



AUDIO PRODUCTS AND SYSTEMS

PUBLIC ADDRESS VOICE EVACUATION CONFERENCE SYSTEMS

General Catalogue
2008



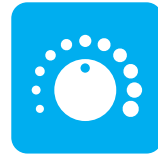
SOUND SYSTEM SPECIALIST

Microphones • Microphone consoles • Radiomicrophones



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Interphone Systems for Counter • Multichannel Systems



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Voice Evacuation Systems - VES (Certified/In Compliance with EN60849)

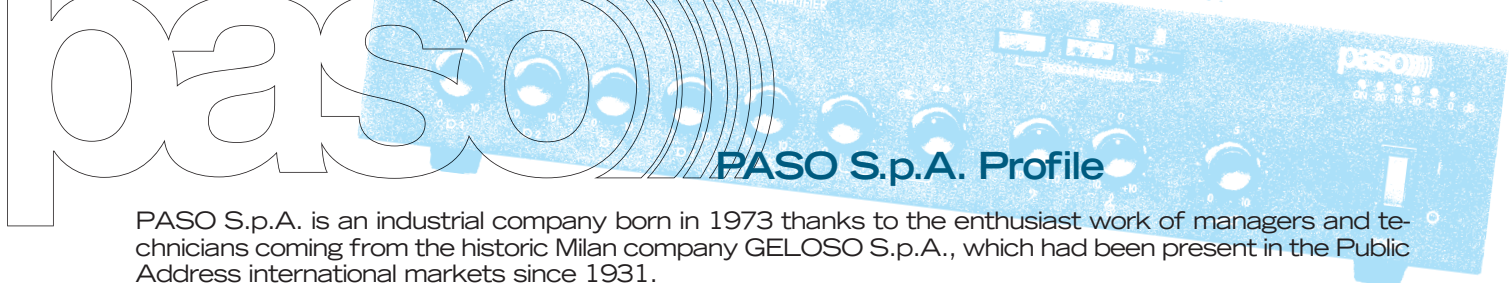


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Conference Systems



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PASO S.p.A. Profile

PASO S.p.A. is an industrial company born in 1973 thanks to the enthusiast work of managers and technicians coming from the historic Milan company GELOSO S.p.A., which had been present in the Public Address international markets since 1931.

PASO S.p.A. has inherited GELOSO S.p.A. patents and its fund of technical knowledge, competence and experience.

PASO S.p.A. has acquired and developed a design, engineering and industrial know-how in more than 70 years of activity, which has consolidated by means of a continuous research of audio innovation through technology.

As in the recent past, the Italian-American bond is still alive; this link was born in 1974 with the establishing of PASO SOUND PRODUCTS Inc. in New York, aimed at activating a collaboration and a technical-specialized exchange to let the Company grow further.

The "AULA" brand was introduced in 2000 to present a new series of professional products for the conference field.

PASO S.p.A. is one of the few Companies in the world that designs, industrializes and produces Their products all on its own.

This is not a fortuitous choice, based on "MADE IN ITALY" quality and commitment, in accordance with the philosophy of the Company, that aims at being not a simple dealer, but Leader and Partner of the Customers, able to study and create - if necessary - customized solutions.



The PASO Quality System

As far as warranty of the quality of our products and services is concerned, our policy and organization are addressed to our customers, suppliers and internal and external collaborators, so that, knowing our Quality systems, they may be able to collaborate and integrate as best as they can, and contribute to the continuous improvement of the Company.

PASO S.p.A. is a Company leader in the field of Public Address and Conference Systems.

To keep and improve its presence in the continuously evolving markets, it is constantly performing researches in terms of new products and technologies.

This requires an organization based on quality and focused on achieving goals and objectives.

PASO S.p.A. is a Company with Quality System Certified ISO 9001/2000



Specialists in Sound



RoHS

The European Directive on eco-compatibility RoHS (2002/95/CE) has come into force since July 1st 2006.

In just a few years, the RoHS (Restriction of the use of certain Hazardous Substances) and the RAEE directives, the latter focused on the Wastes of Electrical and Electronic Equipments, will change the global operative scenario for the companies producing electronic and electro-technical equipments, who will have to limit their use of some substances which are damaging to the environment: **lead, mercury, cadmium, hexavalent chromium and some fire retardant agents, such as PBB and PBDE.**

As responsible of the commercialized products, the manufacturers must:

- convert non RoHS products into RoHS compliant products, also through re-design.
- make sure that the components bought from the suppliers comply with the Directive, as the final responsibility cannot be transferred from the manufacturers to the suppliers.

The total respect of the Directive does not change the electrical characteristics and the performance of the products.



S.p.A. has committed itself for long to manufacture its products through production processes making use of RoHS compliant raw materials.

**RoHS Compliant
Directive 2002/95/EC**

At present, all the products manufactured by PASO S.p.A. comply with the RoHS Directive.

Systems.



Compliance of PASO Products

Topic	UE Directive	Italian Laws
Electrical Safety	73/23 - LVD 93/68 - amendment	Law 18/10/77 n° 971 D.Lgs. 25/11/96 n° 626
Electromagnetic Compatibility	89/336 - EMC 92/31 - amendment 93/68 - amendment	D.Lgs 04/12/92 n° 476 D.Lgs 12/11/96 n° 615
Radio Equipment Compliance	1999/5 - RTTE	D.Lgs 269/2001
Electronic Wastes Disposal	2002/96 - RAEE (WEEE) 2003/108 - amendment	D.Lgs 25/07/2005 n° 151
Prohibition of use of some substances	2002/95 - RoHS	D.Lgs 25/07/2005 n° 151
Responsibility for faulty product	85/374 99/34 - amendment 99/44 - 2 years warranty	D.P.R. 24/05/88 n° 224 D.Lgs 02/02/2001 n° 25 D.Lgs 02/02/2002 n° 26 D.Lgs 06/09/2005 n° 206
General safety	2001/95	D.Lgs 21/05/2004 n° 172

All the products manufactured by PASO S.p.A. comply with the specified EU Laws and Regulations.

A complete series of professional microphones offering an exclusive design together with technical specifications able to satisfy any needs. These microphones sound bright and “clean”.



MICROPHONES

- A complete series of professional microphones offering an exclusive design together with technical specifications able to satisfy any needs.
- These microphones sound bright and “clean”.
- Paso dynamic microphones are equipped with an exclusive anti-shock system that reduces handling noises (coming from the microphone or the cable). The mechanical design joins high immunity from vibrations and great resistance to collisions.
- The microphone unit is protected by a metal grid and an anti-pop/wind screen. The external parts have been treated with anti-reflection scratch/stain resistant paints, to maintain full integrity intact in time.



M1-NC

Unidirectional dynamic microphone, with PTT button, 1,5 m spiral cable, XLR



M936

Unidirectional dynamic microphone for dialogues, cardioid, ON/OFF switch, frequency response 40-13kHz, impedance 600 ohm, sensitivity 2,5mV/Pa, 5 m XLR-XLR cable and clip for boom stand mounting, weight 236g



M976

Unidirectional dynamic microphone for singers/instruments, super-cardioid, ON/OFF switch, frequency response 50-18kHz, impedance 300 ohm, sensitivity 2 mV/Pa, 5 m XLR-XLR cable and clip for boom stand mounting, weight 360 g



MC101

Ultra-flat electret microphone, for flat surfaces (table, floor) or vertical mounting (ceiling), half-cardioid, manufactured in pressure die-cast black aluminium, frequency response 100-12kHz, impedance 1000 ohm, sensitivity 5,6mV/Pa, 8 m XLR cable + 3 m Micro-Cannon-XLR cable, dim. LxD 90x115mm, weight 260 g. 1,5 Vdc battery power supply



MC101-W

Ultra-flat electret microphone, for flat surfaces (table, floor) or vertical mounting (ceiling), half-cardioid, manufactured in pressure die-cast white aluminium, frequency response 100-12kHz, impedance 1000 ohm, sensitivity 5,6mV/Pa, 8 m XLR cable + 3 m Micro-Cannon-XLR cable, dim. LxD 90x115mm, weight 260 g. 1,5 Vdc battery power supply



MC101-P

Ultra-flat electret microphone, for flat surfaces (table, floor) or vertical mounting (ceiling), half-cardioid, manufactured in pressure die-cast black aluminium, frequency response 100-12kHz, impedance 1000 ohm, sensitivity 5,6mV/Pa, 8 m XLR cable + 3 m Micro-Cannon-XLR cable, dim. LxD 90x115mm, weight 260 g. 8-24 Vdc Phantom power



MC101-WP

Ultra-flat electret microphone, for flat surfaces (table, floor) or vertical mounting (ceiling), half-cardioid, manufactured in pressure die-cast white aluminium, frequency response 100-12kHz, impedance 1000 ohm, sensitivity 5,6mV/Pa, 8 m XLR cable + 3 m Micro-Cannon-XLR cable, dim. LxD 90x115mm, weight 260 g. 8-24 Vdc Phantom power



MC250 new

Hypercardioid electret microphone, for high-level signals coming from a small angle (studio setting), frequency response 20-20000 Hz, impedance 150 ohm, voice filter, sensitivity 20mV/Pa, body in brass, black, 4,5 m XLR cable and clip for boom stand mounting, dim. LxD 23x163mm, weight 148 g. 11-52 V Phantom power



MC30-GN new

430 mm goose-neck with high sensibility electret microphone. The microphone, extractable, is made of an electret capsule mounted on a flexible neck, complete with anti-pop filter

**MC260** new

Cardioid electret microphone, length 55 cm, frequency response 50-18kHz, impedance 200 ohm, sensitivity 5,6mV/Pa, 9-52 V phantom power, XLR plug, weight 140 g.

**B260** new

Table support for MC260, ON/OFF switch, XLR plug, dim. LxHxD 120x40x125 mm, black, weight 1170g.

MICROPHONE CONSOLES

- The PASO B700 series microphone consoles includes electret or dynamic microphones with flexible stem.
- These stands are manufactured in a sturdy structure in ABS and offer anti-slip rubber pins.
- The particular design allows recess mounting.
- Beside boasting the innovative technology featuring CAT-5 link for long-distance connections, the range of microphone consoles, with or without pre-amplification and zone selection, are suitable for sound diffusion systems where call addressing on one or more zones (up to 12) is required.

new

SERIE 700
Desk base Microphone
Not Pre-amplified



SERIE 700
Desk base Microphone
Pre-amplified with CAT5
connection

B701-M

Dynamic desk base microphone, with gooseneck, not pre-amplified, PTT+LOCK (press to talk and lock), status led, frequency response 100-12kHz, sensitivity 1,8mV/Pa, impedance 500 ohm, structure in ABS, 5 m XLR cable, priority contacts and 12 Vdc power supply, dim. LxHxD 116x436x200mm, weight 880 g.

B701-M312

As B701-M for connection to PA312-MP3 only.

B701-P

Electret desk base microphone, with gooseneck, not pre-amplified, PTT+LOCK (press to talk and lock), status led, frequency response 100-15kHz, sensitivity 8,3 mV/Pa, impedance 280 ohm, structure in ABS, 5 m XLR cable, priority contacts and 12 Vdc power supply, 8-48V phantom power, dim. LxHxD 116x436x200mm, weight 760 g.

B711

Electret desk base microphone, with gooseneck, pre-amplified, PTT+LOCK (press to talk and lock), mix mode and inter-block of connected bases (cascade or star connections) with 2 priority levels, din don, status led, frequency response 100-15kHz, audio and Din-Don separate levels, impedance 1000 ohm, connector Rj45 for direct connections with SFTP CAT5 cables, 12/24 Vdc power supply, dim. LxHxD 116x440x200mm, weight 820 g.

Microphone consoles compatibility	Amplifiers							Compact systems			Mixers
	Serie 3300	Serie 5500				Serie 8000		CMDS			
		AX5509 AX5512	AX5524	AW5512	AW5524 AW5548	AX8...	AW8...	PA140-MP3	PA212	PA312-MP3	MX5539
not pre-amplified B701-M	•	•	•			•		•	•		
not pre-amplified B701-M312	•	•	•			•		•	• ⁽¹⁾	• ⁽¹⁾	• ⁽¹⁾
not pre-amplified B701-P	•	•	•			•		•	•		
pre-amplified B711		•	•	•	•	• ⁽²⁾	• ⁽²⁾				

⁽¹⁾ The microphone activation LED is not powered.

⁽²⁾ Remove the RJ45 connector and use a 5-pole DIN connector

MICROPHONE CONSOLES



SERIES 700 - Desk base Microphone Pre-amplified with CAT5 connection



B711/6

Electret desk base microphone, with gooseneck, pre-amplified, 6 keys for zone selection (also independently configurable as alarm keys) + general, PTT+LOCK (press to talk and lock), mix mode and inter-block of connected bases (cascade or star connections) with 2 priority levels, din don, status led, frequency response 100-15kHz, audio and Din-Don separate levels, impedance 1000 ohm, connector RJ45 for direct connections with SFTP CAT5 cables, 12/24 Vdc power supply, dim. LxHxD 116 x 440 x 200 mm, weight 850 g.



B711/12

Electret desk base microphone, with gooseneck, pre-amplified, 12 keys for zone selection (also independently configurable as alarm keys) + general, PTT+LOCK (press to talk and lock), mix mode and inter-block of connected bases (cascade or star connections) with 2 priority levels, din don, status led, frequency response 100-15kHz, audio and Din-Don separate levels, impedance 1000 ohm, connector RJ45 for direct connections with SFTP CAT5 cables, 12/24 Vdc power supply, dim. LxHxD 116 x 440 x 200 mm, weight 870 g.

Microphone consoles compatibility	Amplifiers					
	Serie 3300	Serie 5500			Serie 8000	
		AX5509 AX5512	AX5524	AW5512	AW5524 AW5548	AX8... AW8...
multi-zone pre-amplified B711/6		(1)	(2)	(1)	(2)	(3)
multi-zone pre-amplified B711/12		(1)	(2)	(1)	(2)	(4)

(1) To switch zone, the P8036 control device must be used

(2) Direct link - up to 3 zones switching. The P8036 control device is advised for systems with more zones

(3) Remove the RJ45 connector and use the P8036 control device to switch zones

(4) Remove the RJ45 connector and use the P8036 control device or the AC8030 optional module to switch zones

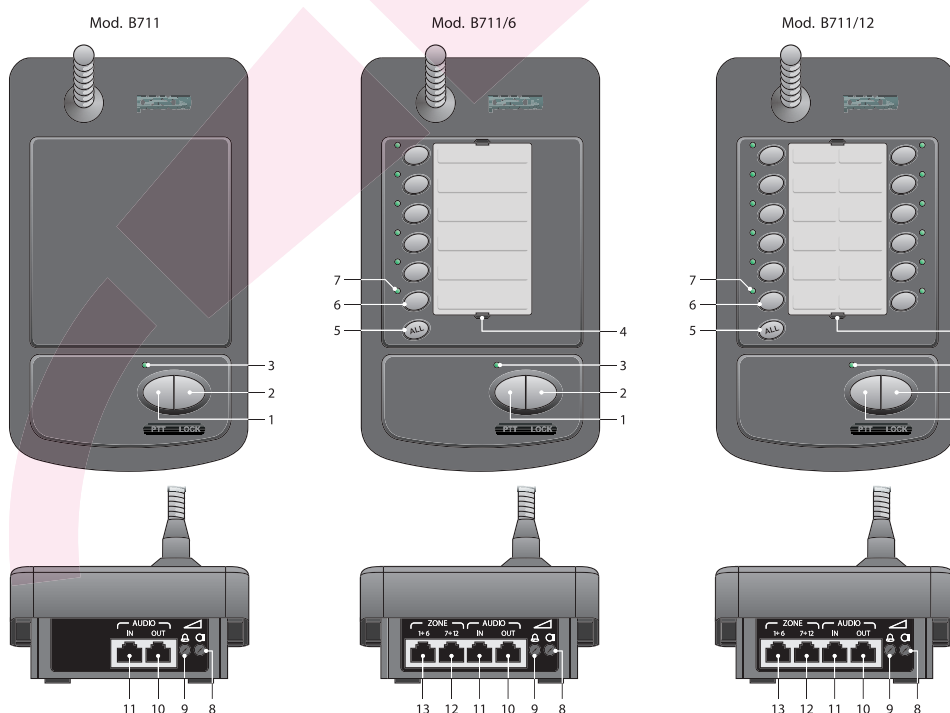
SERIES B50 - Microphone consoles with Pre-amplifier for Supermarkets



B53-C

Pre-amplified cardioid dynamic microphone. Complete with 1,5 m with wires to be soldered. Reduced width to allow mounting on shelves with limited space (e.g. supermarkets). 1 insert key, 1 led indicator, impedance 1000 ohm, sensitivity 3,15V. Dim. LxHxD 48 x 190 x 400 mm, weight 1kg

B711, B711/6 E B711/12, SPECIFICATIONS AND CONNECTIONS



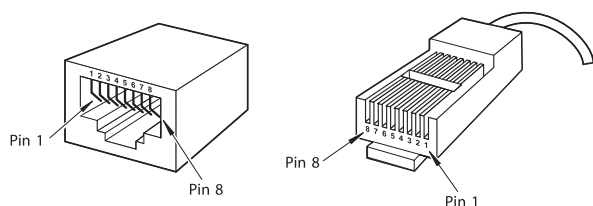
The pre-amplified microphone consoles B711, B711/6 e B711/12 include an electret microphone. They can operate indiscriminately with 12 Vdc or 24 Vdc power supply, satisfying any needs.

Numbered References

1. Call Button (non-latch)
2. Call Key (latch)
3. Indicator Led for microphone activation
4. Zone Labels
5. General Call Key
6. Zone Call Keys
7. Zone Led
8. Microphone level control
9. Warning level control
10. Audio output connector
11. Audio input connector
12. Zone 7÷12 connector
13. Zone 1÷6 connector

Connections

Base microphone connections are made with direct SFTP CAT5 cables (that is, not 'cross-cable'). The EIA/TIA standards require the following pin configurations and colouring for these cables (and RJ45 connectors):



Important! All connectors must be shielded RJ45.

Pin	CAT.5E SFTP (EIA/TIA T568 A)	CAT.5E SFTP (EIA/TIA T568 B)
1	white/green	white/orange
2	green	orange
3	white/orange	white/green
4	blue	blue
5	white/blue	white/blue
6	orange	green
7	white/brown	white/brown
8	brown	brown

Every base microphone includes AUDIO IN and AUDIO OUT connectors. B711/6 and B711/12 also include ZONES 1÷6 and ZONES 7÷12 connectors; the control voltage for zone change/alarm activation relays is taken from these connectors.

The following tables present the pin configurations of these connectors.

The types of connection depend on the chosen operation mode.

Pin	AUDIO IN	AUDIO OUT	ZONES 1÷6	ZONES 7÷12
1	Audio +	Audio +	Zone 1	Zone 7
2	Audio -	Audio -	Zone 2	Zone 8
3	GND	GND	Zone 3	Zone 9
4	IN Priority	OUT Priority	Zone 4	Zone 10
5	n.c*	n.c*	Zone 5	Zone 11
6	+Vdc	+Vdc	n.c*	n.c* (not connected)
7	Serial +	Serial +	Zone 6	Zone 12
8	Serial -	Serial -	GND	GND
Shield	GND	GND	GND	GND

Configuration

Base microphone can operate in mix or inter-block mode, with management of two priority levels. A warning signal (chime) can be activated for each stand, with volume control on the back panel. The B711/6 and B711/12 models include zone-call keys (6 and 12 keys, respectively) and a general call key. The zone keys can also be programmed as alarm keys or be disabled. The microphone level control is on the back panel.

Mix Mode

In this mode, base microphone can freely perform calls and/or alarm activations. The AUDIO OUT connections coming from each stand can be connected in parallel to the terminals of the control device (star connection, fig. 1).

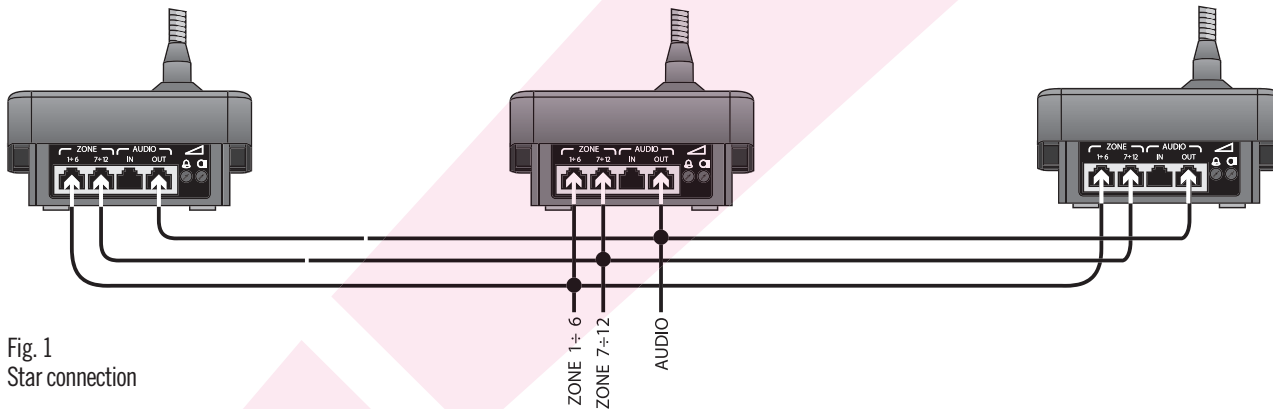


Fig. 1
Star connection

As an alternative, the AUDIO OUT of a single base can be inserted into the AUDIO IN of the preceding base (cascade or 'daisy-chain' connection, fig. 2). The connections of ZONES 1÷6 and ZONES 7÷12 must be parallel to the terminals of the control device.

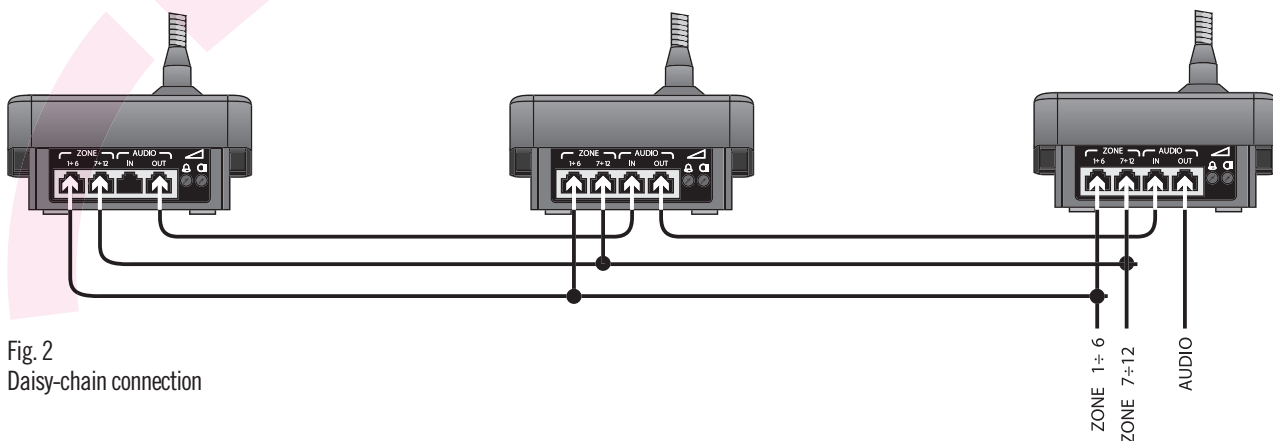


Fig. 2
Daisy-chain connection

Inter-block Mode

This mode offers the following characteristics:

- only one base microphone at a time can be activated; during the activation, the led will blink on the other stands to show the “busy” status; if the active stand is configured as “low priority”, it can be disabled by the activation of a “high priority” base.
- all base microphones present the activations of the calling base to the **ZONES 1÷6** and **ZONES 7÷12** outputs; thus, the **ZONES 1÷6** and **ZONES 7÷12** outputs of a single base must be connected to the control device.
- in case of alarm activation, the status will be shown on the other bases too; all bases including an enabled alarm key will be able to disable the alarm.
- to let the system operate properly, all base microphones must operate in inter-block mode (choosing a priority level for each base) and must have the same configuration of the alarm keys (choosing which ones to make active);

WARNING: when using both B711/6 and B711/12, the former must have the same configuration of the first 6 keys of the B711/12.

