desbal. 150 ohm.
Connection:	Input / output XLR - Jack ¼ "terminals.
Power supply:	115-230 V AC, 50-60 Hz.
Dimensions (W x H x D):	483 x 133 x 174 mm.
Weight:	4.5 kg.

WEF 1010
Feedback suppressor

This dual mono feedback suppressor analyzes frequencies from the input signal and eliminates feedback.
It features 12 NOTCH filters with -45 dB attenuation. Sensitivity is adjustable in 15 steps in order to increase or decrease these values.

WEF 1010 includes many functions like channel search selection and detection (L, R or L/R), or copy of values from a channel to another. It features 4 presets and 16 additional positions so users can set up their own filters. The LCD display allows visualizing all these functions. It additionaly features Bypass function and can be connected to MIDI/USB devices for an external control.

Features
- Digital dual mono feedback suppressor.
- 12 Notch filters with -45 dB attenuation.
- 4 presets + 16 user positions.
- LCD display for function visualization.
- Bypass function.
- MIDI interface available.

Screenshot of the software.

Technical data	WEF 1010
Number of input channels:	Analog 2 L/R.
Number of output channels:	Analog 2 L/R.
Connectivity:	MIDI/USB.
Notch filters:	2x 12 filters .
Bandwidth:	1/70, 1/20, 1/10, 1/5 oct. (selectable).
Max attenuation:	-45 dB.
Sensitivity steps:	15 steps.
A/D and D/A resolution:	20 bit.
Processor resolution:	24 x 32 bit.
Input impedance:	47 kΩ.
Max input level:	270 mV / 9 dBu.
Frequency response:	20 Hz - 20 kHz.
S/N ratio:	> 90 dB.
THD+N:	<0.01%.
Max output level:	270 mV / 9 dBu.
Display:	Backlite 2x20 alphanumeric LCD.
Rear panel connectors:	2x XLR3-¼" Jack (input), 2x XLR3-¼" Jack (output), 2x DIN 5p (MIDI input/output), 1x USB, 1x IEC (Main supply).
Rear panel controls:	USB/MIDI selector.
Front panel controls:	2x Encoders (Variation,Navigation), 2x Potentiometers (Input/Output gain control), 4x On/off switches (ENTER, QUIT, PROCESS, Power).
Indicators:	LCD display, 1x QUIT,ENTER (Green LED), 1x CLIP, Power (Red LED).
Main supply:	AC 240 V, 50 Hz.
Power consumption:	21 W.
Dimensions (WxHxD):	483 x 44 x 210 mm.
Weight:	2.5 kg.

WEF 1010 is suitable for external control thanks to the USB interface and to communicate via MIDI.

WD 421
Audio signal distributor

Technical data	WD 421
Inputs:	2 (XLR3 female balanced).
Outputs:	8 (XLR3 male balanced).
Input sensitivity:	0 dBu.
Max. level input:	22 dBu.
Input impedance:	10 kΩ.
Level range:	∞ a - 12dBu.
Frequency response:	20 Hz to 22 kHz.
Distortion:	<0,03% to 0 dB, 20 Hz - 22 kHz.
SNR:	< -110 dBr.
Dynamic range:	> 110 dBu.
Noise and hum:	< - 80 dB @ 20 Hz - 22 kHz.
Crosstalk:	< - 80 dB @ 20 Hz - 22 kHz.
Output impedance:	120 Ω.
Main supply:	110 - 120 V / 220 - 240 V 50/60 Hz.
Power consumption:	20 W.
Dimensions (WxHxD):	483 x 44 x 220 mm.
Weight:	2.75 kg.

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.

Side view

1 Channel frontal controls. Depending on operating mode they control one type of output or another.
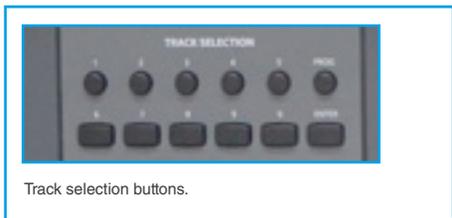
MULTIPLAYER 2 MK II

Multimedia Player

Designed to fit into a 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 MK II 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.
- 19" rack unit format.
- 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.
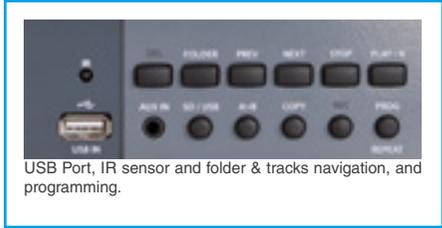
Track selection buttons.
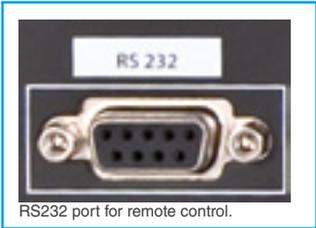
USB / SD interfaces. Track navigation buttons.

Remote controller.

MULTIPLAYER 3R
Multimedia player / recorder

USB Port, IR sensor and folder & tracks navigation, and programming.

RS232 port for remote control.

Slot for SD card. LCD screen with folder, track and length information.

Multiplayer 3R is an audio 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.

Technical data	MULTIPLAYER 3R
Audio format :	MP3, WMA.
Recording format:	MP3.
Capacity:	128 MB to 16GB USB or SDHC card.
Addition audio inputs:	USB + SD card slot.
Recording quality:	Between 128 and 192 Kbps with 44.1 kHz.
MP3 decoding:	16 / 22.05 / 24 / 32 / 44.1 / 48 kHz sampling.
Instant start:	0.015 seconds.
Track selection:	Alphanumeric track search.
Oversampling rate:	8 times.
Sampling frequency:	44.1 kHz.
S/N Ratio:	100 dB.
THD+N:	<0.05 %.
Dynamic range:	96 dB.
Channel separation:	50 dB (1 kHz).
Output level:	1V RMS.
Display:	2x20 character LCD backlight.
Rear panel connectors:	1x Dual RCA audio output 1 x 2-pole (Main supply).
Rear panel controls:	SUB 9 (RS 232 port + audio out/rec in).
Front panel control:	USB port, SD card slot, remote sensor, 10x quick access buttons, 11x function buttons (Play, Prog, Pitch, folder ...).
Main supply:	AC 230 V, 50 Hz.
Power consumption:	60 W.
Dimensions (WxHxD):	483 x 44 x 266 mm.
Weight:	2.5 kg.
Included accesories:	Remote control, L/R RCA-RCA audio cable, Main supply cable, backside rubber pieces.

Remote controller.

MULTIPLAYER 4

Multimedia Player and AM / FM tuner

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 remotely control the audio player with third party controllers that use this interface. An infra-red remote control is also available.
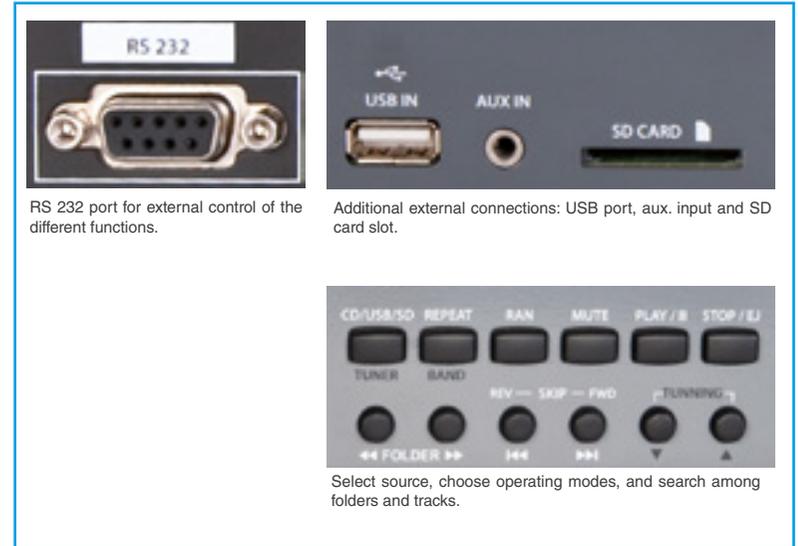
MULTIPLAYER 4 is a convenient audio player. It provides several operating modes (Random, Play All, Repeat, Program, Mute) and an intuitive search mode (using the front display). It is possible to connect external storage devices (USB pendrives, SD cards) with up to 16 GB memory.

RS 232 port for external control of the different functions.

Additional external connections: USB port, aux. input and SD card slot.

Select source, choose operating modes, and search among folders and tracks.

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.

Remote controller.

Technical data	MULTIPLAYER 4
Supported disc formats:	CD/CD-R/CD-RW and MP3 discs.
Supported dsc size:	12 cm.
Additional audio inputs:	USB + SD / SDHC card slot.
Anti-shock buffer memory:	40 seconds.
MP3 decoding:	16 / 22.05 / 24 / 32 / 44.1 / 48 kHz sampling.
Instant start:	0.015 seconds.
Track selection:	Alphanumeric track search.
Oversampling rate:	8 times.
Sampling frequency:	44.1 kHz.
S/N Ratio:	100 dB.
THD+N:	<0.05 %.
Dynamic range:	96 dB.
Channel separation:	50 dB (1 kHz).
Output level:	1V RMS.
Display:	2x20 character LCD backlight.
Rear panel connectors	1x Dual RCA audio output 1 x 2-pole (Main supply).
Front panel control:	1x CD slot-in, USB port, SD card slot, remote sensor, 10 x quick access buttons, 14 x function buttons (Play, Prog, Pitch, folder ...).
Main supply:	AC 230 V, 50 Hz.
Power consumption:	60 W.
Dimensions:	483 x 44 x 266 mm.
Weight:	2.5 kg.
Included accesories:	Remote control, L/R RCA-RCA audio cable, Main supply cable, FM wire antenna, AM antenna.

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 give a device suitable for fixed installations or mobiles when it is not required all the elements separately to obtain the desired result. Also built-in a RS 232 connection for the reception of control commands.

In the section on player, allows to reproduce all audio CD types (CD,CD-R,CD-RW even CD with MP3 and WMA files) and function anti-shock. Built-in controls to navigate through files and folders, Random function and programming up to 10 tracks. In addition, it has USB interface and slot for SD card up to 16GB for MP3 files.

The AM/FM tuner gives the option to store up to 10 stations and immediate access to them through buttons. On the rear panel are located the antennas input for both bands. The LCD screen shows the operation mode information (CD or SSD) with information about the number of tracks and folders.

Besides being an audio files played this device 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). Likewise includes 2 independents inputs LINE and one more AUX.
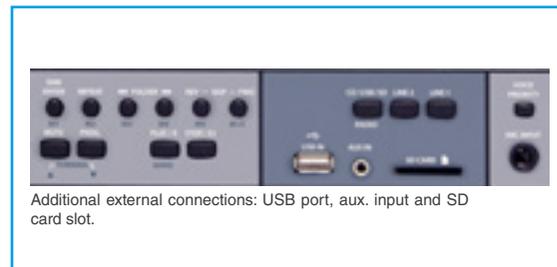
Features

- 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.

Remote controller.

RS 232 port for external control of the different functions.

Additional external connections: USB port, aux. input and SD card slot.

MULTIPLAYER 12 WEB

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

This media player is the updated version of Multiplayer 10 Web. This is a full-featured audio player that offers users the possibility to play different audios:
Thousands of streaming radio stations, thanks to the WiFi and LAN connection.
Conventional FM radio stations (BNC antenna connection).
DAB/DAB+ radio station with digital quality.
Audio files from Web servers, PC, etc.
Audio files from external storage devices, using the USB port.

Its big 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 a RS232 port in order to control the unit via external commands, as well as an auxiliary input (LINE level) and headphones outputs. In 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 station (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).

Technical data	MULTIPLAYER 12 WEB
Power supply	AC 220-240V 50/60 Hz.
Dimensions	483 x 44 x 214 mm.
Weight	2 kg.

RS 232 port for external control of the different functions.

Remote controller.

WSE 81
Start sequencer and power distributor

USB port for gooseneck lamp connection (included).

63 A circuit breaker and Link input to group several units.

This start sequencer / 8 output power distributor allows sequential start of loads for all inputs with 1 second interval. The device is protected from overloads thanks to its 63 A circuit breaker.

Each channel has its own On/Off switch and a maximum load of 10 A per channel. Bypass function enables or disables sequence and supplies all the outputs. An additional socket is available on front panel (no integrated on start sequence) to supply small units.

LED lights indicate the state of the devices connected to **WSE 81** and an USB port allows the connection of a standard lamp (included). Using the Link connection, users can link various devices and realize a general start sequence.

Features

Start sequencer and 8 output power distributor.
Individual On/Off switch for each channel.
Bypass function.
LED indicator for each channel.
Link input for interconnection between several units.
Additional main supply for small device connection.
Protections from overloads with 63 A circuit breaker.

Technical data	WSE 81
Number of outputs:	8.
Max. output load:	10 A per output.
Max. total load:	63 A.
Sequence time:	1 second between outputs.
Protections:	1x bipolar circuit breaker 400 V 63 A.
Rear panel connectors/controls:	8x power entry connector, 2 x link function (¼" Jack), 1 x 63 A circuit breaker, 1 x earth screw.
Front panel connectors/controls:	1x Power entry connector, USB socket (for lamp), 8x output push buttons, 1x Bypass push button.
Front panel indicators:	8x channel active (Green LED), 1 x plugin, 1x Bypass (Red LED), 1 x Power on/off (Green LED).
Main supply:	AC 220-240 V, 60/50 Hz.
Power consumption:	14 kW (max.).
Dimensions (WxHxD):	483 x 44 x 260 mm.
Weight:	1.8 kg.
Included Accesories:	USB LED lamp.

WPA 6600
Headphone amplifier

WPA 6600 is a headphone amplifier which allows connecting up to 6 headphones stereo 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 headphone 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.

Technical data	WPA 6600
AUDIO INPUT:	
Connectors:	XLR3 y Jack¼".
Impedance:	50 kΩ balanced / 25kΩ unbalanced.
Max. input level:	+ 21 dBu balanced and unbalanced.
AUX IN and DIRECT IN:	
Connectors:	Jack¼".
Impedance:	25kΩ unbalanced.
Max. input level:	+ 21 dBu unbalanced.
OUTPUT:	
Connectors:	XLR3 y Jack¼".
Max. output level:	+21 dBu balanced and unbalanced.
Frequency response:	10 Hz to 22 kHz ±2 dB.
SNR:	>90 dB to 10 Hz - 22 kHz.
THD:	<0.005% @ 0 dBu, 1 kHz.
HEADPHONE OUTPUT:	
Max. output:	+21 dBu.
Min. impedance:	100 Ω.
Max. gain:	+12 dB (input: 0 dBu, input/output gain max.).
Main supply:	AC 100 V - 120 V or 220 V - 240 V. 50/60 Hz.
Dimensions (WxHxD):	483 x 44 x 197 mm.
Weight:	3.1 kg.

Direct audio input.

Common channel controls (Gain, Balanced, MON/ST selection, Mute).

WPA 4400
Headphone amplifier

Individual controls for each channel. Frontalconnection, gain control and MONO/ST selector.

Direct input. Frontal and rearconnection. Gain and balance controls.

WPA 4400 is a complete headphone amplifier which allows connecting up to 4 headphone stereo channels to the same audio source.

Each independent channel has a balanced aux input, a general and local control, mono / stereo switch, and a signal level indicator. Each channel has 3 headphone outputs (1 on frontal panel and 2 on rear panel).

WPA 4400 has a direct general input L & R with gain control and balance. So many configuration options make from WPA 4400 something more than a common headphone amplifier, making it the ideal product for conference rooms, press conferences, radio stations, etc.

Features
- 4 channel stereo headphone amplifier.
- Each channel has independent control of:
- Gain control.
- Mono / stereo switch.
- LED vumeter signal indicator.
- 3 connectors by channel, 2 on rear panel and 1 on fontal panel.
- Direct general input L y R with gain control and balance.

Technical data	WPA 4400
DIRECT IN INPUT:	
Connectors:	Jack ¼".
Impedance:	25 kΩ unbalanced.
Max. gain:	+6 dBu.
Max. input level:	+ 21 dBu unbalanced.
OUTPUT:	
Connectors:	Jack ¼".
Max. output level:	+21 dBu balanced and unbalanced.
Frequency response:	10 Hz to 22 kHz ±2 dB.
SNR:	>90 dB to 22 Hz - 22 kHz.
THD:	<0.01% @ 0 dBu, 1 kHz.
HEADPHONES OUTPUT:	
Max. output:	+21 dBu.
Min. impedance:	100 Ω.
Max. gain:	+12 dB (input: 0 dBu, input/output max. gain).
Main supply:	AC 18 V / 1000 mA (external power supply).
Dimensions (WxHxD):	240 x 44 x 140 mm.
Weight:	1,9 kg.

Rack mount kit included.

D 19L
LED light bar for rack

D 19L is a LED light bar specially designed for racks. It is composed of 21 square LEDs that provide white light with a 6000°K colour temperature. The light is focused on the devices placed below the LED light bar, providing a perfect visualization of front panels.
A switch and an external supply (12 V / 800 mA) are available on the front of the unit.

Features
- LED quantity: 21 square LEDs.
- Colour temperature: 6000°K.
- Supply: 12 V / 800 mA (built-in AC external supply).
- Dimensions: 483 x 44 x 33 mm.
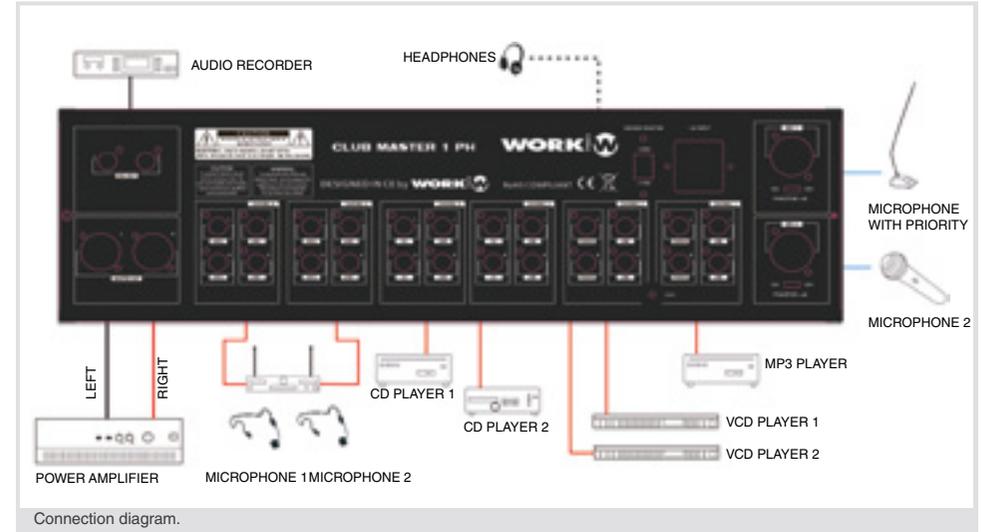
CLUB MASTER 1 PH

Audio mixer

Club Master 1 PH is a professional mixer designed in a 3U rack enclosure and Phantom power available on all the inputs which is adequate for many small/medium size installations.
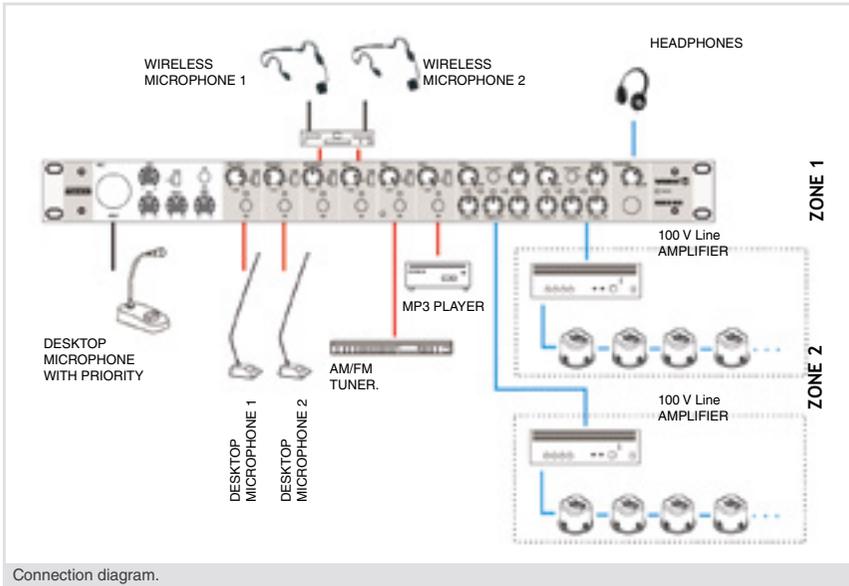
It features 6 stereo channels with their own 3 band equalizer and balance, in order to control the input sources available (Line/Phono, Line/CD, Line1/Line2). Two Mic inputs with priority are available and allow muting the music during messages. It also includes options like Rec and headphone outputs.

Features

- 8 input channel mixer (2 Mic inputs with priority).
- 6 stereo channels with selectable input source (Line/ Phono, Line/CD, Line1/Line2).
- Mic inputs with Phantom supply (only for Club Master 1 PH).
- Mic inputs with front and rear connectors.
- 3 band equalizer for stereo channels and balance for Master section.

- Individual gain level and PAN function.
- 70 mm slide faders.
- LED vumeter with 10 segments.
- Headphone output with gain level.
- Rec output.
- Adequate for small/medium-size installations.

Connection diagram.

Technical data	CLUB MASTER 1 PH
Number of input channels:	2 mono + 6 stereo.
Type of input channels:	2 Mic (with priority), 2 Line/Phono, 2 Line/CD, 2 Line/Line.
MIC inputs impedance/sensitivity:	10 kΩ, 10 mV / -33 dBu.
LINE/AUX inputs impedance/sensitivity:	47 kΩ, 770 mV / 0 dBu.
PHONO inputs impedance/sensitivity:	10 kΩ, 50 mV / -23 dBu.
Tone Control: Bass Bandwidth/Gain: Middle Bandwidth/Gain: Treble Bandwidth/Gain:	80 Hz, -15 dB to +15 dB. 2 kHz, -15 dB to +15 dB. 12 kHz, -15 dB to +15 dB.
Frequency Response:	20 Hz - 20 kHz.
THD+N:	<0.01%.
Crosstalk:	>75 dB.
Type of output:	1 x Dual Master, 1x Record, Phones.
Master 1-2 Max. level:	20 dB.
Rec output Max. level:	20 dB.
Phones output min. load:	20 dB @ 32Ω.
Monitor output Max. level:	20 dB.
Rear panel connectors/controls:	12 x Dual RCA (inputs), 2 x Combo XLR3-¼" Jack (inputs), 2 x XLR3 (Master outputs), 1x Dual RCA (Monitor output, record), 1x IEC (main supply).
Front panel connectors:	1 x ¼" Jack (Phones).
Main supply:	AC 115/230 V 50/60 Hz.
Power consumption:	8 W.
Dimensions (WxHxD):	483 x 132 x 230 mm.
Weight:	5.1 kg.

MMX 65
Audio mixer

Connection diagram.

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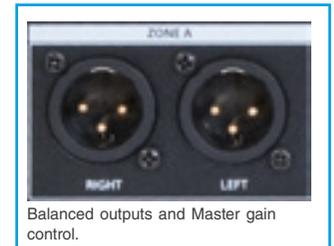
Each input channel can be assigned to zone 1, 2 (or both). This is particularly useful for installations like stores or museums.

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.

Technical data	MMX 65
Number of input channels:	6 stereo.
Type of input channels:	3 Mic (Mic 1 with talkover), 6 Line, 1 Phono.
MIC inputs impedance/sensitivity:	10K Ω / 15 mV / -34.25 dBu.
LINE/AUX inputs impedance/sensitivity:	10K Ω / 14 mV / -34.85 dBu.
PHONO inputs impedance/sensitivity:	10K Ω / 14 mV / -34.85 dBu.
Tone Control: Bass Bandwidth/Gain: Middle Bandwidth/Gain: Treble Bandwidth/Gain:	± 20 dB. ± 15 dB. ± 15 dB.
Frequency Response:	22 Hz - 22 kHz.
THD+N:	<0,01%.
Type of output:	2x Zone A (balanced), 2x Zone B (balanced), 1x Zone A (unbalanced), 1x Zone B (unbalanced), 1xRecord (unbalanced).
Phones output Min. load/power:	47 Ω / 0.5 W.
Rear panel connectors/controls:	3x Combo XLR3 - ¼" Jack (inputs), 4 x Dual RCA (inputs), 2x XLR3 (balanced output Zone A), 2x ¼" Jack (balanced output Zone B), 1x Dual RCA (Unbalanced output Zone A), (Unbalanced output Zone B), (Record), 1x DIN 3p (main supply). 2x Mic/Line switch, 2x MO/ST switch, 1x talkover level switch, 1x Phono/Line switch, 1x Master gain reduction selector,1x talkover sensitivity, 1 x delay time control.
Front panel connectors:	1 x COMBO XLR3 - ¼" Jack (input), 1 x ¼" Jack (Phones).
Main supply:	AC 2 x 15.5 V.
Power consumption:	12 W.
Dimensions (WxHxD):	483 x 44 x 200 mm.
Weight:	2.2 kg.

Zone selector for each input.

Master section with zone control and equalizer.

Balanced outputs and Master gain control.