- B711 can also be used; these bases will be allowed to perform only general calls.
- the bases must be connected in cascade (‘daisy-chain’) with a maximum of two derived lines starting from the control device (fig. 3).

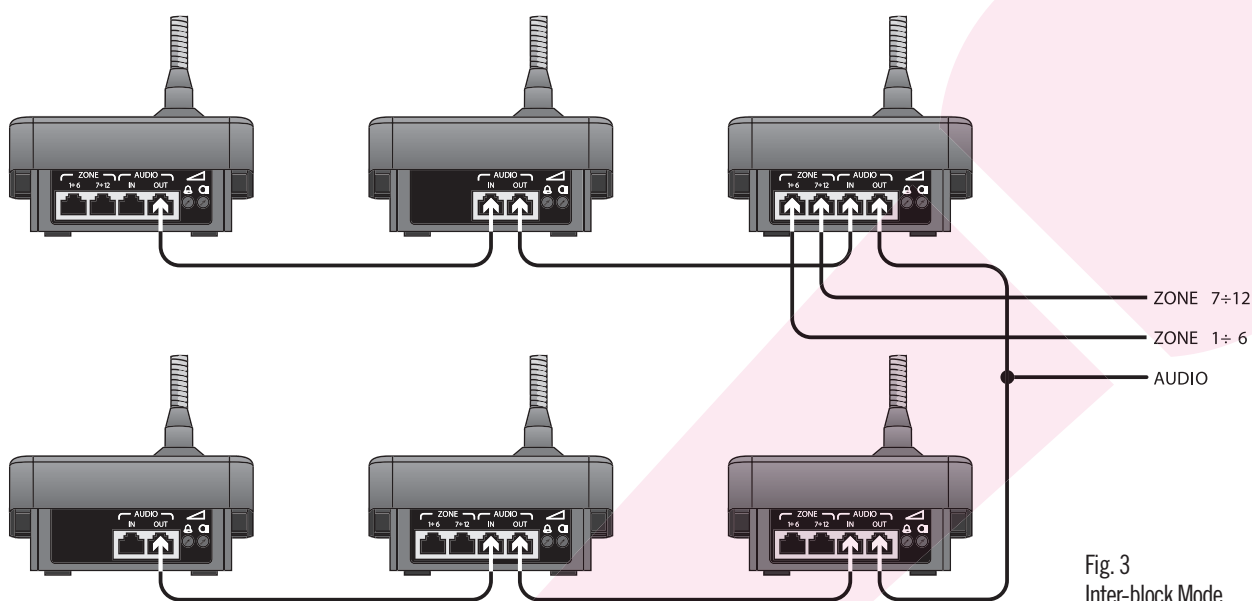


Fig. 3
Inter-block Mode

ACCESSORIES FOR MICROPHONES AND MICROPHONE CONSOLES

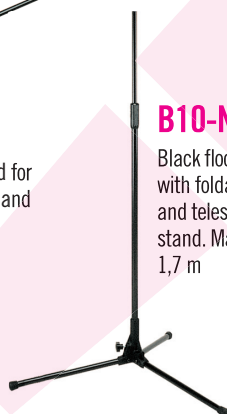
A13-N

Adjustable black stand for B10-N, B18-N, B20-N and B44-N floor stands



B10-N

Black floor stand, with foldable tripod and telescopic stand. Max height 1,7 m



B18-N

Black floor stand, with foldable tripod and adjustable telescopic stand 85÷170 cm



B20-N

Round black floor stand, with extendible and adjustable stand. Height 95÷175 cm



B44-N

Black floor stand with foldable tripod and telescopic stand. Height 95÷170 cm



F11-C

Black gooseneck with microphone XLR plug; 1,1 m XLR shielded cable. H: 40 cm, Ø: 14 mm



F5-N

Black gooseneck, without cable, with threaded plug. H: 40 cm, Ø: 14 mm



B116

Black cast iron table, with telescopic stand (37÷60 cm) for S1, S8 and S10 mounts





	S1 Articulated adjustable microphone mount, for telescopic table and floor stands
	S10 Articulated adjustable microphone mount, with elastic anti-vibration body, for telescopic table and floor stands
	S8 Articulated adjustable microphone mount, for hand-held radio-microphones and telescopic table and floor stands
	27/59 Three-thread adaptor for S1 and S10 mounts
	B60-N Stand for table clamping, black chromium-plated, for F5-N and F11-C goosenecks
	B70 Stand for table clamping, black painted, for F5-N and F11-C goosenecks
	B160 Table stand for goosenecks with MC30-GN microphones, with shielded cable (1m)
	B12 Black cast iron table, for F5-N and F11-C goosenecks

Cables

CV2002	CAT5 SFTP shielded cable - RJ45 - 2m	new
CV2005	CAT5 SFTP shielded cable - RJ45 - 5m	new
CV2010	CAT5 SFTP shielded cable - RJ45 - 10m	new
31/142-100	CAT5 SFTP shielded cable - RJ45 in 100 m hanks	new
31/2-100	CAT5 SFTP shielded cable, in 100 m hanks	
31/84	Shielded cable (2 wires + 2 wires with shield)	
31/65-250	CEI 20-22 II cable, (3 wires +1 shielded wire), in 250 m hanks	
CV15	5 m microphone cable extension with male and female XLR connectors	
CV24	10 m microphone cable extension with male and female XLR connectors	
CV27	1 m shielded cable with 5-pole DIN plug	
CV28	1 m shielded cable with 5-pole DIN plug and phono (RCA) plug	
CV32	10 m microphone cable extension for pre-amplified microphone consoles with male and female 5-pole DIN connectors	
CV33	1,5 m shielded cable with phono (RCA) plugs	

RADIO-MICROPHONES



- PASO radio-microphones and receivers operate in VHF (from 174,6 to 216,25 MHz) and UHF (from 433,05 to 434,79 MHz and from 798 to 826 MHz) bands. Hand-held and pocket radio-microphones are available for every band; receivers are available in single channel, "diversity" and multi-channel modular versions, allowing the simultaneous reception of more signals on different frequencies.
- The VHF "TX" models offer a 32,768 KHz "Pilot Tone", which makes the system almost totally immune from interferences.
- Sophisticated transmission and reception circuits make these devices fit for high quality music caption.
- The emission frequency is quartz-controlled and frequency modulated. The RF section includes amplifiers with double accord band filters for maximum rejection of spurious frequencies. In the BF section, sophisticated circuits for dynamics compression and equalization, together with complementary circuits, optimize the signal-to-noise ratio and the acoustical response.

UHF Radio-microphones

**MA855/R850**

Hand-held transmitter/receiver radio-microphone kit. UHF band from 798 to 826 MHz. Dynamic microphone, LCD display, 144 frequencies in groups of 12, mute function, battery status display, operates also with rechargeable batteries. Receiver with 144 channels PLL diversity technology, LCD display, RF/AF level meter, scan for automatic transmitter research, A and B sockets for two 2 antennas (included), battery status display and group-channel indicator, power supply included.

**MA853/R850**

Transmitter/receiver lavalier radio-microphone kit. UHF band from 798 to 826 MHz. Tie electret microphone, LCD display, 144 frequencies in groups of 12, mute function, battery status display, operates also with rechargeable batteries. Receiver with 144 channels PLL diversity technology, LCD display, RF/AF level meter, scan for automatic transmitter research, A and B sockets for two 2 antennas (included), battery status display and group-channel indicator, power supply included.

**MA824/R820-Fx** new

Single wireless UHF microphone kit. UHF hand held dynamic microphone transmitter and single-channel true diversity receiver kit. Frequency range 741.55 – 812.70 MHz. A and B sockets on the front panel for 2 antennas (included); active antenna and audio frequency status indicators, audio level control, line and mic audio outputs. 2 batteries 1,5V power supply (for microphone) and 230 Vca 12-15Vcc adapter (for receiver) included. Dim 50 x 260 mm. (microphone), 210 x 160 x 40 mm (receiver).

**R824-Fx** new

Multi-channel wireless microphones UHF system. UHF 4 hand held microphone transmitters and 4 single-channels receiver modules in a single case for 19" rack mounting. Frequency range 741.55 – 812.70 MHz. A and B sockets for 2 antennas (included) on the rear panel, 90 dB S/N ratio (receiver), ON/OFF, RF and audio frequency status indicators, individual audio level and squelch control, 4 balanced mic outputs (separated channels). 2x 1,5V power supply (for each microphone), 230Vca 13-18Vcc adapter (for receiver) included. Dimensions: 50 x 260 mm (each microphone), 480 x 170 x 45 mm (case for receivers). H 1E

AC850 Support for rack mounting of one R850 receiver with antenna doubling on the front panel

AC852 Support for rack mounting of two R850 receivers

AC855 Battery charger for MA855 and MA853 transmitters

VHF Radio-microphones

**MA155-FX**

Hand-held microphone transmitter, VHF band from 175.00 to 199.82 MHz. Unidirectional dynamic microphone, ON/OFF switch, frequency response 50-15kHz, operates with batteries 9Vdc IEC 6LR61 power supply. Typical lifespan 6-8 hours. Dim. LxHxD Ø50x250 mm, weight 210g.

**MA155-TX**

Hand-held microphone transmitter, VHF band from 175.00 to 199.82 MHz, with pilot tone. Unidirectional dynamic microphone, ON/OFF switch, frequency response 50-15kHz, operates with batteries 9Vdc IEC 6LR61 power supply. Typical lifespan 6-8 hours. Dim. LxHxD Ø50x250 mm, weight 210g.

VHF Radio-microphones



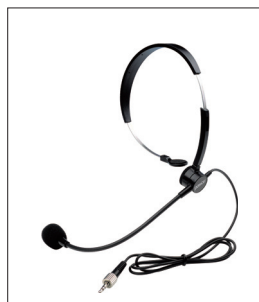
MA153-TX

Pocket radio-microphone, with pilot tone. Cardioid electret condenser capsule. Lavalier microphone transmitter, VHF band from 175.00 to 199.82 MHz, ON/OFF switch, frequency response 50-15kHz, operates with batteries 9Vdc IEC 6LR61 power supply. Typical lifespan 6-8 hours. Dim. LxHxD 61x115x22 mm, weight 80g.



MA153/R208-KX

Pocket microphone transmitter/receiver kit, VHF band from 175 to 199MHz, with pilot tone. Unidirectional dynamic microphone, ON/OFF switch, operates with 9Vdc batteries, single channel diversity receiver, double antenna, squelch, balanced micro and aux output, 12-18Vdc power supply



MC53

Headset microphone with electret capsule and jack (for MA153-Tx)



MA155/R208-KX

Hand-held microphone transmitter/receiver kit, VHF band from 175 to 199MHz, with pilot tone. Unidirectional dynamic microphone, ON/OFF switch, operates with 9Vdc batteries, single channel diversity receiver, double antenna, squelch, balanced micro and aux output, 12-18Vdc power supply



AC29-BNC

Stand to remote the telescopic antenna, with 5m extension cable



MA153-FX

Pocket radio-microphone. Cardioid electret condenser capsule. Lavalier microphone transmitter, VHF band from 175.00 to 199.82 MHz, ON/OFF switch, frequency response 50-15kHz, operates with batteries 9Vdc IEC 6LR61 power supply. Typical lifespan 6-8 hours. Dim. LxHxD 61x115x22 mm, weight 80g.



R234 with 4 channels RD200-Fx



RD200-FX

True diversity receiver, modular (up to 4 receivers can be inserted in the R234 case, to receive up to 4 different signals coming from as many transmitters)

R234

Case for rack mounting of 4 RD200-Fx receivers, 4 separate independent audio outputs

AR2-BNC

Ground Plane Antenna for R234



ACV100

Anti-shock briefcase for MA153/R208-Kx and MA155/R208-Kx radio-microphone kits

Frequency selection and compatibility table

radio-microphone		reference colour	frequency
hand-held	pocket		
MA155-T1*	MA153-T1*	Red	175,00 MHz
MA155-T2*	MA153-T2*	Green	179,30 MHz
MA155-T3*	MA153-T3*	Yellow	184,32 MHz
MA155-T4*	MA153-T4*	Orange	199,82 MHz
MA155-F6	MA153-F6	Grey	180,00 MHz
MA155-F7	MA153-F7	Blue	195,25 MHz
MA155-F8	MA153-F8	Turquoise	197,10 MHz

* with pilot tone



The functions and versatility of Paso amplifiers and power units are the result of a long-time experience in this field. Each of our ranges, from the cheapest to the most professional, responds to precise operational criteria and is built and tested so as to be able to guarantee our users absolute reliability, even in case of continuous operation. The various characteristics and accessories offered allows the users to fine-tune the amplification system leaving its complexity out of consideration. Now we have added new brand-new current amplifiers range for acoustic protheses bearers to our range of tension and power amplifiers.



A range of integrated amplifiers expressly designed to satisfy the needs of the most common installations with very simple and straightforward design solutions.

Series 3300 consists of two basic models of 30/45 W and 40/60 W integrated amplifiers and two 60/90 W and 120/180 W model with more advanced performance; it boasts great functional features and is characterised by a particularly favourable price/performance ratio.

These units are highly customizable, which makes them versatile systems able to satisfy the needs of small to medium installations.



pub

- Balanced microphone inputs, with volume control, for dynamic and condenser/electret microphones (Phantom power).
- Audio input dedicated to the connection of a private telephone switchboard to send announcements by telephone and/or emergency signals with higher priority, with automatic interruption of any music programmes and of the other microphone inputs
- Auxiliary inputs for audio sources with front-panel switch and volume control.
- Independent volume, high and low tone and master volume controls (only for AX3306 and AX3312).
- Two-tones warning signal generator (DIN DON) (AX3303 excluded)
- Recorder output and/or cascade link to another amplifier.
- Signal of the selected music source always available at the MOH 'Music On Hold' (1W/8 ohm) output, for a monitor loudspeaker or for other devices and telephone switchboards (AX3303 excluded).
- Output LED-Meter in dB (AX3303 excluded).
- Final stage protection and transformer for constant voltage lines (parallel link of loudspeakers on double row line).



AX3303 new

30W/45W RMS/MAX integrated amplifier, 1 microphone input with 24V phantom power, frequency response 50-13kHz, priority contact, 1 TEL balanced input with sensitivity control, 1 CD input and 1 aux input, frequency response 45-22kHz, tone controls, separate volume controls for sound source and microphone, overload indicator, 100/70/50V and 8ohm output, line out, 230/115 Vac - 24 Vdc power supply. AC56 optional bracket for rack mounting. Weight 5 kg. Dim. LxHxD 360x100x310 mm (H 2U)



AX3304

40W/60W RMS/MAX integrated amplifier, 2 XLR balanced microphone inputs with phantom power, 1 mic input on the front panel, VOX with sensitivity control, frequency response 50-16kHz, priority contact, 1 TEL balanced input with sensitivity control, 1 CD input and 1 aux input, frequency response 45-17kHz, din-don, tone controls, separate volume controls for sound source and microphones, VU meter and overload indicator, 100/70/50V and 8ohm output, 1W/8ohm monitor output, line out, 230/115 Vac - 24 Vdc power supply. AC56 optional bracket for rack mounting. Weight 5,8 kg. Dim.LxHxD 360x88x285 mm (H 2U)



AX3306

60W/90W RMS/MAX integrated amplifier, 3 XLR balanced microphone inputs with phantom power, 1 mic input on the front panel, VOX with sensitivity control, frequency response 50-16kHz, priority contact, 1 TEL balanced input with sensitivity control, 1 CD input, 1 TUNER input and 1 aux input, frequency response 45-20kHz, general tone controls, separate volume controls for sound source and microphones, VU meter and overload indicator, 100/70/50V and 8ohm output, 1W/8ohm monitor output, line out, 230/115 Vac - 24 Vdc power supply. AC57 optional bracket for rack mounting. Weight 8 kg. Dim.LxHxD 435x88x330 mm (H 2U)



AX3312

120W/180W RMS/MAX integrated amplifier, 3 XLR balanced microphone inputs with phantom power, 1 mic input on the front panel, VOX with sensitivity control, frequency response 50-16kHz, priority contact, 1 TEL balanced input with sensitivity control, 1 CD input, 1 TUNER input and 1 aux input, frequency response 45-20kHz, general tone controls, separate volume controls for sound source and microphones, VU meter and overload indicator, 100/70/50V and 8ohm output, 1W/8ohm monitor output, line out, 230/115 Vac - 24 Vdc power supply. AC57 optional bracket for rack mounting. Weight 10 kg. Dim.LxHxD 435x88x330 mm (H 2U)

AC56 Brackets for rack mounting for AX3304 and AX3303

AC57 Brackets for rack mounting for AX3306 and AX3312

5500 Series - Mixer Amplifiers

new

paso

The new standard for audio PA applications, power range from 90 WRMS to 240 WRMS



5 microphone inputs, 3 zones* and CAT5 Plug and Play

Main features:

- 3 balanced XLR microphone inputs with phantom power supply and programmable progressive priorities.
- 2 balanced Micro/Line XLR Combo inputs with disconnectable phantom power supply.
- 1 top priority emergency input (VOX) for an audio link to a PABX or microphone bases.
- 3 AUX inputs with gauged sensitivity for Tuner/CD/Tape sound sources.
- Music-On-Hold function
- Built-in and adjustable chime generator
- Easy to install with connections to the bases and to other units of the 5500 range by means of RJ45 sockets (CAT5).
- 50/70/100V or 8 Ohm outputs
- Selective calls to three zones by means of pre-amplified microphone bases of the 700 range (AX5524 only)
- Cooled by means of a fan at a speed that is variable depending on the temperature and with electronic protection of the end stage.

AX5509 – Mixer Amplifier: Output power: 90 W RMS. Frequency response: 30/20kHz. Output voltages: at 50/70/100V or 8 Ohms. Power supply: 230/115 VAC and 24 VDC. Controls: 5 volume controls for mic. inputs, level control and selection of auxiliary inputs, treble/bass controls, master volume control. Connections: 5 XLR microphone inputs with 16V phantom power supply for non-pre-amplified bases/microphones, 3 auxiliary inputs for sound sources (tuner/CD/tape, emergency input for PABX, RJ45 sockets for connecting bases (CAT5 SFTP), line output for connecting other amplifiers, loudspeaker output terminal strip, precedence and override connection terminal strip, "Music on Hold" terminal strip, activation and adjustment of the warning signal (chime), tape out, insert.

Optional accessories: Microphone bases of the 700 range, Paso dynamic and electret microphones, AC5500 supporting brackets for rack-mounting.

AX5512 - Mixer Amplifier: Output power: 120 W RMS. Frequency response: 30/20kHz. Output voltage: at 50/70/100V or 8 Ohms. Power supply: 230/115 VAC and 24 VDC. Controls: 5 volume controls for mic. inputs, level control and selection of auxiliary inputs, treble/bass controls, master volume control. Connections: 5 XLR microphone inputs with 16 V phantom power supply for non-pre-amplified bases/microphones, 3 auxiliary inputs for sound sources (tuner/CD/tape), emergency input for PABX, RJ45 sockets for connecting bases (CAT5 SFTP), line output for connecting other amplifiers, loudspeaker output terminal strip, 24 V power-supply terminal strip, precedence and override connection terminal strip, "Music on Hold" terminal strip, activation and adjustment of the warning signal (chime), tape out, insert.

Optional accessories: Microphone bases of the 700 range, Paso dynamic and electret microphones, AC5500 supporting brackets for rack-mounting and AC50 side supports.

AX5524 - Mixer Amplifier: Output power: 240W RMS. Frequency response: 30/20kHz. Output voltage: at 50/70/100V or 8 Ohms. Power supply: 230/115 VAC and 24 VDC. Controls: 3 music/zone selection keys, 5 volume controls for mic. inputs, level control and selection of auxiliary inputs, treble/bass controls, master volume control. Connections: 5 XLR microphone inputs with 16 V phantom power supply for non-pre-amplified bases/microphones, 3 auxiliary inputs for sound sources (tuner/CD/tape), emergency input for PABX, RJ45 sockets for connecting bases (CAT5 SFTP), line output for connecting other amplifiers, zone-selection terminal strip, loudspeaker output terminal strip, 24 V power-supply terminal strip, precedence and override connection terminal strip, "Music on Hold" terminal strip, activation and adjustment of the warning signal (chime), tape out, insert.

Optional accessories: Microphone bases of the 700 range, Paso dynamic and electret microphones, AC5500 supporting brackets for rack-mounting and AC50 side supports.



*model AX5524

5500 Series - Boosters

new

pasos

The new standard for audio PA applications, power range from 120 WRMS to 480 WRMS



3 zones* and Plug and Play, CAT5 with power output up to 480W

Main features:

- Selective calling to three zones by means of pre-amplified microphone bases of the 700 range (AW5524 and AW 5548 only)
- Balanced line input and output .
- Top-priority emergency input (VOX function) for an audio collection to a PABX or to microphone bases.
- Music On Hold function
- 50/70/100V or 8 Ohm outputs
- Easy to install with connections to the bases and to other units of the 5500 range by means of RJ45 sockets (CAT5).
- Built-in and adjustable chime generator.
- Cooled by means of a fan at a speed that is variable depending on the temperature and with electronic protection of the end stage.

AW5512 - Booster: Output power: 120 W RMS. Frequency response: 30/20kHz. Output voltages: at 50/70/100V or 8 Ohms. Power supply: 230/115 VAC and 24 VDC. Controls: treble/bass controls, master volume control. Connections: line input, RJ45 sockets connecting bases RJ45 (CAT5 SFTP), line output for connecting other amplifiers, loudspeaker output terminal strip, 24 V power supply terminal strip, precedence and override connection terminal strip, line output and power for "Music on Hold" terminal strip, activation and adjustment of the warning signal (chime), emergency input for PABX.

Optional accessories: Pre-amplified bases of the 700 range, AC5500 supporting brackets for rack-mounting and AC 50 side brackets.

AW5524 - Booster: Output power: 240 W RMS. Frequency response: 30/20kHz. Output voltages: at 50/70/100V or 8 Ohms. Power supply: 230/115 VAC and 24 VDC. Controls: music/zone selection keys, treble/bass controls, master volume control. Connections: line input, RJ45 sockets connecting bases RJ45 (CAT5 SFTP), line output for connecting other amplifiers, loudspeaker output terminal strip, zone selection terminal strip, 24 V power supply terminal strip, precedence and override connection terminal strip, line output and power for "Music on Hold" terminal strip, activation and adjustment of the warning signal (chime), emergency input for PABX;

Optional accessories: Pre-amplified bases of the 700 range, AC5500 supporting brackets for rack-mounting and AC 50 side brackets.

AW5548 - Booster: Output power: 480 W RMS. Frequency response: 30/20kHz. Output voltages: at 50/70/100V or 8 Ohms; Power supply: 230/115 VAC and 24 VDC; Controls: 3 music/zone selection keys, treble/bass controls, master volume control. Connections: line input, RJ45 sockets connecting bases (CAT5 SFTP), line output for connecting other amplifiers, loudspeaker output terminal strip, zone selection terminal strip, 24 V power supply terminal strip, precedence and override connection terminal strip, line output and power for "Music on Hold" terminal strip, activation and adjustment of the warning signal (chime), emergency input for PABX.