MMX 62
Audio mixer

MMX 62 is a mixer that features 6 Mic/Line channels and 3 stereo channels, with 3 band equalizer and stereo Master output. It is adequate for several types of installations, from conference rooms, to bars, shops, hotels, etc.

All the mono inputs are balanced and they can be selected as Line or Mic input. It is possible to activate the phantom power supply if necessary. The input connector (combi type) provides XLR and Jack connectors.

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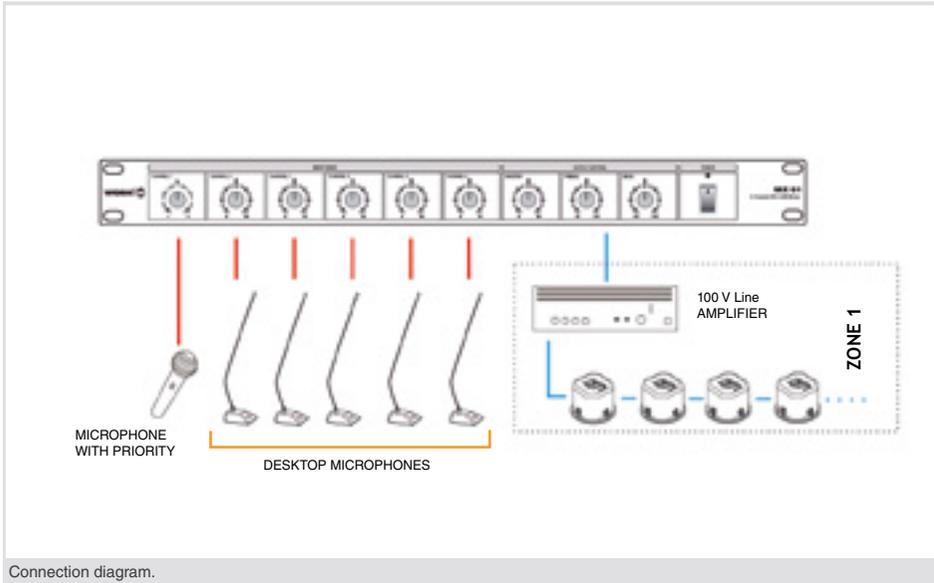
Additionally, MMX 62 features a DC 24 V input power supply to protect the mixer from electric power failure.

Features
9 channel mixer, including:
6 balanced channels Mic/Line with Phantom power supply.
3 stereo channels.
Stereo balanced output.
Mono balanced input.
Rec stereo unbalanced output.
First channel priority of MIC/LINE with Talkover adjustment.
3 band equalizer.
DC 24 V secondary power supply connection (emergency, back-up).

Technical data	MMX 62
MONO INPUTS:	
Frequency response:	20 Hz to 22 kHz ±2 dBu.
THD + N:	<0.03% a 1 kHz.
Impedance/Sensitivity:	1,4 kΩ/-40 dBu.
Max. input:	- 19 dBu.
Max. gain:	60 dB.
PHANTOM power:	+ 18 V to + 21 V.
LINE INPUTS:	
Frequency response:	20 Hz to 22 kHz ±2 dBu.
THD + N:	<0.03% to 1 kHz.
Impedance/Sensitivity:	10 kΩ/0 dBu.
Max. input:	+ 21 dBu.
Max. gain:	10 dB.
SNR:	> 103 dB.
STEREO INPUTS:	
Frequency response:	20 Hz to 22 kHz ±2 dBu.
THD + N:	<0,03% to 1 kHz.
Impedance/Sensitivity:	10 kΩ/+10 dBu.
Max. input:	+ 21 dBu.
Max. gain:	10 dB.
SNR:	> 103 dB.
Equalization:	Bass: ±15 dB @ 80 Hz. Middle: ±12 dB @ 2,5 kHz. Treble: ±15 dB @ 12 kHz
Crosstalt:	< -70 dB @ 1 kHz.
OUTPUTS:	
Line output:	0 dBu (±2 dBu) balanced.
Mono output:	0 dBu (±2 dBu) balanced.
Max. output:	+21 dBu balanced.
Noise:	< -83 dB @ 20 Hz - 22 kHz.
Main supply:	AC 110 V - 120 V or 220 V - 240 V 50/60 Hz. DC 24 V.
Dimensions (WxHxD):	483 x 44 x 195 mm.
Weight:	2.9 kg.

MX 61
Audio mixer

100 V Line
AMPLIFIER

ZONE 1

MICROPHONE
WITH PRIORITY

DESKTOP MICROPHONES

Connection diagram.

MX 61 is a 6 channel mixer that allows to connect Mic and Line signals on each input channel.
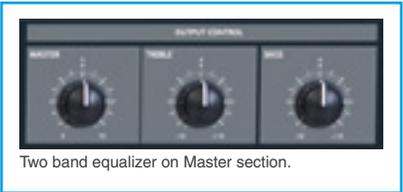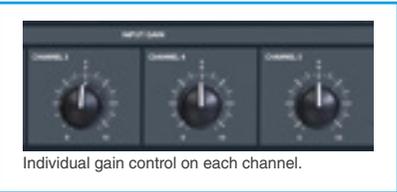It has been designed to be easily integrated in any installation, thanks to its 1U rack enclosure.

For an optimal control over audio, MX 61 features a 2 band equalizer on Master section, individual
gain control on each channel and general volume control for mix. 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 band equalizer for Master section.
- Individual gain control and Master.
- Voltage selector.
- Switch for output level selection (Hi/Low).
- Suitable for almost any commercial audio installation.

Technical data	MX 61
Number of input channels:	6 mono.
Type of input channels:	6 Mic/Line (3 inputs with 15 V phantom power).
MIC inputs impedance/sensitivity:	1 kΩ / 1.4 mV / -54.85 dBu.
LINE/AUX inputs impedance/sensitivity:	10 kΩ / 4.5 mV / -24.71 dBu.
Tone Control: Bass Bandwidth/Gain: Treble Bandwidth/Gain:	100 Hz/ ± 12 dB. 10 kHz/ ± 12 dB.
Frequency Response:	20 Hz - 22 kHz.
THD+N:	<0,1%.
Type of output:	1 x Master (balanced), 1 x Master (unbalanced).
Master 1-2 Max. level:	(+25 dBU) (balanced-unbalanced).
Rear panel connectors/controls:	6 x XLR3 (Balanced MIC inputs), 6 x ¼" Jack (unbalanced Line inputs), 1 x XLR3(Balanced output), 1 x ¼" Jack (unbalanced output), 1x IEC (main supply). 1 xHi/Low output level switch, 1x voltage selector.
Main supply:	AC 115/230 V, 60/50 Hz.
Power consumption:	10 W.
Dimensions (WxHxD):	483 x 44 x 192 mm.
Weight:	2.42 kg.

Individual gain control on each channel.

Two band equalizer on Master section.

AUDIO MIXERS

MMX 60
Audio mixer

Thanks to its 6 input channels and 3 band equalizer in the Master section, MMX 60 provides the perfect control of audio parameters, being a great solution for pro users.

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).
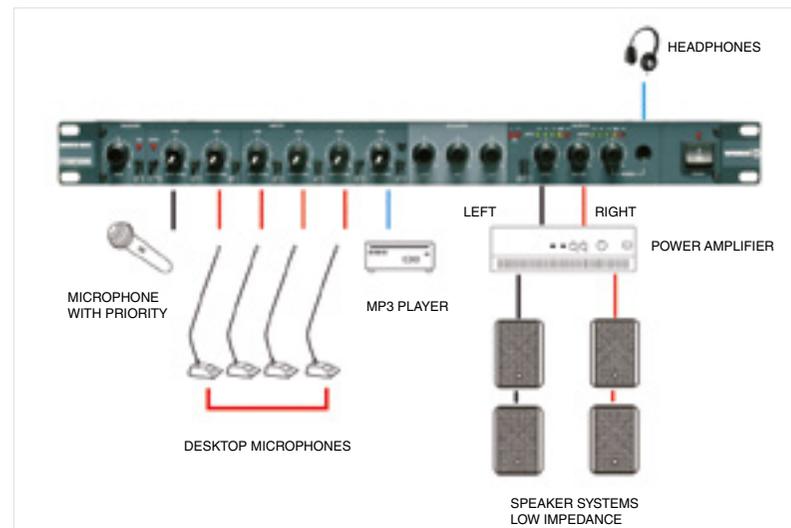
Features

- 6 input mixer.
- Mic/Line selector for each channel.
- Gain control and balance for each channel.
- 3 band equalizer 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.

Connection diagram.

1. Talkover function for channel 1 or 1+2 and Mic/Line input source selector on each channel.

2. Separate L/R Master control. Headphone input.

Technical data	MMX 60
Number of input channels:	6 stereo
Type of input channels:	6 Mic/Line
MIC inputs impedance/sensitivity:	10 kΩ / 100 mV / -17.78 dBu.
LINE/AUX inputs impedance/sensitivity:	10 kΩ / 100 mV / -17.78 dBu.
Tone Control: Bass Bandwidth/Gain: Middle Bandwidth/Gain: Treble Bandwidth/Gain:	50 Hz, -12 dB to +12 dB. 1 kHz, -12 dB to +12 dB. 10 kHz, -12 dB to +12 dB.
Frequency Response:	20 Hz - 20 kHz.
THD+N:	<0,1%.
Type of output:	2 x Master (balanced), 1 x Master (unbalanced), 1 x Record (unbalanced).
Master 1-2 Max. level:	1V / 600 Ω (balanced-unbalanced).
Rec output Max. level:	310 mV /600 Ω (unbalanced).
Phones output Min. load/power:	2x 8 Ω.
Rear panel connectors/controls:	6 x Dual RCA (inputs), 6 x XLR3 (inputs), 2 x XLR3 (balanced output), 1x dual RCA (unbalanced output record).
Front panel connectors:	¼" Jack (Phones).
Main supply:	AC 230 V, 50 Hz.
Power consumption:	12 W.
Dimensions (WxHxD):	483 x 44 x 208 mm.
Weight:	3.18 kg.

ROADER 408
Portable self-powered sound system

Features

- 500 W portable self-powered system.
- Composed of a main unit and two three-way loudspeakers.
- Amplifier/mixer:
·8 channels (7 Mic/Line channels + 1 channel with two stereo Aux inputs).
·Class D amplifier.
·High & Low EQ per channel.
·USB/SD input (.MP3 files) with LCD display.
·FX and MONITOR controls per channel.
·IN/OUT loop effects.
·Built-in DSP with 16 effects.

·Up to 4 outputs available to connect a 4 Ω configuration.
·REC output and input/output PreAmp.
·Speaker circuit protection.
·Connector for 12 V BNC lamp (not included).
·Forced fan.
- Loudspeakers:
·Three way system.
·Admissible power: 250 W.
·Impedance: 8 Ω.
·Stands not included.

ROADER 408 is a portable self-powered sound system composed of one central unit (mixer, audio player and amplifier) and two three-way loudspeakers. The class D amplifier delivers 500 W output power (2x250 W).

The portable design is very convenient, especially for installations like hotels, events, gym clubs, small churches and conferences. Users can easily install it or fold it in a few minutes, without anyone's help. Thanks to its ABS plastic housing manufacture, it is protected from damages during transportation. In addition, it includes an area to store the microphone (included) and cables.

Users can connect external storage devices to ROADER 408 and play MP3 files, thanks to the USB/SD input. The mixer of the main unit, for its own, features seven Mic/Line channels as well as another channel with 2 Aux stereo inputs. The 16 effects of the DSP ensure an excellent control over audio mix.

Easy to fold and tansport.

Technical data	ROADER 408
Amplifier:	Class D amplifier (250W+250W @ 4 Ω / 150W+150W @ 8 Ω).
Distortion THD+N:	<0.02% (1W@8 Ω).
Signal to noise:	>78 dB.
Input gain:	-44.4dBV a -14.5dBV.
Equalizer inpus MIC/LINE:	High: 12 kHz (+/- 12dB), Low: 80 Hz (+/- 12dB).
Outputs LINE/REC:	Unbalanced line output (-20dB).
Main supply:	AC 115/230V - 50/60 Hz selectable.
Dimensions: System: Mixer/Amplifier: Loudspeaker:	728 x 559 x 210 mm. 200 x 559 x 210 mm. 264 x 550 x 210 mm.
Weight: System: Mixer/Amplier: Loudspeaker:	17 kg. 69 kg. 5.5 kg.

* Stands not included.

WAP series

Portable PA amplifiers

WAP portable PA amplifiers are adapted to installations without fixed sound system, such as schools and small conference rooms. It is also possible to use them in open air events thanks to their built-in battery and compact size.

Thanks to the convenient USB port and SD slot, users can store their audio files in compact storage devices like pendrive or SD cards. An Aux input is also available to connect external devices.

The four models available come with handheld microphone, headset microphone, transmitter and lavalier microphone. They differ from each other in size and amplifier power (from 50 to 130 W depending on the model).

Features

- Portable PA amplifiers.
- From 50 to 130 W output power depending on model.
- USB port / SD slot available to play audio files from external storage devices.
- Aux input for external devices.
- Built-in mixer, FM tuner and remote control (only for WAP 850).
- Digital echo effect and tone control.

WAP 850 **WAP 650** **WAP 505** **WAP 305**

Technical data	WAP 305	WAP 505	WAP 650	WAP 850
Elements:	6.5" woofer (4 Ω).	6.5" woofer (4 Ω).	8" woofer (2 Ω) 1.5" piezoelectric driver.	8,5" woofer (4 Ω)+ 1.5" twt.
Amplifier power:	50 W max.	75 W max.	120 W max.	130 W max.
Aux. inputs:	1.	1.	3.	1.
Frequency band:	VHF band (4 different groups).	VHF band (4 different groups).	VHF band (8 different groups).	VHF.
Frequency response:	25 Hz - 15 kHz.	25 Hz - 15 kHz.	25 Hz - 15 kHz.	25 Hz - 15 kHz.
Operating range:	35 m.	35 m.	35 m.	35 m.
Channels:	Mono channel.	Double channel.	Double channel.	2 wireless Mic channels.
Sensitivity:	10 dB uV (S/N 60 dB).	10 dB uV (S/N 60 dB).	10 dB uV (S/N 60 dB).	---------
Oscillating mode:	± 0.005% quartz oscillating locked.	± 0.005% quartz oscillating locked.	± 0.005% quartz oscillating locked.	± 0.005% quartz oscillating locked.
T.H.D.:	Less than 5%.	Less than 5%.	Less than 5%.	---------
Working temperature:	25° C to 45° C.	25° C to 45° C.	25° C to 45° C.	25° C to 45° C.
PA system battery autonomy:	2 ½ hours	3 hours	5 1/2 hours	6 hours.
Main supply:	AC 220 V, 50 Hz - 1.0 A; DC 12 V DC (1.2 AH rechargeable battery; external power supply not included).	AC 220 V, 50 Hz - 1.0 A; DC 12 V DC (2.2 AH rechargeable battery; external power supply not included).	AC 220 V, 50 Hz - 1.0 A; DC 12 V DC (7 AH rechargeable battery; external power supply not included).	AC 220V~50Hz 1.0A (Aliment. AC) external: 12V 2.5A DC: 12V 7AH (7AH rechargeable battery).
Dimensions (WxHxD):	180 x 300 x 110 mm.	230 x 320 x 160 mm.	322 x 435 x 170 mm.	388 x 208 x 520 mm.
Weight:	2.4 kg.	4 kg.	7.2 kg.	8.5 kg.

Player SD/USB ports. Different input controls for the wireless & dynamic microphones.

Solid state player.

Details of the model WAP 305

Details of the model WAP 505

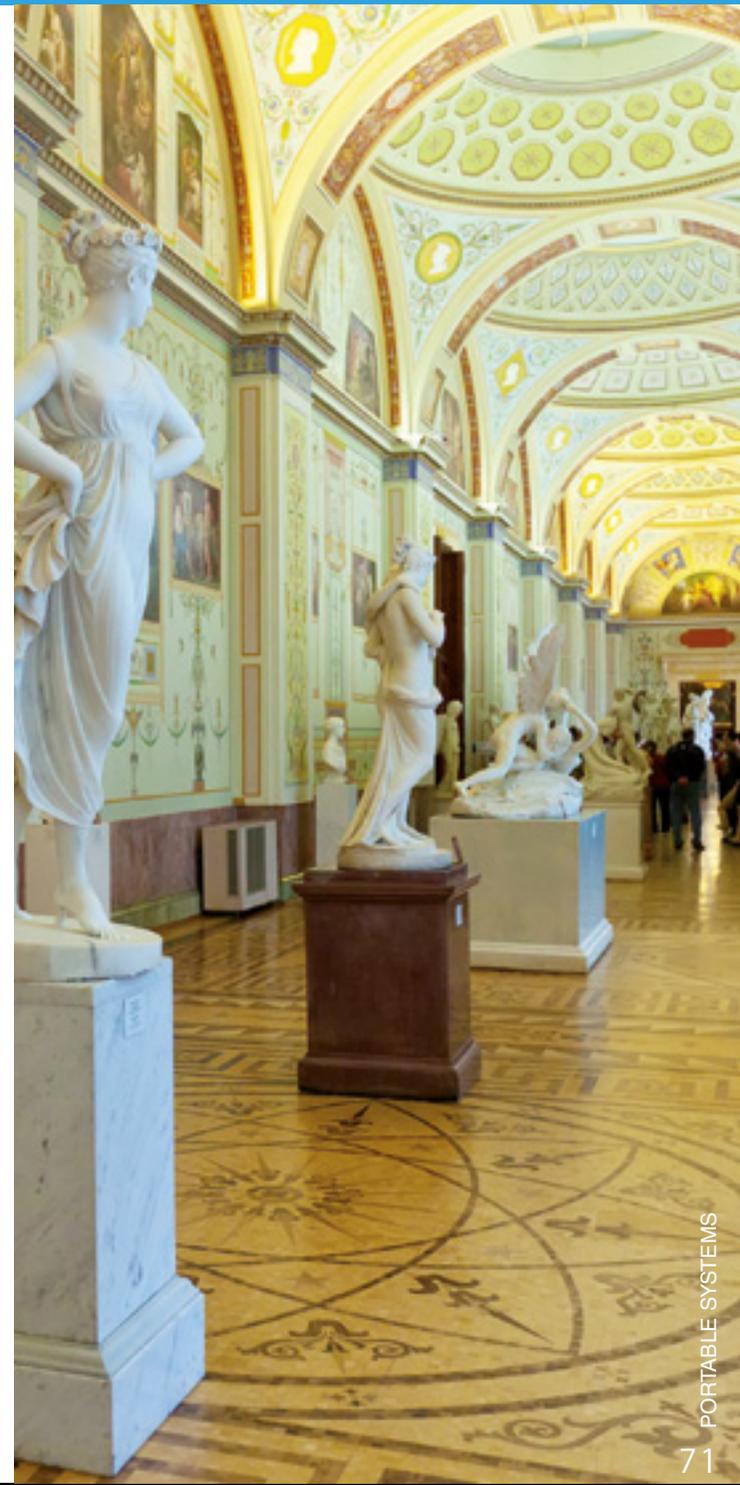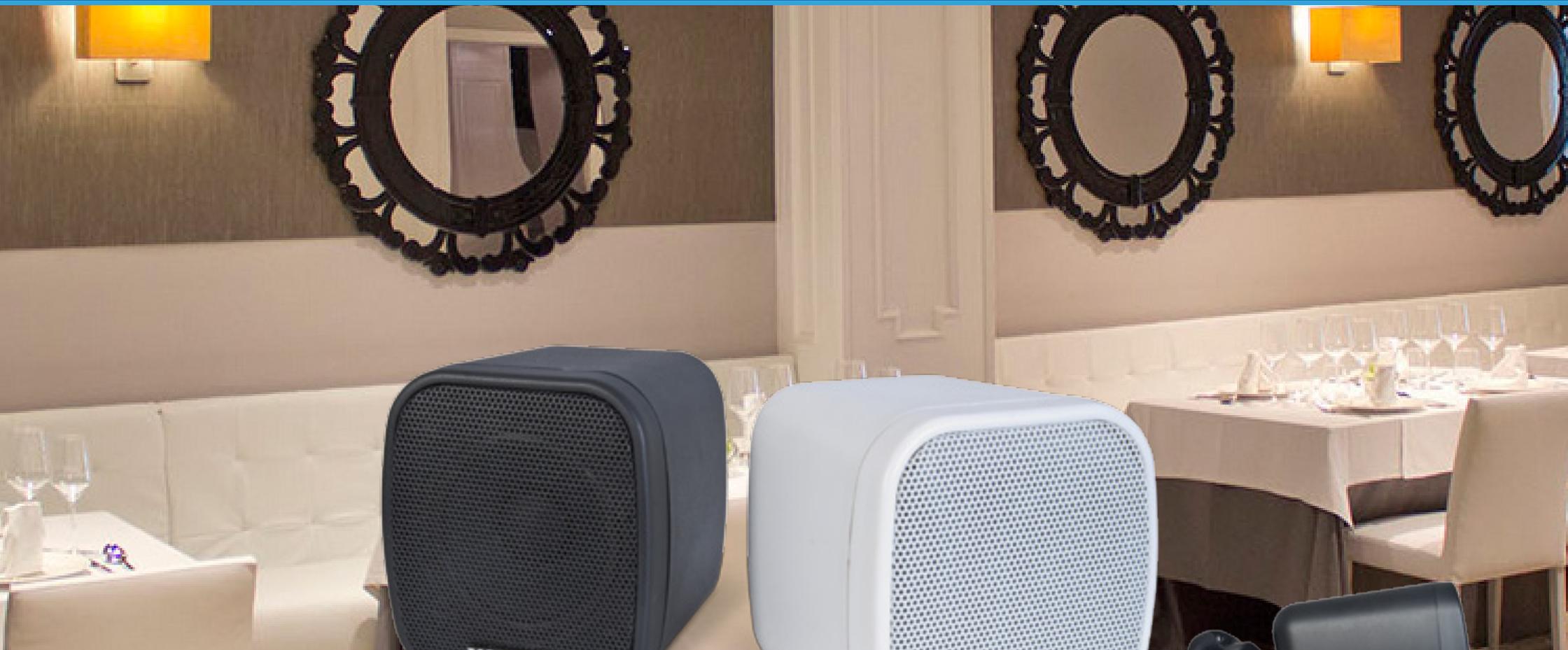**WAP 850**   **WAP 650**   **WAP 505**   **WAP 305**

NEO 3
Installation loudspeaker

NEO 3 is a ultra-compact loudspeaker directly inspired by the first models of the NEO series. It features a high performing driver for the reproduction of a wide range of frequencies.

NEO 3 is compatible with 100 V Line and 8 Ω installations. When the loudspeaker is connected to low impedance, audio doesn't go through the transformer, in order to maintain a high quality level.

NEO 3 is very quick and simple to install, thanks to its new bracket specifically designed for this model. It is possible to orientate the speaker in both axis very quickly.

Features

- Ultra-compact loudspeaker.
- Elegant shape and minimalist design for an easy integration in any installation.
- Compatible with 70/100 V Line and low impedance (8 Ω) installations.
- High performing driver which allows the reproduction of a wide range of frequencies.
- Available in black and white colour.

NEO S8 A
Self-powered subwoofer

NEO S8 A is the perfect complement for NEO series louds-peakers. This self-powered subwoofer with balanced inputs can be perfectly installed in almost any installations thanks to its elegant ultrafine design. It can be hung to walls vertically or horizontally and it is possible to hide it with a simple painting.

It features balanced signal inputs (by block of terminals) and high level input coming from an amplifier. It is possible to control gain and cut frequency with a value between 50 and 150 Hz.

Features

- Self-powered subwoofer.
- Can be installed in horizontal and vertical position.
- Elegant ultrafine design easy to hide.
- The perfect complement for the NEO loudspeakers.
- Balanced inputs.
- Available in black and white colour.

Technical data	NEO S8 A
Type:	Powered subwoofer.
Elements:	8" woofer.
LINE input: Input impedance:	22 KΩ.
LINE input: Max. input level:	0.775 V rms (0 dBu).
HI LEVEL input: Input impedance:	240 Ω.
HI LEVEL input: Max. input level:	15 V rms @ 80 Hz.
Output power:	58 W rms @ 0,1% THD.
Max. SPL:	10 dB.
Frequency response:	40 Hz -160 Hz.
Crossover frequency:	50 Hz - 150 Hz (selectable).
Material (housing):	MDF wood.
Dimensions (WxHxD):	520 x 400 x 130 mm.
Weight:	8.5 kg.

Amplifier module with balanced inputs, frequency cut and gain controls.

NEO series
Installation loudspeakers

Five models for all your projects!

Loudspeakers from the NEO series associate sound quality and elegant design for a perfect integration in all your projects. Five models are available with different power and dimensions.

NEO loudspeakers are suitable for low impedance (8 Ω) and high voltage installations (100 V). The wall-mount bracket, specially designed for the NEO series, allows a quick and easy installation.

Speakers are easily oriented to the optimum angle for the desired coverage. The aluminium grille is designed to withstand humid environments.

Contractors take advantage of the modern line, black or white finish and elegant design of NEO loudspeakers, which make them suitable for many projects.

Features
- Passive loudspeakers for fixed installation.
- Available in black and white finish.
- Elegant shape and modern design for an easy integration.
- Included bracket designed for a fast mounting operation.
- Suitable for low impedance (8 Ω) and high voltage installations (100 V).