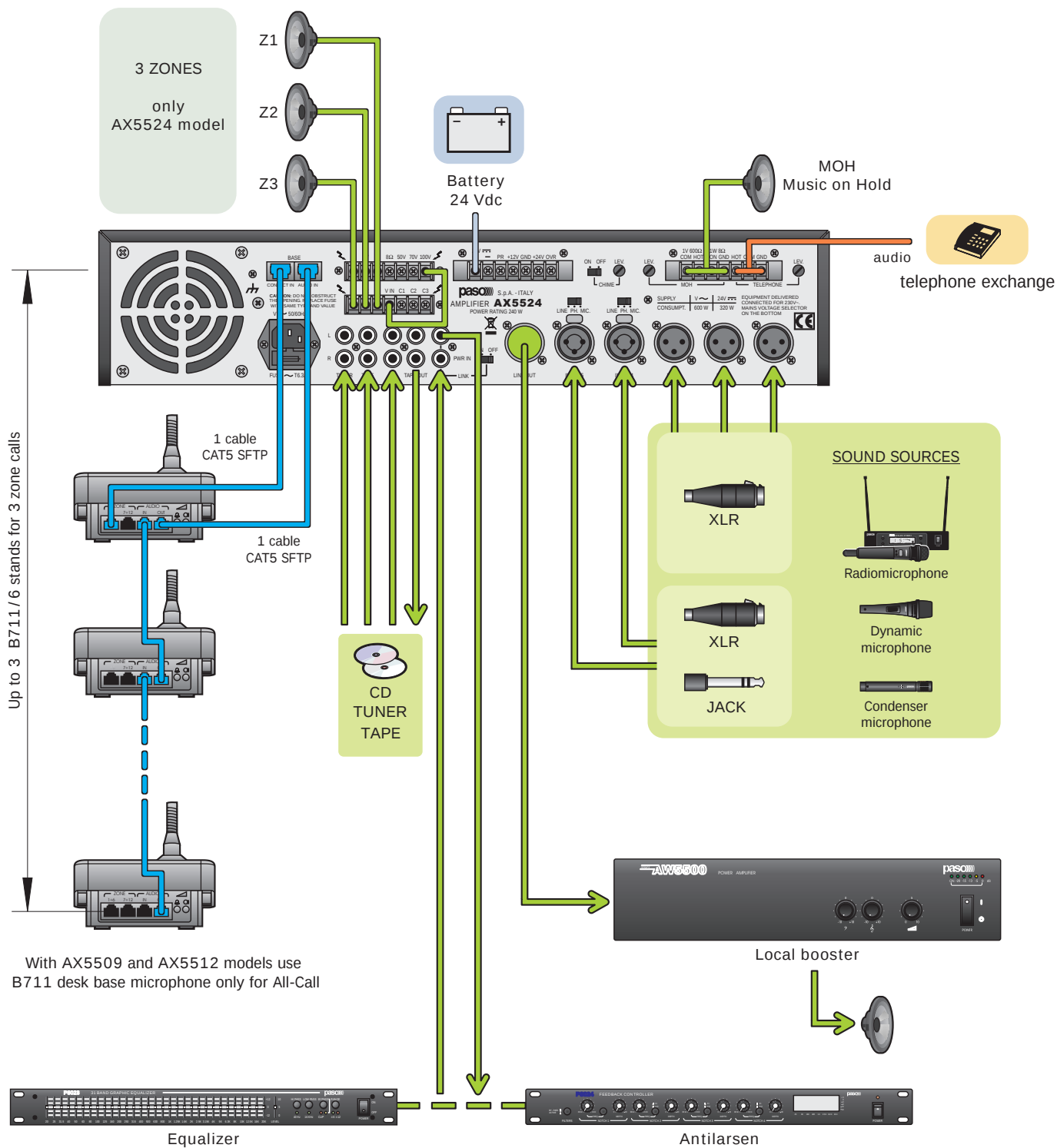
Optional accessories: Pre-amplified bases of the 700 range, AC5500 supporting brackets for rack-mounting and AC 50 side brackets.

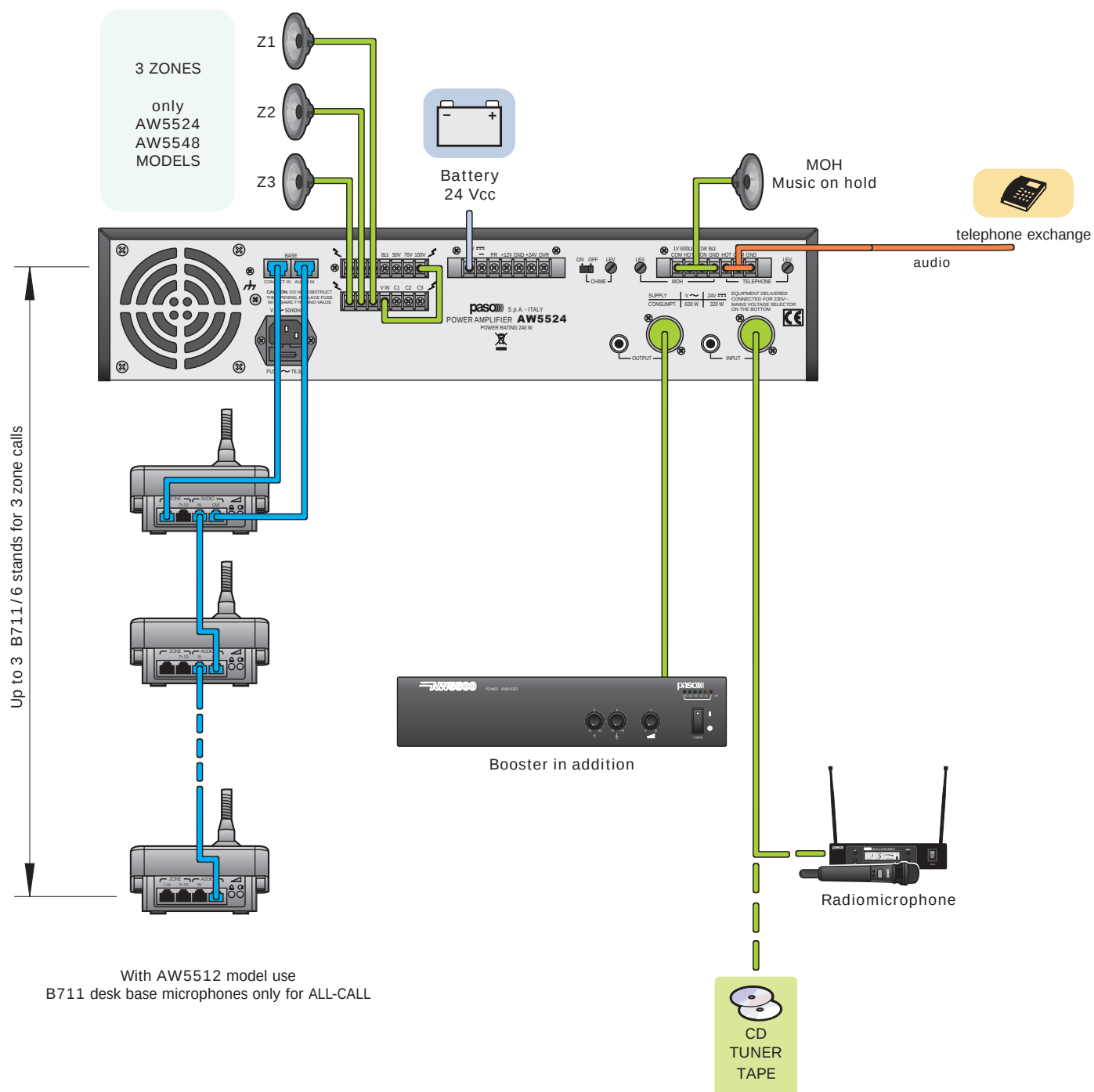
AC5500: brackets for rack-mounting of the 5500 range

AC50: side brackets for rack-mounting



*model AW5524 and AW5548





The maximum reliability in extreme conditions



naval

The series 8000 amplifiers-mixers and power units have been design to satisfy the needs of a continuously evolving market in the most flexible and professional way.

The boast great quality, reliability and very long life, a real example of "Made in Italy"

The wide range of features of the series 8000 can be extended by using a vast range of external and internal modules, able to adapt the product to the specific needs of the installation and the final users.

Series 8000 Integrated Amplifiers

- 4 independent microphone inputs with Phantom power switch, electronically or galvanically balanced with optional TM90 transformers, for low impedance dynamic or electret microphones. The connectors are XLR with mechanical block mechanism. A terminal board for microphone priority allows the users to set graduated priorities for the connected microphones. Up to 4 levels of priority are available.
- 3 auxiliary inputs (CD, TUNER e TAPE) with normalised input levels and double RCA socket for standard stereo cables. A TAPE output with double RCA connection is available to connect a tape recorder.
- PRE OUT and POWER IN, to connect an equaliser or an anti-feedback device.
- Telephone/emergency input with automatic fading (VOX) and priority over all other inputs. A trimmer allows the users to adjust the level of the emergency signal.
- Pre-amplified microphone console input, on 5-pole DIN plug with sensitivity control. Automatic priority device (VOX) with threshold control. Optional external control of the level and tone of the warning signal (with optional AC25 board).
- Emergency 24 Vdc power supply.
- Internal selective filter to optimize the response with horn loudspeakers.
- Front panel controls for high-low tones.
- Front panel control for general volume.
- LED Vu meter for a clear and immediate check of the emitted power.
- Anomalous operation control light (overload).
- Optional external and/or internal modules to expand the functions of the standard configuration.



AX8120

120 W RMS Integrated Amplifier, 1 EMERG/TEL priority balanced input with sensitivity control, 4 XLR microphone inputs with phantom power, 3 TAPE IN/CD/TUNER stereo aux inputs, 1 5-pole DIN pre-amplified base microphones input with sensitivity control, pre-out and power in to insert an audio processor, tape out, 1,1V/600ohm booster out, volume and tone controls, music source and microphones volume control, 50/70/100V and 8/16 ohm output, mic. frequency response 50-20kHz, line frequency response 40-20kHz, operation temperature -10° +45° C, relative humidity <95%. Distortion at nominal power <1%. High reliability guaranteed by electronic protections against overload and overheating of the power devices. 230Vac-24 Vdc power supply, weight 14,1 kg. Dimensions LxHxD 482x133x325 mm (H 3U).



AX8240

240 W RMS Integrated Amplifier, 1 EMERG/TEL priority balanced input with sensitivity control, 4 XLR microphone inputs with phantom power, 3 TAPE IN/CD/TUNER stereo aux inputs, 1 5-pole DIN pre-amplified base microphones input with sensitivity control, pre-out and power in to insert an audio processor, tape out, 1,1V/600ohm booster out, volume and tone controls, music source and microphones volume control, 50/70/100V and 8/16 ohm output, mic. frequency response 50-20kHz, line frequency response 40-20kHz, operation temperature -10° +45° C, relative humidity <95%. Distortion at nominal power <1%. High reliability guaranteed by electronic protections against overload and overheating of the power devices. 230Vac-24 Vdc power supply, Weight 14,1 kg. Dimensions LxHxD 482x133x325 mm (H 3U).

Series 8000 Booster Units

- XLR input to connect a pre-amplifier or another power unit. The LEVEL control adjusts the sensitivity for such input. An internal connector for the TM92 balancing transformer is present to balance the input (particularly long or disturbed lines). A second output XLR allows cascading of more units.
- Pre-amplified stand input with automatic enabling, through threshold adjustment (A.P.T.).
- 24 Vdc emergency power supply.
- Internal selective filter to optimize the response with horn loudspeakers.
- Front panel high/low tones and general volume controls, with rings protecting against accidental operation.
- LED Vu meter for a clear and immediate check of the emitted power. Light indication of amplifier overload.
- Optional external and/or internal modules to expand the functions of the standard configuration (AW8502 excluded).



AW8121

120 W RMS Booster unit, 5-pole DIN microphone console input with sensitivity control, 1 XLR input/output booster (line level - 1,1V/1k ohm) for cascading of a second booster, volume and tone controls, VU meter, 50/70/100V and 8/16 ohm output, frequency response 40-20kHz, operational temperature -10° +45° C, relative humidity <95%. Distortion at nominal power <1%. High reliability guaranteed by electronic protections against overload and overheating of the power devices. 230Vac-24 Vdc power supply. Weight 14,1 kg. Dimensions LxHxD 482x133x325 mm (H 3U).



AW8241

240 W RMS Booster unit, 5-pole DIN microphone console input with sensitivity control, 1 XLR input/output booster (line level - 1,1V/1k ohm) for cascading of a second booster, volume and tone controls, VU meter, 50/70/100V and 8/16 ohm output, frequency response 40-20kHz, operational temperature -10° +45° C, relative humidity <95%. Distortion at nominal power <1%. High reliability guaranteed by electronic protections against overload and overheating of the power devices. 230Vac-24 Vdc power supply. Weight 14,1 kg. Dimensions LxHxD 482x133x325 mm (H 3U).



AW8502 new

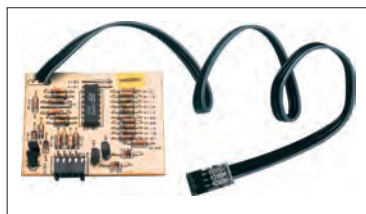
500 W RMS Booster unit, 1 priority EMERG input with sensitivity control, 1 XLR input/output booster (line level - 1,1V/1k ohm) for cascading of a second booster, VU meter, 50/70/100V and 16 ohm output, frequency response 40-20kHz, operational temperature -10° +45° C, relative humidity <95%. Distortion at nominal power <1%. High reliability guaranteed by electronic protections against overload and overheating of the power devices. 230Vac-24 Vdc power supply. Weight 25 kg. Dimensions LxHxD 482x133x420 mm (H 3U).



AW8501

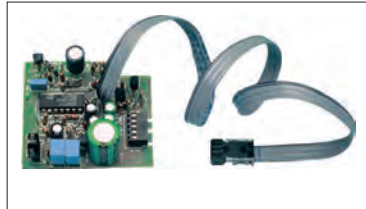
500 W RMS Booster unit, 1 5-pole DIN microphone console input with sensitivity control, 1 XLR input/output booster (line level - 1,1V/1k ohm) for cascading of a second booster, volume and tone controls, VU meter, 50/70/100V and 16 ohm output, frequency response 40-20kHz, operational temperature -10° +45° C, relative humidity <95%. Distortion at nominal power <1%. High reliability guaranteed by electronic protections against overload and overheating of the power devices. 230Vac-24 Vdc power supply. Weight 25 kg. Dimensions LxHxD 482x133x420 mm (H 3U).

Accessories and internal modules for Series 8000



AC20

Remote Volume Control



AC21

Dual tone alarm signal generator



AC25

Chime signal generator – 2 or 3 tones Din-Don

AC60

Flat cable kit with 8 connectors to connect the P8006 and the AC8050 modules. 2 m long.

CV35

Connection cable between the P8006 and the AC8050 modules. 2 m long.

Accessories and external modules for Series 8000



AC50

Pair of universal mounting brackets



AC8010

Double microphone input (XLR), transformer and Phantom power



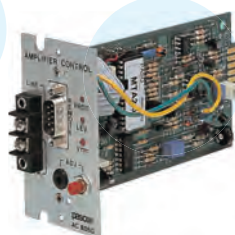
AC8020

Double aux input/output (DIN/ RCA)



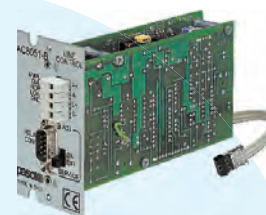
AC8030

Relay selection for six independent zones



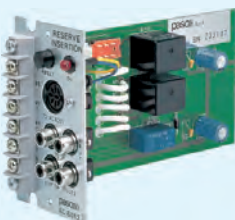
AC8050

Amplifier control with serial output



AC8051-B

Amplifier and loudspeaker line supervision



AC8052

Management amplifier of back-up



AC8040

Microphone input (XLR) and aux input/output (RCA)

DIGITAL AMPLIFIERS

New professional line

new



**Adjustable-output 500 W RMS Class D amplifiers for constant-voltage lines or for low-impedance lines.
Single rack without output transformer**

FEATURES AND USES

- The class D AW500CD amplifier has been designed to ensure maximum effective output power without time limits with an extremely high degree of reliability and, at the same time, low energy consumption.
- The amplifier has a unique feature enabling free front-panel switching of the output voltage for constant voltage applications at 100, 70 and 50 V or for 10 Ohm or 8 Ohm low-impedance lines.
- The very low consumption by comparison with a conventional amplifier producing the same output power enables considerable energy saving, and it is also possible to use a proportionally smaller UPS, with a consequent overall saving on the total cost of the system.
- The power dissipated in the form of heat is 5 times lower at the rated output power by comparison with a professional pure class AB amplifier, or 7 times lower at half the output power (see chart).
- The low heat developed by the unit enables several amplifiers to be placed one on top of the other, so as to take up less space.
- The peculiarity of the technical specifications qualifies this product as the most suitable for all those professional applications in which low consumption, high reliability and limited occupation of space are required.
- The V version is designed for use in audio systems applied to emergency services, in accordance with EN 60849, and fits in perfectly with our own PASO PMS2000-VES systems.

Connections

- Balanced line inputs
- 1 off XLR with sensitivity adjustment
- 1 off RJ45 for CAT5 and SFTP connection of the amplified microphones of the B700 range.
- 1 off input on screw-down terminal (VES version only)

Controls

- Volume control and treble and bass tone control
- Compact size and lightweight (height equivalent to 1 unit for rack mounting).
- Diagnostic panel with LEDs
- For systems according to EN60849 it is necessary to use AW500CD-V amplifiers with diagnostics for checking correct operation of the amplifiers and monitoring the loudspeaker lines.

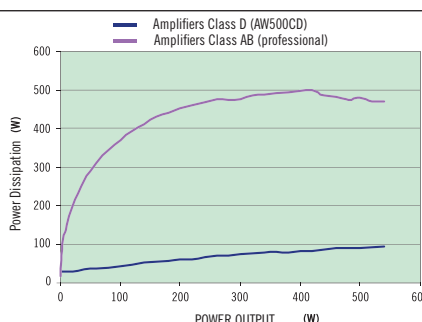
Controls

- **Volume control and treble and bass tone control**
- Compact size and lightweight (height equivalent to 1 unit for rack mounting).
- Diagnostic panel with LEDs
- For systems according to EN60849 it is necessary to use AW500CD-V amplifiers with diagnostics for checking correct operation of the amplifiers and monitoring the loudspeaker lines.

* for AW500CD-V version only



Rated power output	500 W RMS
Constant voltage outputs	50 - 70 - 100 V
Low impedance outputs	8 - 16 ohm
Typical distortion at 450 W	< 0.05
S/N ratio	> 93 dBA
Frequency response	25 Hz tot 25000 Hz
Performance	85 %
Sensitivity	300 mV
General Information:	
Power Supply	230/115 V $\pm$ 10% 50/60 Hz
Rack mounting	H 1U
Weight	7,4 Kg



AW500CD
500 W RMS - Class D
Amplifiers

new

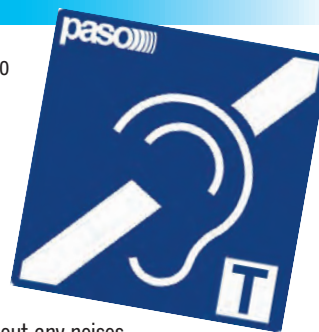
AW500CD-V
500 W RMS - Class D
Amplifiers

new

Voice Evacuation System VES

SERIES LAX - SYSTEMS FOR HEARING AIDS BEARERS CURRENT AMPLIFIERS

- The Series LAX amplifiers have been specifically designed to transmit sounds inductively; they are mainly used in audio systems dedicated to people wearing hearing aids.
- Most modern equipment have a two positions switch, offering a "M" and a "T" position. The "M" position is dedicated to "normal" hearing through the microphone. The "T" (Telecoil) position is dedicated to an "inductive" hearing, through a special coil inside the device. The current amplifier connected to the sound source feeds a copper turn (Loop) - opportunely insulated - placed on the perimeter to be voiced. The current in the coil generates a variable magnetic field that is "induced" in the coil inside the acoustic aid device.
- Normally, the magnetic field is intense enough to allow the people wearing acoustic protheses to freely move inside the premises, while hearing at a continuously comfortable level. The main benefit of this system, when compared with others operating with radio-frequencies or infra-red, is that the sound comes to user in a non-distorted way and without any noises, echoes or ambience reverb, thus being totally intelligible.
- The use of this kind of devices is more and more widespread in public spaces, such as theatres, churches, banks, schools, offices, etc., However, it can also be used at home, with connections to the TV set, the tuner, the telephone or the intercom system.



SERIES LAX - Loop Amplifiers



LAX20

Loop amplifier for areas of about 20 sqm, 2 microphone inputs (H 1U)



LAX50

Loop amplifier for areas of about 50 sqm, 2 microphone inputs (H 1U)



LAX450

Loop amplifier for areas of about 450 sqm, 2 microphone inputs and 1 Micro/Line input (H 1U)

LAX200

Loop amplifier for areas of about 200 sqm, 2 microphone inputs and 1 Micro/Line input (H 1U)



LAX800

Loop amplifier for areas of about 800 sqm, 2 microphone inputs and 1 Micro/Line input (H 1U)

SERIES LAX - Accessories

LACF01	Insulated copper band, 50 m
LACL10	Twisted connection cable, 10 m
LAC50	Induction coil for counters or desks, for LAX50 amplifier
LALT01	Adhesive tape band for LACF01, 50 m
LAL01	Label Kit with AFILS logo (10 pcs.)
LAM50	Microphone with clip for LAX50
LASC50	Scart TV adapter for LAX50
LASC100	Scart TV adapter for LAX800, LAX450 and LAX200
LATR100	100 V line interface for LAX800, LAX450 and LAX200
LATR50	100 V line interface for LAX50
27/4555	Brackets for rack mounting for LAX800, LAX450 and LAX200

SERIES LAX Measurement Instruments



LASFM01

Magnetic field meter



LARX01

Receiver with headphones

The comfort and “feel” of a shop, a department store, a restaurant or a hotel can be significantly improved by installing a high quality sound system.

PASO compact multi-function systems and devices for more complex systems offer various solutions to generate music programmes and messages able to give the most appropriate and effective answer to any requests.



break area

They include two high quality and sturdy music sources, and a professional amplifier (120 W for PA312-MP3 and PA212 models and 40 W for PA140-MP3 model) and all the accessories needed to integrate in a sound system.

The PA312-MP3 and PA140-MP3 models include a CD/MP3 player and an AM/FM tuner, whereas the PA212 model includes a cassette recorder/player and an AM/FM tuner.



hotel

- Balanced microphone inputs, with separate volume controls, for dynamic and condenser/electret microphones (Phantom power) (only for PA312-MP3).
- Input dedicated to the connection of a private telephone switchboard to send telephone announcements and/or emergency signals with higher priority - automatic disabling of background music programmes and of the other microphone inputs (except PA140-MP3).
- Contact to activate microphone priority over the background music programme.
- Chime signal generator (except PA140-MP3).
- Extra input for external music sources.
- Front panel zones selection switches (except PA140-MP3).
- High/low tone and general volume controls.



PA140-MP3

40W amplified tuner-CD/mp3 player. Compact system with CD/mp3 player and AM/FM tuner, mixer and 40W RMS amplifier, 2 XLR microphone inputs, 1 line aux input, tone and volume controls, AM/FM tuner and 5+5 preset channels, FM 87.5-108MHz, MW 531-1602KHz, CD player with program and repeat functions, pre-out, 100/70/50V and 4/8/16 ohm output. Frequency response 60-17kHz aux S/N>77dB, 60-14kHz mic S/N >65dB. 230Vac power supply. Dimensions LxHxD 400x100x310 mm. Weight 7kg. (H 2U)



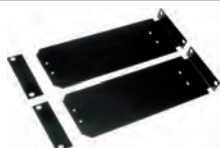
PA212

120W three-zone tuner-cassette player. Compact system with cassette player/recorder and AM/FM tuner, mixer and 120W RMS amplifier with front panel zone selection keys, 1 priority VOX input, din don, 4 XLR microphone inputs, 2 line aux inputs, tone and volume controls, AM/FM tuner with 7+7 preset channels, FM 87.5-108MHz, AM 531-1602KHz, tape with program and repeat functions, 100/70/50V and 4/8/16 ohm output. Frequency response 50-15kHz mic S/N >62dB. 230Vac-24Vdc power supply. Dimensions LxHxD 450x150x330 mm. Weight 11kg. (H 3U)



PA312-MP3

120W two-zone tuner-CD/mp3 player. Compact system with CD-R/CD-RW/CDDA/mp3 player, AM/FM tuner, mixer and 120W RMS amplifier with front panel key selection zones, 1 priority VOX input (jack on the front panel - 1 microphone input on the rear panel), din don, 4 XLR microphone inputs with Phantom power, 1 line aux input, tone and volume controls, AM/FM tuner with 10+10 preset channels, Cd player with program and repeat functions, “music on hold” output, 100/70/50V and 8 ohm output, cooling fan, 220Vac-24Vdc power supply. Dimensions LxHxD 430x88x280 mm. Weight 10,3kg. Pair of AC55 brackets for rack mounting(H 2U)



AC55

Pair of brackets for rack mounting for PA312-MP3

P8035 Support for PA140-MP3, PA312-MP3 and PA212 (H 3U)

- Large as well as small installations need sound and music playing devices with particular reliability, versatility and user-friendliness characteristics, designed to satisfy in most rational way the needs of music programmes, spaced out by commercials and service messages or, in rare cases, by alarms.
- PASO sound sources and processors give the users multiple solutions to generate music programmes and messages able to give the most appropriate and effective answers to any requests.