NEO 4   **NEO 6**   **NEO 8**   **NEO 5**   **NEO 3**

Technical data	NEO 3	NEO 4	NEO 5	NEO 6	NEO 8
Type:	Full range loudspeaker.	2 way passive loudspeaker.	2 way passive loudspeaker.	2 way passive loudspeaker.	2 way passive loudspeaker.
Elements:	2.5" speaker.	4" woofer + 0.5" TWT.	5¼" woofer + 0.5" TWT.	6½" woofer + 1" TWT.	8" woofer + 1" TWT.
Power handling (100 V Line):	10 W (1 kΩ).	16 W (625 Ω) / 8 W (1k25 Ω) / 4 W (2k5 Ω) / 2 W (5 kΩ).	16 W (625 Ω) / 8 W (1k25 Ω) / 4 W (2k5 Ω) / 2 W (5 kΩ).	32 W (312 Ω) / 16 W (625 Ω) / 8 W (1k2 Ω) / 4 W (2k5 Ω).	32 W (312 Ω) / 16 W (625 Ω) / 8 W (1k2 Ω) / 4 W (2k5 Ω).
(*) Power handling (70 V Line):	5 W (980 Ω).	8 W (612 Ω) / 4 W (1k22 Ω) / 2 W (2k45 Ω) / 1 W (4k9 kΩ).	8 W (612 Ω) / 4 W (1k22 Ω) / 2 W (2k45 Ω) / 1 W (4k9 kΩ).	16 W (326 Ω) / 8 W (612 Ω) / 4 W (12k23 Ω) / 2 W (2k45 kΩ).	16 W (326 Ω) / 8 W (612 Ω) / 4 W (12k23 Ω) / 2 W (2k45 kΩ).
Power handling (8 Ω):	50 W RMS (with 120 Hz HPF).	30 W at 8 Ω.	40 W at 8 Ω.	60 W at 8 Ω.	70 W at 8 Ω.
Input connectors:	Euroblock.	Euroblock.	Euroblock.	Euroblock.	Euroblock.
Sensitivity (1W/1m):	87 dB.	89 dB.	91 dB.	92 dB.	93 dB.
Max SPL:	100 dB.	103 dB.	107 dB.	109 dB.	111 dB.
Frequency response:	110 Hz - 20 kHz.	70 Hz - 20 kHz.	60 Hz - 20 kHz.	55 Hz - 20 kHz.	52 Hz -20 kHz.
RAL colour code:	RAL 9003 (W) /9004 (B).	RAL 9003 (W) /9004 (B).	RAL 9003 (W) /9004 (B).	RAL 9003 (W) /9004 (B).	RAL 9003 (W) /9004 (B).
Material (housing):	Polypropylene plastic.	Polypropylene plastic.	Polypropylene plastic.	Polypropylene plastic.	Polypropylene plastic.
Material (grille):	Aluminium.	Aluminium.	Aluminium.	Aluminium.	Aluminium.
Dimensions (WxHxD):	85 x 95 x 100 mm.	148 x 210 x 134 mm.	171 x 244 x 166 mm.	200 x 290 x 175 mm.	260 x 370 x 240 mm.
Weight:	0.5 kg.	1.95 kg each.	2.4 kg each.	3.1 kg each.	4.95 kg each.

(*) The power taps indicated on the selector switch are calculated for 100V line. In the case of 70V line installation, each power tap will correspond to half the value.

NEO A series
Installation loudspeakers

NEO 8A

NEO 5A

NEO 6A

The NEO A series is composed of three self-powered models which complete the NEO series for maximum convenience and flexibility. They feature a two channel class D amplifier, bass and treble tone controls, RCA, 3.5 mm Mini-Jack inputs and a powered output for a passive speaker (included).
Each self-powered model comes with a passive loudspeaker and cables for connection (except for the NEO 8A).

Discover the new NEO 8A .
The NEO 8A is the latest model of the NEO A series. This powerful loudspeaker differentiates itself from the others as its amplifier is exclusively dedicated to this unit. That is why it doesn't come with a passive loudspeaker.
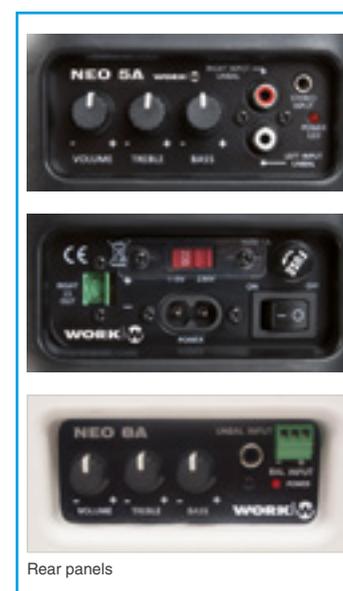
Features

Self-powered two way loudspeakers designed for fixed installations.
Class D amplifier for minimal weight and heat.
Included wall-mount bracket with fast mounting system.
Each unit comes with a passive loudspeaker (except for the NEO 8A).
Available in black and white finish.

Technical data	NEO 5A	NEO 6A	NEO 8A
Type:	2 way self-powered loudspeaker.	2 way self-powered loudspeaker.	2 way self-powered loudspeaker.
Elements:	5¼" woofer + 0.5" TWT.	6½" woofer + 1" TWT.	8" woofer + 1" TWT.
Amplifier power:	2 x 25 W at 4 Ω.	2 x 30 W at 4 Ω.	42 W.
Input connectors:	RCA - Mini-Jack 3.5 mm / Euroblock.	RCA - Mini-Jack 3.5 mm / Euroblock.	RCA - Mini-Jack 3.5 mm
Input sensitivity:	1 V / 2.21 dBu.	1 V / 2.21 dBu.	1 V / 2.21 dBu.
Frequency response:	60 Hz -20 kHz.	55 Hz - 20 kHz.	50 Hz - 20 kHz.
RAL colour code:	RAL 9003 (W) /9004 (B).	RAL 9003 (W) /9004 (B).	RAL 9003 (W) /9004 (B).
Material (housing):	Polypropylene plastic.	Polypropylene plastic.	Polypropylene plastic.
Material (grille):	Aluminium.	Aluminium.	Aluminium.
Main supply:	AC 115/230 V, 60/50 Hz.	AC 115/230 V, 60/50 Hz.	AC 115/230 V, 60/50 Hz.
Dimensions (WxHxD):	171 x 244 x 166 mm.	200 x 290 x 175 mm.	260 x 370 x 240 mm.
Weight:	4.4 kg each.	5.1 kg each.	5.46 kg each.

Rear panels

The wall-mount bracket allows quick and easy installation. Speakers are easily adjustable to the optimum angle for the desired coverage.

NEO 5A ES
Smart installation loudspeakers

The energy efficiency is nowadays a necessary and important subject. More and more, Governments and Industry work to minimize the consumption of energy. Distributed audio installations are one of the elements to take under consideration, but it is hard to control it in installations where there are mostly used self-powered loudspeakers.

The new smart NEO 5A ES is a solution that allows to take advantage of the features of self-powered systems using, at the same time, lower energy consumption. This loudspeaker adds a sensor at the audio input capable of shutting down when it is not receiving audio signal. This auto-off feature means a reduction in its consumption below 1W under these circumstances. When the system starts distributing audio again, the loudspeakers get activated automatically. Thanks to this product, it is possible to exponentially enhance the performance and efficiency of the audio installations.

NEO 5A ES has been certified with the standard ErP EN 50564: 2011 guaranteeing that the product has been designed and developed following the energy efficiency standards.

It is sold in pairs (active + passive box).

Technical data	NEO 5A ES
Type:	2-way self-powered loudspeaker.
Components:	5 ¼ "woofer + 0.5" TWT.
Power amplifier:	2 x 25 W (4Ω).
Input Connectors:	RCA 3.5mm Mini-Jack / Euroblock.
Input sensitivity:	1 V / 2.21 dBu.
Frequency response:	60 Hz -20 kHz.
RAL color code:	RAL 9003 (W) / 9004 (B).
Material (enclosure):	Polypropylene ABS plastic.
Material (grille):	Aluminium.
Power Supply:	AC 115/230 V, 60/50 Hz
Dimensions (HxWxD):	171 x 244 x 166 mm.
Weight:	4.4 kg.

*Available in black and white colour.

Yatch Club of Gandía, Spain

NEO 5 IP
Installation loudspeakers with high IP rating

With an IP protection factor of 65, NEO 5 IP guarantees installations in outdoors with heavy rains, which is a very demmanded feature for this kind of surface mounted loudspeakers. Technical specifications are identical to NEO 5 except for the rear connection which has been replaced with a cable with the different power taps.

Sold in pairs (two passive boxes).

Technical data	NEO 5 IP
Type:	2-way passive loudspeaker.
IP rating:	IP 65
Components:	5 ¼ "woofer + 0.5" TWT.
Power (100 V line):	16 W (625 Ω) / 8 W (1k25 Ω) / 4 W (2k5 Ω) / 2 W (5 k).
(*) Power (70 V line):	8 W (612 Ω) / 4 W (1k22 Ω) / 2 W (2k45 Ω) / 1 W (4k9 kΩ).
Power (8 ohm):	40 W, 8 Ω.
Input Connector:	Euroblock.
Sensitivity (1W/1m):	91 dB.
Max SPL:	107 dB.
Frequency response:	60 Hz - 20 kHz.
RAL color:	RAL 9003 (white) / 9004 (black).
Material (enclosure):	Polypropylene ABS plastic.
Material (grille):	Aluminium.
Dimensions (HxWxD):	171 x 244 x 166 mm.
Weight:	2.4 kg each.
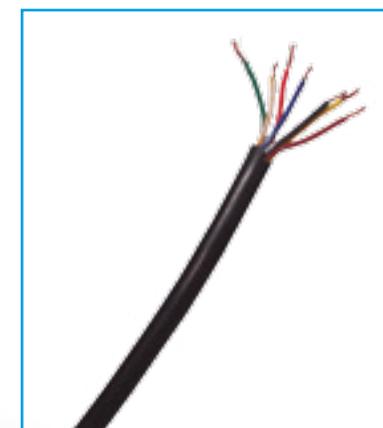
*Available in black and white colour.

STUDIO A series
Installation loudspeakers

STUDIO 40A and STUDIO 50A feature 2 x 20 W or 2 x 30 W power depending on model and they include two operating modes, being suitable for mono and stereo configuration.

A unique device for a better control.
These loudspeakers feature independent volume control with bass and treble tone controls. Input connection is possible by means of Mini-Jack or RCA connectors. Thanks to their power connection, they can directly power a passive loudspeaker (included) to expand the system.
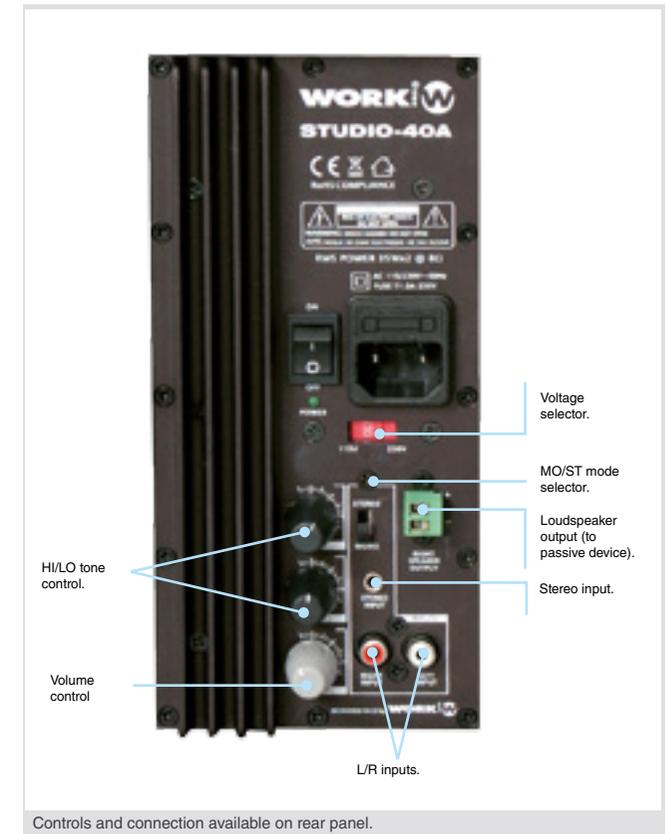
Features
- Self-powered two way loudspeakers for galleries and conference rooms.
- Wide angle dispersion (60° x 90°).
- Mono and Stereo operating modes with low/high tone controls.
- Available with black and white finish.
- Lightweight and compact design.
- Reinforced with high resistance ABS housing.
- Included wall-mount bracket.

STUDIO 50 A
STUDIO 40 A

A passive model comes with each active loudspeaker.

Technical data	STUDIO 40A	STUDIO 50A
Type:	2 way self-powered loudspeaker.	2 way self-powered loudspeaker.
Elements:	6.5" woofer + TWT.	8" woofer + TWT.
Amplifier power:	2 x 20 W at 8 Ω.	2 x 30 W at 8 Ω.
Input connectors:	RCA - Mini-Jack 3.5 mm / Binding post.	RCA - Mini-Jack 3.5 mm / Binding post.
Input sensitivity:	1 V / 2.21 dBu.	1 V / 2.21 dBu.
Frequency response:	60 Hz – 16 kHz.	60 Hz – 16 kHz.
Material (housing):	ABS plastic.	ABS plastic.
Material (grille):	Metal.	Metal.
Main supply:	AC 115/230 V, 60/50 Hz.	AC 115/230 V, 60/50 Hz.
Dimensions (WxHxD):	225 x 300 x 200 mm.	276 x 366 x 240 mm.
Weight:	6.2 kg.	6.8 kg.

Voltage selector.

MO/ST mode selector.

Loudspeaker output (to passive device).

Stereo input.

HI/LO tone control.

Volume control

L/R inputs.

Controls and connection available on rear panel.

ARQ series
Installation loudspeakers

The design of the ARQ series is based on installer feedback, taking into account what they consider important in a medium power installation loudspeaker made for fixed installations.

Audio fidelity.
Choosing the right components has been one of the first steps in the design of the series. Components have been selected to ensure an excellent audio fidelity and enough power for medium size installation purposes. Acoustic enclosures have been designed to optimize sound output, taking advantage of efficient filters.

Suitable for low impedance and 100 V Line installations.
Thanks to their built-in transformer, ARQ loudspeakers can be directly installed in low impedance (8 Ω) and 100 V Line installations. There is no need to buy any accessory. A switch allows to connect low impedance inputs directly to the speaker, without passing across the transformer.

Easy to install.
ARQ series provides several mounting systems, with built-in screws for U brackets in vertical and/or horizontal positions and a 2D bracket to be placed at the back of the cabinet.

Neutral design... in style.
The ARQ series has been made taking into account that loudspeakers have to respect the overall design of the installation. That is why a special care has been taken to the external design of the loudspeakers. The elegant shape and minimalist style of the cabinet make integration really easy in almost any installation.

Excellent finish.
Each detail of the ARQ loudspeakers has been designed with care. For this reason, cabinets are made of strong quality plywood and use the best painting materials, ensuring the long lifetime of the loudspeakers.

Features
- Loudspeakers designed for fixed installations.
- Elegant shape and minimalist design.
- Built-in transformer to install loudspeakers in low impedance (8 Ω) and 100 V Line installations.
- Switch for low impedance inputs connection directly across the transformer.
- Easy to install thanks to the several positions available.
- Made of strong quality plywood.

ARQ 16 **ARQ 25** **ARQ 18**

Technical data	ARQ 16	ARQ 18	ARQ 25
Type:	Two way passive loudspeaker.	Two way passive loudspeaker.	Two way passive loudspeaker.
Elements:	6 1/2" woofer + 1" compression driver.	8" woofer + 1" compression driver.	2 x 5 ¼" woofer + 1" TWT.
Power taps (100 V Line):	40 W (250 Ω) / 20 W (500 Ω).	40 W (250 Ω) / 20 W (500 Ω).	40 W (250 Ω) / 20 W (500 Ω).
(*) Power taps (70 V Line):	20 W (245 Ω) / 10 W (490 Ω).	20 W (245 Ω) / 10 W (490 Ω).	20 W (245 Ω) / 10 W (490 Ω).
Power handling (low impedance):	160 W (8 Ω).	240 W (8 Ω).	240 W (8 Ω).
Input connectors:	Terminals (screw).	Terminals (screw).	Terminals (screw).
Sensitivity:	86 dB (1 W @ 1 m).	87 dB (1 W @ 1 m).	87 dB (1 W @ 1 m).
Max SPL:	105 dB.	108 dB.	108 dB.
Frequency response:	75 Hz - 20 kHz.	70 Hz - 20 kHz.	95 Hz - 20 kHz.
Dispersion (HxV):	90° x 60°	90° x 60°	60° x 60°
Material (housing):	Plywood.	Plywood.	Plywood.
Material (grille):	Metal.	Metal.	Metal.
Dimensions (WxHxD):	370 x 195.5 x 255 mm.	425 x 242.5 x 260 mm.	450 x 177.5 x 202 mm.
Weight:	7.1 kg.	9.2 kg.	7.2 kg.

(*) The power taps indicated on the selector switch are calculated for 100V Line. In the case of 70V Line installation, each power tap will correspond to half the value.

U brackets to mount loudspeakers in vertical and horizontal positions.

UDA 16

Uniform Dispersion Array

UDA 16 is a new concept of modular column with Line array shape. Thanks to an elaborate system of filters and 16 transducers with a wide frequency range placed as a line array system, UDA 16 provides two interesting features:

- Cylindrical waveform (Line Array effect), reducing pressure at only 3dB each time the listening position doubles (minimum loss).
- Beam control or vertical dispersion in all the reproduction band of the column, to control at anytime the presence of undesirable effects induced by wall and ceiling reflections. In addition, it concentrates power on the area that has to be covered (minimizing the secondary lobes effects).
These two features lead to a greater intelligibility at a higher distance which make possible the sound systems with few sources. This minimizes the impact over the installation architecture.

· **Modular system with stacking capability.**

· **Total control of vertical beam width to avoid reflections.**

· **Uniform dispersion array to maintain coherence of frequency response.**

· **Cylindrical wave form to provide minimum loss of sound pressure.**

· **Music and speech intelligibility also in reverberant acoustic conditions.**

· **Elegant and compact design. Available in white and black colour.**

Technical data	UDA 16
Elements:	16 x 2.75" speakers.
Frequency response (-10 dB):	145 Hz - 18.3 kHz.
Sensitivity (SPL@1m):	96 dB.
Max SPL:	122 dB (1 column) 128 dB (2 columns).
Horizontal dispersion:	140°.
Vertical dispersion (1 column):	22°,+/-4°.
Vertical dispersion (2 columns):	11° +/-2°.
Input impedance:	8 Ω.
Power Handling (8 Ω):	430 W.
70/100V transformer:	70/140 W.
DSP controller:	Required.
Connectors:	Terminals.
Colour:	Black or white.
Mounting:	Rear DIN rail.
Dimensions (WxHxD):	105 x 1143 x 112 mm.
Weight:	10.2 kg.

Accessories available with different degrees of inclination and fixing points

Wall 16   **Sub 16/2**   **Spk 16/2**

UDA 16 TL

Transformer for conversion of low impedance into high impedance. It allows to connect UDA 16 column loudspeaker to a 100V line amplifier. It has been designed to blend in any installation with UDA 16 taking advantage of the same DIN rail. Connection through terminals.

Conventional PA systems vs. Array Column Systems
Conventional PA systems provide high power levels but lack directional coverage. Not all the frequencies reach the audience properly, making music and speech intelligibility very diffi cult.

With the distance, conventional PA systems easily lose sound pressure level. This insufficient reach involves lack of clarity for the audience located at the back of the room (whereas levels at the front are too loud). At the same time, low frequencies pressure decrease faster than high frequencies, so people of the audience will hear a different sound according to their position in the room.

The array column system UDA 16 has been designed to provide an efficient solution to these main issues. The efficient control of vertical beamwidth provides a more targeted sound transmission to audience areas. It also attenuates potential refl ections from walls and ceilings, improving speech intelligibility.

Thanks to the Uniform Dispersion Control of the beam, it is possible to maintain constant the frequency response in a wide range of the frequency band in all the area that has to be covered.

The cylindrical dispersion generated by the position of the transducers (line array effect) has direct consequences on sound pressure level, which only decreases by 3 dB each time the distance doubles. It becomes easier for technicians to adjust sound levels and reach all the audience, without having to disturb people at the front with very loud listening levels.

CONVENTIONAL PA SYSTEM   LINE ARRAY COLUMN SYSTEM
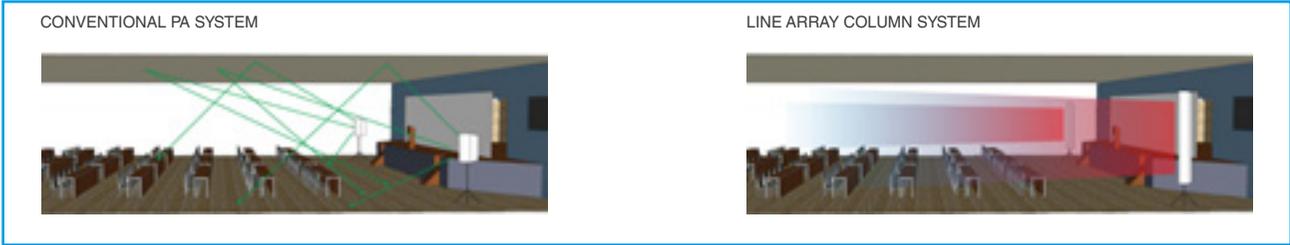
Conventional Line Array System vs. Uniform Dispersion Array
The main advantage of a controlled beam (Uniform dispersion) line array systems is that the audio spectrum that wants to be reproduced has the same dispersion in all the band giving a CONSTANT directivity index (see fi gure), against the conventional array systems which the directivity are directly depending of the frequency, which means different frequency remains in different dispersion so the energy audio levels received by the audience varies in frequency hearing consequently a different sound that the one reproduced by the system.

Band dispersion of a conventional array (approximate figure)   Band dispersion of a conventional array (approximate figure)

Control UDA 16 with WPE 26N and WorkCAD Designer.
The use of the 2-in/6-out WORK's WPE 26N digital system controller is highly advised. UDA 16 presets make use of extensive crossover, EQ, delay and limiting functionality to provide plug-and-play optimization and hence guarantee the best possible audio quality and reliability. An Ethernet connection allows to manage the operation from WORK's WorkCAD Designer PC-based editor with auxilliary devices like WNC-1 or mobile (devices tablets or smartphones), it is possible to activate differents presets in order to adjust the processing for different situations (speech,music,...).

COLUMN SPEAKERS

WS series
Subwoofers

Designed for low frequency reinforcement and composed of two models, the WS series is suitable for almost any installations.

They feature a woofer with a great response in low frequency and a built-in low pass filter. Their compact floor footprint enables them to be discretely positioned within the installation.

The WS 1000 is the perfect complement to installation loudspeakers from the STUDIO series, whereas WS 1200 is more appropriate for loudspeakers with high acoustic response.

Features
- Superior low frequency response for sub-bass.
- Suitable for almost any installations.
- Low-pass built-in filter.

Technical data	WS 1000	WS 1200
Type:	Subwoofer.	Subwoofer.
Elements:	10" woofer.	12" woofer.
Power handling:	500 W.	800 W.
Impedance:	8 Ω ±15% @ 90 Hz 1 V.	8 Ω ±15% @ 90 Hz 1 V.
Input connectors:	2 x speaker 4 pole chassis connector.	2 x speaker 4 pole chassis connector.
Sensitivity:	94 dB ±3 dB @ 1m 1W.	96 dB ±3 dB @ 1m 1W.
Max SPL:	118 dB +/- 3 dB @ 1W 1m.	122 dB +/- 3 dB @ 1W 1m.
Frequency response:	40 Hz to 400 Hz (SPL. -10 dB).	35 Hz to 400 Hz (SPL. -10 dB).
Crossover frequency:	HPF: -12 dB/oct. LPF: 0 dB/oct.	HPF: -12 dB/oct. LPF: 0 B/oct.
Dispersion (HxV):	100° x 45°.	100° x 45°.
Material (housing):	Agglomarated wood.	Agglomarated wood.
Material (grille):	Metal.	Metal.
Dimensions (WxHxD):	320 x 540 x 460 mm.	350 x 625 x 530 mm.
Weight:	15.8 kg.	17.2 kg.

WS 1000

WS 1200

ARC SUB Series
Self-powered Subwoofers

ARC SUB 12

ARC SUB 10

ARC SUB Series

These self-powered subwoofers feature a powerful amplifier and a subwoofer for a perfect reproduction of low frequencies. In addition to low distortion, the transformer ensures signal integrity and long lifetime.

Combination of ARC SUB Series with wall-mount loudspeakers provides great results in bars or event rooms. Thanks to its black wood housing, it perfectly integrates in any installation´s design.

Total control on low frequencies.
Rear panel of ARC SUB Series features many controls for connection system configuration, providing a perfect integration in any installations. Thus, it is possible to modify parameters like inner low-pass filter frequency (from 50 Hz to 150 Hz) or woofer phase inversion. Regarding input signal, ARC SUB 12 has a conventional full range Line input, as well as another LFE that allows using it as an unique bass amplifier (in case of external passive loudspeaker use). In addition, they have a high level input for signals coming from amplifier.

Features
- High performance self-powered subwoofer.
- Power output: 150 W (ARC SUB 10) 200 W (ARC SUB 12).
- Line In / LFE inputs.
- Inner cut frequency adjustment.
- 180° woofer phase inversion.
- Standby function (the amplifier only operates when it detects input signal).

Technical data	ARC SUB 10
Elements:	10" woofer.
Power output:	150W.
Frequency range (Low-pass):	30 Hz -150 Hz.
Frequency range (LFE):	20 Hz - 380 Hz.
Sensitivity:	131 mV @ 150 W.
Crossover:	50 Hz - 180 Hz.
Dimensions (WxHxD).	330 x 450 x 412 mm.
Weight:	16 kg.

Technical data	ARC SUB 12
Elements:	12" woofer.
Power output:	200W.
Frequency range (Low-pass):	30 Hz -150 Hz.
Frequency range (LFE):	20 Hz - 380 Hz.
Sensitivity:	131 mV @ 200 W.
Crossover:	50 Hz - 180 Hz.
Dimensions (WxHxD).	380 x 489 x 470 mm.
Weight:	19 kg.

LOUDSPEAKERS

MINO series
Installation loudspeakers

MINO 15

The MINO series is composed of a wide range of passive loudspeakers made of MDF wood and with an excellent frequency response, even at high output power levels. Many models are available, from 160 W to 1000 W output power. It is also possible to use them as stage monitors, due to their trapezoidal shape.

MINO 12

Features
- Passive loudspeakers, from 160 W to 1000 W output power.
- Excellent frequency response.
- Made of resistant MDF wood.
- Trapezoidal shape.
- MINO 6, 8 and 10 available in black and white finish.
- Bracket included with MINO 6 and 8 loudspeakers.
- MINO 10, 12 and 15 include a rigging system and a 35 mm diameter insertion.

Trapezoidal shape.

MINO 10

MINO 6

MINO 8

Technical data	MINO 6	MINO 8	MINO 10	MINO 12	MINO 15
Elements:	6" woofer + 1" comp. driver.	8" woofer + 1" comp. driver.	10" woofer + 1" comp. driver	12" woofer + 3" comp. driver	15" woofer + 3" comp. driver.
Power handling (8 Ω):	160 W.	200 W.	400 W.	500 W.	1000 W.
Sensitivity (1W/1m):	90 dB.	93 dB	95 dB.	97 dB.	97 dB.
Dispersion (HxV):	140° x 140°.	140° x 140°	55-100° x 55°.	80° x 50°	80° x 50°
Frequency response	80 Hz -18 kHz (-3 dB)	78 Hz -19 kHz (-3 dB)	60 Hz -20 kHz (-3 dB)	60 Hz -16 kHz (-3 dB).	50 Hz -16 kHz (-3 dB)
Input connector:	XLN 4.	XLN 4.	XLN 4.	XLN 4 x 2.	XLN 4 x 2.
Dimensions (WxHxD):	212 x 364 x 194 mm.	258 x 408 x 247 mm.	330 x 502 x 308 mm.	395 x 610 x 377 mm.	542 x 747 x 458 mm.
Weight:	6 kg.	8 kg.	15 kg.	29 kg.	38 kg.

Rigging system and lateral protection for grill.

Bracket available for MINO 6 and 8 loudspeakers.

MINO 6, 8 and 10

MINO 6, 8 and 10 are adequate for small installations like stores and pubs. They are available in black and white finish to easily blend in with the decor. A bracket is included with MINO 6 and 8 to mount loudspeakers on walls.

MINO 6

MINO 8

MINO 10

MINO 12 and 15

MINO 12 and 15 are more suitable for large auditoriums. They include a rigging system and a 35 mm diameter insertion.

MINO 12

MINO 15

MINO A PRO series
Self-powered loudspeakers

MINO 12 A PRO and MINO 15 A PRO are two self-powered loudspeakers (full range) with an excellent frequency response. Their design is based on the passive loudspeakers of the series.

The amplifier has integrated the new DSP module that allows to get the appropriated equalization by setting several parameter. The process is very accurate and it is made through exclusive software, allowing to integrate a wide range of EQ settings.

Therefore, the amplifier is precisely set to offer the best performance possible to the whole system according to its loudspeakers and transducers.
The module has a switch that makes possible for the users to select three prefixed presets for enhancing a particular band (voice, loudness and default).

Features
- Self-powered loudspeakers (full range).
- Excellent frequency response.
- DSP control system (vía software).
- Made of resistant MDF wood.
- Trapezoidal form.
- Rigging system and a 35 mm diameter insertion.

Amplified module

MINO 12 A PRO **MINO 15 A PRO**

Technical data	MINO 12 A PRO / MINO 15 A PRO
Configuration:	650W + 150W @ 8Ω (EIAJ)
Amplifier class:	Class D (Bass), Clases AB (Treble)
Input connectors:	XLR3 (MIC) / XLR3-RCA (LINE)
Input impedance:	10kΩ
Gain (class D ampl. / class AB):	32-36 dB / 27 dB
S / N ratio (class D ampl. / class AB):	>95 dB/A - >95 dB/A
Slew rate (8Ω):	1,5 V/uS – 50 V/uS
Frequency response (class D ampl. / class AB):	15 Hz – 20 kHz /10 Hz – 50 kHz
Damping factor (class D ampl. / class AB):	100Hz>400 – 1kHz>180 / 100Hz>500 – 1kHz>500
Power supply:	100-120/220-240V AC 50/60Hz
*Dimensions:	270x 170 x120 mm
Weight:	2,3 kg

* The dimensions are referred to the amplified module.

Monitor position

WND series
Installation loudspeakers

Thanks to their trapezoidal design and speaker's distribution, WND loudspeakers can be used as commercial projectors or grouped to form a cluster.

Each loudspeaker is composed of 2 woofers and 1 tweeter for a large sound dispersion. Their combination provides an excellent output frequency mix, a well-balanced sound for short distances and a great medium frequency response.

A self-powered version of each model is now available: WND 6A and WND 8A. They feature Master volume control as well as balanced Combi XLR inputs and Euroblock.

Taking into account their shape and the 2 available colours (black and white finish), WND loudspeakers are perfectly appropriate for commercial audio applications, providing flexibility and sound quality.

Features
- Versatile, two way trapezoidal loudspeakers.
- The self-powered version is available.
- Excellent output frequency mix.
- Well-balanced sound for short distances.
- Available in black and white finish.

**WND 8W /
WND 8W A**

**WND 6B /
WND 6B A**

**WND 6W /
WND 6W A**

**WND 8B /
WND 8B A**

Technical data	WND 6	WND 8
Type:	Trapezoidal loudspeaker.	Trapezoidal loudspeaker.
Elements:	2 x 6.5" woofer + 1.35" TWT.	2 x 8" woofer + 1.35" TWT.
Power handling:	400 W.	500 W.
Impedance:	8 Ω.	8 Ω.
Input connectors:	2 x XLN4.	2 x XLN4.
Sensitivity:	93 dB @ 1m/1W.	95 dB @ 1m/1W.
Max SPL:	119 dB.	122 dB.
Frequency response:	50 Hz – 18 kHz.	68 Hz – 18 kHz.
Dispersion (H x V):	50° - 100° x 55°.	50° - 100° x 55°.
Material (housing):	MDF wood.	MDF wood.
Material (grille):	Iron.	Iron.
Dimensions (WxHxD):	215 x 610 x 220 mm.	260 x 700 x 270 mm.
Weight:	13.3 kg.	17.4 kg.

Technical data	WND 6A	WND 8A
Type:	2 way self-powered loudspeaker.	2 way self-powered loudspeaker.
Elements:	2 x 6.5" woofer + 1.35" TWT.	2 x 8" woofer + 1.35" TWT.
Amplifier power:	400 W.	400 W.
Input connectors:	XLR Combi + Euroblock.	XLR Combi + Euroblock.
Input sensitivity:	200 mV (unbalanced) - 100 mV (unbalanced) -	200 mV (unbalanced) - 100 mV (unbalanced) -
Frequency response:	70 Hz - 18 kHz.	60 Hz - 18 kHz.
Dispersion (H x V):	50° - 100° x 55°.	50° - 100° x 55°.
Material (housing):	MDF wood.	MDF wood.
Material (grille):	Iron.	Iron.
Main supply:	AC 115 - 230 V.	AC 115 - 230 V.
Dimensions (WxHxD):	215 x 610 x 220 mm.	260 x 700 x 270 mm.
Weight:	15.90 kg.	20.70 kg.

WND 8A

WND 6

Metal accessory: **ACB-1**

Bracket model:**STB-5**

Bracket model: **STB-10**

* STB-6X (for models WND 6And WND 6A).
STB-8X (for models WND 8And WND 8A).
STB-XB (black models).
STB-XW (white models).

*Bracket model:
STB-6B
STB-6W
STB-8B
STB-8W

CS series
Column speakers

The CS series includes three column speakers designed for audio diffusion in churches, train stations and almost any other places where a clear understanding of the message is essential, even with a large audio dispersion.

The three models can be installed in any 100 V Line installations.
They all include a power tap selector to adjust output to installation requirements. Made of aluminium, they feature an elevate IP range (IP 66) which increases possibilities, as they are also suitable for outdoor applications.

Features

- Column speakers with a large audio diffusion.
- Designed for a clear understanding of announcement.
- Suitable for high impedance (100 V) voltage line installations.
- Especially adequate for churches, train stations and colleges.
- Elevate IP range (66) for outdoor use.

Inputconnection.

Technical data	CS 206	CS 210	CS 214
Type:	Column speaker.	Column speaker.	Column speaker.
Elements:	6 x 2" woofer (full range) + 1" TWT.	10 x 2" woofer (full range) + 1" TWT.	14 x 2" woofer (full range) + 1" TWT.
Power taps (100 V line):	30 W (333 Ω) / 15 W (666 Ω) / 7.5 W (1k3 Ω).	30 W (333 Ω) / 15 W (666 Ω) / 7.5 W (1k3 Ω).	30 W (333 Ω) / 15 W (666 Ω) / 7.5 W (1k3 Ω).
(*) Power taps (70 V Line):	15 W (326 Ω) / 7.5 W (653 Ω) / 3.75 W (1k3 Ω).	15 W (326 Ω) / 7.5 W (653 Ω) / 3.75 W (1k3 Ω).	15 W (326 Ω) / 7.5 W (653 Ω) / 3.75 W (1k3 Ω).
Frequency response:	180 Hz – 18 kHz.	180 Hz – 18 kHz.	180 Hz – 18 kHz.
Sensitivity (1W/1m):	91 dB.	91 dB.	91 dB.
Max. SPL.:	105 dB.	105 dB.	105 dB.
Dispersion (H/V):	165°/55°.	165°/50°.	165°/75°.
IP range:	IP 66.	IP 66.	IP 66.
RAL colour code:	9010.	9010.	9010.
Material (housing):	Aluminium.	Aluminium.	Aluminium.
Material (grille):	Aluminium.	Aluminium.	Aluminium.
Dimensions (LxWxH):	506 x 75 x 70 mm.	721 x 75 x 70 mm.	937 x 75 x 70 mm.
Weight:	2.2 kg.	3.1 kg.	3.9 kg.

(*) The power taps indicated on the selector switch are calculated for 100V line. In the case of 70V line installation, each power tap will correspond to half the value.

COLUMN SPEAKERS

CSV 640
Column speaker

CSV 640 is a self-powered column designed for conferences, meetings and teaching.

It features 4 full range speakers and delivers up to 40 W power. It features several inputs: 2 Mic, 1 Line and 1 Aux (with 4 sensitivity positions and tone/volume control).

One of the Mic inputs is located close to the flex lamp (microphone included). A Rec output is available, as well as a direct connection to external speakers. An optional wireless VHF microphone is available with the column.

Features
- Self-powered column designed for conferences, meetings and teaching.
- Gooseneck lamp and microphone included.
- Four position selector with individual volume control.

Technical data	CSV 640
Type:	Column speaker.
Elements:	4 x 6" woofer + 2 x TWT.
Amplifier power:	40 W at 8 Ω.
Frequency response:	100 Hz - 16 kHz.
Input sensitivity / impedance: Mic 1: Mic 2: Line: Aux 1: Aux 2: Aux 3: Aux 4:	- 50 dB / 680 Ω. - 55 dB / 600 Ω. - 20 dB / 50 kΩ. - 20 dB / 10 kΩ. - 15 dB / 30 kΩ. - 10 dB / 50 kΩ. - 3 dB / 80 kΩ.
Max. SPL.:	110 dB.
THD:	0.5%.
S/N ratio:	45 dB.
RAL colour code:	9016.
Material (housing):	Metal.
Material (grille):	Metal.
Main supply:	AC 220 V / DC12 V.
Dimensions:	1314.5 x 580 x 420 mm.
Weight:	19 kg.

2 Mic, 1 Line and 1 Aux inputs with their own volume and tone controls.

Stable base.

ARION
series

Self-powered line array system with configurable DSP module.

The ARION 5 line array system is composed of four SL 25 satellites and a SL 115 SA self-powered subwoofer.

Each SL 25 integrates two 5.25" transducers for mid and a 1" compression driver for high. The high quality of these transducers makes it possible to obtain an efficient response. SL 115 SA uses a 15" woofer specially designed to enhance low frequencies response. Besides, it includes the power amplifier. This bi-amplified module has separated ways to amplify each band section according to their requirements.

Thanks to its self-powered feature and compact size, ARION 5 is a plug and play line array system which is really easy to transport and install. These features and its power output make it a perfect choice for small and medium installations, such as conference rooms, auditorium, shopping-malls, etc. ARION 5 is made in 15" high density plywood and it is available in two colours: black and white.

Great flexibility in shaping array curvature.

Mechanically speaking the ARION 5 uses built-in rigging hardware with adjustable angles from 0 to 10 degrees in 1.5 degree increments, which allows for great flexibility in shaping array curvature.

Integrated amplifier module.

The tri-amplified module included into the SL 115 SA provides a complete control over each band.
The amplifier offers three separated ways, 1000W for the own subwoofer and 650W + 150W for the SL 25 satellites (mid+high). The module incorporates balanced/unbalanced inputs with tone controls and pre-amplified output.

In relation to protection functions, this amplifier incorporates circuitry which avoids damage caused by short-circuits, DC voltage in the output and thermal.
The built-in DSP allows to set and insert a defined number of equalization filters, what makes it an easily adaptable system for different situations.

Configurable DSP module.

The amplifier has integrated the **new DSP module** that allows to get the appropriated equalization by setting several parameter. The process is very accurate and it is made through exclusive software, allowing to integrate a wide range of EQ settings.

Therefore, the amplifier is precisely set to offer the best performance possible to the whole system according to its loudspeakers and transducers.
The module has a switch that makes possible for the users to select three prefixed presets for enhancing a particular band (voice, loudness and default).

SL 115 SA

SL 25

FEATURES SL 115 SA

- Self -powered loudspeaker for bass reinforcement.
- The perfect complement for SL 25 loudspeakers.
- Composed of 1 x 15" LF woofer.
- High sensitibity (96 dB).
- High SPL output level (123 dB).
- Fast mounting system and stacking.
- Acoustic cabinet made of 15 mm birch plywood.
- Polyurethane coating with textured finish for extended use.

AMPLIFIER

- Tri-amplifier with internal DSP
- 1000W + 500W + 500W
- Built-in equalization presets
- Two tone controls
- Balanced/Unbalanced LINE inputs

FEATURES SL 25

- Two way full range loudspeaker.
- Ultra compact and lightweight design.
- High sensitivity (99 dB).
- High output level (122 dB).
- Transducers:
  · 2 x 5.25" Neodymium transducer.
  · 1 x 44mm Neodymium compression motor for high frequencies.
- 110° horizontal dispersion.
- Fast mounting system and stacking.
- Printed angle indicators to adjust vertical angle in steps of 1°.
- Acoustic cabinet made of 15 mm birch plywood.
- Quick and safe fixing system (aluminium) for rigging.
- Polyurethane coating with textured finish for extended use.

ARION 5 is equipped with an amplifier and a DSP module with preset settings.

Also available in white

Technical data	SL 25
Type:	Bi-amp full range loudspeaker
HF driver:	1 x T 44 HF Compression driver
LF driver:	2 x 5.25 LF driver
Frequency range, on-axis, -3 dB:	120 Hz – 20 kHz.
Frequency range, on-axis, -10 dB:	110 Hz – 20 kHz.
Sensitivity (1W @ 1m, on-axis):	99 dB (1w @ 1m).
Maximum SPL, nominal:	122 dB (1m).
Coverage angle:	Horizontal: 110°. Vertical: 30°.
Crossover point:	DSP equalization.
Nominal Impedance:	High: 16 Ω, Low: 16 Ω.
Enclosure:	Trapezoidal, 15mm birch plywood.
Finish:	Black polyurethane for cabinet,black powder coated for grille.
Connectors:	2 x NL4 speakON.
Dimensions (WxHxD):	490 x 251 x 165 mm.
Weight:	9.2 kg.
Installation:	Specialized hardware (Flying Frame MFF5)

Technical data	SL 115 SA Loudspeaker
Type:	Self-powered subwoofer (tri-amplifier)
Transducers:	1 x 15" LF driver.
Frequency response (-3 dB):	45 Hz – 110 Hz.
Frequency response (-10 dB):	45 Hz – 120 Hz
Sensitivity (1 W @ 1 m):	96 dB (1w @ 1m).
Maximum SPL:	123 dB (1m).
Enclosure:	Wedge cabinet, 18 mm birch plywood.
Finish:	Black polyurethane for cabinet, black powder coated for the grille
Carry:	2 x wooden handles
Connector:	2 x NL4.
Dimensions (WxHxD):	600 x 590 x 640 mm.
Weight:	33.5 kg.
Installation:	Special rigging brackets and accesories

Technical data	SL 115 SA Amplifier
Power Output:	1000W + 500W + 500W (class D + AB)
Input Impedance:	10k Ω.
Gain (amp. class D / AB):	32-36 dB / 27 dB.
SN Ratio (amp. class D / AB):	> 95 dB / > 95 dB.
Slew Rate (8 Ω):	1.5V / uS - 50V / uS.
Freq. Response (amp. class D / AB):	15Hz - 20kHz / 10Hz - 50kHz.
Damping Factor (amp. class D / AB):	> 180; >500 @ 1kHz / > 400; > 500 @ 100 Hz
Main Supply:	AC 115/230 V 50/60 Hz

ARION series

ARION 10
Line Array System

WORK PRO's all-new Arion line gets started with the ARION 10, a passive line array module for bi-amplified use. Compact sized, it can be used as a full range system with a useable response down to 45 Hz or with subwoofer complement.

The heart of any loudspeaker system lies on its transducers, which is why the ARION 10 features only Neodymium magnet assemblies, guaranteeing high efficiency and low distortion, as well as reduced weight.

For the high frequencies two 1.75 in. pure titanium diaphragm compression drivers are used. A 44 mm voice coil, wound to a high temperature Kapton former, ensures high power handling, while a flux density 2.2 Tesla motor structure provides unprecedented efficiency, all of which translates to clean SPL to spare. Each driver is mounted onto a separate precision waveguide that provides a flat wave front, essential to line array coupling and resulting in smoothly increasing directivity characteristics.

Low frequencies are handled by a 10" cone driver that makes uses of a centrally located Neodymium magnet. A 2.5" edge-wound voice coil with Kapton support is utilised as well as pole-piece venting and extensive heat sinking, which will keep power compression under control.

Mechanically speaking the ARION 10 uses built-in rigging hardware with adjustable angles from 0 to 10 degrees in 1 degree increments, which allows for great flexibility in shaping array curvature.
The SL 101 suspension frame provides safe and practical suspension; up to 16 units can be flown with a safety factor of 10:1.

With a maximum peak sound pressure level of 124 dBs, the ARION 10 is ideal for small to medium sized indoor or outdoor applications such as theatres, houses of worship and arenas. Frontfill or sidefill use in larger scale events is also a possibility.

Features SL 101

- Two way loudspeaker with Line Array format.
- Ultra compact and lightweight design.
- High sensitivity (95 dB).
- High output level (124 dB peak).
- Transducers:
  · 1 10" Neodymium transducer.
  · 2 1.7" Neodymium compression motors for high frequencies.
- 120° horizontal dispersion.
- Fast mounting system and stacking.
- Printed angle indicators to adjust vertical angle in steps of 1°.
- Acoustic cabinet made of 15 mm birch plywood.
- Quick and safe fixing system (aluminium) for rigging.
- Polyurethane coating with textured finish for extended use.

Features SL 212 B

- Loudspeaker for bass reinforcement.
- The perfect complement for SL 101 loudspeakers.
- Composed of 2 LF compression drivers (12" neodymium) for low frequency top performance.
- High SPL output level (128 dB peak).
- Fast mounting system and stacking.
- Acoustic cabinet made of 15 mm birch plywood.
- Polyurethane coating with textured finish for extended use.

SL 212 B

SL 101

Control ARION 10 with WPE 26N and WorkCAD Designer.
The use of the 2-in/6-out WORK's WPE 26N digital system controller is highly advised. Arion 10 presets make use of extensive crossover, EQ, delay and limiting functionality to provide plug-and-play optimization and hence guarantee the best possible audio quality and reliability. An Ethernet connection allows for operation from WORK's WorkCAD Designer PC-based editor.

Coupled with OSC (Open Sound Control) connectivity, wired or wireless remote control from all sorts of devices including iOS or Android based phones and tablet computers, such as iPhones and iPads. In addition to the preset panel configurations provided by WORK, the user will be able to easily build customized control panels.

Technical data	SL 101
Power Handling, Low:	400W Program. 800W Peak.
Power Handling, High:	240W Program. 480W Peak.
Frequency range, on-axis, -10 dB:	45 Hz – 20 kHz.
Sensitivity (1W@1m, on-axis):	95 dB SPL.
Maximum SPL, nominal:	118 dB SPL / 124 dB SPL (Peak).
Coverage angle:	Horizontal: 120°. Vertical: Array geometry dependent.
Nominal Impedance:	High: 8 Ω, Low: 8 Ω.
Enclosure:	Trapezoidal, 15mm birch plywood.
Finish:	Black, textured polyurethane for cabinet,powder coated for grille.
Transducers:	1 x 10" cone speaker, Neodimium magnet,2 x 1,75" diaphragm compression driver,Neodimium magnet.
Connectors:	2xNL4 speakON.
Dimensions (WxHxD):	538.5 x 262 x 435.5 mm.
Weight:	17 kg.
Optional accessories:	Suspension frame.

Technical data	SL 212 B
Construction:	15 mm birch plywood.
Transducers:	2 x 12" LF compression driver.
Frequency response (-3 dB):	45 Hz – 300 Hz.
Rated power:	1.800 W Program. 3.600 W Peak.
Sensitivity (1 W @ 1 m):	92 dB.
Maximum SPL:	122 dB / 128 dB (Peak).
Rated impedance:	4 Ω.
Connector:	2 x NL4.
Dimensions (WxHxD):	540 x 713 x 680 mm.
Weight:	50 kg.

ZERO series
Active Subwoofers

ZERO Series is a new series of Subwoofers which complement the Arion Series from WORK PRO designed for fixed and portable sound applications because on both cases, users are looking for compact size but powerful response. Zero Active series is composed of 2 models, Z15 A (single 15"), Z18 A (Single 18") with a Class D amplifier which combined with the built-in DSP makes a prefect sound adjustment for each model.

Made for an impact bass
Being a direct radiation design, it has a great impulsive response and compact size (which becomes in "punch" bass) making it very suitable for direct sound and/or music clubs or discotheque. In addition, the powered version takes even more from the unit because of the built-in preadjusted DSP and the high efficient class-D Amplifier.

Cardioid Pattern possibilities
Thanks to the direct radiation design, Zero subwoofers are designed to make a Cardioid pattern configuration if needed. With Cardioid configuration it reduces (almost eliminates) the low frequencies radiation backwards removing the effect of low frequencies in the stage where the musicians are, and allowing to clearly listen the monitor speakers at the stage.

Portable and durable
With a 21mm high quality plywood and rugged powder coated grill, the construction is designed to resist the touring mobility but also it has been designed to be portable because of the very compact size.

M20 screwed insertion
Recommended bracket: SH 120

ZERO series
Active Subwoofers

Z 15 AS
Features
- Subwoofer in active configuration.
- Incorporates 15" woofer.
- Bass reflex design.

Z 18 AS
Features
- Subwoofer in active configuration.
- Incorporates 18" woofer.
- Bass reflex design.

Technical data	Z 15 AS
Configuration:	15" woofer.
Type of radiation:	Direct radiation (bass reflex).
Power handling:	1000W.
Frequency response (-3 dB):	45 Hz - 110 Hz.
Recommended filtering:	45 Hz - 120 Hz.
Sensitivity:	96 dB.
Max. SPL:	123 dB.
Impedance:	8 Ω.
Enclosure:	18 mm plywood.
Grille:	Steel with powder coating paint.
Connectors:	Parallel Speakon XLN 4 (x2).
Dimensions (W x Hl x D):	490 x 495 x 521 mm.
Dimensions (packed):	600 x 590 x 640 mm.
Net weight:	30.5 kg.
Gross weight:	33.5 kg.

Technical data	Z 18 AS
Configuration:	18" woofer.
Type of radiation:	Direct radiation (bass reflex).
Power handling:	1200W.
Frequency response (-3 dB):	42 Hz - 90 Hz.
Recommended filtering:	42 Hz - 100 Hz.
Sensitivity:	97 dB.
Max. SPL:	125 dB.
Impedance:	8 Ω.
Enclosure:	18 mm plywood.
Grille:	Steel with powder coating paint
Connectors:	parallel Speakon XLN 4 (x2)
Dimensions (W x Hl x D):	538 x 573 x 618 mm.
Dimensions (packed):	670 x 640 x 740 mm.
Net weight:	37.5 kg.
Gross weight:	41 kg.