DMG9016

Digital recorder/player, up to 16 different messages. Maximum global memory capacity 240 seconds. Possibility to divide the 16 messages into two groups (group A and group B) with double audio out to allow the simultaneous emission of two different messages or to mix the two groups on the same output. Din-Don player with amplitude and tone controls. Front panel keyboard to operate the device manually. A connector on the rear panel allows the connection of a remote control through remote contacts or keyboard. Monitor display, write/cancel memory protection. Microphone input with 12V phantom power, limiter and aux line input for recording. 230 Vac - 24 Vdc power supply. Dimensions LxHxD 410x50x230 mm. Weight 3kg. Optional 27/2466 bracket for rack mounting. (H 1U)



DTM9000

Sequential timer for automatic forwarding of commercials, to be used with DMG9016. Automatic player for the messages recorded with the DMG9016 digital recorder, at selectable time intervals. Interval selection on the front panel x5 x10 x15 x20 x25 x30 minutes, play indicator, switch for time doubling, input for channels A and B of DMG9016, input contact n.a., line in/out. Optional 27/2469 bracket for rack mounting. 230 Vac - 24 Vdc power supply (H 1U)



DAG9200-B

Digital alarm signal generator - 10 signals. Unit with 7 pre-recorded signals, 1 alarm (DIN33404), 1 fixed signal, 1 recordable message (1 minute max). Front panel keyboard to operate the device manually. A connector on the rear panel allows the connection of a remote control through remote contacts or keyboard. Selectable play time, balanced microphone input with sensitivity control, aux input for recording, line output, status display, preset keys and key-switch to enable message recording. 230Vac-24Vdc power supply. Dimensions LxHxD 410x50x230 mm. Weight 3kg. Optional 27/2466 bracket for rack mounting (H 1U)



CP122-B

Double cassette player with auto reverse. Continuous playing of two cassettes, possibility to cascade up to 10 CP122-B to play in sequence up to 20 audio-cassettes, play mechanisms mounted on extractable drawers, audio connection cable 1m. Frequency response 50-10kHz, S/N ratio >50dB, distortion <1.5%. 230Vac-24Vdc power supply. Dimensions LxHxD 410x50x230 mm. Weight 3,2kg. Optional 27/2466 brackets for rack mounting (H 1U)



P8081

Stereo double cassette player/recorder with auto reverse. One deck offers Play/Rec functions, the second deck offers Play function only, Dolby system, continuous play, search system and memory key, normal/high speed copy. Frequency response 20-18kHz, S/N ratio >74dB with Dolby C. 230Vac-24Vdc power supply. Dimensions LxHxD 439x135x310 mm. Weight 4kg. Rack mounting (H 4U)



WMS13

Sequential double cassette player/recorder with auto reverse. Continuous play, track start search function, tape counter, song search, continuous recording with automatic spacing for unrecorded spaces 4 minutes long, simultaneous parallel recording on two cassettes, copy function, frequency response 25-17kHz, S/N ratio >79dB with Dolby C. 230/120Vac-24Vdc power supply. Dimensions LxHxD 435x127x292 mm. Weight 4kg. Rack mounting (H 3U).



P8083 new

Player CD/mp3 and AM/FM Tuner. Display, system anti-shock, 20 preset radio, separate volume control, 1 output for CD and 1 output for tuner, 1 combine output. 230Vca power supply. Rack mounting (H 1U).



P8083-R new

Player and digital recorder with USB. Display, 99 tracks with 128Mb internal memory and an external SD card connection available. Direct microphone input for recording. 230Vca power supply. Rack mounting (H 1U).



P8084

Stereo digital AM-FM tuner. Pre-selection of up to 30 channels, automatic and manual tuning, preset memory-frequency-tuning-stereo display. FM 87.5-108MHz, MW 531-1602KHz, LW 152-282 kHz. S/N ratio FM mono>80dB, FM stereo>73dB, MW>52dB, LW>50dB. Distortion <0.2%. 230/120Vac-24Vdc power supply. Dimensions LxHxD 439x87x300 mm. Weight 3kg. Rack mounting (H 2U)



P8085

CD CD-R/CD-RW/CDDA and mp3 compact disc player with 5-disc cartridge. Repeat, random, track skip/search functions, analogue output, optic and coaxial digital output, remote control. Frequency response 5-20kHz. S/N ratio >106dB. Distortion <0.002%. 230Vac power supply. Dimensions LxHxD 435x106x380 mm. Weight 7kg. Rack mounting (H 3U)



P8023

1/3 octave graphic equalizer, 31 bands, frequency range 20-20000Hz, 40Hz high-pass filter and 16kHz low-pass filter, range ± 6 dB or ± 12 dB. Frequency response 10-50kHz. S/N ratio >85dB. Distortion <0,04%. 230/117 Vac power supply. Dimensions LxHxD 480x44x220 mm. Weight 3,1kg. Rack mounting (H 1U)



P8024-B

Anti-larsen device, 4 NOTCH filters with independent controls, suppressed band at 1/6 octave, output signal display. Filters attenuation 0 ± 20 dB. Frequency response 20-20kHz. S/N ratio >80dB line >94dB A. Distortion <0,03%. 230Vac - 24Vdc power supply. Dimensions LxHxD 483x44x210 mm. Weight 2,5kg. Rack mounting. (H 1U)



MX5539 new

Mixer with 9 inputs and 2 outputs. 9 input channels with adjustable sensitivity (Micro and Line) and individual level control for each input. 2 balanced output channels (right and left) Input 1 with priority over inputs 4 to 9 and VOX of inputs 2 and 3 enabled by a front-panel switch. Built-in 4-tone chime activated by a contact and local ON/OFF push-button, level control. ON/OFF speech filter on each input. Output for tape recorder, possibility of cascade connection of a mixer. Frequency response 20 to 20kHz. S/N ratio >63dB (mic) >73dB (line). Distortion <0,3%. Power supply 230 VAC — 24 VDC. Size LxHxD: 483x44x200 mm. Weight: 3.9kg. Rack mounting (H 1U)



DLC9000

Automatic volume control device. Environmental noise sensing (through environment microphone, sold separately), display visualization and storage in memory of the minimum/maximum noise level, attenuation according to the desired S/N ratio, day/night function, stop through contact. S/N ratio >62dB. 230Vac - 24Vdc power supply. Dimensions LxHxD 275x45x225 mm. Weight 2.1kg. Optional 27/2469 bracket for rack mounting (H 1U)



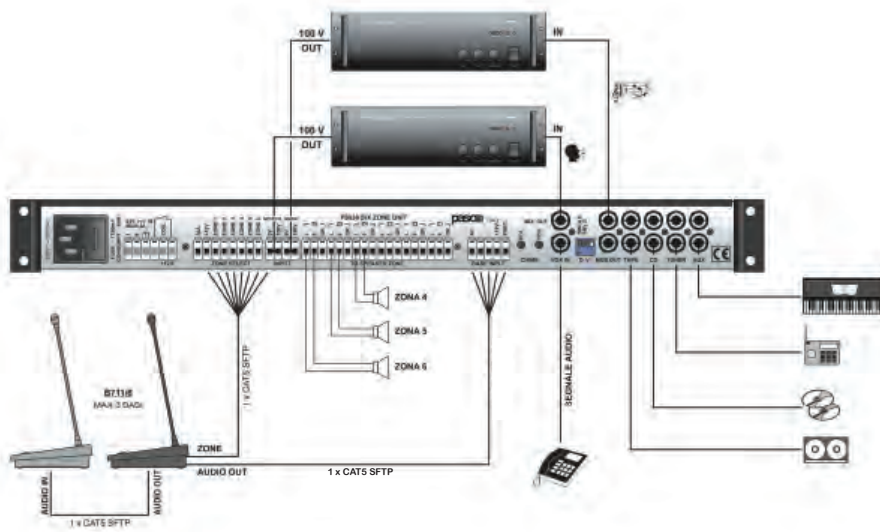
P8036

Voice/music management device for 6 zones. Call/music selection up to six output zones through relay. Music on/off for each zone, 4 RCA line inputs and 1 VOX audio line input for general calls, input for pre-amplified microphone consoles, priority selection base/VOX and VOX/base, separate 100V voice/music inputs, 6 loudspeaker outputs with possibility to use 3 wires to enable override, voice/music outputs. Frequency response 30-20kHz vox S/N>89dB, 50-20kHz mic S/N>88dB, 25-20kHz aux S/N>92dB. 230Vac - 24Vdc power supply. Dimensions LxHxD 482x44x233 mm. Weight 3,6kg. Rack mounting (H 1U)

27/2466 Pair of brackets for rack mounting for CP122-B, DMG9016, DAG9200 (H 1U)

27/2469 Clamps for rack mounting for DTM9000

P8036
schematics
double
amplification
(voice/music)
Max 500 W
on 6 total
zones





In the various models and characteristics of Paso loudspeakers, users can find the models they need, the best devices for any applications and environments, designed and built with great accuracy, with rigorous performance and specifications, respecting the declared measurements, and always reliable in time.



SOUND COLUMNS

The new columns of Series C400, as well as the elegant walnut sound columns, are characterised by loudspeakers with extended response and high efficiency tweeters, which deliver perfect intelligibility of the spoken language and a faithful reproduction of music. In particular, the C450-TW model can be used in outdoor applications, even under unfavourable weather.

SERIES 400 - Aluminium Sound Columns



C402-T

Two way loudspeaker, 6W, light grey, with adjustable swivel, with power transf. 6/3/1,5W, SPL RMSpower/1m 98dB, angle of dispersion @2KHz 210°, frequency response 200÷18kHz, 100/70/50V input
L x H x D (mm) 95 x 182 x 78



C420-T

20W column with adjustable swivel, light grey, with power transf. 20/10/5W, 4 speakers + 1 Tweeter, IP44, speech/music filter, SPL RMSpower/1m 105dB, angle of dispersion @2KHz 160° horiz. ÷ 30° vert., frequency response 180÷16kHz, 100/70/50V input.
L x H x D (mm) 95 x 520 x 80



C512-T

12W column with adjustable swivel, aluminium grey, with power transf. 12/6/3W, 2 speakers, IP44, SPL Pnom/1m 106 dB, angle of dispersion @2KHz 165° horiz. ÷ 40° vert., frequency response 120 ÷ 13 kHz, 100/70/50V input.
L x H x D (mm) 160 x 408 x 120

C430-T
30W column with adjustable swivel, light grey, with power transf. 30/15/7,5W, 6 speakers + 1 Tweeter, IP44, speech/music filter, SPL MSpower/1m 110dB, angle of dispersion @2KHz 160° horiz. ÷ 20° vert., frequency response 180÷16kHz, 100/70/50V input.
L x H x D (mm) 95 x 725 x 80



C440-T

40W column with adjustable swivel, light grey, with power transf. 40/20/10W, 7 speakers + 2 Tweeter, IP44, speech/music filter, SPL RMSpower/1m 110dB, angle of dispersion @2KHz 160° horiz. ÷ 13° vert., frequency response 150÷14kHz, 100/70/50V input.
L x H x d (mm) 95 x 890 x 80



C550-T

50W column with adjustable swivel, aluminium grey, with power transf. 50/25/12W, 2 speakers + 1 tweeter, IP44, SPL Pnom/1m 108dB, angle of dispersion @2KHz 120° horiz. ÷ 40° vert., frequency response 100÷20 kHz, 100/70/50V input.
L x H x D (mm) 160 x 408 x 120



new

C4100-TW

100W column with adjustable swivel S4-B, light grey, with power transf. 100/50/25W, 7 speakers + 2 Tweeter, IP66, SPL Pnom/1m 115dB, angle of dispersion @2KHz 150° horiz. ÷ 20° vert., frequency response 100÷10kHz 100/70/50V input.
L x H x D (mm) 95 x 890 x 80



S4-B

Swivel support for Series 400

Walnut Sound Columns

C624-T

24W column in solid walnut wood, precious and elegant, with adjustable swivel, with power transf. 24/12/6W, 6 speakers, IP53, speech enhancer filter, SPL RMSpower/1m 106dB, angle of dispersion @2KHz 210° horiz. ÷ 20° vert., frequency response 150÷15kHz, 100/70/50/25V input.
L x H x D (mm) 140 x 870 x 100.



C450-TW

50W column with adjustable swivel, light grey, with power transf. 50/25/12, 5W, 4 speakers + 1 Tweeter, IP66 dust and water resistant, speech/music filter, SPL RMSpower/1m 109dB, angle of dispersion @2KHz 160° horiz. ÷ 30° vert., frequency response 120÷15 kHz, 100/70/50V input.
L x H x D (mm) 95 x 520 x 80



AC904

Swivel support for C624-T - 360°, wall-mounting, in metal

- Sound projectors are mainly used to give sounds a direction and to concentrate the sound beam towards a precise area.
- The bi-direction model is the ideal projector for corridors.
- The sound projectors made of self-extinguishing abs (UL94-V0 rules) provide optimal sound quality and high acoustic performance. They are available in models for indoor use (C55, C56/6-T, C48/6-T and C48/6-2T) and in humidity resistant models (C46-TW, C48/12-TW and C48/12-2TW) or water-proof models (C55-S and C55-TW).
- Aluminium sound projectors are water-proof projectors also suitable for outdoor applications under unfavourable weather.
- The models with “-V” suffix have been designed for safety installations (VES) and include a thermal fuse, that insulates the loudspeaker from the system in case of thermal overload, and a fire-resistant connection board.

ABS Sound Projectors

	C56/6-T 6W “Sunflower” sound projector, self-extinguishing white ABS, IP 44, with power transf. 6/3/1,5W, SPL RMSpower/1m 96dB, angle of dispersion @2kHz 90°, frequency response 150÷12kHz, 100/70/50V input, with adjustable swivel	L x H x D (mm) 239 x 156 x 194
	C46-TW 6W cylindrical projector, self-extinguishing light grey ABS, for humid environments, IP 54, with power transf. 6/3/1,5W, SPL RMSpower/1m 96dB, angle of dispersion @2kHz 180°, frequency response 140-150kHz, 100/70/50V input, with adjustable swivel	Ø 114 x 160 (mm)
	C48/6-T 6W cylindrical projector, self-extinguishing white ABS, IP44, with power transf 6/3/1,5W, SPL RMSpower/1m 96dB, angle of dispersion @2kHz 160°, frequency response 150÷120kHz, 100/70/50V input, with adjustable swivel	Ø 140 x 207 (mm)
	C48/12-TW 12W cylindrical projector, self-extinguishing white ABS, water-proof IP65, with power transf. 12/6/3W, SPL RMSpower/1m 99dB, angle of dispersion @2kHz 160°, frequency response 150÷150kHz, 100/70/50V input, with adjustable swivel	Ø 140 x 207 (mm)
	C48/6-2T 6+6W bi-directional cylindrical projector, self-extinguishing white ABS, IP44, with power transf. 12/6/3W, SPL RMSpower/1m 96dB, angle of dispersion @2kHz 2x140°, frequency response 170÷120kHz, 100/70/50V input, with adjustable swivel	Ø 140 x 207 (mm)
	C48/12-2TW 12+12W bi-directional cylindrical projector, self-extinguishing white ABS, water-proof, IP65, with power transf. 24/12/6W, SPL RMSpower/1m 98dB, angle of dispersion @2kHz 2x140°, frequency response 170÷120kHz, 100/70/50V input, with adjustable swivel	Ø 140 x 207 (mm)
	C55 20W sound projector, light grey and black front panel, self-extinguishing ABS, IP44, with power transf. 20/10/5W, SPL RMSpower/1m 102dB, angle of dispersion @2kHz 70°, frequency response 130-16kHz, 100/70/50V input, with adjustable swivel	Ø 202 x 220 (mm)
	C55-S 20W sound projector, light grey and black front panel, self-extinguishing ABS, water-proof IP66, with power transf. 20/10/5W, SPL RMSpower/1m 102dB, angle of dispersion @2kHz 70°, frequency response 150-6kHz, 100/70/50V input, with adjustable swivel	Ø 202 x 220 (mm)
	C55-TW 40W sound projector, light grey and black front panel, self-extinguishing ABS, water-proof IP66, with power transf. 40/20/10/5W, SPL RMSpower/1m 103dB, angle of dispersion @2kHz 110°, frequency response 130-10kHz, 100/70/50/25V input, with adjustable swivel	Ø 202 x 220 (mm)



Aluminium Sound Projectors

	C86/20-TW new 20W sound projector, grey, body in aluminium and grid in steel, water-proof IP66, with power transf. 20/10/5W, SPL RMSpower/1m 103dB, angle of dispersion @2kHz 90°, frequency response 150-15kHz, 100/70/50V input, with bracket	L x H x D (mm) 180 x 145 x 178
	C86/20-2TW new 10+10W bi-directional sound projector, grey, body in aluminium and grid in steel, water-proof IP66, with power transf. 20/10/5W, SPL RMSpower/1m 100dB, angle of dispersion @2kHz 2x110°, frequency response 150-15kHz, 100/70/50V input, with bracket	L x H x D (mm) 180 x 145 x 178

VES Sound Projectors - Voice Evacuation Systems - IEC60849 Compliance

	C86/20-V new 20W VES sound projector, grey, body in aluminium and grid in steel, water-proof IP66, with power transf. 20/10/5W, SPL RMSpower/1m 103dB, angle of dispersion @2kHz 90°, frequency response 150-15kHz, 100/70/50V input, with bracket, thermal fuse and fire resistant connection cable (IEC60849 regulations)	L x H x D (mm) 180 x 145 x 178
	C86/20-2V new 10+10W bi-directional VES sound projector, grey, body in aluminium and grid in steel, water-proof IP66, with power transf. 20/10/5W, SPL RMSpower/1m 100dB, angle of dispersion @2kHz 2x110°, frequency response 150-15kHz, 100/70/50V input, with bracket, thermal fuse and fire resistant connection cable (IEC60849 regulations)	L x H x D (mm) 180 x 145 x 178

HORN LOUDSPEAKERS COMPLETE WITH DRIVER UNITS

- Horn loudspeakers are designed for outdoor applications and are available in a version complete with magneto-dynamic unit or in a version in which an exponential horn can be used with its unit to reach high efficiency and sound pressure values.
- The TR10-TW, TR20-TW and TRX20-V models are characterised by a die-cast aluminium body with inox steel screws and brackets. The horn is made of aluminium sheeting in the 20 W and 30 W models and in anti-shock abs in the TR10-TW model. All models include a line transformer and a rear switch for operating output selection.
- The TRX20-V model has been designed to be used in safety installations and includes a 4KV line transformer with insulation, a thermal fuse that insulates the loudspeaker from the system in case of thermal overload, and a fire resistant board (VES).
- The TR20-HF and TR40-HF horns are two-way units characterised by high efficiency, extended frequency response and optimal power holding. The horn is made of reinforced polypropylene and is highly self-extinguishable (UL 94-V0).
- Exponential horns are grey, unbreakable and weather resistant. They include an adjustable swivel and a back cap for magneto-dynamic units (driver) mounting (sold separately). (Cfr. table below)

Metal Horns

	TR10-TW 10W rectangular horn, body in aluminium, horn in anti-shock ABS and bracket in steel, light grey, humidity resistant IP65, with 100V transf., selectable power 10/5/3/1W, SPL RMSpower/1m 112dB, angle of dispersion @2kHz 100°horiz. - 90°vert, frequency response 450-10kHz	L x H x D (mm) 176 x 126 x 180
	TRX20-TW 20W round horn, in die-cast aluminium with horn in aluminium and bracket in inox steel, water-proof IP66, light grey, with 100V transf., selectable power 20/15/10/5/2,5W, SPL RMSpower/1m 123dB, angle of dispersion @2kHz 80°, frequency response 350-12,5kHz	Ø 213 x 230 (mm)
	TR30-TW 30W round horn, in die-cast aluminium with horn in aluminium and bracket in inox steel, water-proof IP66, light grey, with 100V transf., selectable power 30/20/15/10/5W, SPL RMSpower/1m 122dB, angle of dispersion @2kHz 70°, frequency response 350-6kHz	Ø 259 x 261 (mm)

Metal VES Horns - Voice Evacuation Systems - IEC60849 Compliance - with 4KV Voltage Insulation

	TRX20-V 20W round VES horn (Voice Evacuation System), in aluminium, with die-cast body and bracket in inox steel, water-proof IP 66, light grey, 4 kV voltage insulation, with thermal fuse and fire-resistant cable (CEI 20-22 III, CEI 20-35 and CEI 20-45 regulations), with 100V transf., selectable power 20/15/10/5W, SPL RMSpower/1m 123dB, angle of dispersion @2kHz 80°, frequency response 350-12,5kHz	Ø 213 x 230 (mm)
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2-way Plastic Horns

	TR20-HF 16W two-way rectangular horn, in self-extinguishing reinforced polypropylene, IP44, with power transf. 16/8/4/2W, SPL RMSpower/1m 116dB, angle of dispersion @2kHz 45° horiz. - 80° vert., frequency response 110-20kHz, 100/70/50/25V input, with adjustable swivel	L x H x D (mm) 356 x 240 x 308
	TR40-HF 40W two-way rectangular horn, in self-extinguishing reinforced polypropylene, IP44, with power transf. 40/20/10/5W, SPL RMSpower/1m 118dB, angle of dispersion @2kHz 45° horiz. - 80° vert., frequency response 110-17kHz, 100/70/50/25V input, with adjustable swivel	L x H x D (mm) 356 x 240 x 308

HORN LOUDSPEAKERS WITH SEPARATE DRIVER UNITS

Exponential horns for high efficiency and sound pressure levels

	TR1-B Exponential horn, in UV-stabilised polypropylene, grey, round horn, IP66 protection, needs a UT35-T driver unit for 100V connections with adjustable power or a UT35 driver unit for low impedance connections (16ohm), SPL RMSpower/1m 123dB (data measured with UT35-T), angle of dispersion @2kHz 50°, frequency response 300-5kHz, with adjustable swivel	Ø 250 x 408 (mm)
	TR2-B Exponential horn, in UV-stabilised polypropylene, grey, rectangular horn, IP66 protection, needs a UT35-T or a UT60-T driver unit for 100V connections with adjustable power or a UT35 driver unit for low impedance connections (16ohm), SPL RMSpower/1m 123dB (data measured with UT35-T), angle of dispersion @2kHz 70° horiz. 50° vert., frequency response 300-5kHz, with adjustable swivel	L x H x D (mm) 340 x 180 x 415
	TR3-B Exponential horn, in UV-stabilised polypropylene, grey, rectangular horn, IP66 protection, needs a UT35-T / UT60-T driver unit for 100V connections with adjustable power or a UT35 / UT60 for low impedance connections (16ohm), SPL RMSpower/1m 123dB (data measured with UT35-T), angle of dispersion @2kHz 55° horiz. 40° vert., frequency response 350-5kHz, with adjustable swivel	L x H x D (mm) 515 x 285 x 486
	TR400-SX 240/600W rectangular multiple horn, up to 4 driver units, in ABS and reinforced glass-fibre, grey, IP44, needs a UT60 driver unit (up to 4x60W -16ohm) or a UT150 driver unit (up to 4x150W - 16ohm), SPL RMSpower/1m 140dB (measured with UT150), angle of dispersion @2kHz 125° horiz. 141° vert., frequency response 100-10kHz, with adjustable swivel	L x H x D (mm) 680 x 410 x 545

DRIVER UNITS

	UT35 35W and 16 Ohm driver unit, for TR1-B, TR2-B and TR3-B exponential horns, nominal power 35W, impedance 16ohm, sensitivity 1W/1m 109dB	(mm) Ø 105 x h 106
	UT35-T 35W driver unit with transformer, for TR1-B, TR2-B and TR3-B exponential horns, nominal power 35W, 100V connection with adjustable power 35/20/10W, sensitivity 1W/1m 110dB	(mm) Ø 112 x h 154
	UT60 60W and 16 Ohm driver unit, for TR3-B exponential horns, nominal power 60W, impedance 16ohm, sensitivity 1W/1m 110dB	(mm) Ø 105 x h 106
	UT60-T 60W driver unit with transformer, for TR3-B exponential horns, nominal power 60W, 100V connection with adjustable power 60/40/20W, sensitivity 1W/1m 111dB	(mm) Ø 112 x h 154
	UT150 150W and 16 Ohm driver unit, for TR400-SX exponential horns, nominal power 150W, impedance 16ohm, sensitivity 1W/1m 114dB	(mm) Ø 116 x h 100

Driver Compatibility

	Model	Frequency response	sensitivity (1W/1m)	Sound pressure (RMSpower/1m)	Angle of Horizontal/Vertical dispersion (@ 2 kHz)	Weight (kg)
(1)	TR1-B	300 ÷ 5.000 Hz	108 dB	123 dB	50° - 50°	1,2
(1)	TR2-B	300 ÷ 5.000 Hz	108 dB	123 dB	70° - 50°	1,25
(1)	TR3-B	300 ÷ 5.000 Hz	110 dB	125 dB	55° - 40°	2,1
(2)	TR400-SX	300 ÷ 5.000 Hz	114 dB	140 dB	125° - 150°	10

(1) Reference measurements performed with UT35-T units

(2) Reference measurements performed with UT150 units

	Model	Specific characteristics	Nominal power	sensitivity	Impedance	Line Voltage	Weight (kg)
(1)	UT35	for TR1-B / 2 / 3	35 W	109 dB	16 Ohm	-	1,3
(1)	UT35-T	for TR1-B / 2 / 3	35 W	110 dB	-	100 V	1,75
(1)	UT60	for TR3-B and TR400-SX	60 W	110 dB	16 Ohm	-	1,55
(1)	UT60-T	only for TR3-B	60 W	111 dB	-	100 V	2,1
(2)	UT150	for TR400-SX	150 W	114 dB	16 Ohm	-	3,1

(1) Reference measurements performed with TR3-B horn

(2) Reference measurements performed with TR400-SX horn

Common accessories for horns



B18-N

Black floor stand with foldable tripod and telescopic boom stand (85÷170 cm)



27/94

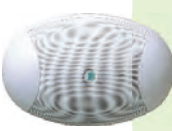
Adaptor to mount horns on type B18-N stands

- Wall-mounting loudspeakers are characterised by an elegant and discrete design, specifically aimed at schools, hospitals, waiting rooms, hotels, shops, offices, and restaurants where both music and speech have to be heard by customers.
- Various wall-mounting loudspeakers are available, in different materials, according to the technical/acoustic needs and aesthetic taste.
- The C34-RB and C34-TB models are made of a body in grey UV-stabilised ABS with metal front grid, whereas the C37/6-V model (IEC 60849 standards) has a metal body.
- The C36/6-T "Candy" models can be mounted on a wall or ceiling, with self-extinguishing white ABS body (RAL 9003).
- Cabinet-mounted speaker units, usually two ways units (high and low frequencies are separated at output) are mostly aimed at mid-high power sound broadcasting.