Technical data	Z 15 AS Amplifier module
Type:	Class D amplifier.
Main supply:	AC 220-240V 50/60Hz AC 110-120V 50/60Hz.
Dimensions (W x H x D):	246 x 126 x 70 mm.
Weight:	1.7 kg.
Slew rate:	1.5V/uS.
Distortion:	<0.1% (THD, DIM, SMPTE).
Inputs:	Unbalanced.
Input impedance:	10 K Ω.
Gain:	32dB.
Outputs:	Unbalanced.
Frequency response:	15Hz - 20kHz.
Damping factor:	100 H > 400 / 1Khz > 180.
Output power:	1000W @ 8 Ω.
Protections:	Thermal, short circuit, overload, 12V DC controlled temperature, overvoltage, DC compensated stop.

Technical data	Z 18 AS Amplifier module
Type:	Class D amplifier.
Main supply:	AC 220-240V 50/60Hz AC 110-120V 50/60Hz.
Dimensions (W x H x D):	246 x 126 x 70 mm.
Weight:	1.7 kg.
Slew rate:	1.5V/uS.
Distortion:	<0.1% (THD, DIM, SMPTE).
Inputs:	Unbalanced.
Input impedance:	10 K Ω.
Gain:	32dB.
Outputs:	Unbalanced.
Frequency response:	15Hz - 20kHz.
Damping factor:	100 H > 400 / 1Khz > 180.
Output power:	1000W @ 8 Ω.
Protections:	Thermal, short circuit, overload, 12V DC controlled temperature, overvoltage, DC compensated stop.

SL 218 RD
Subwoofer

This new subwoofer series is designed for installation and portable audio applications, since both users are in search of a compact element but with a powerful response with direct radiating design, it offers a large impulse response and compact size (which becomes a "punch" bass) so it is very suitable for the direct sound and / or discos and clubs. This same design achieves direct radiation cardioid configuration if necessary. This configuration reduces (almost eliminates) the low frequency radiation to the back of the enclosure, eliminating the effect of low level frequencies caused by the musicians on stage and allowing to clearly hear the monitor loudspeakers located on the stage. Made of 21 mm plywood and a coated grille with high strength powder paint, these subwoofer are designed to withstand the mobility of touring, taking advantage of its compact size. These subwoofers can be the perfect complement for the reinforcement of other systems such as line array series ARION or UDA16 column.

Features
- Subwoofers reinforcement.
- Configuration folded horn.
- Setup for direct radiation (bass reflex).
- 2 x 18" woofers.
- Made in 21 mm plywood.
- Waterproof paint.
- Transport wheels.
- Strong handles.

Technical data	SL 218 RD
Type of radiation :	Direct (Bass reflex).
Elements :	2 x 18 "woofer.
Frequency response :	36 Hz - 250 Hz.
Power handling:	2400 W.
Impedance:	4 Ω.
Sensitivity:	103 dB (1W/1m).
Max. SPL:	136 dB.
Dimensions:	1160 x 635 x 580 mm.
Weight:	98 kg.

EVENTER 1
Self-powered systems

This set is composed of two Z 15 self-powered subwoofers (bi-amplified module) with a power of 500W+500W (subwoofer + satellite) each one. It adds a specific configuration with the pre-equalization prepared for UDA 16. This set incorporates the cables for subwoofers and satellites and power supply cables for the subwoofers.

Features
Cables included.

EVENTER 1 is equipped with an amplifier and a DSP module with preset settings.

Technical data	UDA 16
Elements:	16 x 2.75" speakers.
Frequency response (-10 dB):	80 Hz - 20 kHz.
Sensitivity (SPL@1m):	96 dB.
Max SPL:	122 dB (1 column) 128 dB (2 columns).
Horizontal dispersion:	140°.
Vertical dispersion (1 column):	22°,+/-4°.
Vertical dispersion (2 columns):	11° +/-2°.
Input impedance:	8 Ω.
Power Handling (8 Ω):	430 W.
70/100V transformer:	70/140 W.
DSP controller:	Required.
Connectors:	Terminals.
Colour:	Black or white.
Mounting:	6 nuts (M4) at each end (wall bracket included).
Dimensions (WxHxD):	105 x 1143 x 112 mm.
Weight:	10.2 kg.

Technical data	Z 15 AU
Configuration:	15" woofer.
Type of radiation:	Direct radiation (bass reflex).
Power handling:	500W.
Frequency response (-3 dB):	45 Hz - 110 Hz.
Recommended filtering:	45 Hz - 120 Hz.
Sensitivity:	96 dB.
Max. SPL:	123 dB.
Impedance:	8 Ω.
Enclosure:	18 mm plywood.
Grille:	Steel with powder coating paint
Connectors:	Parallel Speakon XLN 4 (x2)
Dimensions (W x Hl x D):	490 x 495 x 521 mm.
Dimensions (packed):	600 x 590 x 640 mm.
Net weight:	30.5 kg.
Gross weight:	33.5 kg.

Technical data	Z 15 AU Amplifier module
Type:	Class D amplifier.
Amplifier power:	500W + 500W.
Main supply:	AC 220-240V 50/60Hz AC 110-120V 50/60Hz.
Dimensions (W x H x D):	246 X 126 X 70 mm.
Weight:	1.7 kg.
Slew Rate:	1.5V/uS.
Distortion:	<0.1% (THD, DIM, SMPTE).
Inputs:	Unbalanced.
Input impedance:	10K Ω.
Gain:	32dB.
Output:	Unbalanced.
Frequency response:	15Hz-20 kHz.
Damping factor:	100 H > 400 / 1kHz > 180.
Protections:	Thermal, short circuit, overload, 12V DC controlled temperature, overvoltage, DC compensated stop.

EVENTER 2
Self-powered systems

This set is composed of two Z 15 self-powered subwoofers (bi-amplified module) with a power of 600W+150W (subwoofer + satellite) each one. It adds a specific configuration with the pre-equalization prepared for MINO 10. This set incorporates the cables for subwoofers and satellites and power supply cables for the subwoofers.

Features
Cables included.

EVENTER 2 is equipped with an amplifier and a DSP module with preset settings.

Technical data	MINO 10
Elements:	10" woofer + 1" comp. driver.
Power handling:	200 W.
Sensitivity:	95dB/1W/1m.
Max SPL:	118 dB.
Dispersion (HxV):	55-100° x 55°.
Impedance:	8 Ω.
Frequency response:	60 Hz - 20 KHz (-3dB).
Input connector:	XLN 4.
Dimensions (W xH x D):	330 x 4502 x 308 mm.
Weight:	15 kg.

Technical data	Z 15 AM 1
Configuration:	15" woofer.
Type of radiation:	Direct radiation (bass reflex).
Power handling:	500W.
Frequency response (-3 dB):	45 Hz - 110 Hz.
Recommended filtering:	45 Hz - 120 Hz.
Sensitivity:	96 dB.
Max. SPL:	123 dB.
Impedance:	8 Ω.
Enclosure:	18 mm plywood.
Grille:	Steel with powder coating paint
Connectors:	Parallel Speakon XLN 4 (x2)
Dimensions (W x Hl x D):	490 x 495 x 521 mm.
Dimensions (packed):	600 x 590 x 640 mm.
Net weight:	30.5 kg.
Gross weight:	33.5 kg.

Technical data	Z 15 AM 1 Amplifier module
Type:	Class D amplifier.
Power:	650W + 150W.
Main supply:	AC 220-240V 50/60Hz AC 110-120V 50/60Hz.
Dimensions: (W xH x D)	246 X 126 X 70 mm.
Weight:	1.7 kg.
Slew Rate:	1.5V/uS.
Distortion:	<0.1% (THD, DIM, SMPTE).
Inputs:	Unbalanced.
Input impedance:	10 K Ω.
Gain:	32dB.
Output:	Unbalanced.
Frequency response:	15Hz-20 kHz.
Damping factor:	100 H > 400 / 1kHz > 180.
Protections:	Thermal, short circuit, overload, 12V DC controlled temperature, overvoltage, DC compensated stop.

EVENTER 3
Self-powered systems

Technical data	MINO 12
Elements:	12" woofer + 3" comp. driver.
Power handling:	250 W.
Sensitivity:	97dB/1W/1m.
Máx SPL:	121 dB.
Dispersion (HxV):	80° x 50°.
Impedance:	8 Ω.
Frequency response:	60 Hz-16 KHz (-3dB).
Input connector:	XLN4 x 2.
Dimensions (W xH x D):	395 x 610 x 377 mm.
Weight:	29 kg.

This set is composed of two Z 18 self-powered subwoofers (bi-amplified module) with a power of 500W+500W (subwoofer + satellite) each one. It adds a specific configuration with the pre-equalization prepared for MINO 12. This set incorporates the cables for subwoofers and satellites and power supply cables for the subwoofers.

Technical data	Z 18 AM
Configuration:	18" woofer.
Radiation type:	Direct radiation(bass reflex).
Power handling:	600W.
Frequency response (-3 dB):	42 Hz - 90 Hz.
Recommended filtering:	42 Hz - 100 Hz.
Sensitivity:	97 dB.
Máx. SPL:	125 dB.
Impedance:	8 Ω.
Enclosure:	18 mm plywood.
Grille:	Steel with powder coating paint.
Connectors:	Parallel speakon XLN 4 (x2)
Dimensions (W x H x D):	538 x 573 x 618 mm.
Dimensions (packed):	670 x 640 x 740 mm.
Net weight:	37.5 kg.
Gross weight:	41 kg.

Features
Cables included.

Technical data	Z 18 AM Amplifier module
Type:	Class D amplifier.
Power:	500W + 500W.
Main supply:	AC 220-240V 50/60Hz AC 110-120V 50/60Hz.
Dimensions (W xH x D):	246 x 126 x 70 mm.
Weight:	1.7 kg.
Slew rate:	1.5V/uS.
Distortion:	<0.1% (THD, DIM, SMPTE).
Inputs:	Unbalanced.
Input impedance:	10 K Ω.
Gain:	32dB.
Output:	Unbalanced.
Frequency response:	15Hz - 20kHz.
Damping factor:	100 H > 400 / 1Khz > 180.
Protections:	Thermal, short circuit, overload, 12V DC controlled temperature, overvoltage, DC compensated stop.

EVENTER 3 is equipped with an amplifier and a DSP module with preset settings.

SPB Loudspeaker Accessories

SPB mini

8 cm

9 cm

SPB Mini is a 3D wall-mount bracket (vertical and horizontal). Easy mounting system to loudspeaker. 2 colours available: black and white.

SPB 1 E

SPB 1 E/B

SPB 1 E/W

9 cm

9 cm

10 cm

SPB 1 E is a wall-mount bracket for small-size loudspeakers, all appropriate for installations where audio has to go unnoticed. SPB 1 E allows a total orientation of the speakers and thus ensures audio spread. Thanks to its security locking cable, SPB 1 E ensures that speaker will never fall.

SPB 2 E

MARK

24 cm

19 cm

11 cm

33 cm

Wall-mount bracket.
Maximum load: 45 kg.

SPB 3 E

16 cm

12.5 cm

24 cm

20 cm

26 cm

Wall-mount bracket for loudspeakers.
3 positions with 90° and 135° turns.
Maximum load: 45 kg.

SPB 4 E
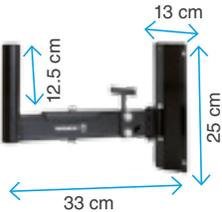
13 cm

12.5 cm

25 cm

33 cm

Wall-mount bracket for loudspeakers. 2 axes of rotation.
Adjustable depth for loudspeaker position.

Maximum load: 45 kg.

SPB 5 E

62 cm Max.

32 cm

15 cm

30 cm

Wall-mount bracket for loudspeakers. 2 axes of rotation.
Adjustable depth for loudspeaker position.

Maximum load: 45 kg.

![WORK logo]

SPB Loudspeaker Accesories

SPB 6

33 cm

40 cm

9'5 cm

33 cm

52 cm
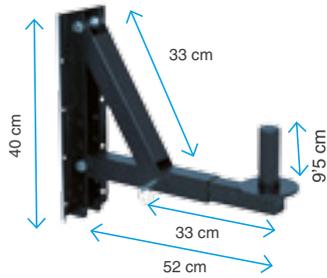
Wall-mount bracket specially designed for heavy loudspeakers. Re-inforced rear panel allows its installation on walls and corners.

Insertion: Ø 35 mm.
Inclination angles: 22.5°, 45°, 90°, 112.5° and 135°.
Maximum load: 60 kg.

SPB 7
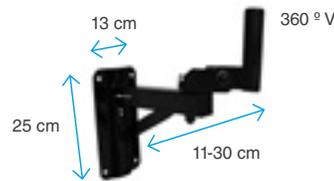
13 cm   360 º V

25 cm

11-30 cm

High resistance wall-mount bracket for loudspeakers.

Insertion: Ø 35 mm.
Inclination angles: 360°.
Maximum load: 60 kg.

SPB 8
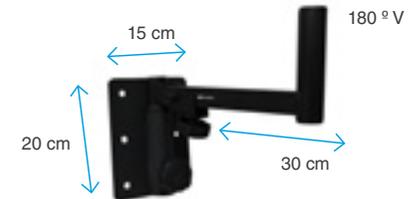
15 cm   180 º V

20 cm

30 cm

High resistance wall-mount bracket for loudspeakers.

Insertion: Ø 35 mm.
Inclination angles: 180°.
Maximum load: 60 kg.

SPB Loudspeaker Accesories

SPB 10

8 cm

27cm long. mín.
37cm long. máx.

SPB 11

8 cm

270 cm

SPB 15

8 cm

9,5 cm

15,5 cm

15 cm

SPB 10 is the indicated wall-mount bracket for the placement of loudspeakers on a truss. For this purpose, it includes a clamp with screw for tubes from 48 to 50 mm on one side and a 35 mm insertion tube on the other side. It includes a mobile lane that allows to change the arm length between 270 mm and 370mm.

Maximum length: 370 mm.
Minimum length: 270 mm.
Insertion tube height: 80 mm.

SPB 11 is a high resistance wall-mount bracket for loudspeakers that allows its placement on the top of foldable stands with 35 mm insertion from the SH series. Its lower double screw system ensures a perfect fixation. The top side has a insertion tube for loudspeakers, and holes to be placed on diferent angles . (5 positions from 0° to 45°).

Length: 270 mm.
Insertion tube height: 80 mm.
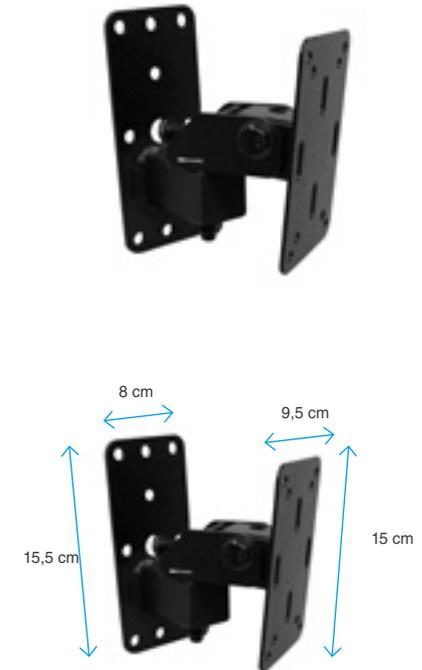
SPB 15 is a wall-mount bracket that allows to adjust the horizontal angle of the loudspeaker.

Insertion: Ø 35 mm.
Inclination angles: 180°.
Maximum load: 60 kg.

Mercure Hotel, Portugal

IC PRO series
Ceiling speakers

The IC Pro series of **WORK PRO®** is composed of three ceiling speakers with separate woofer and tweeter. They provide high sound quality in your installation.

They are made of high impact resistance ABS plastic and feature a metal grille as well as a metal back enclosure which contains the crossover network and transformer. A bass reflex design, coupled with extended enclosure volume and bass resonance tube provide better bass extension.

They are suitable for high impedance (70 V, 100 V) voltage line and low impedance (8 Ω) installations. The power tap selector is accessible from the front of the speaker so levels can be adjusted after installation. They also have a detachable Euroblock connector, contained within a metal compartment for ease of installation.

Features
- Two way ceiling speakers designed for retail stores and halls.
- Separate woofer and tweeter with low frequency tube resonator for excellent sound quality.
- Suitable for high impedance (70 V, 100 V) voltage line and low impedance (8 Ω) installations.
- High resistance ABS housing with metal grille and metal rear cover.
- Power tap selector accessible from the front of the speaker.

IC 4 PRO S
IC 6 PRO S Also available in silver.

IC 6 PRO

IC 4 PRO R

IC 4 PRO

Technical data	IC 4 PRO	IC 4 PRO R	IC 6 PRO
Type:	Two way ceiling speaker.	Two way ceiling speaker.	Two way ceiling speaker.
Elements:	4" woofer + ¾" TWT.	4" woofer + ¾" TWT.	6.5" woofer + ¾" TWT.
Power taps (100 V line):	8 W (1k2 Ω) / 4 W (2k5 Ω) / 2 W (5 kΩ) / 1 W (10 kΩ).	8 W (1k2 Ω) / 4 W (2k5 Ω) / 2 W (5 kΩ) / 1 W (10 kΩ).	50 W (200 Ω) / 30 W (333 Ω) / 15 W (666 Ω) / 5 W (2 kΩ).
Power taps (70 V line):	8 W (612 Ω) / 4 W (1k22 Ω)/ 2 W (2k5 Ω) / 1 W (4k9 Ω).	8 W (612 Ω) / 4 W (1k22 Ω)/ 2 W (2k5 Ω) / 1 W (4k9 Ω).	50 W (98 Ω) / 30 W (163 Ω) / 15 W (326 Ω) / 5 W (980 Ω).
Low impedance output:	30 W at 8 Ω.	30 W at 8 Ω.	60 W at 8 Ω.
Frequency response:	80 Hz – 20 kHz.	80 Hz – 20 kHz.	60 Hz – 20 kHz.
Sensitivity (1W/1m):	88 dB.	88 dB.	88 dB.
Max SPL:	95 dB.	96 dB.	104 dB.
RAL colour code:	RAL 9003.	RAL 9003.	RAL 9003.
Material (housing):	ABS plastic.	ABS plastic.	ABS plastic.
Material (grille):	Powder coated iron mesh.	Powder coated iron mesh.	Powder coated iron mesh.
Mounting dimensions (Ø x D):	170 x 30 mm. (max ceiling thickness).	190 x 190 mm 30 mm. (max ceiling thickness).	220 mm x 30 mm. (max ceiling thickness).
Dimensions (Ø x D):	185 x 130 mm.	210 x 210 x 115 mm (WxHxD).	240 x 190 mm.
Weight:	2.2 kg.	2.4 kg.	3 kg.
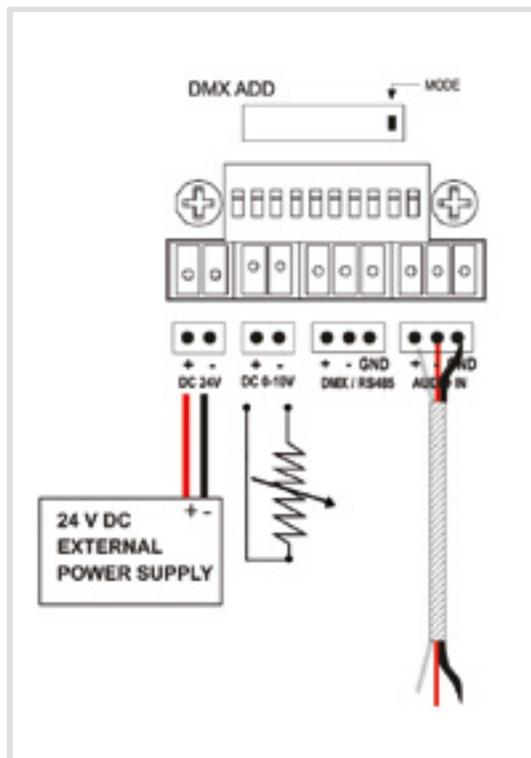
IC 6 PRO A can directly control the volume with a simple potentiometer connected to DC 0-10V pins.

Features
- Self-powered, two way ceiling speaker.
- 25 W class D amplifier.
- RS485/DMX or Analog signal (DC 0-10 V) for volume control.
- Power On/Off (standby) through DMX.
- Balanced input signal.
- DIP switch for DMX address selection.
- White LED on front panel to indicate if the unit is turned on.

IC 6 Pro A is an innovative ceiling speaker that includes a 25 W amplifier controlled by DMX.
IC 6 Pro A can cover many zones (512 zones per universe). This is a convenient solution for integrators who need order to control each speaker independently through a DMX console.

Taking advantage of digital control.
DMX is a protocol that has been initially designed for lighting consoles, but it is also well-known by integrators because it is compatible with the most common control devices (Creston, AMX, etc.). Each IC 6 Pro A uses a DMX channel for volume control and to switch on/off the amplifier (Standby mode for energy savings). A DIP switch is available on rear panel to select the start DMX address.

Self-powered speaker.
IC 6 Pro A drives up to 25 W (8 Ω) thanks to its built-in class D amplifier. It also features a balanced input to use long distance cables in the installation.

Technical data	IC 6 PRO A
Type:	Self-powered two way ceiling speaker.
Elements:	6.5" woofer + ¾" TWT.
Amplifier power:	25 W at 8 Ω.
Frequency response:	60 Hz - 20 kHz.
Input impedance:	10 kΩ.
Sensitivity (1W/1m):	88 dB.
Max SPL:	102 dB.
RAL colour code:	RAL 9003.
Material (housing):	ABS plastic.
Material (grille):	Powder coated iron mesh.
Mounting dimensions (Ø x D):	220 mm x 30 mm (max ceiling thickness).
Dimensions (Ø x D):	241 x 171 mm.
Weight:	2.8 kg.

Main supply 24V - 1.7A (OPTIONAL)
Non-rackable outer main supply (IC 6 PRO A).

IC 6 PRO A. Connections for DMX channel selection.

IC T 50/60/80
Ceiling speakers

These three professional ceiling speakers are designed to offer a professional solution to contractors on a budget. They are all suitable for small audio installations like retail stores and small rooms.

They feature a light, quick installation system and clean design for a perfect integration. In order to ensure a long lifetime, they are made of strong ABS plastic which protects them from heat.

Features

- Ceiling speakers with full range woofer.
- Suitable for high impedance (100 V) voltage line installations.
- High resistance ABS housing with metal grille.
- Easy, fast and safe fastening system.

IC 80T **IC 60T** **IC 50T**

Technical data	IC 50T	IC 60T	IC 80T
Type:	Full range ceiling speakers.	Full range ceiling speakers.	Full range ceiling speakers.
Elements:	5" woofer.	6" woofer.	8" woofer.
Power taps (100 V line):	6 W (1k6 Ω) / 3 W (3k3 Ω).	6 W (1k6 Ω) / 3 W (3k3 Ω).	6 W (1k6 Ω) / 3 W (3k3 Ω).
(*) Power taps (70 V line):	3 W (1k6 Ω) / 1.5 W (3k2 Ω).	3 W (1k6 Ω) / 1.5 W (3k2 Ω).	3 W (1k6 Ω) / 1.5 W (3k2 Ω).
Frequency response:	110 Hz - 18 kHz.	110 Hz - 18 kHz.	50 Hz - 18 kHz.
Sensitivity (1W/1m):	88 dB.	88 dB.	88 dB.
Max SPL:	95 dB.	95 dB.	95 dB.
RAL colour code:	RAL 9016.	RAL 9016.	RAL 9016.
Material (housing):	ABS plastic.	ABS plastic.	ABS plastic.
Material (grille):	Powder coated iron mesh.	Powder coated iron mesh.	Powder coated iron mesh.
Mounting dimensions (Ø x D):	170 x 30 mm (max ceiling thickness).	200 x 30 mm (max ceiling thickness).	240 x 30 mm (max ceiling thickness).
Dimensions (Ø x D):	Ø 203 x 80 mm.	Ø 230 x 80 mm.	Ø 270 x 85 mm.
Weight:	0.70 kg.	0.90 kg.	1.2 kg.

(*) The power taps indicated on the selector switch are calculated for 100V line. In the case of 70V line installation, each power tap will correspond to half the value.

IC T 511/611/811
Ceiling speakers

Designed for commercial audio applications, these three ceiling speakers take advantage of a high quality coaxial transducer to provide quality sound results.

Their power tap selector makes them suitable for high impedance (70 V, 100 V) voltage line and low impedance (8 Ω) installations. The transformer is contained within a metal can enclosure to improve response.

IC 511T

IC 611T

IC 811T

Features
- Two way ceiling speakers for commercial audio applications.
- Suitable for high impedance (70/100 V) voltage line and low impedance (8 Ω) installations.
- High resistance ABS housing with metal grille.
- Full protection of the transformer.
- Easy, fast and safe fastening system.

Technical data	IC 511T	IC 611T	IC 811T
Type:	Two way ceiling speakers.	Two way ceiling speakers.	Two way ceiling speakers.
Elements:	5" woofer + 0.5" TWT.	6" woofer + 0.5" TWT.	8" woofer + 0.5" TWT.
Power taps (100 V line):	20 W (500 Ω) / 10 W (1 kΩ) / 5 W (2 kΩ) / 2.5 W (4 kΩ).	30 W (333 Ω) / 15 W (666 Ω) / 7.5 W (1k3 Ω) / 3.8 W (2k6 Ω).	40 W (250 Ω) / 20 W (500 Ω) /10 W (1 kΩ) / 5 W (2 kΩ).
Power taps (70 V line):	20 W (245 Ω) / 10 W (490 Ω) / 5 W (980 Ω) / 2.5 W (1k96 Ω) / 1.25 W (3k92 Ω).	30 W (163 Ω) / 15 W (326 Ω) / 7.5 W (653 Ω) / 3.8 W (1k3 Ω) / 1.9 W (2k6 Ω).	40 W (122 Ω) / 20 W (245 Ω) /10 W (490 Ω) / 5 W (980 Ω) / 2.5 W (1k96 Ω).
Power taps (low impedance):	20 W at 8 Ω.	30 W at 8 Ω.	40 W at 8 Ω.
Frequency response:	100 Hz - 20 kHz.	90 Hz - 20 kHz.	50 Hz - 20 kHz.
Sensitivity (1W/1m):	88 dB.	88 dB.	88 dB.
Max SPL:	101 dB.	102 dB.	104 dB.
RAL colour code:	RAL 9016.	RAL 9016.	RAL 9016.
Material (housing):	ABS plastic.	ABS plastic.	ABS plastic.
Material (grille):	Powder coated iron mesh.	Powder coated iron mesh.	Powder coated iron mesh.
Mounting dimensions (Ø x D):	170 x 30 mm (max ceiling thickness).	200 x 30 mm (max ceiling thickness).	240 x 30 mm (max ceiling thickness).
Dimensions (Ø x D):	Ø 203 x 145 mm.	Ø 230 x 150 mm.	Ø 270 x 185 mm.
Weight:	1.80 kg.	2.3 kg.	3.1 kg.

IC T 500/600/800
Ceiling speakers

These three professional ceiling speakers are designed to offer an economic and professional solution to contractors. They are suitable for small audio installations as shops and small rooms.

They are light, have a quick mounting system and a simple design. They are made of a very resistant ABS plastic that protects them from heat and ensures long lifetime.

Features
- Ceiling speakers with full range woofer.
- Suitable for high impedance installations (70/100 V).
- Transformer with 4 selectable inputs.
- Very resistant ABS plastic enclosure and metallic grille.
- Quick mounting system.

IC 800T **IC 600T** **IC 500T**

Technical data	IC 500T	IC 600T	IC 800T
Type:	Two way ceiling speakers.	Two way ceiling speakers.	Two way ceiling speakers.
Elements:	5" woofer.	6" woofer.	8" woofer.
Power (100 V line):	6 W (1k6 Ω) / 3 W (3k2 Ω).	6 W (1k6 Ω) / 3 W (3k2 Ω).	6 W (1k6 Ω) / 3 W (3k2 Ω).
Power (70 V line):	3 W (1k6 Ω) / 1.5 W (3k2 Ω).	3 W (1k6 Ω) / 1.5 W (3k2 Ω).	3 W (1k6 Ω) / 1.5 W (3k2 Ω).
Frequency response:	110 Hz - 18 kHz.	110 Hz - 18 kHz.	50 Hz - 18 kHz.
Sensitivity (1W/1m):	92 dB.	92 dB.	92 dB.
Max SPL:	99 dB.	99 dB.	99 dB.
RAL colour code:	RAL 9016.	RAL 9016.	RAL 9016.
Material (housing):	ABS plastic.	ABS plastic.	ABS plastic.
Material (grille):	Powder coated iron mesh.	Powder coated iron mesh.	Powder coated iron mesh.
Mounting dimensions (Ø x D):	170 x 30 mm (max ceiling thickness).	200 x 30 mm (max ceiling thickness).	240 x 30 mm (max ceiling thickness).
Dimensions (Ø x D):	Ø 203 x 145 mm.	Ø 230 x 150 mm.	Ø 270 x 185 mm.
Weight:	1.2 kg.	1.5 kg.	2.3 kg.

IC T 550/660/880
Ceiling speakers

Step 1

Step 2

Step 3

Step 4

8 seconds that make the difference.

8 seconds, this is the time a contractor need to install these ceiling speakers. Forget about screws and any other slow mounting system: you only have to press the buttons to trigger clamps and directly fix speakers to the ceiling.

This fast-mounting system is 10 times faster than any other system, so contractors will save many time and increase their efficiency.

This unique and patented system is also very easy to use. Anyone can install speakers, no need to be an expert.

One of the main tendency in installation design is to hide the plastic parts of ceiling speakers. The IC T series features an ultra thin frame design with a uniform grille which occupies 96%of the total speaker surface.

In order to provide a high quality sound, the IC T ceiling speakers include an efficient two way system, perfectly adequate for background music.

Features

- Two way ceiling speakers.
- Suitable for high impedance voltage line installations.
- Ultrafast fastening system (only 8 sec.), easy to install.
- The grille occupies 96% of the total speaker surface.
- Perfectly adequate for background music.

IC 880T   **IC 660T**   **IC 550T**

Technical data	IC 550T	IC 660T	IC 880T
Type:	Two way ceiling speakers.	Two way ceiling speakers.	Two way ceiling speakers.
Elements:	5 ¼" woofer + 0.5" TWT.	6 1/2" woofer + 0.5" TWT.	8" woofer + 0.5" TWT.
Power taps (100 V line):	6 W (1k6 Ω) / 3 W (3k3 Ω) / 1.5 W (6k6 Ω).	6 W (1k6 Ω) / 3 W (3k3 Ω) / 1.5 W (6k6 Ω).	6 W (1k6 Ω) / 3 W (3k3 Ω) / 1.5 W (6k6 Ω).
(*) Power taps (70 V line):	3 W (1k6 Ω) / 1.5 W (3k2 Ω) / 0.75 W (6k5 Ω).	3 W (1k6 Ω) / 1.5 W (3k2 Ω) / 0.75 W (6k5 Ω).	3 W (1k6 Ω) / 1.5 W (3k2 Ω) / 0.75 W (6k5 Ω).
Frequency response:	81 Hz - 20 kHz.	80 Hz - 20 kHz.	62 Hz - 20 kHz.
Sensitivity (1W/1m):	87 dB.	87 dB.	87 dB.
Max SPL:	95 dB.	95 dB.	95 dB.
RAL colour code:	RAL 9003.	RAL 9003.	RAL 9003.
Material (housing):	ABS plastic.	ABS plastic.	ABS plastic.
Material (grille):	Powder coated iron mesh.	Powder coated iron mesh.	Powder coated iron mesh.
Mounting dimensions (Ø x D):	175 x 30 mm (max ceiling thickness).	213 x 30 mm (max ceiling thickness).	245 x 30 mm (max ceiling thickness).
Dimensions (Ø x D):	Ø 205 x 80 mm.	Ø 237 x 75 mm.	Ø 275 x 98 mm.
Weight:	1 kg.	1.12 kg.	1.54 kg.

(*) The power taps indicated on the selector switch are calculated for 100V line. In the case of 70V line installation, each power tap will correspond to half the value.

The uniform grille occupies 96% of the total speaker surface.

RCS 403 Pro T
Ceiling speaker

RCS 403 Pro T is a ceiling speaker easy to install and designed for music diffusion and speech. It is suitable for high impedance (100 V) voltage line installations.

Housing is made of ABS plastic with a metal grille. Fixation with removable towing hook system ensures the perfect fastening of the ceiling speaker.

Features
- Ceiling speaker designed for music diffusion and speech.
- Suitable with for high impedance (100 V) voltage line installations.
- High resistance ABS housing with metal grille.
- Easy, fast and safe fastening system.

Technical data	RCS 403 Pro T
Type:	Full range ceiling speaker.
Elements:	4" woofer.
Power taps (100 V line):	6 W (1k6 Ω) / 3 W (3k3 Ω).
(*) Power taps (70 V line):	3 W (1k6 Ω) / 1.5 W (3k2 Ω).
Frequency response:	150 Hz - 18 kHz.
Sensitivity (1W/1m):	91 dB.
Max. SPL.:	95 dB.
RAL colour code:	9016.
Material (housing):	ABS plastic.
Material (grille):	Powder coated iron mesh.
Mounting dimensions (Ø x D):	Ø 125 x 30 mm (max ceiling thickness).
Dimensions (Ø x D):	Ø 140 x 130 mm.
Weight:	0.9 kg.

(*) The power taps indicated on the selector switch are calculated for 100V line. In the case of 70V line installation, each power tap will correspond to half the value.

RCS 204
Ceiling speaker

Contrary to other ceiling speakers, RCS 204 has a square shape, offering an alternative to contractors and designers.

This full range ceiling speaker features an ABS plastic made housing and metal grille. It is suitable for high impedance (100 V) voltage line installations. Thanks to its size (220 x 220 mm), it can be installed in any place with conventional lighting.

Features
- Full range ceiling speaker with a square shape.
- Suitable for high impedance (100 V) voltage line installations.
- High resistance ABS housing with metal grille.
- Easy, fast and safe fastening system.

Technical data	RCS 204
Type:	Full range ceiling speaker.
Elements:	4" woofer.
Power taps (100 V line):	6 W (1k6 Ω) / 3 W (3k3 Ω).
(*) Power taps (70 V line):	3 W (1k6 Ω) / 1.5 W (3k2 Ω).
Frequency response:	150 Hz - 18 kHz.
Sensitivity (1W/1m):	91 dB.
Max. SPL.:	95 dB.
RAL colour code:	9016.
Material (housing):	ABS plastic.
Material (grille):	Powder coated iron mesh.
Mounting Dimensions:	185 x 185 x 30 mm (max ceiling thickness).
Dimensions:	220 x 220 x 95 mm.
Weight:	1.86 kg.

(*) The power taps indicated on the selector switch are calculated for 100V line. In the case of 70V line installation, each power tap will correspond to half the value.

RCS series
In-wall speakers

RCS series includes three in-wall speakers designed for both background music systems and other commercial audio applications. They are molded in a high resistance ABS plastic and have a rectangular shape.

They feature an efficient 2 way or 3 way system with passive crossover filter. They are suitable for constant voltage line (100 V) installations and provide optimum results even at low frequencies, due to their wide frequency range.
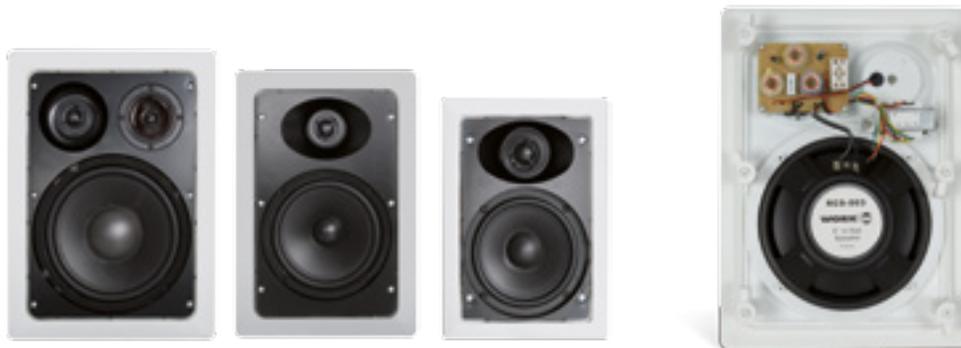
Features

- In-wall speakers designed for any commercial audio applications.
- Rectangular shape.
- Two way system with passive crossover for RCS 001 and RCS 002.
- Three way system with passive crossover for RCS 003.
- Suitable for high impedance (100 V) voltage line installations.
- High resistance ABS housing with metal grille.

RCS 003   **RCS 002**   **RCS 001**

Technical data	RCS 001	RCS 002	RCS 003
Type:	Two way in-wall speaker.	Two way in-wall speaker.	Three way in-wall speaker.
Elements:	5" woofer + 1" tweeter.	6 1/2" full range woofer + 1" tweeter.	8" full range woofer + 2.5" tweeter + 1" silk dome.
Power taps (100 V line):	12 W (833 Ω) / 8 W (1k25 Ω) / 4 W (2k5 Ω).	20 W (500 Ω) / 15 W (666 Ω) / 10 W (1 kΩ).	30 W (333 Ω) / 20 W (500 Ω) / 10 W (1 kΩ).
(*) Power taps (70 V line):	6 W (817 Ω) / 4 W (1k22 Ω) / 2 W (2k45 Ω).	10 W (490 Ω) / 7.5 W (653 Ω) / 5 W (980 Ω).	15 W (326 Ω) / 10 W (490 Ω) / 5 W (980 Ω).
Frequency response:	50 Hz - 20 kHz.	45 Hz - 20 kHz.	30 Hz - 20 kHz.
Sensitivity (1W/1m):	88 dB.	90 dB.	92 dB.
RAL colour code:	RAL 9003.	RAL 9003.	RAL 9003.
Max. SPL:	98 dB.	103 dB.	106 dB.
Material (housing):	ABS plastic.	ABS plastic.	ABS plastic.
Material (grille):	Powder coated iron mesh.	Powder coated iron mesh.	Powder coated iron mesh.
Mounting dimensions (WxH):	211 x 144 mm.	303 x 195 mm.	330 x 230 x 30 mm.
Dimensions (WxHxD):	260 x 190 x 59 mm.	345 x 235 x 90 mm.	370 x 270 x 95 mm.
Weight:	1.3 kg.	1.52 kg.	2.50 kg.

(*) The power taps indicated on the selector switch are calculated for 100V line. In the case of 70V line installation, each power tap will correspond to half the value.

ATP series
Volume controllers with program selector

The ATP series includes 3 volume controllers with built-in program selector. It is adequate for multizone and local control applications. The three models have a new and minimalist design in order to make their integration easier in any installation. They all include a 24 V DC input for emergency backup.

Features
- Volume controllers with built-in program selector.
- Designed for multizone and local control applications.
- Up to 24 W power (depending on model).
- Up to 10 attenuation steps.
- 24 V input for emergency alarms.

ATP 224 (24W)
ATP 206 (6W) RESISTIVE

Technical data	ATP series
Material:	ABS plastic.
Colour:	White.
Dimensions:	80 x 154 x 50 mm.
Weight:	370 g.

AT series
Volume controllers with amplifier

These 3 volume controllers with amplifier are made of strong ABS plastic. Power, which depends on model, can reach up to 50 W. They are suitable for constant voltage line (100 V) installations and feature 10 attenuation steps (3 dB per step / max attenuation: 30 dB). It minimalist design makes its integration easier in any installation.

Features
- Volume controllers with amplifier.
- Up to 50 W (depending on model).
- Up to 10 attenuation steps.
- Suitable for 100 V Line installations.
- Recommended for multizone and local control.

AT 150 (50W)
AT 125 (25W)
AT 106 (6W) RESISTIVE

Technical data	AT series
Available outputs:	100 V.
Attenuation steps:	10 steps (3dB por step).
Max attenuation:	30 dB.
Material:	ABS plastic.
Colour:	White.
Dimensions:	80 x 80 x 53 mm.
Weight:	250 g.

AT 225
Stereo volume attenuator

AT 225 is an adequate solution for volume remote control in a stereo configuration with low impedance (4 Ω). This attenuator features two transformers and controls in 10 steps of 3 dB up to 25 W per channel. Several low impedance loudspeakers can be connected to the same amplifier output.

Features
- Stereo attenuator for volume remote control.
- Suitable for low impedance (4 Ω) stereo configurations.
- Controls up to 25 W per channel, with 10 steps of 3 dB.
- Possibility to connect speakers to the same amplifier output.

Technical data	AT 225
Available outputs:	4 Ω.
Attenuation steps:	10 steps (3dB por step).
Max attenuation:	30 dB.
Material:	ABS plastic.
Colour:	White.
Dimensions:	80 x 80 x 53 mm.
Weight:	340 g.

AP 6
Programmer + volume attenuator

AP 6 is a six position programmer made of ABS plastic. It design allows its integration in a standard electrical box: this makes contractors job easier because they use the same boxes for interrupters and network sockets.

The design of AP 6 makes possible its integration in a standard electrical box.

ATP series

AT series   **AP 6**
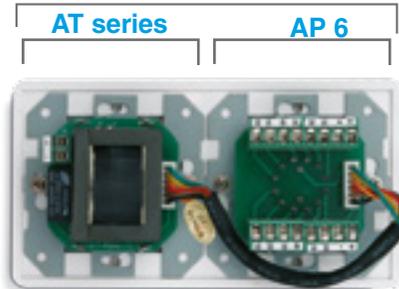
Technical data	AP 6
Programas:	6.
Material:	ABS plastic.
Colour:	White.
Dimensions:	80 x 80 x 28 mm.
Weight:	160 g.

WORK

MSH 30/BT / WHS 45S
Sound projectors

WHS 45S and MSH 30/BT are sound projectors with a full range speaker. They provide efficient directionality.
MSH 30/BT features a two way system to optimize acoustic response.

Thanks to their high IP range, they are ideal for outdoor installations and other areas suffering adverse weather conditions. Their aluminium handle enables a fast mounting operation.

Features
- High quality sound projectors.
- Designed to provide an efficient directionality.
- Suitable for high impedance (70/100 V voltage line) and low impedance (8 Ω) installations.
- Excellent response for any frequency range.
- Ideals for outdoor installations and other areas suffering adverse weather conditions.

MSH 30/BT

WHS 45S

Technical data	MSH 30/BT
Type:	Two way sound projector.
Elements:	6" woofer + 2.5" TWT.
Power taps (100 V line):	50 W (200 Ω) / 25 W (400 Ω) / 12.5 W (800 Ω) / 9 W (1k1 Ω) / 4.5 W (2k2 Ω) / 3.5 W (2k8 Ω).
Power taps (70 V line):	25 W (197 Ω) / 12.5 W (392 Ω) / 6.5 W (753 Ω) / 4.5 W (1k2 Ω) / 2.7 W (1k8 Ω) / 1.7 W (2k8 Ω).
Low impedance output:	50 W at 8 Ω.
Frequency response:	90 Hz-20 kHz.
Sensitivity (1W/1m):	99 dB.
Max. SPL.:	115 dB.
IP range:	IP 56.
RAL colour code:	7035.
Material (housing):	ABS plastic.
Dimensions (WxHxD):	363 x 253 x 310 mm.
Weight:	3.9 kg.

Technical data	WHS 45S
Type:	Full range sound projector.
Elements:	5" woofer.
Power taps (100 V line):	30 W (333 Ω) / 15 W (666 Ω) / 7.5 W (1k3 Ω) / 3.8 W (2k6 Ω).
Power taps (70 V line):	30 W (163 Ω) / 15 W (326 Ω) / 7.5 W (653 Ω) / 3.8 W (1k3 Ω) / 1.9 W (2k5 Ω).
Power taps (low impedance):	30 W at 8 Ω.
Frequency response:	100 Hz - 10 kHz.
Sensitivity (1W/1m):	90 dB.
Max. SPL.:	105 dB.
IP range:	IP 56.
RAL colour code:	7035.
Material (housing):	ABS plastic.
Material (grille):	Powder coated iron mesh.
Dimensions (WxHxD):	366 x 230 x 272 mm.
Weight:	3 kg.

SOUND PROJECTORS

CS 6A
Sound projector

CS 6A is a cylindrical sound projector made of strong ABS plastic.
It features a 120 mm dynamic cone woofer (full range) which provides
an excellent response for any frequency. It is suitable for several type of
installation thanks to its transformer (50, 70, 100 V Line and 8 Ω).

Features
- Sound projector with a cylindrical shape and dynamic cone woofer.
- Designed for large areas with important background (train stations, airports, etc.).
- Suitable for high impedance (50/70/100 V voltage line) and low impedance (8 Ω) installations.
- Made of strong ABS plastic to improve resistance.

CS 6A

Technical data	CS 6A
Type:	Full range sound projector.
Elements:	5" woofer.
Power taps (100 V line):	6 W (1k6 Ω) / 3 W (3k3 Ω) / 1.5 W (6k3 Ω).
Power taps (70 V line):	6 W (816 Ω).
Power taps (50 V line):	6 W (416 Ω).
Power taps (low impedance):	6 W at 8 Ω.
Frequency response:	150 Hz - 15 kHz.
Sensitivity (1W/1m):	98 dB.
Max. SPL.:	105 dB.
IP range:	IP 46.
RAL colour code:	1002.
Material (housing):	ABS plastic.
Material (grille):	Powder coated iron mesh.
Dimensions (Ø x D):	185 x 200 mm.
Weight:	1.4 kg.

CS 30A
Sound projector

This sound projector with a square shape is designed for large areas with important background
noise (train stations, airports, etc.). It is made of strong ABS plastic to protect it from hits.

It features a 120 mm dynamic cone woofer that provides an excellent acoustic response for any frequency.
It is suitable for several type of installation thanks to its transformer (50, 70, 100 V Line and 8 Ω).

Features
- Sound projector with a square shape and dynamic cone woofer.
- Designed for large areas with important background (train stations, airports, etc.).
- Suitable for high impedance (50/70/100 V voltage line) and low impedance (8 Ω) installations.
- Made of strong ABS plastic to improve resistance.

CS 30A

Technical data	CS 30A
Type:	Full range sound projector.
Elements:	5" woofer.
Power taps (100 V line):	30 W (333 Ω) / 15 W (666 Ω) / 7.5 W (1k3 Ω).
Power taps (70 V line):	30 W (163 Ω).
Power taps (50 V line):	30 W (83 Ω).
Power taps (low impedance):	30 W at 8 Ω.
Frequency response:	125 Hz - 15 kHz.
Sensitivity (1W/1m):	101 dB.
Max. SPL.:	115 dB.
IP range:	IP 46.
RAL colour code:	1002.
Material (housing):	ABS plastic.
Material (grille):	Powder coated iron mesh.
Dimensions (WxHxD):	283 x 234 x 256 mm.
Weight:	3.7 kg.

SOUND PROJECTORS

WORK

CSR 208
Sound projector

Omnidirectional sound projector.
This projector has been specifically designed for large installations such as commercial malls. Thanks to its power tap selector, it is possible to use it in high-voltage (100V 32 / 16 / 8 / 4 W) or low impedance (8 Ω) installations. CSR 208 features a minimalist design to easily blend in with the decor.

Features
- Omnidirectional sound projector for large installations.
- Power tap selector, being suitable for high impedance (100V) and low impedance (8 Ω) voltage line installations.
- Minimalist design to blend in with any decor.

Technical data	CSR 208
Elements:	6.5" woofer + 1" TWT.
Power:	32W/16W/8W/4 W (100 V), 8 Ω.
Frequency response:	80 Hz - 18 kHz.
Dimensions (ØxD):	Ø 270 mm x 230 mm.
Weight	2.8 kg.

These sound projectors made of ABS plastic and aluminium are designed to precisely control the orientation of the sound.

They all feature an axial cone woofer (full range), a wide frequency range and a SPL system which improves sound orientation. Their transformer makes them suitable for several type of installations. They are particularly adequate for areas with background noise like train stations and airports.

Features

- Sound projector with a cylindrical shape.
- Axial cone woofer (full range).
- SPL system to improve sound orientation.
- Suitable for high impedance (with 100V

passive crossover) voltage line installations.
- Highly recommended for areas with background music (e.g. train stations, airports).

Technical data	CS 323T / CS 310T	CS 306T / CS 303T
Type:	Full range sound projector.	Full range sound projector.
Elements:	6.5" woofer.	5" woofer.
Power taps (100 V line):	20 W (500 Ω) / 10 W (1k Ω) / 5 W (2k Ω).	10 W (1 kΩ) / 5 W (2 kΩ) / 2.5 W (4 kΩ).
(*) Power taps (70 V line):	10 W (490 Ω) / 5 W (980 Ω) / 2.5 W (1k96 Ω).	5 W (980 Ω) / 2.5 W (1k96 Ω) / 1.25 W (3k9 Ω).
Frequenzy response:	110 Hz - 15 kHz.	130 Hz - 15 kHz.
Sensitivity (1W/1m):	92 dB.	91 dB.
Max. SPL:	108 dB.	101 dB.
IP range:	CS 323T: IP 55. CS 310T: IP 54	CS 306T: IP 55. CS 303T: IP 54.
RAL colour code:	9016.	9016.
Material (housing):	CS 323T: ABS plastic. CS 310T: Aluminium.	CS 306T: ABS plastic. CS 303T: Aluminium.
Material (grille):	CS 323T: Aluminium. CS 310T: Steel.	CS 306T: Aluminium. CS 303T: Steel.
Dimensions:	CS 323T: Ø 170 x 245 mm. CS 310T: Ø 170 x 252 mm.	CS 306T: Ø 138 x 205 mm. CS 303T: Ø 138 x 205 mm.
Weight:	CS 323T: 1.6 kg. CS 310T: 2.8 kg.	CS 306T: 1.6 kg. CS 303T: 2.2 kg.

(*) The power taps indicated on the selector switch are calculated for 100V line. In the case of 70V line installation, each power tap will correspond to half the value.

CS 323T
Sound projector

CS 310T
Sound projector

CS 306T
Sound projector

CS 303T
Sound projector

CS 601 / CS 602
Sound projectors

CS 601 and CS 602 have been designed for indoor and outdoor installations that require a good sound response and smart look. Transformer included for high impedance (100 V) and 3 power selectors.
Contrary to CS 601, CS 602 is bidirectional. It has two speakers, one opposite to another.