Wood Wall Mounting Speakers

	C601-TB 6 W speaker, for wall-mounting, white, with power transf. 6/3/1,5W, SPL RMSpower/1m 98dB, frequency response 150-120kHz, angle of dispersion @2kHz 120°, 100/70/50V input, slot system for wall/ceiling mounting	L x H x D (mm) 164 x 279 x 95
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Plastic Wall Mounting Speakers

	C34-RB 6W speaker, for wall-mounting, in anti-shock plastic material, metal grid, matt white, with power transf. 6/3/1,5/0,8/0,4W, SPL RMSpower/1m 100dB, frequency response 180-16kHz, angle of dispersion @2kHz 110°, with volume control on the front panel, 100/70/50V input	L x H x D (mm) 218 x 216 x 120
	C34-TB 6W speaker, for wall-mounting, in anti-shock plastic material, metal grid, matt white, with power transf. 6/3/1,5/0,8/0,4W, SPL RMSpower/1m 100dB, frequency response 180-16kHz, angle of dispersion @2kHz 110°, 100/70/50V input	L x H x D (mm) 218 x 216 x 120
	C36/6-T 6W speaker for wall/ceiling mounting, "Candy" model in ABS with front metal grid, white, with power transf. 6/3/1,5W, SPL RMSpower/1m 96dB, frequency response 150-13kHz, angle of dispersion @2kHz 150°, 100/70/50V input	L x H x D (mm) 258 x 169 x 72
	C36/6-2T new 6W bi-directional speaker for wall/ceiling mounting, "Candy" model in ABS with front metal grid, white, with power transf. 6/3/1,5W, SPL RMSpower/1m 96dB, frequency response 150-13kHz, angle of dispersion @2kHz 150°, 100/70/50V input	L x H x D (mm) 258 x 169 x 72

Metal Mounted Speakers - VES Voice Evacuation Systems – IEC 60849 Com-

	C37/6-V 6 W wall-mounting VES speaker (Voice Evacuation System), in metal, matt white, with power transf 6/3/1,5W, SPL RMSpower/1m 98dB, frequency response 120-15kHz, angle of dispersion @2kHz 130°, 100/70/50V input, with ceramic clamp and thermal fuse	L x H x D (mm) 210 x 190 x 70
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Cabinet-mounted speakers

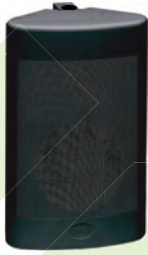
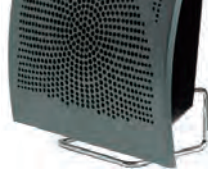
	C82/10-T 10W two-way cabinet-mounted speaker, optimal music/speech reproduction, white, in plastic material, 1 woofer + 1 tweeter, with 100V transf. with adjustable power 10/5/2,5W and low impedance connection (8 ohm), SPL RMSpower/1m 98dB, frequency response 200-22,5kHz, angle of dispersion @2kHz 115°, with bracket for vertical/horizontal wall mounting	L x H x D (mm) 140 x 187 x 115
	C82/10-TN 10W two-way cabinet-mounted speaker, optimal music/speech reproduction, black, in plastic material, 1 woofer + 1 tweeter, with 100V transf. with adjustable power 10/5/2,5W and low impedance connection (8 ohm), SPL RMSpower/1m 98dB, frequency response 200-22,5kHz, angle of dispersion @2kHz 115°, with bracket for vertical/horizontal wall mounting	L x H x D (mm) 140 x 187 x 115



WALL-MOUNTING LOUDSPEAKERS



Cabinet-mounted speakers

 C92/20-T	 C92/20-TN	C92/20-T C92/20-TN 20W double cone cabinet-mounted speaker, optimal music/speech reproduction, in pressed white or black resin, with power transf. 20/10/5W, SPL RMSpower/1m 103dB, frequency response 100-15kHz, angle of dispersion @2kHz 120°, 100/70/50V input, with bracket for vertical/horizontal wall mounting, optional bracket for array mounting of 2/3/4 loudspeakers	L x H x D (mm) 180 x 280 x 160
 C92/40-T	 C92/40-TN	C92/40-T C92/40-TN 40W two-way cabinet-mounted speaker, optimal music/speech reproduction, in pressed white or black resin, 1 woofer + 1 tweeter, with 100V transf. with adjustable power 40/20/10W, SPL RMSpower/1m 104dB, frequency response 100-18kHz, angle of dispersion @2kHz 120°, 100/70/50V input, with bracket for vertical/horizontal wall mounting, optional bracket for array mounting of 2/3/4 loudspeakers	L x H x D (mm) 180 x 280 x 160
 C93/16-T	 C93/16-TN	C93/16-T C93/16-TN 16W two-way cabinet-mounted speaker, optimal music/speech reproduction, in pressed white or black resin, with 100V transf. with adjustable power 16/8/4/2W and low impedance connection (8ohm), SPL RMSpower/1m 98dB, frequency response 120-20kHz, angle of dispersion @2kHz 130°, with bracket for vertical/horizontal wall mounting	L x H x D (mm) 165 x 210 x 135
 C93/30-T	 C93/30-TN	C93/30-T C93/30-TN 30W two-way cabinet-mounted speaker, optimal music/speech reproduction, in pressed white or black resin, with 100V transf. with adjustable power 30/16/8/4/2W and low impedance connection (8ohm), SPL RMSpower/1m 101dB, frequency response 70-20kHz, angle of dispersion @2kHz 90°, with bracket for vertical/horizontal wall mounting	L x H x D (mm) 220 x 290 x 170
 C95/20-T C95/40 C95/40-T		C95/20-T C95/20-TN 20W cabinet-mounted speaker, "wave" series, design "Lucci e Orlandini", optimal music/speech reproduction, in pressed white or black resin, wide band loudspeaker, transf. with adjustable power 20/10/5/2.5W, SPL RMSpower/1m 104dB, frequency response 130-20kHz, angle of dispersion @2kHz 150°, 100/70/50V input, with bracket for wall mounting, optional support for shelf-mounting	L x H x D (mm) 215 x 320 x 93
 C95/20-TN C95/40-N C95/40-TN		C95/40 C95/40-N 40W cabinet-mounted speaker, two-way "wave" series, design "Lucci e Orlandini", optimal music/speech reproduction, in pressed white or black resin, 1 tweeter and 1 woofer, low impedance connection (8ohm), SPL RMSpower/1m 104dB, frequency response 100-20kHz, angle of dispersion @2kHz 130°, with bracket for wall mounting, optional support for shelf-mounting	L x H x D (mm) 215 x 320 x 93
 C95/40-T C95/40-TN		C95/40-T C95/40-TN 40W cabinet-mounted speaker, two-way "wave" series, design "Lucci e Orlandini", optimal music/speech reproduction, in pressed white or black resin, 1 tweeter and 1 woofer, with 100V transf., with adjustable power 40/20/10/5W, SPL RMSpower/1m 104dB, frequency response 100-20kHz, angle of dispersion @2kHz 130°, 100/70/50V input, with bracket for wall mounting, optional support for shelf-mounting	L x H x D (mm) 215 x 320 x 93

Accessories for Wall-Mounting Loudspeakers

	AC922-B (white) AC922-N (black) Wall-mounting kit for two C92 Loudspeakers
	AC923-B (white) AC923-N (black) Wall-mounting kit for three C92 Loudspeakers
	AC924-B (white) AC924-N (black) Wall-mounting kit for four C92 Loudspeakers
	AC915 Support for shelf-mounting of C95 'Wave' Series Loudspeakers

FLUSH-MOUNTING LOUDSPEAKERS

	C44/20-B 20W panel loudspeaker, for flush-mounting, ideal for background music and speech, in UV-stabilised self-extinguishing plastic material, metal front grid, white, double cone wide band loudspeaker, low impedance connection (8ohm), SPL RMSpower/1m 103dB, frequency response 100-15kHz, angle of dispersion @2kHz 120°, optional AC901 flush-mounting box	L x H x D (mm) 165 x 280 x 70
	C44/20-TB 20W panel loudspeaker, for flush-mounting, ideal for background music and speech, in UV-stabilised self-extinguishing plastic material, metal front grid, white, double cone wide band loudspeaker, with 100V transf., with adjustable power 20/10/5/2,5W, SPL RMSpower/1m 103dB, frequency response 100-15kHz, angle of dispersion @2kHz 120°, 100/70/50V input, optional AC901 flush-mounting box	L x H x D (mm) 165 x 280 x 70
	C44/6-TB 6W panel loudspeaker, for flush-mounting, ideal for background music and speech, in UV-stabilised self-extinguishing plastic material, metal front grid, white, with 100V transf., with adjustable power 6/3/1,5W, SPL RMSpower/1m 98dB, frequency response 100-13kHz, angle of dispersion @2kHz 120°, 100/70/50V input, optional AC901 flush-mounting box	L x H x D (mm) 165 x 280 x 70
	AC901 Flush-mounting box for C44/20-B, C44/20-TB and C44/6-TB	





CEILING-MOUNTING LOUDSPEAKERS

- Thanks to the very thin front panel and the peculiar design of the grid, these loudspeakers perfectly fit in every context. Ceiling-mounting loudspeakers are characterised by compact dimensions, an excellent acoustic response and a special quick ceiling flush-mounting system.
- ABS ceiling-mounting loudspeakers are made in auto-extinguishing materials and are particularly fit for indoor installations. The C47/12-TW can be used in particularly wet environments (bathrooms, kitchens, swimming pools, shelters)
- The C57-TB, C58/6-TB and C58/12-TB models are made of pressed sheets with anti-scratch and anti-reflection white paint. They consist of a supporting ring with spring hooks for an easy clamping to the ceiling. The central panel with the loudspeaker connected to the line transformer fits into the ring with a simple joint rotation.
- The Series "Fashion" loudspeakers, with interchangeable design, are completely innovative products that consist of a basic metallic structure supporting the different components and that can be clamped to a false ceiling or a panel; the aesthetical grids are clamped to this structure with a release device; users can choose a vast range of grid models and colours, thus creating a great series of customization options, able to satisfy technical and aesthetical needs.
- The ceiling-mounting spot loudspeakers boast a modern design and small dimensions, so as to be able to satisfy different furnishing needs. They are made of metal with various paints that give the products a robust and very good finishing, while preserving excellent acoustic properties.
- The ceiling-mounting VES loudspeakers - Voice Evacuation System - comply to the strictest safety regulations, including anti-flame rules, by applying the optional AC957 protection cap to the C57-TB model or the AC958 cap to the C58/6-TB and C58/12-TB models.

Ceiling-Mounting Loudspeakers with body in ABS

	C47/6-TB 6W round ceiling-mounting loudspeaker, for false ceilings, made in UL94-VO auto-extinguishing plastic material, white, quick spring clamping systems, with 100V transf., adjustable power 6/3/1,5W, SPL RMSpower/1m 97dB, frequency response 110-12kHz, angle of dispersion @2kHz 160°, 100/70/50V input	(mm) Ø 140 x 105, Ø hole 109
	C47/12-TW 12W round ceiling-mounting loudspeaker, for false ceilings, made in UL94-VO auto-extinguishing plastic material, white, quick spring clamping systems, with 100V transf., adjustable power 12/6/3W, SPL RMSpower/1m 99dB, frequency response 110-14kHz, angle of dispersion @2kHz 160°, 100/70/50V input	(mm) Ø 140 x 105, Ø hole 109
	C49/6-T 6W round protruding indoor loudspeaker, for wall- or ceiling-mounting, in ABS, white, with 100V transf., adjustable power 6/3/1,5W, SPL RMSpower/1m 96dB, frequency response 110-12kHz, angle of dispersion @2kHz 160°, 100/70/50V input	(mm) Ø 220 x 70

Ceiling-Mounting Loudspeakers with body in Metal

	C52/6-T 6W round ceiling-mounting loudspeaker, for false ceilings, made in white pressed sheets, with 100V transf., adjustable power 6/3/1,5W, SPL RMSpower/1m 99dB, frequency response 80-15kHz, angle of dispersion @2kHz 160°, 100/70/50V input, quick clamping system with spring hooks. (can be sold in multiples of 5 pcs).	(mm) Ø 200 x 62, Ø hole 165
	C52/12-T 12W round ceiling-mounting loudspeaker, for false ceilings, made in white pressed sheets, with 100V transf., adjustable power 12/6/3W, SPL RMSpower/1m 102dB, frequency response 80-15kHz, angle of dispersion @2kHz 160°, 100/70/50V input, quick clamping system with spring hooks. (can be sold in multiples of 5 pcs).	(mm) Ø 200 x 62, Ø hole 165
	C53/10-T 10W round ceiling-mounting loudspeaker, for false ceilings, made in white pressed sheets, with 100V transf., adjustable power 10/5/2,5W, SPL RMSpower/1m 103dB, frequency response 70-20kHz, angle of dispersion @2kHz 80°, 100/70/50V input, quick clamping system with spring hooks. (can be sold in multiples of 5 pcs).	(mm) Ø 265 x 78,5 Ø hole 230
	C57-TB 6W round ceiling-mounting, for false ceilings, body and support ring in metal, white, with 100V transf., adjustable power 6/3/1,5W, SPL RMSpower/1m 102dB, frequency response 100-15kHz, angle of dispersion @2kHz 150°, 100/70/50V input, quick spring clamping system and bayonet coupling, optional AC957 anti-flame cap.	(mm) Ø 180 x 110, Ø hole 160
	C58/6-TB 6W round ceiling-mounting, for false ceilings, body and support ring in metal, white, with 100V transf., adjustable power 6/3/1,5W, SPL RMSpower/1m 103dB, frequency response 80-20kHz, angle of dispersion @2kHz 130°, 100/70/50V input, quick spring clamping system and bayonet coupling, optional AC958 anti-flame cap.	(mm) Ø 220 x 95, Ø hole 200

	C58/12-TB 12W round ceiling-mounting, for false ceilings, body and support ring in metal, white, with 100V transf., adjustable power 12/6/3W, SPL RMSpower/1m 105dB, frequency response 80-20kHz, angle of dispersion @2kHz 130°, 100/70/50V input, quick spring clamping system and bayonet coupling, optional AC958 anti-flame cap.	(mm) Ø 220 x 95, Ø hole 200
	C58/24-TB 24W round ceiling-mounting, for false ceilings, body and support ring in metal, white, with 100V transf., adjustable power 24/12/6W, SPL RMSpower/1m 104dB, frequency response 80-20kHz, angle of dispersion @2kHz 130°, 100/70/50V input, quick spring clamping system and bayonet coupling.	(mm) Ø 220 x 95, Ø hole 200

Accessories for Ceiling-Mounting Loudspeakers

	AC950 Accessory for loudspeakers. Ceramic clamp with thermal fuse.
	AC957 Anti-flame protection cup in steel for C57-TB. AC958 Anti-flame protection cup in steel for C58/6-TB and C58/12-TB.
	AC960 Pair of spring supports for quick mounting of C67/6-T, C68/6-T and C68/12-T

Ceiling-Mounting Loudspeakers with Interchangeable Design - Series "FASHION"

	C67/6-T 6W ceiling-mounting with interchangeable design, series “Fashion” for false ceilings, metallic structure to be used with series CG67/5x grids, with 100V transf., adjustable power 6/3/1,5W, SPL RMSpower/1m 99dB, frequency response 100-12kHz, angle of dispersion @2kHz 120°, 100/70/50V input, screw mounting or optional AC960 spring system.	(mm) Ø 197 x 95, Ø hole 140
	C68/6-T 6W ceiling-mounting with interchangeable design, series “Fashion” for false ceilings, metallic structure to be used with series CG68/5x grids, with 100V transf., adjustable power 6/3/1,5W, SPL RMSpower/1m 101dB, frequency response 90-15kHz, angle of dispersion @2kHz 100°, 100/70/50V input, screw mounting or optional AC960 spring system.	(mm) Ø 237 x 68, Ø hole 180
	C68/12-T 12W ceiling-mounting with interchangeable design, series “Fashion” for false ceilings, metallic structure to be used with series CG68/5x grids, with 100V transf., adjustable power 12/6/3W, SPL RMSpower/1m 104dB, frequency response 90-15kHz, angle of dispersion @2kHz 100°, 100/70/50V input, screw mounting or optional AC960 spring system.	(mm) Ø 237 x 68, Ø hole 180
	CG67/5D DAISY grids for C67 loudspeakers, in metal, white. (Set of 5 grids for C67/6-T and C67/6-V loudspeakers, price included to your choice in the set of 5 loudspeakers series Fashion).	
	CG67/5M MOON grids for C67 loudspeakers, in metal, white. (Set of 5 grids for C67/6-T and C67/6-V loudspeakers, price included to your choice in the set of 5 loudspeakers series Fashion).	
	CG67/5W WAVE grids for C67 loudspeakers, in metal, white. (Set of 5 grids for C67/6-T and C67/6-V loudspeakers, price included to your choice in the set of 5 loudspeakers series Fashion).	

CEILING-MOUNTING LOUDESPEAKERS

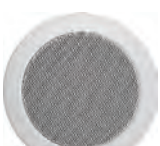
Ceiling-Mounting Loudspeakers with Interchangeable Design - Series "FASHION"

	C68/5D DAISY grids for C68, in metal, white. (Set of 5 grids for C68/6-T, C68/12-T and C68/12-V loudspeakers, price included to your choice in the set of 5 loudspeakers series Fashion).		C68/5M MOON grids for C68, in metal, white. (Set of 5 grids for C68/6-T, C68/12-T and C68/12-V loudspeakers, price included to your choice in the set of 5 loudspeakers series Fashion).
	C68/5W WAVE grids for C68, in metal, white. (Set of 5 grids for C68/6-T, C68/12-T and C68/12-V loudspeakers, price included to your choice in the set of 5 loudspeakers series Fashion).		

Ceiling-Mounting VES Loudspeakers - Voice Evacuation System - EN60849 Compliance

	C67/6-V 6W ceiling-mounting with interchangeable design, series "Fashion" for false ceilings, metallic structure to be used with series CG67/5x grids, with anti-flame cup in steel, with 100V transf., adjustable power 6/3/1,5W, SPL RMSpower/1m 99dB, frequency response 200-13kHz, angle of dispersion @2kHz 120°, 100/70/50V input, screw mounting or optional AC960 spring system, ceramic clamp and thermal fuse.	(mm) Ø 197 x 148, Ø hole 152
	C68/12-V 12W ceiling-mounting with interchangeable design, series "Fashion" for false ceilings, metallic structure to be used with series CG68/5x grids, with anti-flame cup in steel, with 100V transf., adjustable power 12/6/3W, SPL RMSpower/1m 104dB, frequency response 150-15kHz, angle of dispersion @2kHz 100°, 100/70/50V input, screw mounting or optional AC960 spring system, ceramic clamp and thermal fuse.	(mm) Ø 237 x 148, Ø hole 190
	C68/24-V 24W ceiling-mounting with interchangeable design, series "Fashion" for false ceilings, metallic structure to be used with series CG68/5x grids, with anti-flame cup in steel, with 100V transf., adjustable power 24/12/6W, SPL RMSpower/1m 105dB, frequency response 80-15kHz, angle of dispersion @2kHz 100°, 100/70/50V input, screw mounting or optional AC960 spring system, ceramic clamp and thermal fuse.	(mm) Ø 237 x 200, Ø hole 190
	C571/6-V new 6W flameproof metal ceiling-mounting speaker. Easy and quick mounting in the false ceiling with effective system of insertion and removal of the speaker, 100V transformer, adjustable power output 6/3/1,5/0,75 W, SPL RMS power/1m 99dB, frequency response 150-20kHz, dispersion angle @2kHz 160°. Fixed ceramic terminal block, 145°C thermal fuse and metal cap included. Weight 1,7 kg.	(mm) Ø 185 x 131, Ø hole 165
	C581/6-V new 6W flameproof metal ceiling-mounting speaker. Easy and quick mounting in the false ceiling with effective system of insertion and removal of the speaker, 100V transformer, adjustable power output 6/3/1,5/0,75 W, SPL RMS power/1m 100dB, frequency response 120-20kHz, dispersion angle @2kHz 120°. Fixed ceramic terminal block, 145°C thermal fuse and metal cap included. Weight 2,0 kg.	(mm) Ø 230 x 137, Ø hole 205

Ceiling-Mounting Spot Loudspeakers

	CSPOT/6-T 6 W round ceiling-mounting, "spot-light" type, reduced dimension for false ceiling, white, in metal, with 100V transf., adjustable power 6/4/2W, SPL RMSpower/1m 95dB, frequency response 100-20kHz, angle of dispersion @2kHz 130°, quick spring clamping system.	(mm) Ø 105 x 85, Ø hole 85
	CSPOT/6-TN 6 W round ceiling-mounting, "spot-light" type, reduced dimension for false ceiling, black, in metal, with 100V transf., adjustable power 6/4/2W, SPL RMSpower/1m 95dB, frequency response 100-20kHz, angle of dispersion @2kHz 130°, quick spring clamping system.	(mm) Ø 105 x 85, Ø hole 85
	CSPOT/6-TS 6 W round ceiling-mounting, "spot-light" type, reduced dimension for false ceiling, chrome, in metal, with 100V transf., adjustable power 6/4/2W, SPL RMSpower/1m 95dB, frequency response 100-20kHz, angle of dispersion @2kHz 130°, quick spring clamping system.	(mm) Ø 105 x 85, Ø hole 85

Pendant Loudspeakers



C59-T

15W pendant loudspeaker, spherical hanging, white, in ABS, with 4 m cable for ceiling mounting, with power transf. 15/7,5/3,5W, dual-cone loudspeaker, SPL RMSpower/1m 100dB, frequency response 70-20kHz, angle of dispersion @2kHz 80°, 100/70/50V input

(mm)
Ø 202 x 176

PRO-SOUND LOUDSPEAKERS

80/150W and 8 ohm loudspeaker – optional 100V input with TM106-I



C980

Professional loudspeaker - 80W RMS - 150W long-term power (IEC 268-3) , two-way with cross-over filter, bass-reflex unit, dark grey shockproof cabinet with built-in carrier handle, low impedance connection (8 ohm), 1 tweeter and 1 woofer, can be used in constant voltage by adding a 100V TM106-I transformer with adjustable power 80/40/20W, SPL RMSpower/1m 117dB, frequency response 60-18kHz, angle of dispersion @2kHz 200° horiz. 180° vert., clamp and 6,3mm jack input.

L x H x D (mm)
250 x 405 x 257

Active 80W Loudspeaker



CA980

Professional loudspeaker - 80W RMS - 120W long-term power, two-way with limiter, bass-reflex unit, dark grey shockproof cabinet with built-in carrier handle, 1 tweeter and 1 woofer, SPL RMSpower/1m 117dB, frequency response: line 40-16,5kHz, angle of dispersion @2kHz 180° horiz. 180° vert., mic/line input, input/output for cascade connection of more loudspeakers, volume control, 230Vac power supply

L x H x D (mm)
250 x 405 x 257

Accessories for Pro-Sound Loudspeakers

TM106-I Transformer for C980 with multiple sockets: 50/70/100 V, 8 Ohm, 80/40/20 W



AC904

360°Adjustable swivel for wall-mounting, in metal



AC930

Adapter for C980 and CA980 loudspeakers – to use with B102 stands.



B102

Support base with telescopic stand, adjustable from 116 to 194 cm



- Volume controls allow the users to adjust the audio volume, by attenuating the output power of the connected loudspeakers for constant voltage systems (100-70-50V).
- Available in different nominal powers, according to the maximum load, they include an auto-transformer, an 11 position switch and front panel.
- TL10, TL35, TL35-R and TL50 volume controls can be easily flush-mounted with the optional 27/901 box (standard 503). The TL35-R model include a relay to disable the fading in presence of emergency priority signals, by applying – on a secondary bipolar line – a 24Vdc signal.
- The “Europa” series TL12-E, TL36-E volume controls can be flush-mounted using the optional AC911 box (excluding TL100-RE) or wall-mounted using the optional AC913 and AC914 boxes. The TL36-RE and TL100-RE models include a relay to disable – with additional cabling with 24 V signal – the volume controls in presence of alarm priority signals.
- The connections are made through pull-out terminal boards with slide clutch.
- The LS6-R channel selector allows the users to switch 6 different programmes from constant voltage lines, on one or more loudspeakers. It includes a by-pass relay for priority calls and can be connected to TL range.

Volume Controls - Series Italia



TL10

10 W volume control, 10+Off switches, flush-mounting with standard 3-unit box or with optional 27/901 box, front panel, series Italia.

TL10-N

Colour: Anthracite grey



TL35

35 W volume control, 10+Off switches, flush-mounting with standard 3-unit box or with optional 27/901 box, front panel, series Italia

TL35-N

Colour: Anthracite grey

TL35-R

35 W, volume control 10+Off switches and by-pass relay to disable the volume control in presence of emergency priority signal using a 24Vdc signal on additional bipolar line, flush-mounting with standard 3-unit box or with optional 27/901 box, front panel, series Italia

TL35-RN

Colour: Anthracite grey

TL50

50W, volume control 10+Off switches, flush-mounting with standard 3-unit box or with optional 27/901 box, front panel, series Italia

TL50-N

Colour: Anthracite grey

L x H x P (mm) 116 x 77 x 50

Volume Controls - Series Europa



TL12-E

12 W, volume control 10+Off switches, flush-mounting with optional AC911 box or wall-mounting with optional AC913 box, series Europa

TL36-E

36 W, volume control 10+Off switches, flush-mounting with optional AC911 box or wall-mounting with optional AC913 box, series Europa

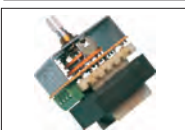
TL36-RE

36 W, volume control 10+Off switches and by-pass relay to disable the volume control in presence of emergency priority signal using a 24Vdc signal on additional bipolar line, flush-mounting with optional AC911 box or wall wall-mounting with optional AC913 box, series Europa

TL50-E

50 W, volume control 10+Off switches, flush-mounting with optional AC911 box or wall-mounting with optional AC913 box, series Europa

L x H x P (mm) 81 x 81 x 50



TL51

50 W panel volume control, 10+Off switches, custom mounting

L x H x D (mm)
81 x 81 x 50



TL100-RE

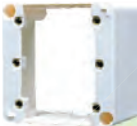
100 W, volume control switches and by-pass relay to disable the volume control in presence of emergency priority signal using a 24Vdc signal on additional bipolar line, flush-mounting with optional AC911 box or wall wall-mounting with optional AC914 box, series Europa

L x H x D (mm)
80 x 152 x 45

Channel Selectors

	LS6-R Channel selector, 6 programme switches and by-pass relay to disable the volume control in presence of emergency priority signal using a 24Vdc signal on additional bipolar line, flush-mounting with optional AC911 box or wall wall-mounting with optional AC913 box, series Europa	L x H x D (mm) 81 x 81 x 48
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Accessories

AC911	Flush-mounting box, in plastic material, for Series Europa modules	L x H x D (mm) 70 x 70 x 50
	AC913 Adapter in plastic materials for protruding wall-mounting of Series Europa modules	L x H x D (mm) 81 x 81 x 50
	AC914 Wall-mounting box for TL100-RE	L x H x D (mm) 82 x 155 x 51
27/901	Flush-mounting box, in plastic material	L x H x D (mm) 107 x 72 x 53

TRANSFORMERS

Transformers with Microphone or Line Signals

TM80	Galvanic separation transformer, with mumetal shielding, for low level microphone signals, for PM2020-B and PM2023-B modules (PMS2000 system)
TM92	Galvanic separation transformer, with mumetal shielding, for high level line signals, for PM2020-B and PM2023-B modules (PMS2000 system) and booster Series 8000
TM90	Galvanic separation transformer, with mumetal shielding, for low level microphone signals, for amplifier-mixer Series 8000

Line Transformers for Loudspeakers

TM99-I	Transformer with multiple sockets 50/70/100 V, 4/8 Ohm, 6/3/1,5 W
TM104-I	Transformer with multiple sockets 50/70/100 V, 4/8 Ohm, 4/2/1 W
TM106-I	Transformer for C980 with multiple sockets 50/70/100 V, 8 Ohm, 80/40/20 W

indoor or outdoor speech and music diffusion for exhibitions and commercial shows, tourist guides, show rooms and shops, conventions and meetings, as well as mobile sound reinforcement, need a series of products purposely designed to operate even when lacking mains supply, and that need to be handy, transportable and robust.

The vast range of Paso devices and accessories can give the most appropriate answer to the needs mobile sound reinforcement.

AMPLIFICATION FOR MOVING MEANS OF TRANSPORT - SERIES 1000

Series 1000 - Amplifier and Cassette Player

	T1120-B 10W RMS/4ohm 12Vdc amplifier and 20W RMS /8ohm 24Vdc amplifier, 1 microphone input and 1 aux input, volume and tone controls, APT device (vox), frequency response 40-20kHz, 12/24 Vdc power supply	L x H x P (mm) 204 x 52 x 100
	T1140 40W RMS / 4-8-15 ohm 12Vdc amplifier, 2 microphone inputs and 2 aux inputs, volume and tone control, APT device (vox), frequency response 65-18kHz, 12÷14 Vdc power supply	L x H x P (mm) 204 x 52 x 100
	T1120-LB 2x10W RMS (4+4ohm) 12Vdc amplifier and 2x20W RMS (8+8ohm) 24Vdc amplifiers with cassette player, 1 microphone input and 1 aux input, 1 auto-reverse cassette player, volume and tone control, APT device (vox), frequency response 40-20kHz, 12/24 Vdc power supply, front panel, series Italia	L x H x P (mm) 204 x 52 x 100
	TR7/4 Rectangular horn, complete with dynamic 18W and 4 ohm unit, in grey ABS, with bracket	L x H x P (mm) 260 x 160 x 120
	TR7/8 Rectangular horn, complete with dynamic 18W and 8 ohm unit, in grey ABS, with bracket	L x H x P (mm) 260 x 160 x 120
	27/360 Support for 2 horns series TR7, complete with bands and hooks	

PORTABLE AMPLIFIED SYSTEMS

Amplified Lectern

	SL1120-B Lectern in glazed wood, amplifier: 30W RMS 24Vdc - 25W RMS 230Vac, 1 microphone input, 1 aux input, 4 loudspeakers, double power supply 230 Vac - 24 Vdc (with optional rechargeable internal battery), with flexible gooseneck for optional dynamic microphone	L x H x P (mm) 530 x 1150 x 450
	TA16 10 W megaphone with fixed microphone. Light and handy, in anti-shock and water/cold/heat/salt-resistant material. On/off switch with volume control. Battery power supply	

Procession Systems



- The TA220-FR mobile amplified system, light and easily transportable, finds its ideal use in speech and music diffusion during outdoor events with a lot of attending people (marches, processions, sport events, guided visits, itinerant groups, fairs and exhibitions, etc.).
- The professional VHF hand-held radio-microphone, included in the set, gives the speaker great freedom of movement, letting him move tens of metres away from the system without damaging the quality and power of the signal
- To use up to two TA220 simultaneously in the same area, two models are available with different frequencies (FR1=175,00 Mhz and FR3=184,30 Mhz). A microphone XLR input and an AUX RCA stereo input, with independent volume controls, increase the versatility of this product with external sources (hand-held microphone, cassette player, cd player, etc.).
- The B10-N stand, included in the set, adds flexibility to the system, changing it into a fixed device. The rechargeable internal battery has been tailored to give good autonomy without making the device too heavy. The power supply, included in the set, allows to recharge the batteries in an "intelligent" way, optimizing its duration.
- The TA220 is highly ergonomic, features specified during the design process; as a matter of fact, the peculiar brace fixing system and the position of the controls make this device easy and comfortable to "wear" ad use.

TA220B-Fx

35 W portable system, with receiver and hand-held radio-microphone transmitter, 2 horn loudspeakers, power supply and braces for "on the move" operation. Complete with B10-N tripod.

L x H x P (mm)
97 x 105 x 1485
(console excluded)
4,9 kg



TA222B-F1+F3

35 W, portable system, with receiver and two hand-held radio-microphone transmitters that can be used simultaneously, 2 horn loudspeakers, power supply and braces for "on the move" operation. Complete with B10-N tripod.

L x H x P (mm)
97 x 105 x 1485
(console excluded)
4,9 kg

70W Amplified Trolley System with CD Player and Radio-Microphone



TCA870/MA825

70 W RMS amplified trolley system, 3-way 10" loudspeaker, hand-held radio-microphone + UHF receiver (16 channels - PLL) and CD player. Power supply: 100-240 V (50/60 Hz) or two rechargeable 12 V / 4,5 A lead batteries.



TCA40B-LTx

40 W suitcase, with cassette player, VHF receiver, pocket radio-microphone, dynamic mic input and aux in/out, rechargeable battery included, jack connector for external amplifier, independent volume and tone controls, double-cone bass reflex loudspeakers, carrier handle.

TCA40B-Tx

40 W suitcase, with cassette player, VHF receiver, hand held radio-microphone, dynamic mic input and aux in/out, rechargeable battery included, jack connector for external amplifier, independent volume and tone controls, double-cone bass reflex loudspeakers, carrier handle.

MULTI-CHANNEL DISTRIBUTION SYSTEMS



- The SD200 system allows the simultaneous distribution of 6 different audio channels on a single pair of cables (e.g. telephone duplex cable). It is easier to install than traditional systems, which makes it particularly fit for the sound reinforcement of individual spaces of reception premises such as hotels, nursing homes, tourist centres, residential centres, ferryboats, private homes. The heart of the system is the SDP220 receiver module, that can be installed in normal flush-mounting boxes for electrical installations. The SDM200 modulator can produce a constant signal for up to 80 SDP220 receivers. The system can be expanded in multiples of 80, by inserting one or more SDB200 amplifiers on the signal line.

SDM200

Modulator for 6 low frequency inputs in 6 modulated carriers in mixed radio-frequency. It allows to transmit and mix on a telephone duplex cable 6 signal sources generated locally by CD and cassette players, tuners, etc. A pre-amplification circuit controls the amplitude of the source signals to allow the correct modulation of the carriers, and generates 6 quartz reference frequencies with PLL technique. The 6 modulated carriers are sent to a RF amplifier and to the outputs by means of a RF transformer which balances the signals and controls the right impedance value. Frequencies: Ch1=178kHz, Ch2=211kHz, Ch3=244kHz, Ch4=277kHz, Ch5=310kHz, Ch6=343kHz. 230Vac power supply. Weight 3,3 kg (H 1U).

L x H x P (mm)
411 x 44 x 235



SDP220

Amplified receiver, 6 programmes selector, headphone output, volume control and display. The device de-modulates the signals distributed by the SDM200 modulator (or directly by cable radio systems). The receiver can be remote operated, also when turned off, through 12 V continuous voltage. This feature allows the users to force-send emergency messages in individual listening zones. The module can be fed by 12 Vdc or by 230Vac mains, using the SDT100 transformer, included in the SDA200-T loudspeaker module. Channel selection is cyclical and can be performed with dedicated keys. The selected channel is shown on a display with automatic brightness adjustment according to environmental light. The volume control is electronic. Users will be able to listen using headphones. In particularly important installations, the modules can be supplied in customized versions, with various panels.

L x H x P (mm)
116 x 77 x 45

SDP220-N

Colour: Anthracite grey



SDA200

3 W and 8 Ohm loudspeaker module

SDA200-N

Colour: Anthracite grey

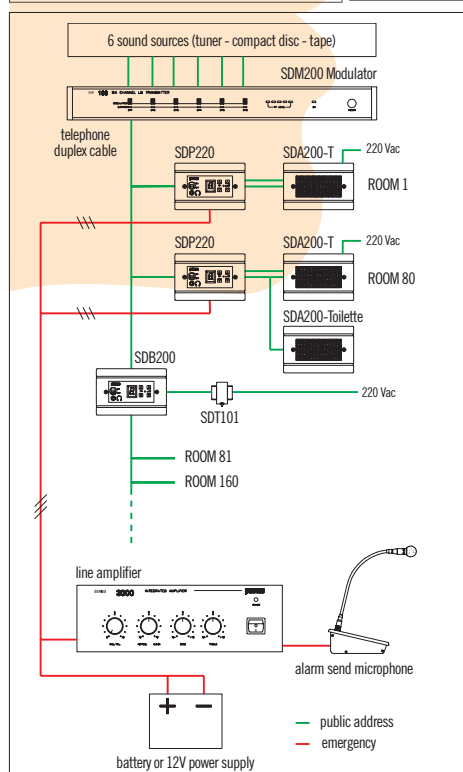
L x H x P (mm)
116 x 77 x 45

SDA200-T

3 W loudspeaker module with mains transformer to feed the receiver

SDA200-TN

Colour: Anthracite grey



SDB200

Amplifier to expand the system of 80 receivers more. It must be used when the length of the line excessively attenuates the signal or, in any case, when the system has to include more than 80 SDP220 receivers. 80 receivers can be added for each SDB200. By carefully using different SDB200 amplifiers, the system can be expanded to a virtually unlimited number of receivers. To get 230 Vac mains supply, the SDT101 transformer is needed.

L x H x P (mm)
116 x 77 x 45

SDB200-N

Colour: Anthracite grey

SDT100

Transformer for 230 Vac mains power supply – for SDP220 module

SDT101

Transformer for 230 Vac mains power supply – for SDB200 module

Installation Examples

Distribution system for hotels, with emergency call option

- ITC2000-C is a device for operator/public communications through the security-glass of a counter. The microprocessor control allows high quality performance and flexibility. The system offers different operation modes, it is configurable as hands-free "speak-hear" and, when connected to an amplifier, it can be included in a public address system. This application is particularly interesting, because the operator, beside talking through the glass, can make announcements or receive calls from other operators (e.g. the security manager or other officers). The ITC2000-C is different from other systems in the market as it operates in attenuation mode instead of commutation.
- Therefore, the conversation is more natural, thanks to the cancellation of the unpleasant dialogue interruptions that characterise the devices operating in commutation mode. The operator post includes a gooseneck microphone, long enough to allow to speak with natural tone and volume, without problems of acoustic feedback. The listening system on the public side, must be completed with 1 or 2 PASO C401-B loudspeakers, made in aluminium, extremely robust and fit for anti-vandal applications (railway stations and underground lines, night-shift chemists). On the back of the operator post there are two standard 3,5 mm jack connectors to connect a headphone and/or an external microphone.



ITC2000-C

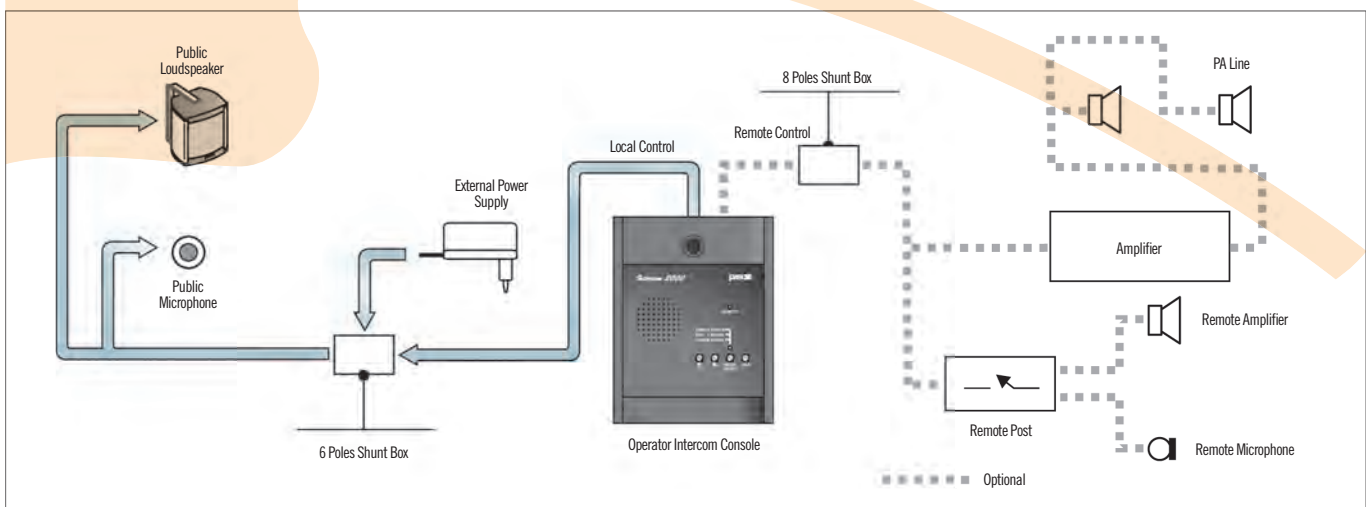
Intercom system for counters, complete with desk console, wall-mounting microphone and power supply.



C401-B

Wall-mounting loudspeaker for ITC2000-C, power: 3 W, 16 Ohm Output.

Operation Schematics





SYSTEMS

Sound systems, in particular if it involves complex installations and needs high levels of safety and flexibility, must be integrated with sophisticated management and diagnostics systems of the various components involved, of the control lines, of power supply and amplifiers, of flexible input/output selection, of interfacing with external peripherals. The Paso PMS2000 solution addresses these issues; it consists of a professional versatile modular amplification system, able to meet the most complex installation specifications.

The PMS2000 system has been developed aiming at creating both traditional public address systems, characterised by flexibility and integration in time, and sound systems with diagnostics control, including the possibility to send emergency and/or evacuation messages (Voice Evacuation Systems - VES), compliant with the IEC60849 standards.

department store



airport



theatre



hospital

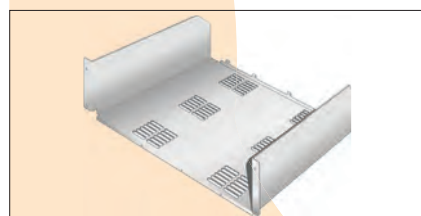


The system is modular and can be tailored to individual needs, as far as both design specifications and budget are concerned. To create VES systems, the installation must comply with the mentioned IEC60849 standards, and with the following indications.



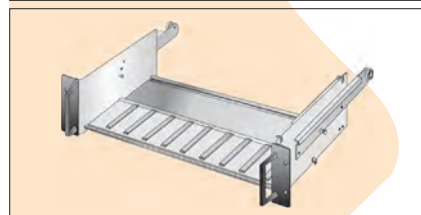
- The PMS2000 modular system provides for the use of two different boxes: a signal box able to house up to 9 modules (standard width 38 mm) with PM2011-B power supply and a power box able to house from two to four amplifiers.
- The PMS2000-B signal box houses the input/output modules, the zone selection modules, the line output, the power supply, etc. The bus on the motherboard transmits the power supply lines, the audio signals, the serial communication line and the service signals (priority, enabling signals, etc.). Audio signals are processed through 3 signal bus: one for the PA and two (A and B), for the management of two independent signals or one stereo audio signal. This allows the implementation inside a single box of more independent systems, linked to a single control and power supply line.
- An application example may be a theatre where a single system can broadcast stereo music for the show and perform vocal calls in the dressing rooms; in case of need or emergency, the music can be aborted to send a general warning message.
- The priority of the audio inputs of the various modules will be defined by the position of the module inside the box.
- The signal box is mounted on sliding bands that allow the users to pull the box out of the rack to access its interior without completely removing it; module installation and maintenance are, therefore, easy and functional. The modules' front panels report the main commands, indications and settings, whereas the rear panels include all the connections; modules can be easily inserted into the box from above, without needing internal cabling.
- All input/output connectors on the rear panel are professional and particularly functional (XLR inputs with block, removable screw clamps with bayonet coupling, etc.).
- The PMS2001 power box allows the rack installation of power amplifiers, available in three models: 240 W (PMW240), 120 W (PMW120) and 60 W (PMW60). A single box can house up to 4 60 W or 120 W amplifiers, or 2 240 W amplifiers, because of their double front dimensions. The PMS2000 system is compatible with all Paso amplifiers.

Modular Units for PMS2000 Systems



PMS2001

Box for power amplifiers series PMW 60-120-240W. (H 3U)



PMS2002-B

Signal box for Series PMS2000 modules (H 3U).



PM2011-B

40W power supply module. Power supply for the units of the system (excluding power amplifiers), electronic protection against short-circuits and overloads. Main switch, energy status (AC/DC) and power supply (on/off) LEDs, expansion connector, to link other system boxes, a toroidal transformer to guarantee a high S/N ratio, 230 Vac 10% - 24 Vdc 10% power supply.



PM2020-B

Double mic/line input module. Input configuration for microphone or high level signals (three-level gain: low, mid and high), independent Phantom power and direct pre-amplified output, output level and tone controls. Each input can include transformer with galvanic separation (both at microphone and line level). Possibility to apply a dynamics limiter to each input to improve speech quality. Each input includes a terminal board to activate the priority conditions between the two inputs and the inputs of other modules. All control data from other system modules and the audio of the calling consoles are transferred via the bus in the signal box.