Technical data	CS 601 / CS 602
Type:	CS 601: Unidirectional projector. CS 602: Bidirectional projector.
Frequency response:	130 Hz -15 kHz.
Sensitivity (1W/1m):	91 + 3 dB.
Max. SPL.:	100 dB @ 10 W (100V).
Power handling:	CS 601: 10 W. CS 602: 12 W.
Selectable power:	CS 601: 10 W/5 W/2,5 W. CS 602: 12 W/6 W/3 W.
Input level:	100 V.
IP range:	IP 55.
Speaker:	CS 601: 5" full range. CS 602: 2x 5" full range.
Color:	RAL 9016 white.
Dimensions (LxØ):	CS 601: 205 x 138 mm. CS 602: 200 x 138 mm.
Weight:	CS 601: 1.5 kg. CS 602: 1.7 kg.

CS 602

CS 601

Features

- Audio projectors for indoors and outdoors (IP 55 range).
- Two configurations: unidirectional (CS 601) and bidirectional (CS 602).
- Designed for (100 V) high impedance installations.
- Power selector with 3 positions.

SOUND PROJECTORS

SC/AH series
Horn speakers

The following horn speakers feature a transformer which makes them suitable for high impedance (25, 70 and 100 V) voltage line installations. Their power taps (from 10 to 30 W) ensure an efficient sound diffusion in medium-size installations.

They are made of ABS plastic and have a high IP range (66). They also feature stainless steel handles, being all adequate for alarm systems in outdoor applications.

Features
- Horn speakers made of strong ABS plastic.
- Highly resistant speakers, with 66 IP range.
- Suitable for high impedance (100 V) voltage line installations.
- Up to 30 W power, depending on model.
- Suitable for medium-size outdoor applications.

SC 10 AH

SC 15 AH

SC 30 AH

Technical data	SC 10 AH	SC 15 AH	SC 30 AH
Type:	Horn speaker.	Horn speaker.	Horn speaker.
Power taps (100 V line):	10 W (1 kΩ) / 5 W (2 kΩ) / 3 W (3k3 Ω) / 1 W (10 kΩ).	15 W (666 Ω) /10 W (1 kΩ) / 5 W (2 kΩ) / 3 W (3k3 Ω) / 1 W (10 kΩ).	30 W (333 Ω) / 15 W (666 Ω) / 7.5 W (1k3 Ω) / 3 W (3k3 Ω) / 1 W (10 kΩ).
Power taps (70 V line):	5 W (980 Ω) / 2.5 W (1k9 Ω) / 1.5 W (3k2 Ω) / 0.5 W (9k8 Ω).	7.5 W (653 Ω) / 2.5 W (1k9 Ω) / 1.5 W (3k2 Ω) / 0.5 W (9k8 Ω).	15 W (326 Ω) / 7.5 W (653 Ω) / 3.75 W (1k3 Ω) / 1.5 W (3k2 Ω) / 0.5 W (9k8 Ω).
Power taps (25 V line):	10 W (250 Ω).	15 W (166 Ω).	30 W (83 Ω).
Frequency response:	315 Hz - 12k5 Hz.	280 Hz - 12k5 Hz.	250 Hz - 16 kHz.
Sensitivity (1W/1m):	93 dB.	94 dB.	93 dB.
Max. SPL.:	103 dB.	105 dB.	107 dB.
IP range:	IP 66.	IP 66.	IP 66.
RAL colour code:	1002.	1002.	1002.
Material (housing):	ABS plastic.	ABS plastic.	ABS plastic.
Dimensions:	Ø 176 x 179 mm.	Ø 222 x 227.5 mm.	Ø 287 x 257.5 mm.
Weight:	1 kg.	1.6 kg.	2 kg.

PH/BT series
Horn speakers

Features

- Horn speakers made of strong ABS plastic.
- Highly resistant speakers, with steel handles.
- Suitable for outdoor applications (IP 56).
- Suitable for high impedance (70/100 V) voltage line and low impedance (8 Ω) installations.
- Included power tap selector.
- Up to 30 W power, depending on model.

These horn speakers are specially designed for outdoor installations (IP 56) and alarm systems. They are made of ABS plastic and feature stainless steel handles.

Each model has its own power, from 10 to 30 W, which ensures sound diffusion in any medium-size installations. Thanks to their transformer and power tap selector, they are suitable for high impedance (70/100 V) voltage line and low impedance (8 Ω) installations.

PH 10/BT

PH 15/BT

PH 30/BT

Technical data	PH 10/BT	PH 15/BT	PH 30/BT
Type:	Horn speaker.	Horn speaker.	Horn speaker.
Power taps (100 V line):	10 W (1 kΩ) / 5 W (2 kΩ) / 2.5 W (4 kΩ) / 1.25 W (8 kΩ).	15 W (666 Ω) / 7.5 W (1k3 Ω) / 3.75 W (2k6 Ω) / 1.9 W (5k9 Ω).	30 W (333 Ω) / 15 W (666 Ω) / 7.5 W (1k3 Ω) / 3.75 W (2k6 Ω).
Power taps (70 V line):	10 W (490 Ω) / 5 W (980 Ω) / 2.5 W (1k9 Ω) / 1.25 W (3k9 Ω) /0.6 W (8k1 Ω).	15 W (326 Ω) / 7.5 W (653 Ω) / 3.75 W (1k3Ω) / 1.9 W (2k5 Ω) / 1 W (4k9 Ω).	30 W (163 Ω) / 15 W (326 Ω) / 7.5 W (653 Ω) / 3.75 W (1k3Ω) / 1.9 W (2k5 Ω).
Power taps (low impedance):	10 W at 8 Ω.	15 W at 8 Ω.	30 W at 8 Ω.
Frequency response:	400 Hz - 10 kHz.	300 Hz - 8 kHz.	350 Hz - 8 kHz.
Sensitivity (1W/1m):	87 dB.	91 dB.	87 dB.
Max. SPL.:	97 dB.	102 dB.	101 dB.
IP range:	IP 56.	IP 56.	IP 56.
RAL colour code:	9016.	9016.	9016.
Material (housing):	ABS plastic.	ABS plastic.	ABS plastic.
Dimensions:	Ø 140 x 190 mm.	Ø 200 x 235 mm.	Ø 246 x 292 mm.
Weight:	1.3 kg.	1.9 kg.	2.3 kg.

HORN SPEAKERS

TU 15 / TU 25 / TU 1640
Horn speakers

These horn speakers suitable for low impedance installation (8 Ω) are designed for music and speech. They have a circular shape and they are highly recommended for large areas which require a high sound pressure level.

They are molded in aluminium and they have a high IP range to protect them from adverse weather conditions.

Features

- Horn speakers made of aluminium.
- Highly resistant speakers, with 66 IP range.
- Designed for music and speech.
- Suitable for low impedance (8 Ω) installations.
- Suitable for large areas.

TH 25 / SC 35A / SC 1540
Horn speakers

These horn speakers suitable for low impedance installation (8 Ω) are designed for music and speech. They have a square shape and they are especially recommended for large areas which require a high sound pressure level.

They are molded in aluminium and have a high IP range in order to protect them from adverse weather conditions.

Features

- Horn speaker made of aluminium.
- Highly resistant speaker, with 66 IP range.
- Designed for music and speech.
- Suitable for low impedance (8 Ω) installations.
- Suitable for large areas.

TH 14 / TH 16 / TH 20
Horn diffusors

These horn diffusers provide a large dispersion of sound. They are suitable with the compression motors of the TU/MT series. They are made of alumium and include a steel mounting handle to fix it on walls and ceilings.

Features

- Horn diffusors made of aluminium.
- Suitable with the compression motors of the TU/MT series.
- Highly resistant diffusor, with 66 IP range.
- Easy to connect to compression motors.

Technical data	TU 15	TU 25	TU 1640
Type:	Horn speaker.	Horn speaker.	Horn speaker.
Power handling (low impedance):	15 W at 8 Ω.	25 W at 8 Ω.	40 W at 8 Ω.
Frequency response:	300 Hz - 8 kHz.	300 Hz - 8 kHz.	250 Hz - 5 kHz.
Max. SPL.:	100 dB.	107 dB.	112 dB.
IP range:	IP 66.	IP 66.	IP 66.
RAL colour code:	7037.	7037.	7037.
Material (housing):	ABS plastic.	ABS plastic.	ABS plastic.
Dimensions:	Ø 205 x 210 mm.	Ø 240 x 260 mm.	Ø 410 x 380 mm.
Weight:	0.85 kg.	1.1 kg.	2.1 kg.

Technical data	TH 25	SC 35A	SC 1540
Type:	Horn speaker.	Horn speaker.	Horn speaker.
Low impedance output:	25 W at 8 Ω.	35 W at 8 Ω.	40 W at 8 Ω.
Frequency response:	300 Hz - 9 kHz.	300 Hz - 10 kHz.	250 Hz - 7 kHz.
Max. SPL.:	100 dB.	107 dB.	105 dB.
IP range:	IP 66.	IP 66.	IP 66.
RAL colour code:	7037.	7037.	7037.
Material (housing):	ABS plastic.	ABS plastic.	ABS plastic.
Dimensions:	Ø 210 x 200 mm.	Ø 230 x 260 mm.	Ø 350 x 340 mm.
Weight:	0.84 kg.	1.05 kg.	2 kg.

Technical data	TH 14	TH 16	TH 20
Type:	14" horn diffusor.	16" horn diffusor.	20" horn diffusor.
IP range:	IP 66.	IP 66.	IP 66.
RAL colour code:	7037.	7037.	7037.
Material (housing):	ABS plastic.	ABS plastic.	ABS plastic.
Dimensions:	Ø 365 x 277 mm.	Ø 406 x 280 mm.	Ø 516 x 390 mm.
Weight:	1.4 kg.	1.5 kg.	1.9 kg.

TU ML series
Compression drivers

These compression drivers made of aluminium are suitable for 100 V voltage line installations. Three models are available with their respective output power, from 35 to 80 W. They are all compatible with the TH horn speakers and are easy to connect.

Features

- Compression drivers for 100 V line installations.
- Up to 80 W power, depending on model.
- Suitable for the horn diffusors of the TH series.
- Easy to connect to the diffusor.

Compression drivers compatible with the TH horn diffusers.

MT 35   **MT 60**   **TU 80 ML**

Technical data	MT 35	MT 60	TU 80 ML
Type:	Compression motor.	Compression motor.	Compression motor.
Power (100 V line):	35 W (285 Ω) / 20 W (500 Ω) / 10 W (1 kΩ).	60 W (166 Ω) / 40 W (250 Ω) / 20 W (500 Ω).	80 W (125 Ω) / 50 W (200 Ω) / 35 W (285 Ω).
(*) Power (70 V Line):	17.5 W (280 Ω) / 10 W (490 Ω) / 5 W (980 Ω).	30 W (163 Ω) / 20 W (245 Ω) / 10 W (490 Ω).	40 W (122 Ω) / 25 W (196 Ω) / 17.5 W (280 Ω).
Frequency response:	150 Hz - 6kHz	200 Hz - 4.5 kHz.	200 Hz - 4.5 kHz.
Sensitivity (1W/1m):	114 dB	96 dB.	96 dB.
Max. SPL.:	129 dB	115 dB.	115 dB.
Material (housing):	Metal.	Metal.	Metal.
Dimensions:	130 x 137,5 mm.	110 x 160 mm.	110 x 160 mm.
Weight:	1,9 kg.	2.1 kg.	2.1 kg.

(*) The power taps indicated on the selector switch are calculated for 100V line. In the case of 70V line installation, each power tap will correspond to half the value.

WORK

MR 110G LINE
MR 110S LINE
Garden speaker

MR 110G LINE

MR 110S LINE
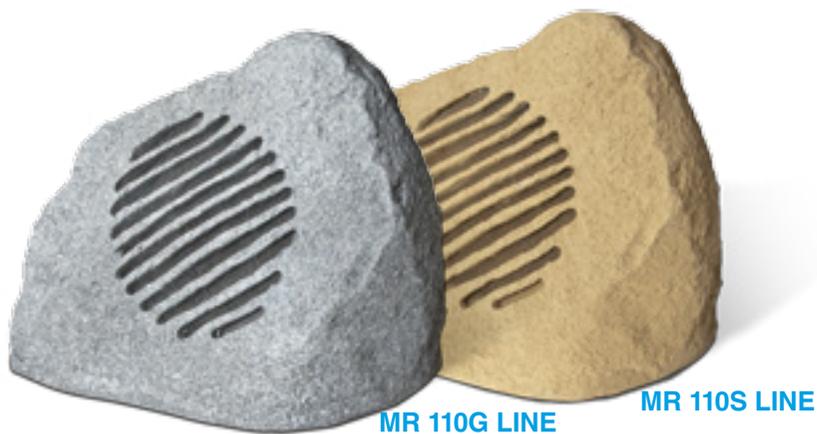
Output power selector
(8 Ω and 4 output Line
positions 100 V).

WORK PRO presents the new version of MR 110 LINE, its garden speaker with a rock shape. Its design has been improved to face external weather conditions and provide optimum results.

The first significant change has to do with the speaker's chassis. Whereas most garden speakers have an aluminium chassis, MR 110 LINE is made of ABS plastic to protect speaker from oxidation.

The other improvement has to do with connection system. A new base with connector has been added to avoid wearing down cable and to protect connection. In addition, thank to its power tap selector, it fits almost any installation requirements.
MR 110 LINE is available in two colours: grey (MR 110G LINE) or sand (MR 110S LINE).

Technical data	MR 110G LINE / MR 110S LINE
Elements:	8" woofer+ TWT.
Power:	30 / 15 / 7.5 / 3 W.
Impedance:	8 Ω/100 V.
Sensitivity:	89 dB.
Crossover frequency:	4.5 KΩ.
Frequency response:	50 Hz - 20 kHz.
Dimensions (WxHxD):	400 x 300 x 230 mm.
Weight:	5.4 kg.

Features
- Garden speaker with a rock shape.
- Plastic chassis to protect speaker from oxidation.
- Base with connector.
- Power tap selector to fit almost any installations requirement.
- Available in 2 colours: grey (MR 110G LINE) or sand (MR 110S LINE).

PS 300 LINE
Garden speaker

Flowerpot holder with a built-in speaker. Ideal colour and shape for decorative atmospheres.

Features
- Built-in Line transformer.
- Hanging peg included.
- 360° vertical and horizontal dispersion.

Technical data	PS 300 LINE
Elements:	8" woofer+ TWT.
Power output:	5W/10W/20W/30W.
Impedance:	8Ω/100V.
Sensitivity:	89 dB.
Crossover frequency:	4.5 KΩ.
Frequency response:	50 Hz - 20 kHz.
Dimensions (Ø x H):	Ø 260 x 320 mm.
Weight:	5.3 kg.

NGS 5L
Garden speaker

For all the music-lovers who don't want to give up the possibility of enjoying music at outdoor spaces, such as gardens or terraces, WORK PRO has designed NGS-5L, an interesting garden speaker that provides a natural sound and an integrated design which allows to enjoy the music without spoiling the surroundings.

Its features and functionalities make this speaker a good choice for those professionals who need to design and install audio systems in medium and big installations, like pub terraces, restaurants or hotel complexes, either urban or leisure venues.

Its design with mushroom shape and green colour make it much easier to fit NGS-5L speaker in natural environments. These speakers are designed for outdoor fixed installations (IP 65) because they are capable of resisting unfavourable weather conditions, from rain to cold or really hot days. Even in windy conditions, NGS-5L is a good option for outdoor installations.

Thereby users will be able to design an outdoor audio system and minimize its visual and architectural impact over the installation.

Features

- Garden speaker with mushroom shape.
- Frequency response: 140 Hz - 15 kHz (±3 dB).
- 100 V Line transformer.
- Colour and shape ideal for gardening installations.
- 5" woofer.
- 50 W power handling.

Majestic Colonial Hotel, Punta Cana

GARDEN SPEAKERS

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DM 370C
Condenser microphone
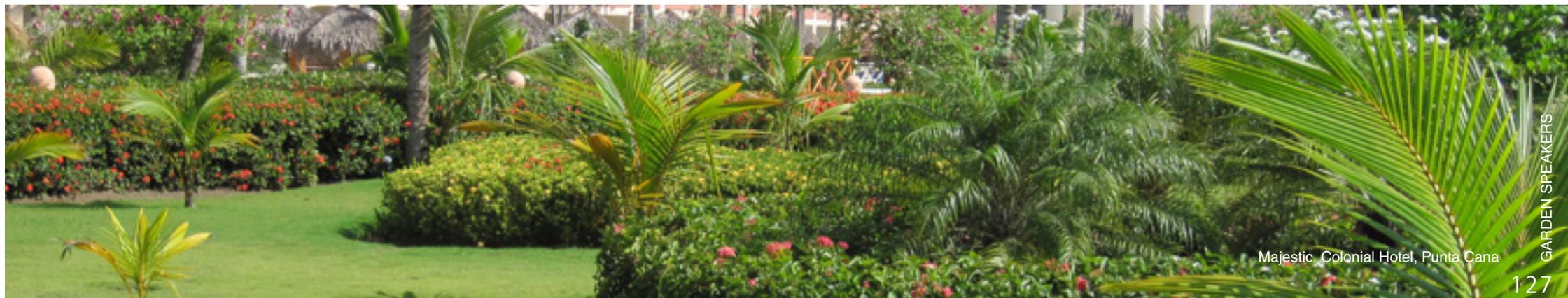
DM 390C
Condenser microphone

DM 370C is a handheld microphone with cardioid pattern, flat frequency response and a sensitivity level which adapts to the frequency.

It is suitable for vocal and instruments, especially for studio and stage. The hardened steel grille is lined with fine steel mesh and a layer open-cell foam for ultimate protection against vocal plosives without compromising high-frequency clarity.

The cardioid polar pattern focuses on the desired sound source while rejecting unwanted ambient noise and feedback.

The body of the microphone contains the electronic and features a low impedance balanced XLR connector.

The electret cartridge with low-mass diaphragm which is only 2 micro thick, provides superior response without distortion. It can be supplied with phantom power (DC 48V).

Features

- XLR balanced connector.
- ON/OFF switch.
- Rugged design and construction for reliable performance.
- Low impedance balanced output.
- Electret cartridge with low-mass diaphragm for a superior response without distortion.
- DC 48V phantom power.

Features

- XLR balanced connector.
- ON/OFF switch.
- Rugged design and construction for reliable performance.
- Low impedance balanced output.
- Electret cartridge with low-mass diaphragm for a superior response without distortion.
- DC 48V phantom power.

Technical data	DM 390C
Frequency response:	50 Hz - 18 kHz.
Polar pattern:	Cardioid.
Sensitivity:	-45 +/- 3 dB (0 dB=1V).
Output impedance:	200 Ω +/- 30 %.
Max SPL output:	136 dB.
Dynamic range:	108 dB.
Main supply:	DC 48V phantom power and 1.5V battery.
Dimensions:	197 x 27 mm.
Weight:	206 g.

DM 390C is a professional condenser microphone with cardioid pattern, flat frequency response and consistent sensitivity through frequency range. The microphone is designed for stage and studio, providing the ultimate combination of excellent, highly detailed electronic and exceptional ruggedness.

The cardioid polar pattern focuses on the desired sound source while rejecting unwanted ambient noise and feedback.

The microphone body is durable metal construction and perfect weight distribution thus ensure fatigue-free handling. The body incorporates the electronic and features a low impedance balanced XLR connector.

The cartridge type is electret, special low-mass diaphragm which is only 2 micro thick, providing superior response without distortion. It can be supplied with phantom power (DC 48V) and 1.5V battery.

Technical data	DM 370C
Frequency response:	50 Hz - 18 kHz.
Polar Pattern:	Cardioid.
Sensitivity:	-45 +/- 3dB (0 dB = 1 V).
Output impedance:	200 Ω +/- 30 %.
Max SPL output:	140 dB.
Dynamic range:	112 dB.
Main supply:	48 V DC phantom power.
Dimensions:	182 x 47 mm.
Weight:	293 g.

PS 22
PHANTOM power supply

PS 22 is a dual PHANTOM power supply for two microphones with condenser capsule and 48 V DC. It includes input connections and an external XLR output (AC 230 V - AC 48 V).

Features

- Phantom power supply source.
- Connections for 2 microphones.
- Power supply 230 V AC.
- Output 48 V DC.
- Dimensions: 150 x 110 x 60 mm.
- Weight: 0,72 kg. (Full set).

Power supply included.

XP 10 Pro / XP 20 Pro
Gooseneck microphones

XPB 2
Desktop base for microphones

These gooseneck microphones, specially designed for conferences and meeting rooms, feature an interference tube which increases directivity at higher frequencies. Both models are suitable for the XPB 2 optional desktop base.

XP 10 Pro has a cardioid polar pattern, a wide low impedance and a balanced output. Its frequency response provides an excelent full range reproduction.

XP 20 Pro ensures a clear voice transmission and a very low feedback level, thanks to its linear+gradient polar pattern. Capture angle is constant on high frequencies.

This desktop base designed for the XP Pro series isolates microphones from vibrations and mechanical noises. It features an On/Off switch, a Combi connector for several types of microphones and a male XLR3 connector for output and connection to mixer.

Features
- Desktop base for microphones.
- Isolates microphones from vibrations and mechanical noises.
- On/Off switch with Combi connector.
- XLR3 male connector for output and connection to mixer.

XP 10 Pro   **XP 20 Pro**

Features
- Gooseneck microphones designed for conferences and meeting rooms.
- Interference tube to increase directivity at higher frequencies.
- XP 10 Pro with cardioid polar pattern and balanced output (low impedance).
- XP 20 Pro with linear + gradient polar pattern and low feedback level.
- Suitable for the optional XPB 2 desktop base.

Technical data	XP 10 Pro	XP 20 Pro
Element:	Electret condenser.	Electret condenser.
Polar pattern:	Unidirectional + cardioid.	Linear + gradient.
Frequency response:	50 Hz~16 kHz.	50 Hz~18 kHz.
Sensitivity:	-54 dB ±3 dB/Pa.	-45 dB ±3 dB/Pa.
Output impedance:	200 Ω ±30%.	250 Ω ±30% .
Max SPL:	138 dB.	125 dB.
S/N ratio:	65 dB.	72 dB.
Dynamic range:	110 dB.	105 dB.
Main supply:	Phantom DC 9~52 V.	Phantom DC 16~52 V.
Output connector:	Male XLR3 pin.	Male XLR3 pin.
Dimensions:	30 (max Ø) x 490 mm.	30 (max Ø) x 490 mm.
Weight:	178 g.	178 g.
Accessories:	Windscreen.	Windscreen.

Technical data	XPB 2
Type:	Desktop base for microphones.
Inputconnection:	XLR3 combi - ¼" Jack.
Outputconnection:	Male XLR3 pin.
On/Off switch:	Yes.
Dimensions:	160 x 110 x 40 mm.
Weight:	1.3 kg.

USM 4 / USM 5
Desktop microphones

WORK PRO® presents the USM ultra-thin desktop microphones, specially designed for conferences. Thanks to their reduced size, they go unperceived in the installation.

These desktop microphones feature an interference tube that increases directivity at higher frequencies to emit a clear and pure sound. They all have Phantom supply and turn 180° for users convenience.

Features
- Ultra-thin desktop microphones.
- Designed for conferences and meetings.
- Interference tube to increase directivity at higher frequencies.
- 180° rotation for users convenience.
- Phantom supply.

USM 4   **USM 5**

Technical data	USM 4	USM 5
Element:	Electret with interference tube.	Electret with interference tube.
Polar pattern:	Cardioid.	Omni-directional.
Frequency response:	56 Hz – 16 kHz.	50 Hz – 18 kHz.
Sensitivity:	-40 dB ±3 dB (0 dB=1V/Pa at 1kHz).	-40 dB ±3 dB (0 dB=1V/Pa at 1kHz).
Impedance:	250 Ω ±30% (at 1 kHz).	250 Ω ±30% (at 1 kHz).
Load impedance:	1.250 Ω.	1.250 Ω.
Noise level:	21 dBA.	21 dBA.
Max SPL:	135 dB (THD 0,5% 1 kHz).	135 dB (THD 0,5% 1 kHz).
S/N ratio:	72 dB.	72 dB.
Dynamic range:	113 dB.	113 dB.
Main supply:	Phantom DC 16-52 V.	Phantom DC 16-52 V.
Consumption:	10 mA.	10 mA.
Output connector:	XLR3.	XLR3.
Dimensions:	Ø 30 x 500 mm.	Ø 30 x 500 mm.
Weight:	120 g.	120 g.
Accessories:	Windscreen.	Windscreen.

USM 4

USM 5

WR 4000
Wireless conference system

WR 4000 enables to act independently over each microphone (balanced XLR3 output) or the complete mix of each system (Jack ¼").

To audio mix system.