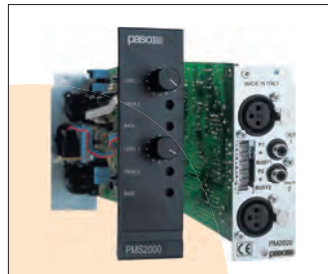
PM2021-B

CPU module for system management via dedicated SW. Management of the activities of the digital consoles, PC connection via RS232 serial port. Commands and controls go from the module to the various digital boards present in the modular system. The firmware provides for the management and control of the audio signals coming from the digital consoles, of the relay boards for zone selection and of the tuner module. To RS485 serial outputs for console connection (up to 31 units). Configuration through PC with dedicated software: microphone signal level, intercom enable/disable and monitor output level (only in purposely configured consoles), "treble boost" and "low cut" filters, priority level of the calling consoles set locally, tuner selection and control, visualization of the selected zones calling, green status LED, red LED for console diagnostics. All control data from other system modules and the audio of the calling consoles are transferred via the bus in the signal box.

Modular Units for PMS2000 Systems

**PM2022-B**

Auxiliary input module. Connection of stereo and mono sound sources. Rotary switch for the selection of up to five different signal sources. Audio output level indicator, stereo/mono switch and left/right channel inversion switch. The tuner input include independent sensitivity controls. The selected audio is routed inside the signal box through the system bus.

**PM2023-B**

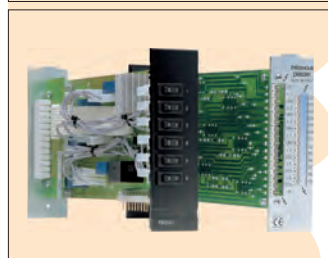
Double input module with priority circuit (vox). Two audio inputs with presets for microphone signals (with Phantom power) or high level signals (three-level gain: low, mid and high). Each input has a circuit with VOX function that allow to generate a priority/enable command for the other system modules, and a direct pre-amplified output with the possibility to choose the point where the signal is taken (pre- or post-fader). Output level and tone controls for every input. Each input can include transformers with galvanic separation (both at microphone and line levels). Terminal board inputs for priority conditions enabling between the two inputs and the inputs of other system modules. The selected audio is routed inside the signal box through the system.

**PM2024-B**

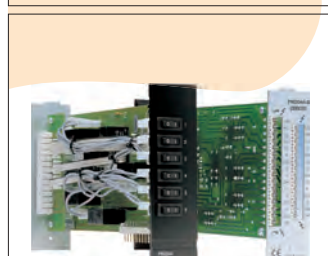
Zone/music selection module with 6 inputs / 6 outputs matrix. The module can select the zones and manage/address up to six sources for background music. The module sorts the audio inputs, allowing the commutation of low level signals. Every output includes an electronic volume fader that can be freely set by the user. Setting through front panel display of the parameters of operation mode, device serial address, digital input setting and fading. Remote control of zone fading through optional AC2024 board. A maximum number of 6 PM2024-B modules can be included in a single system.

**PM2040-B**

Output module. Mixing circuits output and control of the audio signals routed to the buses from the various modules. Output level control, tone control (high, mid and bass) and LED level indicator. Main mono output, stereo output, line output for recording and high level aux input. Relay for delayed output activation (anti-bump), warning signal generator, that can be enabled through command system signal.

**PM2043-B**

6-zone selection module. Addressing of one or two lines (music and speech) on different listening zones (up to 6). The possibility to use the double amplification channel (speech and music) allows to broadcast announcements in some zones without interrupting the music in the zones that are not interested in the call. Six music enable/disable switches for the various zones. Zone selection is performed by means of double-exchange relays, one of which is used by the "override" function (disabling of any volume controls on the loudspeaker line, three wires connection). The zone relays are activated the connections coming from the microphone consoles or directly by emergency devices.

**PM2044-B**

Digital 6-zone selection module. Addressing of one or two lines (music and speech) on different listening zones (up to 6). The possibility to use the double amplification channel (speech and music) allows to broadcast announcements in some zones without interrupting the music in the zones that are not interested in the call. Six music enable/disable switches for the various zones. Configuration for the connection of up to 4 amplifiers (two for the music line and two for the speech line). Us of max. 6 modules to control up to 36 zones. Zone selection is performed by means of double-exchange relays, one of which is used by the "override" function (disabling of any volume controls on the loudspeaker line, three wires connection). The zone relays are activated by means of serial data coming from the CPU and transmitted using the bus inside the signal box. A connection allows any present emergency devices to activate all the relays.

**PM2060-B**

AM/FM tuner module. Digital receiver, with frequency synthesis tuning, highly sophisticated and compact, includes decoder for stereo broadcasters. Two receiver bands (AM/FM) with automatic channel search; direct frequency selection. Memory function up to 10 channels (BSM function). A 4-digit digital display visualizes the frequency of the chosen channel, and the receiver's control functions which can be accessed using a dedicated keyboard. Stereo output, independent from the volume control and a terminal board for an antenna. The output audio signal is transmitted into the system through the buses in the signal box.

Modular Units for PMS2000 Systems

PM2091-B Bus expansion module to add a signal box.

Digital desk base microphones for PMS2000 Systems


PMB106 new

Digital desk base microphone for 6 zones/zone groups selection + all call, pre-amplified. Functional characteristics: powered from control unit or through a local 18 to 36 VDC power supply; addresses of stations 1 up to 31 settable locally; priority levels 1 to 7 settable locally; inclusion of speech filter settable locally; fine adjustment of microphone sensitivity (+/- 4dB) by means of the rear-panel trimmer; adjustment of audio output signal to 7 levels; Possibility of selecting up to 6 zones (PMB106); system busy indication; programmable zone selection keys and All-Call key; connection via ST-UTP cat. 5 cable with PASO systems: PMS2000, PMS2000-VES and PMS2006-VES.

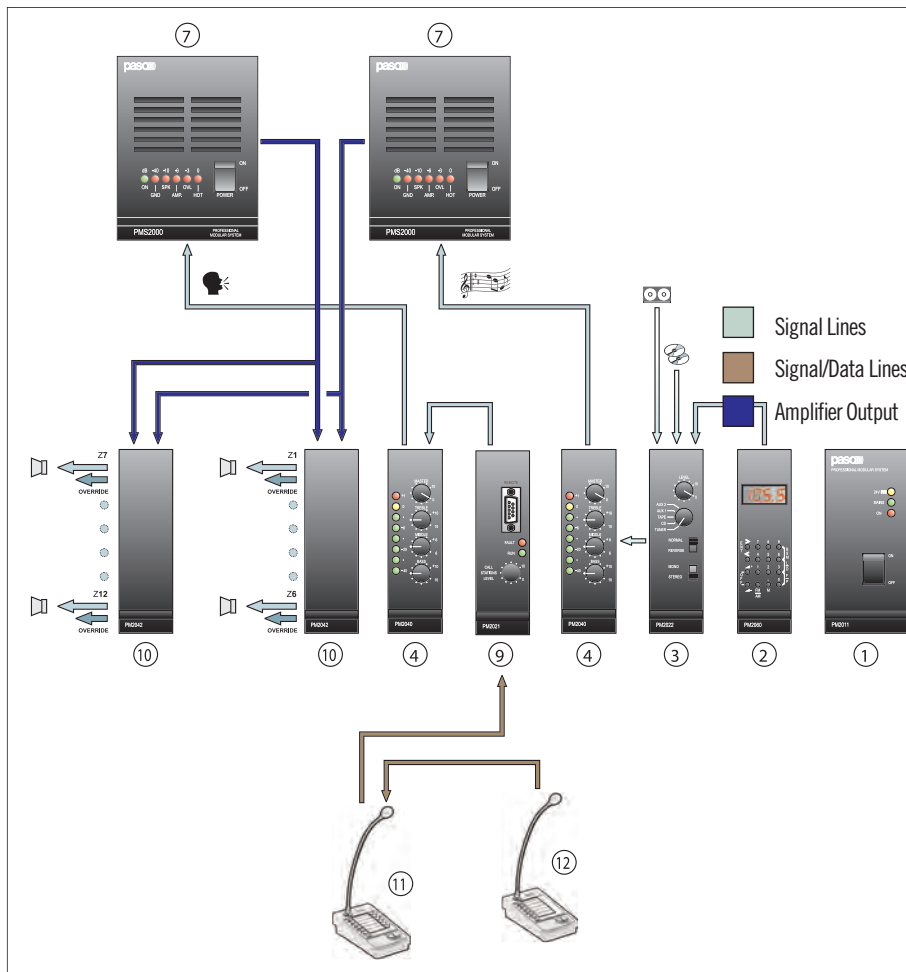

PMB112 new

Digital desk base microphone for 12 zones/zone groups selection + all call, pre-amplified. Functional characteristics: powered from control unit or through a local 18 to 36 VDC power supply; addresses of microphones 1 up to 31 settable locally; priority levels 1 to 7 settable locally; inclusion of speech filter settable locally; fine adjustment of microphone sensitivity (+/- 4dB) by means of the rear-panel trimmer; adjustment of audio output signal to 7 levels; possibility of selecting up to 24 zones (PMB112 + PMB112-E) or 36 zones (PMB112 + 2x PMB112-E); system busy indication; Programmable zone selection keys and All-Call key; Connection via ST-UTP cat. 5 cable with PASO systems: PMS2000, PMS2000-VES and PMS2006-VES.


PMB112-E new

Digital extension key for 12 zones/zone groups selection + all call Functional characteristics : possibility of add the number of zones selection: 24 zones (PMB112 + PMB112-E), 36 zones (PMB112 + 2x PMB112-E); system busy indication; Programmable zone/zone group selection keys and All-Call key; Connection with a flat cable (included) .

System with simultaneous music and announcements (12 zones)



Module	Description
1	PM2011-B Power Supply
2	PM2060-B AM/FM Tuner
3	PM2022--B Auxiliary Inputs
4	PM2040-B Output
7	PMWxx Amplifier
9	PM2021-B Control
10	PM2044-B Digital Zones Selection
11	PMB112 Microphone Console
12	PMB106 Microphone Console

Accessories needed:

MC30-GLN Electret Microphone
MC30-GLN

430 mm gooseneck with high-sensitivity electret microphone and illuminated ring. The pull-out microphone consists of an electret capsule mounted on a flexible gooseneck, complete with anti-pop filter, illuminated ring which signals activation and DIN connector with screwing ring. For custom consoles.



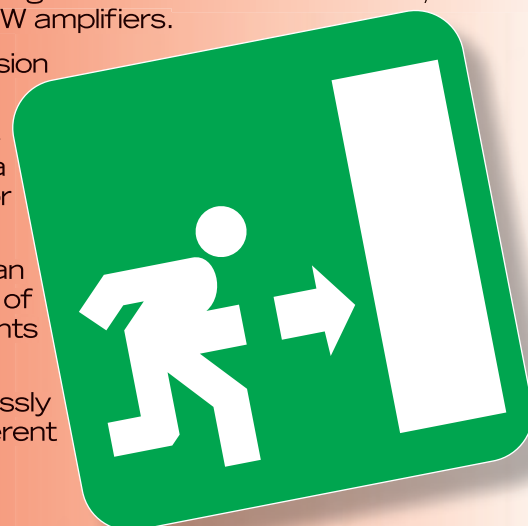
The configuration of the PMS2000-VES system for safety installations complying with the IEC60849 standards, provides for the use of the Voice Evacuation System module range, which are characterised by the -V suffix, instead of the corresponding modules with the -B suffix; besides, users must add a PM2092-V control board in the PMW amplifiers.

Each loudspeaker line must end with a PM2094-V line supervision board.

In synthesis, the IEC 60849 technical regulation applies to the public address and emergency sound systems used to create a fast and orderly mobilization of the people in indoor and outdoor areas in dangerous or emergency situations.

This regulation precisely states the main characteristics of an electro-acoustic emergency/evacuation system, in terms of design and installation, in order to meet the specified requirements as regards safety and reliability.

A public address system to manage emergencies is expressly required by the fire prevention laws specified in different countries.



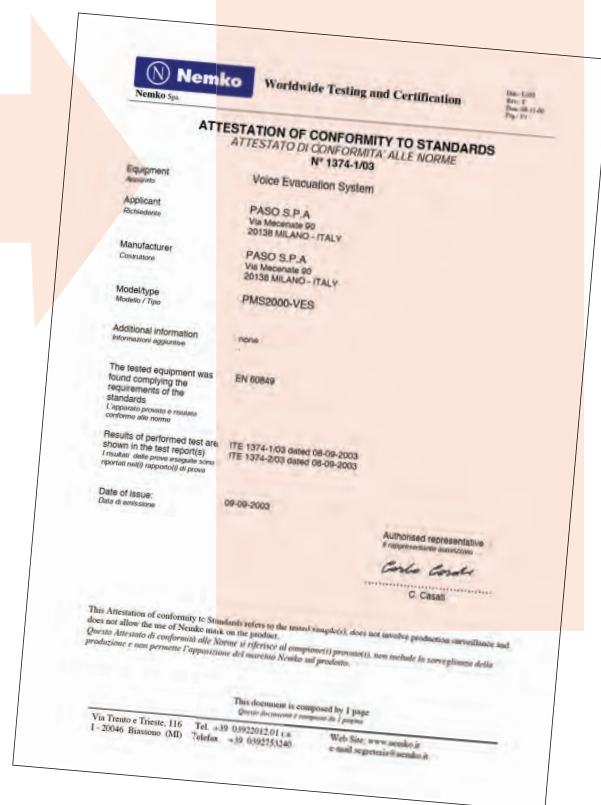
PMS2000-VES CERTIFIED EN 60849 FOR PA/VOICE EVACUATION SYSTEMS System compliant and certified with the EN60849 standards

Without quoting the whole regulation, we can report that, in order to meet the requirements specified by the regulation itself, an evacuation system must include:

- Control and supervision of the integrity of the 'critical path'. Such path is the audio path from the emergency microphone capsule and/or the message generator, to the loudspeaker line through the amplification stage: any failures of the microphone capsule, its connection cable to the console, the amplifiers and the loudspeaker line must be reported as specified.
- Possibility to operate without main power supply at the maximum power for 30 at least and for 24 hours in stand-by conditions. A secondary power supply line is to be provided for.
- The system must be able to store up to 100 failure conditions on a non volatile memory, with date/hour/minutes/seconds indications.

To the operational characteristics of a "normal" PA system, the PMS2000-VES security system adds the following control and alarm features:

- Digital control of the critical path, including:
- Control of the capsule of the microphone console (PMB130-V)
- Control of the connection between the alarm console and the PA system
- Control of the warning and alarm message generator (PM2061-V module)
- Operational control of VES modules (modules with -V suffix)
- Operational control of power amplifiers (Series PMW with internal PM2092-V board)
- Control of the loudspeaker lines (constant voltage output lines).
PM2094-V End of line supervision board.
- Simultaneous broadcast of the evacuation and alarm messages on different zones
- Alarm Login (up to 100) in the CPU non-volatile memory (PM2021-V module)
- Software-programmable I/O functions, to manage failures and alarms (PM2093-V and PM2093-VL modules with 8 inputs and 8 outputs)
- Control through PC, connected to the RS232 serial line, of the programming and management of the whole system
- Control through console (PMB130-V) with display, buzzer, warning signal, mechanical key for manual intervention on the installation, visualization of the alarm status for each zone (evacuation and/or alert).
- Management of back-up amplifiers (PM2095-V board)
- Power Low function, reducing the power consumption of the amplifiers in stand-by conditions
- Disabling of the background music in absence of main power supply to increase the system operational time range.



8 September 2003, certified NEMKO for
PMS2000-VES systems - EN 60849 regulation

Modular Units for PMS2000-VES Systems - Voice Evacuation Systems



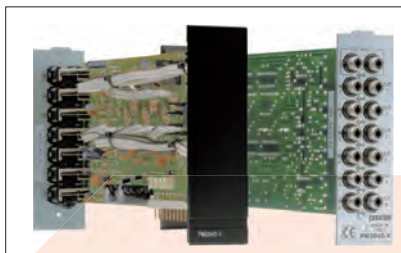
PM2011-V

Controlled power supply module. Power supply for system units (excluding power amps), electronic protection against short-circuits and overloads, micro-controller to check all power supply lines, both from electric system and the batteries, in compliance with the EN 60849 standards. Mains switch, energy status (AC/DC) and power supply (on/off) LEDs, expansion connector for additional system boxes, toroidal transformer with S/N ratio, 230 Vac 10% - 24 Vdc power supply.



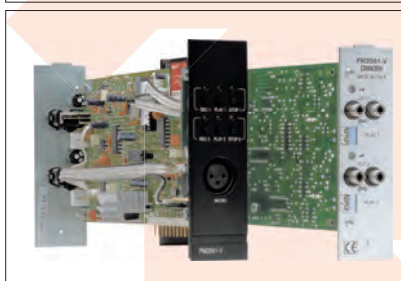
PM2021-V

CPU module to manage the system through a dedicated SW. Management of the activity of the digital consoles, PC connection via serial RS232. Commands and controls are distributed from the module to the different boards included in the modular system. The firmware provides for the management and control of the audio signals coming from the digital consoles, of the relay boards for zone selection and of the tuner module. Two RS485 serial outputs allow the connection of up to 31 consoles. Configuration through PC connection with dedicated software: microphone signal level, intercom enable/disable and monitor output level (only with specific consoles), "treble boost" and "low cut" filters, priority level of the calling consoles set locally, tuner selection and setting, visualization of the selected calling zones, green status LED, red LED for console diagnostics. All control data coming from other system boards and the audio signals coming from the consoles are routed through the bus in the signal box.



PM2045-V

Matrix module for simultaneous address of EMERGENCY and ALERT signals. The module includes 6 programme inputs and 6 amplifier outputs. The signals appearing at the inputs are faithfully routed to the outputs. Under emergency conditions, the emergency audio signals on the system bus are sent to the outputs according to the settings stored in the control CPU. The module includes one input for an external source. Maximum 6 modules to control up to 36 zones.



PM2061-V

Message generator module. Two pre-recorded messages with full control and diagnostics can be played back simultaneously (Evacuation and Alert). Automatic message broadcast (for example, in connection with a fire-detection system) or manual broadcast through external connections. Users will be able to record custom messages using a general dynamic microphone. Automatic gain control to compensate any variations in the voice level. Messages are digitally stored on a specific Multimediacard. For each message, the front panel includes buttons and LEDs for: message start, message stop and record message, together with a connector for a dynamic microphone.



PM2093-V

I/O module. 8 inputs and 8 outputs controlled and set through the CPU of the modular system. Inputs can read the signals coming from the fire-detection system (or other external devices) and activate the sound system. Outputs can activate external signal devices (relays, lamps, etc.). In compliance with EN 60849 standards, every connection must be programmed so that the evacuation message can be broadcast in the danger zones, while sending simultaneously the alert message to the adjacent zones; outputs can be configured as diagnostics in order to remotely report any system failures. The maximum number of I/O modules is 16 units, to control up to 128 inputs and 128 outputs. Pull-out bayonet terminal board. Optional boards: (AC36) system clock, (AC38) 19 pre-recorded alarm tones, (AC37) RS485 serial interface, (AC39) for connection with console PMB130-V



PM2093-VL

I/O module with diagnostics LED. 8 inputs and 8 outputs controlled and set through the CPU of the modular system. Inputs can read the signals coming from the fire-detection system (or other external devices) and activate the sound system. Outputs can activate external signal devices (relays, lamps, etc.). In compliance with IEC 60849 (CEI 100-55) regulations, every connection must be programmed so that the evacuation message can be broadcast in the danger zones, while sending simultaneously the alert message to the adjacent zones; outputs are connected to 8 LEDs on the front panel that report a possible failure situation. The maximum number of I/O modules is 16 units, to control up to 128 inputs and 128 outputs. Pull-out bayonet terminal board. Optional boards: (AC36) system clock, (AC38) 19 pre-recorded alarm tones, (AC37) RS485 serial interface, (AC39) for connection with console PMB130-V

Modular Units for PMS2000-VES Systems - Voice Evacuation Systems

PM2094-V

Supervision board for loudspeaker line end. In compliance with IEC 60849 standards, the loudspeaker lines must be tested (integrity and ground dispersion). In order to make more flexible the operations of cable placing, each main line can be split into up to 3 sub-lines, by inserting a board at the end of each sub-line.

PM2096-V new

Supervision board for loudspeaker line end, loop-cabled (back to the main station). In compliance with IEC 60849 standards, the loudspeaker lines must be tested (integrity and ground dispersion). Each loudspeaker line must be connected reporting its end to the main station.

SWPMS3.x Management Software for PMS2000-VES

Controlled Digital Consoles for PMS2000-VES Systems

**PMB130-V**

Digital console with microphone with control and diagnostics functions. Wide LCD display, hexadecimal keyboard. Possibility to connect up to 3 PMB139-V extension keyboards with 12 programmable keys (36 total keys). Logging visualization of failures and alarms with date/hour/minutes, service calls on the individual zones or zone groups. Safety key, for authorized personnel, to reset the console and store alarm signals, pre-recorded or live message broadcast. When in failure status, a "buzzer" produces an acoustic warning signal that can be muted through the keyboard or the safety key. Microphone console in robust aluminium structure with sides in ABS. 24 Vdc power supply max consumption: 160 mA.

**PMB139-V**

Extension module for PMB130-V. 12 programmable keys.

Modular Amplifiers for PMS2000 and PMS2000-VES Systems

**PMW60**

60W RMS power amplifier. Miniaturized unit to insert up to 4 amplifiers in a PMS2001. Forced ventilation. PA/HF Filter, filtered/full pass-band. Double XLR input for parallel connection of different amplifiers. Overload and thermal protection LEDs. Output volume control. Optional insulation transformer to galvanic-balance the inputs, for particularly long lines. Pull-out bayonet output connections. Diagnostics for: gain, power supply, electronic/temperature protections, ground insulation and insertion of a back-up amplifier. RS485 for remote control. 100/70/50V and 8/4 ohm output.. 230Vac - 24Vdc power supply. Dimensions. (LxHxD): 100x130x395mm. **For EN60849 compliant systems, a PM2092-V serial diagnostics board is needed to test the operation of the amplifier and the status of the loudspeaker lines through a 30 Hz internal generator. H 3U**

**PMW120**

120W RMS power amplifier. Miniaturized unit to insert up to 4 amplifiers in a PMS2001. Forced ventilation. PA/HF Filter, filtered/full pass-band. Double XLR input for parallel connection of different amplifiers. Overload and thermal protection LEDs. Output volume control. Optional insulation transformer to galvanic-balance the inputs, for particularly long lines. Pull-out bayonet output connections. Diagnostics for: gain, power supply, electronic/temperature protections, ground insulation and insertion of a back-up amplifier. RS485 for remote control. 100/70/50V and 8/4 ohm output. 230Vac - 24Vdc power supply. Dimensions. (LxHxD): 100x130x395mm. **For EN60849 compliant systems, a PM2092-V serial diagnostics board is needed to test the operation of the amplifier and the status of the loudspeaker lines through a 30 Hz internal generator. H 3U.**

Modular Amplifiers for PMS2000 and PMS2000-VES Systems



PMW240

240W RMS, power amplifier. Miniaturized unit to insert up to 2 amplifiers in the PMS box. Forced ventilation. PA/HF Filter, filtered/full pass-band. Double XLR input for parallel connection of different amplifiers. Overload and thermal protection LEDs. Output volume control. Optional insulation transformer to galvanic-balance the inputs, for particularly long lines. Pull-out bayonet output connections. Diagnostics for: gain, power supply, electronic/temperature protections, ground insulation and insertion of a back-up amplifier. RS485 for remote control. 100/70/50V and 8/4 ohm output. 230Vac-24Vdc power supply. Dimensions. (LxHxD): 200x130x395mm. **For EN60849 compliant systems, a PM2092-V serial diagnostics board is needed to test the operation of the amplifier and the status of the loudspeaker lines through a 30 Hz internal generator.** H 3U.



PMW500-V

500W RMS power amplifier complete with PM2092-V control board. Forced ventilation. PA/HF Filter, filtered/full pass-band. Double XLR input for parallel connection of different amplifiers. Overload and thermal protection LEDs. Output volume control. Optional insulation transformer to galvanic-balance the inputs, for particularly long lines. Pull-out bayonet output connections. PM2092-V serial diagnostics control board included to test the operation of the amplifier and the status of the loudspeaker lines through a 30 Hz internal generator. Diagnostics for: gain, power supply, electronic/temperature protections, ground insulation and insertion of a back-up amplifier. RS485 connector for remote control. 100/70/50V and 16 ohm output. 230Vac - 24Vdc power supply. Dimensions (LxHxD): 480x130x420mm. H 3U.