Wireless microphone system for conferences. 6 system of 24 independent microphones can be operating at the same time without any interference.
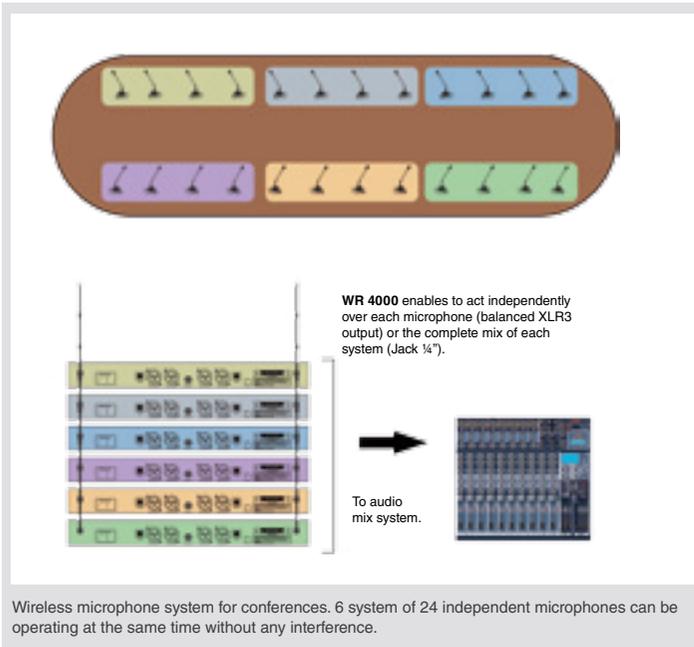
WR 4000 is a wireless conference system featuring four channels for the UHF band. This convenient and discreet solution is composed of a main unit (receiver) and four desktop microphones. These microphones have an activation button, volume control and LED.

The receiver's front panel includes an independent volume control for each of the four channels. Thanks to the two LCD displays, it is possible to visualize channel frequency and state in real time. The individual balanced XLR3 outputs and an additional ¼" Jack output (channel mix) are located on the rear panel of the receiver. A squelch control is also available to adjust two adjacent channels.

WR 4000 C

Features

- Wireless conference system (UHF band).
- Composed of a receiver and four desktop microphones.
- Desktop microphones with activation button, volume control and LED.
- Four channels with individual volume control.
- Two LCD displays to show channel's frequency and state.
- Individual balanced XLR3 outputs + additional ¼" Jack output (channel mix).
- Squelch control.

WCM 400
(up to 24 microphones).

Technical data	WR 4000
CONFERENCE SYSTEM	
Band:	UHF (500-900 MHz).
T.H.D.:	0.005 %.
Modulation type:	FM.
Frequency response:	20 Hz - 18 kHz (+3 dB).
SNR:	> 100 dB.
Harmonic distortion:	> 0.8%.
Effective distance:	50-80 m.
RECEIVER (WR 4000 C)	
System:	Quartz oscillator circuit and constant frequency.
Sensitivity:	10 uV/ 40 dB EMF.
De-Emphasis:	50 mS.
Audio level output:	0 - 0.35 V p.p.
Output impedance:	5 kΩ.
Main supply:	220V /50 Hz.
MICROPHONE (WCM 400)	
Type:	Condenser.
Frequency response:	60 Hz - 16 kHz.
SNR:	> 98 dB.
Channel rejection:	> 80 dB v.
Harmonic distortion:	> 5 %.
Microphone sensitivity:	- 47 ±3 dB @ 1kHz.
Receiver Sensitivity:	50 uS (SINAD=20 dB).
Audio level output:	0 a ±400 mv (indiv.) 0 a ±200 mv (mix).
Main supply:	2 x 1,5v battery

MICROPHONES

CONFERENCE Series 100
Conference system

This simple but effective audio system has been designed for conferences in fixed installations. It is very easy to install and ensures speech intelligibility with up to 70 discussion units, with possibility to set priority. It is composed of a main unit (CMU 100) and two different desktop microphones (WCM 10C and WCM 10D).

CMU 100
The main unit of the conference system.
CMU 100 is the main unit of the conference system, which supplies power to up to 70 microphones.

Several controls are available on front panel (Tel volume, Phones volume, Aux volume and Mic Master), as well as a Limit switch control to limit the number of opened microphones (one, three or six) and shut them down automatically. Integrators will take advantage of the many options available on the rear panel, including a balanced XLR output and an unbalanced Rec output.

WCM 10D
The delegated discussion unit.
This discussion unit is equipped with a speaker and a cardioid electret microphone. To prevent feedbacks, the speaker turns off while the microphone is used. A red light is available to indicate to the other participants which microphone is active.

WCM 10C
The director discussion unit.
This discussion unit is designed for the person who leads the reunions. It has the same functions as the delegated microphone, but it also includes a priority button, in order to turn off all the delegated microphones.

Features
- Conference audio system.
- Possibility to connect up to 70 discussion units.
- Two desktop microphones available: **WCM D** and **WCM C** (with priority)
- Main unit with additional auxiliary inputs and telephone.
- Balanced inputs and recording.
- Integrated speakers in microphones systems.

KCM 1
Extension cable (male/female) of 10 m long.

KCM 2
Extension cable with "T" shape. Input cable of 10 m long, one 5 m output and another free output to link.

CMU 100

WCM 10D
(up to 70 microphones).
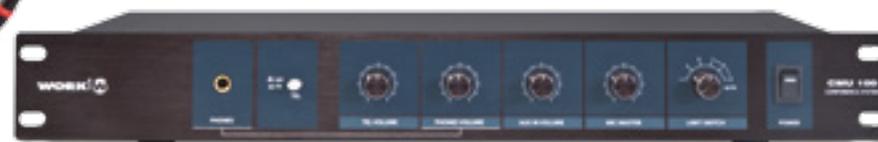
WCM 10C

Technical data	CMU 100	WCM 10C / WCM 10D
Microphone:	-----------------	Electret unidirectional.
Frequency response:	50 Hz - 16 kHz.	50 Hz - 16 kHz.
SNR:	> 81 dB.	> 810 dB.
Sensitivity:	- 15 dB.	- 15 dB.
Dynamic range:	> 85 dB.	> 85 dB.
Main supply:	AC 230V 50/60 Hz.	DC 24 V.
Dimensions:	483 x 44 x 205 mm.	150 x 135 x 435 mm.
Weight:	9.2 kg.	1 kg.

XS 1000 Pro
Headset microphone

Electret headset microphone with omnidirectional / cardioid polar pattern.

It includes a 2.5 mm Mini-Jack / Mini-XLR adaptor.

XS AD 1.
Mini-Jack 2.5 mm
/ Mini-XLR 3 pin.

Technical data	XS 1000 Pro
Polar pattern:	Omnidirectional.
Output connector:	¼" Jack.
Frequency response:	20 Hz - 20 kHz.
Impedance:	1 kΩ.
Sensitivity:	-45 dB.
Main supply:	DC 9-52 V.
Microphone diameter:	Ø 5 mm.
Cable:	Ø 2 mm/1 m length.
Weight:	36 g.
Accessories:	Windscreen, Mini-XLR adapter.

XS 1010 Pro
Headset microphone

Electret headset microphone with unidirectional / cardioid polar pattern.

It includes a 2.5 mm Mini-Jack / Mini-XLR adaptor.

XS AD 1.
Mini-Jack 2.5 mm
/ Mini-XLR 3 pin.

Technical data	XS 1010 Pro
Polar pattern:	Electret Unidirectional.
Output connector:	2.5 mm Mini-Jack.
Frequency response:	50 Hz - 20 kHz.
Impedance:	1 kΩ.
Sensitivity:	-45 dB.
Main supply:	DC 9-52 V.
Microphone diameter:	Ø 12 mm.
Cable:	Ø 2 mm/1.2 m length.
Weight:	42 g.
Accessories:	Windscreen, Mini-XLR adapter.

XS 1500 Pro
Headset microphone
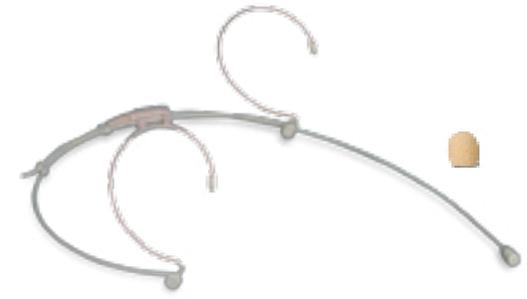
XS 1500 Pro has an ergonomic design and a robust fixation system. It is adequate for live shows because it goes unperceived and provides total liberty of movement on stage.

This microphone is very convenient to use, thanks to its fixation system and to the arm which can be oriented in any direction. It is confortable even for those wearing glasses. It includes a 2.5 mm Mini-Jack / Mini-XLR adaptor.

XS AD 1.
Mini-Jack 2.5 mm
/ Mini-XLR 3 pin.

Technical data	XS 1500 Pro
Polar pattern:	Omnidirectional
Output connector:	2.5 mm Mini-Jack.
Frequency response:	20 Hz - 20 kHz.
Impedance:	1 kΩ.
Sensitivity:	-42 dB.
Main supply:	DC 1.5 - 10 V.
Microphone diameter:	Ø 5 mm.
Cable:	Ø 1.4 mm / 1.20 m lenghth.
Weight:	15 g.
Accessories:	Windscreen, Mini-XLR adapter.

MICROPHONES

XS 1550 Pro
Headset microphone

XS 1400 Pro
Headset microphone

XS 2000 Pro
Lavalier microphone

A 2.5 mm Mini-Jack /Mini-XLR adapter.

XS 1550 Pro is an improved version of the XS 1500 Pro. It has an ergonomic design and a robust fixation system, being adequate for live shows. It differentiates itself from the XS 1500 Pro as it is totally foldable and can be disassembled to protect it during transport.

It includes a transport bag and a Mini-Jack / Mini-XLR adapter for different kind of connection.

XS 1400 Pro is a convenient headset microphone with a unique point of fixation. It has an omnidirectional response, low noise level and high EMI suppression, which ensures quality frequency response. Its built-in circuit provides accurated electro-acoustic response.

This ultra-thin electret lavalier microphone is very convenient for live shows as it goes totally unperceived. It features a Mini-Jack / Mini-XLR adapter for different kind of connection.

XS AD 1.
Mini-Jack 2.5 mm / Mini-XLR 3 pin.

Technical data	XS 1550 Pro
Polar pattern:	Electret omnidirectional.
Output connector:	2.5 mm Mini-Jack.
Frequency response:	20 Hz - 20 kHz.
Impedance:	2 kΩ.
Sensitivity:	-45 dB.
Main supply:	DC 1,5-12 V.
Microphone diameter:	Ø 3.5 mm.
Cable:	Ø 1.4 mm / 1.2 m length.
Weight:	15 g.
Accessories:	Windscreen, Mini-XLR adapter.

Technical data	XS 1400 Pro
Polar pattern:	Electret omnidirectional.
Output connector:	Mini-XLR3.
Frequency response:	20 Hz - 20 kHz.
Impedance:	1 kΩ (±30%).
Sensitivity:	-45 dB.
Main supply:	DC 1.5-10 V.
Microphone diameter:	3 mm.
Cable:	Ø 1.5 mm x 1.2 m.
Weight:	15 g.
Accessories:	Windscreen.

Technical data	XS 2000 Pro
Polar pattern:	Electret omnidirectional.
Output connector:	2.5 mm Mini-Jack.
Frequency response:	30 Hz - 16 kHz.
Impedance:	600 Ω.
Sensitivity:	-45 dB.
Main supply:	DC 48 V.
Microphone diameter:	Ø 8 mm.
Cable:	Ø 2 mm / 1.10 m length.
Weight:	20 g.
Accessories:	Windscreen, Mini-XLR adapter.

SH 2500
Folding desktop base

- Folding desktop base for microphone.
- 3 legs.

SH 2501
Desktop base

- Desktop base for microphone.
- Rounded base.
- Diameter: 150 mm.
- Height: 120 mm.

120 mm.
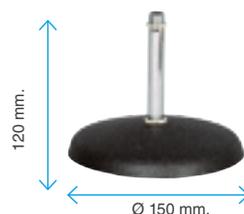
Ø 150 mm.

SH 2502
Desktop base

- Desktop base for microphone
- Rounded base.
- With gooseneck.
- Diameter: 130 mm.
- Height: 320 mm.

SH 2503
Extendable desktop base

350 mm MIN. 590 mm MAX.

- Extendable desktop base for microphone.
- Rounded base.
- Diameter: 150 mm.
- Minimum height: 350 mm.
- Maximum height: 590 mm.

Ø 150 mm.

SH 2504
Extendable desktop base

420 mm MIN. 560 mm MAX.

- Extendable desktop base for microphone.
- Rounded base.
- With gooseneck.
- Made of iron.
- Diameter: 150 mm.
- Minimum height: 420 mm.
- Maximum height: 560 mm.

Ø 150 mm.

SH 2505
Extendable desktop base

- Extendable floor stand for microphone.
- Rounded base.
- With telescopic boom arm.
- Silver metal.
- Diameter: 150 mm.
- Maximum height: 610 mm.
- Boom arm length: 400 mm.

MICROPHONE STANDS

SH 2506
Microphone stand

SH 2601
Microphone stand

SH 2630
Microphone stand

SH 2654
Microphone stand

Extendable floor stand for microphone.
3 folding legs.
With telescopic boom arm.
Silver metal.
Maximum width: 500 mm.
Maximum height: 770 mm.
Boom arm length: 870 mm.

Extendable microphone stand.
Rounded base.
Silver metal.
Minimum height: 860 mm.
Maximum height: 1540 mm.

Folding microphone stand.
3 folding legs.
With extendable boom arm.
Black colour.
Maximum width: 580 mm.
Maximum height: 1600 mm.
Boom arm length: 790 mm.

Folding microphone stand.
3 legs.
With extendable boom arm.
Made of aluminium and iron.
Black colour.
Base with metal hinge.
Maximum width: 630 mm.
Maximum height: 1710 mm.
Boom arm length: 860 mm.

WR 204
VHF Wireless system

WR 204 is a two-channel wireless system for the VHF band. Its compact size and features allow use in facilities such as conference rooms for two speakers or the speaker and audience.The system includes four preset frequency that are selected by a dip-switch block in both rear receiver as in each of the microphones.The receiver has a single unbalanced output and an additional output to mix both channels.

Features

Option 1:
- Wireless System VHF 2 channel.
- 4 preset frequencies to select.
- Unbalanced Outputs + additional output mix.
- 2 handheld microphones.

Option 2:
- Wireless System VHF 2 channel.
- 4 preset frequencies to select.
- Unbalanced Outputs + additional output mix.
- 2 body pack transmitters and lavalier microphones.

WR 204

WM 204

WE 204

Technical data	WR 204
VHF Frequency Band	
Frequency stability:	<± 30 ppm.
Dynamic range:	> 90 dB.
Harmonic distortion:	<0.4%.
Audio output:	400 mV.
S / N:	> 95 dB.
Receive Sensitivity:	> 7dBu (SINAD = 30dB).
De-emphasis:	50 uS.
Power supply:	D17V DC / 300mA (external power supply).
Dimensions:	210 x 110 x 50 mm.
Weight:	365 g.

Technical data	WM 204
Transmission power:	30mW.
Modulation Type:	FM.
Max. Deviation:	± 20 kHz.
Spurious Emissions:	<50 dB (with carrier).
Power supply:	2x 1.5V AA.
Dimensions:	250 x 40 mm.
Weight:	180 g.

Technical data	WE 204
Transmission power:	30mW.
Modulation Type:	FM.
Max. Deviation:	± 20 kHz.
Spurious Emissions:	<50 dB (with carrier).
Power supply:	2x 1.5V AA.
Dimensions:	85 x 65 x 28 mm.
Weight:	70 g.

WR 204 / 1

WR 204 / 2
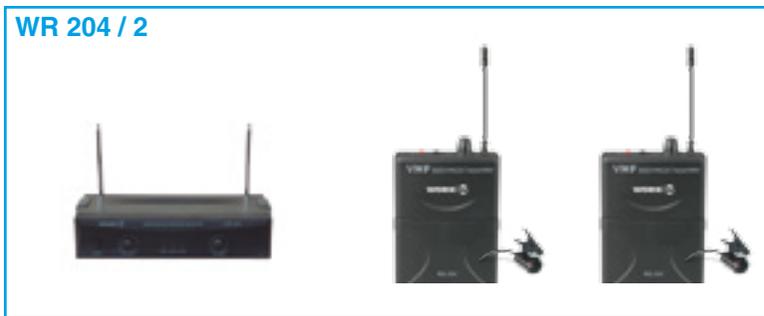
WRD 255
UHF Wireless system

WRD 255 is a Diversity single channel wireless system for the UHF band. This feature eliminates the noise caused by distance or other devices within the same band.On the front panel, the receiver incorporates witness LEDs for operation of either antenna and AF level (marked with a VU meter). WR 255 incorporates balanced (XLR-3) and unbalanced output (jack ¼").

WRD 255/1: UHF wireless system with handheld microphone WM 255.
WRD 255/2: UHF wireless system with body pack transmitter and lavalier microphone.

Features:
- Diversity single channel wireless system.
- UHF band.
- Channel and AF level LEDs.
- Balanced and unbalanced outputs.
- Receiver with external power supply 12-15V DC.

Technical data	TRANSMITTER
Emission power:	30mW.
Modulation Type:	FM.
Deviation:	40 kHz.
Spurious Emissions:	> 60 dB.
Power supply:	3V (2 AA batteries x1.5V).

Technical data	WRD 255
Type:	Single Channel Diversity Wireless System.
Band:	UHF.
Frequency stabilization:	<± 30 ppm.
Dynamic Range:	> 95 dB.
Harmonic distortion:	<0.5%.
Audio output:	400 mV (Balanced / unbalanced).
S / N:	> 95 dB.
Spurious frequency rejection:	> 80 dB.
Receive Sensitivity:	4 dBuV.
De-emphasis:	50 uS.
Power supply:	15-15 V DC / 250 mA (external power supply).
Dimensions:	210 x 160 x 50 mm.
Weight:	390 g.

WM 255

WE 255

WRD 255

WRD 255 / 1

WRD 255 / 2

WR 1100 AF
UHF wireless system

WRD 1100 AF is a Diversity single channel wireless system for UHF band. AFS system incorporates synchronization channel between microphone and receiver. The receiver is capable of tunning 99 different channels. The channel selection and the associated frequency is performed at the receiver, synchronizing the microphone immediately through the IR signal. The front panel features a potentiometer for volume control and two buttons to increase or decrease the channel or frequency (depending on the state) and confirmation button. Its large format and high brightness LCD displays information of RF and AF levels and the selected channel number and frequency. WRD 1100 AF incorporates balanced (XLR-3) and unbalanced output (Jack ¼ ").

WM 1100 AF

WE 1100 AF

WR 1100 AF

Technical data	WRD 1100 AF
System:	AFS single channel Diversity.
Frequency Band:	UHF.
Number of channels:	99 selectable channels.
Dynamic Range:	> 95 dB.
Output Level:	400 mV (Balanced), 400 mV (unbalanced).
S / N:	> 95 dB.
De-Emphasis:	50 uS.
Power supply:	15-17V DC (External power supply included).
Dimensions:	210 x 170 x 44 mm.
Weight:	700 g.

Technical data	WM 1100 AF
Transmission power:	30mW.
Modulation Type:	FM.
Deviation:	40 kHz.
Spurious Emissions:	> 60 dB.
Power supply:	3V (2 x 1.5V AA batteries).
Dimensions:	250 x 30 mm.
Weight:	200 g.

Technical data	WE 1100 AF
Transmission power:	30 mW.
Modulation Type:	FM.
Deviation:	40 kHz.
Spurious Emissions:	> 60 dB.
Power supply:	3V (2 x 1.5V AA batteries).
Dimensions:	85 x 60 x 26 mm.
Weight:	80 g.

WRD 1100 AF / 1

WRD 1100 AF / 2

WIRELESS MICROPHONES

WRD 4160 AF
Microphone stand

4 Diversity Channel UHF Wireless System band allows to use a wide frequency range (up to 160) grouped into 10 preset groups. The selection of the group and frequency can be done by AFS infrared synchronization system . The screen of each channel of the receiver displays all necessary information for intuitive use, showing the ID channel and the group and its frequency in MHz. Also, a built-in vumeter in the display indicates the level of AF and RF signals. The system is supplied with:
4 handheld microphones (WM 4160 AF) with switch and screen showing the channel ID and group together with the battery level.
It also has a gain control with selector (Mic, Instrument or MUTE).

Technical data	WRD 4160 AF
Frequency band:	UHF.
Reception System:	DIVERSITY.
Sensitivity:	-93 dBm for 30 dB SINAD.
Image Rejection:	> 60 dB.
S / N:	> 90 dB.
T.H.D.	<1% to + / -30 kHz offset 1 kHz tone.
Audio Output Level:	XLR connector: -12 dBV. Jack 1/4"connector:-18 dBV.
Freq response. Audio:	60 Hz-16 kHz.
Dynamic Range:.	> 90 dB.
Dimensions (WxHxD):	483 x 45 x 280 mm.
Power supply:	12-18 V DC/1000 mA. included.
Weight:	3.6 kg.

Technical data	WM/WE 4160 AF
Frequency band:	UHF.
Frequency Stability:	50 ppm (-10° - 50° C).
RF Power:	10 dBm.
Spurious Rejection:	> 55 dBc.
Modulation:	30 kHz input level = 25 mV.
Maximum Input Level:	0 dBV.
Dimensions (WxHxD):	252 x 50 mm.
Power:	2 "AA" batteries.
Battery Life:	> 6 hours.
Weight:	220 g. (without batteries)

WE 1160 AF

WM 4160 AF

WRD 4160 AF / 1

WRD 4160 AF / 2

RM Pro series
19" racks

Mounting holes for internal fans (included).

Mounting panel.

Ground stands.

Secondary doors on both sides.

Lateral view.

Safety lock.

RM 24 Pro

RM 8 Pro

The RM PRO series is composed of 6 models of 19" racks made of metal and designed for audio and lighting devices with rack format.

RM PRO racks feature a front methacrilate door which can be easily removed and secondary doors on both sides (with cooling system). They also have fixation holes for internal fans (included) and they include 19" rails and trays to easily fix any devices. Access to front control panels is very convenient, thanks to the large space between the door and the fixation area.

They include wheels and ground stands to be used in fixed and mobile applications, ensuring in both cases the perfect stability of the unit.

The front door protects material from dust and allows the perfect visualization of controllers and indicators. The safety lock avoids external handling.

Features

- 19" racks made of metal with black finishing and methacrylate door.
- Available in 8, 10, 12, 16, 24 or 40 rack units.
- Removable front door with safety lock and secondary doors on both sides.
- Fixation holes for internal fans (included).
- Wheels and ground stands for a perfect stability in any situation.
- 19" rails and trays for an easy installation.

Technical data	RM 8 Pro	RM 10 Pro	RM 12 Pro
Capacity:	8 HU.	10 HU.	12 HU.
Dimensions (WxHxD):	580 x 354 x 580 mm.	580 x 442 x 580 mm.	580 x 531 x 580 mm.
Rack depth:	430 mm.	430 mm.	430 mm.
Weight:	38 kg.	40 kg.	43 kg.
Technical data	RM 16 Pro	RM 24 Pro	RM 40 Pro
Capacity:	16 HU.	24 HU.	40 HU.
Dimensions (WxHxD):	580 x 706 x 580 mm.	580 x 1062 x 580 mm.	580 x 2005 x 580 mm.
Rack depth:	430 mm.	430 mm.	430 mm.
Weight:	46 kg.	67 kg.	96 kg.

RM series
19" racks

These racks made of metal have been exclusively designed for fixed installations. The five models available (from 8 to 24 rack units, with 44 mm high per rack) take advantage of the front column on both side to reinforce the structure and provide a better firmness of the rack. Rails are available on front and rear panels to easily fix devices to the rack, with a maximum depth of 350 mm.

Features

- 19" racks made of metal with black finishing.
- Available in 8, 10, 12, 16 or 24 rack units.
- Reinforcement on both sides for a better stability.

RM 8   **RM 24**

Technical data	RM 8	RM 10	RM 12	RM 16	RM 24
Capacity:	8 HU.	10 HU.	12 HU.	16 HU.	24 HU.
Dimensions (WxHxD):	530 x 415 x 455 mm.	530 x 500 x 455 mm.	530 x 590 x 455 mm.	530 x 770 x 455 mm.	530 x 1125 x 455 mm.
Rack depth:	350 mm.	350 mm.	350 mm.	350 mm.	350 mm.
Weight:	16 kg.	18 kg.	20 kg.	26 kg.	30 kg.

TC 523
TC 524
TC 525

19" multi-punched rack panels.
TC 523: 1 HU rack panel.
TC 524: 2 HU rack panel.
TC 525: 3 HU rack panel.

TC 527
TC 528
TC 529

19" multi-punched rack panels with "L" profile.
TC 527: 1 HU rack panel.
TC 528: 2 HU rack panel.
TC 529: 3 HU rack panel.

RA 1111
RA 1112
RA 1113
RA 1114

19" mounting panels, suitable for un-rackable units.
RA 1111: 1 HU mounting panel.
RA 1112: 2 HU mounting panel.
RA 1113: 3 HU mounting panel.
RA 1114: 4 HU mounting panel.

TV 550   **TV 552**
TV 551

19" rack panels designed for cooling.
TV 550: 1 HU rack panel.
TV 551: 2 HU rack panel.
TV 552: 3 HU rack panel.

TC 520
TC 521
TC 522
TC 530

19" flat rack panels.
TC 520: 1 HU rack panel.
TC 521: 2 HU rack panel.
TC 522: 3 HU rack panel.
TC 530: 4 HU rack panel.

CJ 1000
CJ 1001
CJ 1002

19" metal drawer with keylock.
CJ 1000: 2 HU metal drawer.
CJ 1001: 3 HU metal drawer.
CJ 1002: 4 HU metal drawer.

TP 510
TP 511
TP 512

19" front rack panels with transparent plastic.
TP 510: 1 HU rack panel.
TP 511: 2 HU rack panel.
TP 512: 3 HU rack panel.

RACK ACCESSORIES

PRODUCT INDEX

WORK PRO®

EQUIPSON S.A.