Accessories for PMS2000-VES Systems

PM2092-V

Serial control board for PMW amplifiers. Functions: • Measurement of loudspeaker line integrity • Diagnosis of operation of the amplifier (gain, power supply, electronic protections and operation temperature) • Diagnosis of round insulation (GND FAULT) • Volume setting with remote control (max.1 km) • Secondary input with possibility of selective/mix operation (automatic fading on secondary input) • Control of the power relay • "LOW POWER" mode • Possibility of automatic switch of the malfunctioning amplifier on the back-up (through PM2095 circuit). In VES systems, a PM2092-V board is needed. In this case, the board is controlled through a serial interface; users can visualize and change all the parameters through a PC; the parameters include: reference impedance reading for test purposes, max-min values for the test being valid, test status reading, input signal presence test, temperature of power transistors, volume, relay remote control.

PM2095

Circuit for back-up amplifiers management (1 back-up amplifier every 4 amplifiers or multiples of 4). This board allow the users to manage the insertion of the back-up amplifier for every group of 4 controlled amplifiers. The PM2092-V amplifier control board sends the command of automatic activation for the back-up amplifier. The board is connected in cascade to other boards with fast-lock connectors, which guarantees great configuration flexibility: users will be able to group a single back-up for a higher number of amplifiers (4 / multiples of 4).

AC2095 Box for PM2095 relay board, up to 3 circuits.

Accessories for PMS2000 and PMS2000-VES Systems

AC32 Line repeater for long connections (for PMB consoles)

AC33 Dynamics limiter for PM2020-B and PM2023-B modules

AC34 Line-end connection for PMB consoles (2 pcs.)

AC36 Clock board for PM2093-VL module

AC37 RS485 serial port board (for PM2093-V or PM2093-VL module)

AC38 Alarm generator board (for PM2093-V or PM2093-VL module)

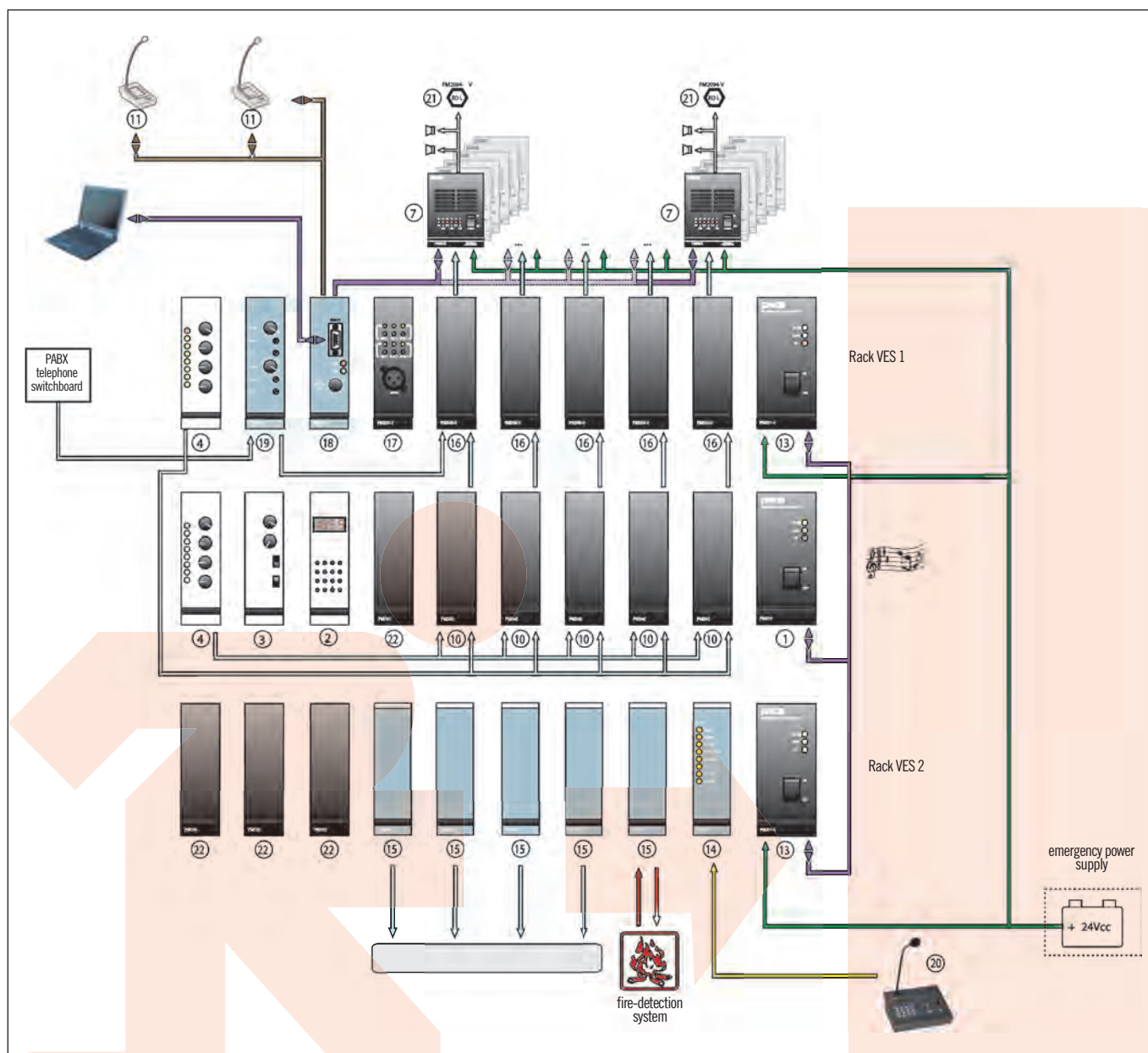
AC39 PMB130-V audio console connection board (for PM2093-V or PM2093-VL module)

AC40 PM2095 connectors box

31/140-100 Cable in hank for Series PMB consoles. 100 metres hanks. AC-304 connectors needed.

Nota: Settare PM2092-V da PC Software
(non usare DIP switch locali)

PA/VES System with Background Music and Announcements (30 zones)



- signal lines
- signal/data lines
- amplifier output
- fire-detection system
- data lines
- loudspeaker line
- I/O connections
- emergency power supply

Module	Description
1 PM2011-B	Power Supply
2 PM2060-B	AM/FM Tuner
3 PM2022-B	Auxiliary Inputs
4 PM2040-B	Output
7 PMWxx	Amplifier
9 PM2021-B	Control
10 PM2044-B	Digital Zone Selection
11 PMB106 - PMB112	Microphone Console
13 PM2011-V	Controlled Power Supply
14 PM2093-VL	LED-Controlled I/O
15 PM2093-V	Controlled I/O
16 PM2045-V	Matrix
17 PM2061-V	Message Generator
18 PM2021-V	CPU
19 PM2023-B	Double Input with VOX
20 PMB130-V	Emergency Microphone
21 PM2094-V	End of Line
22 PM2101	Blind Module

Accessories needed:

AC36	PM2092-V
AC37	TM92
AC39	MC30-GLN



The PMS2006-VES system has been designed and structured to allow easy installation and to be used in a vast range of applications with background music and emergency calls in compliance with the IEC 60849 regulation (hospitals, offices, shops, supermarkets, schools, universities, sports centres, etc.).

The basic configuration includes an amplifier and a 6-zone controller (PM2006-V), with optional expansion up to 36 zones.

sports centres



offices



new

PMS2006-VES COMPLIANT EN60849 FOR PA/VOICE EVACUATION SYSTEMS

System complying according to the EN 60849 standards

Here follow the main functional characteristics of the system:

- Emergency microphone control, up to 36 zones of broadcast, up to 31 broadcasting consoles, malfunctioning and/or failure detection (in 100 seconds), PC configuration software, control and supervising of the integrity of the 'critical path' (from emergency sources to the loudspeaker lines), functionality test of the loudspeaker lines (integrity and ground dispersion), two loudspeaker lines for each zone (A and B), override outputs to broadcast messages without fading, back-up amplifier control, up to programmable I/O connections, secondary safety power supply.
- The system provides for the use of a main PMS2006-VES control box, of PM2006-V line control units (up to 6) and of power amplifiers.
- The control box includes all the boards needed to operate a basic 6-zone system (CPU, microphone control board, message generator, audio output module, I/O board, power supply).
- The PMS2006-VES can be easily expanded with different PMS2000 and PMS2000-VES series modules.
- The PM2006-V control unit can control up to 6 sound broadcast zones. Each zones includes two circuits (A and B) with separate control: in this way, the complete coverage of the area is guaranteed even in case of failure of one of the two line circuits. The PM2006-V unit can be configured with a single amplifier, for both speech and music, or with 2 separate amplifiers (one for speech and one for music). A third amplifier may be added as a back-up. **The system is compatible with any PASO amplifiers with 100 V output, guaranteeing great flexibility and within a reasonable budget.**



PMS2006-VES new

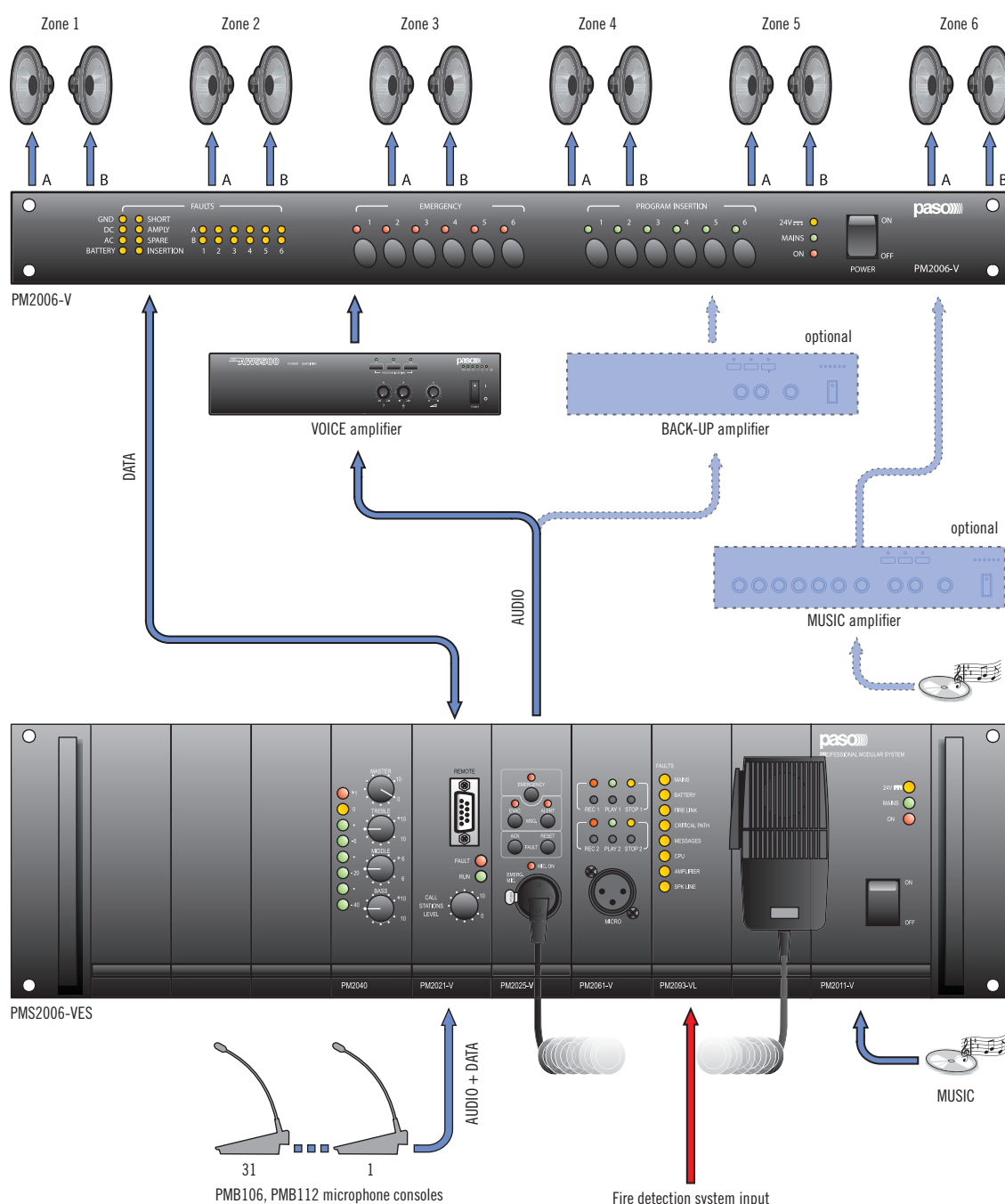
PMS2006-VES SIGNAL MANAGEMENT UNIT. Signal managements system for emergency installations, compliant with EN60849 standards, complete with control CPU for diagnostics/report of the last 99 events, configurable via PC - RS232 port, software included. Recorder/player of 2 emergency messages (4 minutes each), IN/OUT interface with 8 programmable inputs and synoptic LED with 8 diagnosis output. Emergency controlled hand-held microphone (included), audio matrix to manage signal priority, generator with 19 different alarm tones, possibility to connect up to 31 digital console for paging calls. Input 1 music channel, balanced audio output and RS485 serial port to connect up to 6 PM2006-V zone selection modules, for configurations that can be expanded up to 36 zones. Control of the signal critical path by means of pilot tone generation and loudspeaker impedance measurement. Modular expandable design with Series PMS2000 and PMS2000-VES boards. 220Vac e 24Vdc. power supply. Rack mounting (H 3U)

PM2006-V new

CONTROL AND DISTRIBUTION UNIT - 6 LINES PER PMS2006-VES SYSTEM. 6-zone selection and loudspeaker control unit for PA/emergency system compliant with EN60849 standards. 100V line inputs of the amplifiers/mixers-amplifiers for speech, music and back-up up to 500W (with automatic switch in case of failure). Front panel keyboard for music channel activation, emergency call selection on 6 independent zones and parameter setting. RS485 connection for communications to the PMS2006-VES console for configuration and diagnosis purposes. Possibility to use in multiple systems up to 36 zones. The unit switches the speech/music signals on 6 zones with double A/B redundant line and monitors the critical path with automatic disabling of every loudspeaker line in case of short-circuit. 220Vac e 24Vdc. power supply. Rack mounting (H 1U)



PMS2006-VES, Connection Schematics



The Series P5800-D rack cabinets have been designed to house all Paso electronic devices and service panels that can be mounted into 19" racks. Each model, built in thick sheets of hardened steel, is available in black. It includes a mounting kit which consists of 2 sides with ventilation slits, a top and a bottom panel.

The Series P5800-D rack cabinets are manufactured in compliance with the IEC 297-2 and CEI EN 60065 regulations. Besides, as provided for in the general safety Italian regulations on electrical systems (CEI 64-8, CEI 64-11, CEI 23-48), both the rack cabinets and their accessories (doors, closure panels, etc.) include the connectors needed for a correct grounding.

19" RACK CABINETS

Series P5800-D Cabinets - IEC 297-2 and CEI EN 60064 Compliant



P5808	Black rack cabinet (H 8U) 525 mm x 525 mm x 408mm H
P5812-D	Black rack cabinet (H 12U) 525 mm x 525 mm x 586mm H
P5816-D	Black rack cabinet (H 16U) 525 mm x 525 mm x 764mm H
P5820-D	Black rack cabinet (H 20U) 525 mm x 525 mm x 942mm H
P5824-D	Black rack cabinet (H 24U) 525 mm x 525 mm x 1120mm H
P5830-D	Black rack cabinet (H 30U) 525 mm x 525 mm x 1368mm H
P5840-D	Black rack cabinet (H 40U) 525 mm x 525 mm x 1831mm H

Back Panels with Ventilation



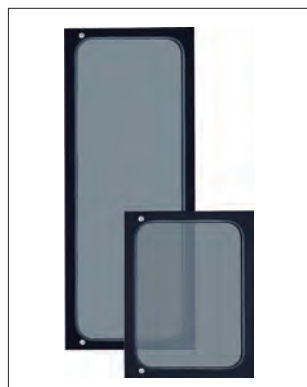
P5404-D	Back panel with ventilation slits (H 4U)
P5408-D	Back panel with ventilation slits (H 8U)
P5410-D	Back panel with ventilation slits (H 10U)

Blind Back Panels with Lock



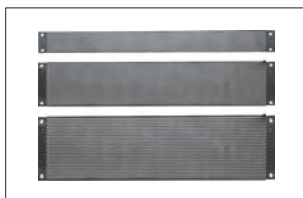
P5416-D	Blind back door with lock (H 16U)
P5420-D	Blind back door with lock (H 20U)
P5424-D	Blind back door with lock (H 24U)
P5430-D	Blind back door with lock (H 30U)
P5440-D	Blind back door with lock (H 40U)

Front Panels with Lock



P5712-B	Black Front-door for rack cabinets (H 12U)
P5716-B	Black Front-door for rack cabinets (H 16U)
P5720-B	Black Front-door for rack cabinets (H 20U)
P5724-B	Black Front-door for rack cabinets (H 24U)
P5730-B	Black Front-door for rack cabinets (H 30U)
P5740-B	Black Front-door for rack cabinets (H 40U)

Perforated Panels for Ventilation

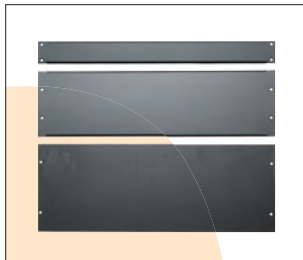


P5201-D Perforated panel for ventilation (H 1U)

P5202-D Perforated panel for ventilation (H 2U)

P5203-D Perforated panel for ventilation (H 3U)

Blind Panels



P8011-D Blind panel (H 1U)

P8012-D Blind panel (H 2U)

P8013-D Blind panel (H 3U)

P8014-D Blind panel (H 4U)

Service Panels



P8001-B
Panel with 16 A mains switch, "ON" led and network fuse (H 1U)



P8002-M
6-switch for volume and loudspeaker monitor panel (H 1U)



P8003/2
Forced ventilation panel, with two fans (H 3U)



P8004
Panel with automatic 50 A magneto-thermal mains switch, "ON" led, network fuse and monitor section (H 2U)



P8030
Box for special applications with network switch and "ON" led, 12 Vdc/2 A power supply (H 2U)

P8056 Panel with faders for 6 zones, each fader includes a by-pass relay (H 1U)



P8082 Selector for 12 loudspeakers (H 1U)



P8082/6 Selector for 6 loudspeakers (H 1U)

Accessories for Rack Cabinets



P8008-D
Multiple socket for 220 Vac distribution (8 sockets)



P8032 Drawer (H 3U)

AC51 40 caged nuts (M5 type)

AC52 20 screws with flat washers (M5 type)

AC54-D 4 wheels kit – max load 65 Kg ea.

AC5801-D Pedestal for P5800-D cabinets



A product line specifically designed for congresses, continuously updated thanks to Paso experience and quality.

Our conference systems can be found on the desks of many Town Halls and County council chambers, Parliaments and installations all over the world.

Paso manufactures two families of conference products and systems:

- Digital systems with the exclusive "AULA®" brand name
- The Series CS2080 and CS2100 systems

The two lines are aimed at different applications and offer different options.

AULA® digital systems. The need to create conference applications including top configuration and accessory options is widely met by the 'AULA' range, designed for integrated applications with simultaneous translations, video tracking of the speaker, different types of illuminated boards; the installation can include from just a few to 250 microphone units and can integrate with parliamentary systems.

Series CS2080 and CS2100 systems. The use of a conference system with a main core of basic functions is the ideal context for a CS2080 system with microphones for chamber discussions, and a CS2100 system with microphone units for conference and voting system.



meeting hall



council chamber

DIGITAL CONFERENCE SYSTEM – AULA SYSTEM

Systems for discussions / vote / video track / with operator / software facilities
attendance registration / hall display boards / simultaneous translation

Central Units



K-DVC305

Central unit for discussion – AULA system. The unit feeds up to 35 microphone consoles on a single line or up to 40 consoles on double lines with cascade link and optional branching through K-AC301 splitter. To be used with K-DVB320-D delegate unit and K-DVB320-P chairman unit – AULA Series. Audio MIC/LINE XLR output for hall broadcast. Small dimensions also fit for mobile systems outside standard 19" rack cabinets.

Central Units

K-DVC310

Central unit for discussion and voting (stand-alone function) – AULA system. Using K-DVC306 power supply devices, the unit can feed and manage up to 250 microphone units on 7 lines with cascade link and optional branching through K-AC301 splitter. To be used with delegate unit, discussion and/or voting type: K-DVB320-D and K-DVB330-D (desk) and/or K-DVP362-D and K-DVP360-D (flush-mounting with interfaces). To setup the system, use at least a K-DVB330-P (desk) or K-DVP360-P (flush-mounting with interfaces) chairman unit. Conference management: free access, speech-controlled access, subscription order, override turn, discussion mode setting with chairman unit, vote start/end from chairman, vote result on unit display. LINE audio output for hall broadcast. The unit can be connected to XK-DVT301 and XK-DVT310 numerical boards. Dimensions for standard 19" rack mounting (H 2U).

**K-DVC311**

Central unit for discussion and voting (stand-alone function /with operator through management software) – AULA system. Using K-DVC306 power supply devices, the unit can feed and manage up to 250 microphone units on 7 lines with cascade link and optional branching through K-AC301 splitter. To be used with delegate unit, discussion and/or vote type: K-DVB320-D and K-DVB330-D (desk) and/or K-DVP362-D and K-DVP360-D (flush-mounting with interfaces) chairman unit. Conference management: free access, speech-controlled access, subscription order, override turn, discussion mode setting with chairman unit, vote start/end from chairman, vote result on unit display. Conference management by operator through PC configured with Aula system software: attendance registration, management of delegates microphones and database, vote with majority count, results printing, results storing. The unit can be connected to XK-DVGnnn geographic boards, and XK-DVT301 and XK-DVT310 numerical boards. Optional automatic video track of the speakers. Audio line output. Dim. for 19" rack mounting (H 2U).

**K-DVC312** new

Central unit for discussion, voting and simultaneous translation- AULA. CAT5 connections via the 10Base-T Ethernet network switch (not included) to translation units (interpreter and channel selector units). Using K-DVC306 power supply devices, the unit can distribute the translation channels (7 channels + floor) and manage up to 250 microphone units on 7 lines with cascade link and optional branching through K-AC301 splitter. Besides offering the functional specifications of the K-DVC311 central unit, it adds the control of contributions and the possibility to hear the translation channel. The chairman and delegate units that offer this function are: K-DVB340-D and K-DVB340-P desk units and/or K-DVP361-D and K-DVP361-P flush-mounting units. This function can be performed by the K-DVP363 arm and back panel. Use the K-DVB370-T interpreter contribution desk unit. Dim. 19" rack mounting (H 2U).



Technical Characteristics Summary - AULA Central Units

MODEL	K-DVC311 / K-DVC312	K-DVC310	K-DVC305
Vote	Yes	Yes (stand-alone)	No
Max number of microphones	250	250	35 on single line 40 on fork line max 64 with K-DVC306
With operator (from PC with K-SWPC and K-SWDS software)	Yes	No	No
Presets	XK-DVGnnn Geographic Boards, XK-DVT301 and XK-DVT310 Numerical Boards, Video tracking (Languages Contribution and Distribution only with K-DVC312)	XK-DVT301 and XK-DVT310 Numerical Boards	No
Mounting	Desk / 19" rack (H 2U)	Desk / 19" rack (H 2U)	desk
Lines/conn. DB9	7	7	1
Audio Output	Line	Line	mic/line XLR
Serial Output	n° 1 RS232	No	No
Power Supply	230 Vac $\pm$ 10% 50/60Hz	230 Vac $\pm$ 10% 50/60Hz	230 Vac $\pm$ 10% 50/60Hz
Dimensions (LxHxD)	19" rack (H 2U)	19" rack (H 2U)	204 x 52 x 190 mm

Desk Microphone Units



K-DVB320-D

Delegate microphone desk unit for discussion – AULA system. Electret microphone with 50 cm gooseneck and light ring for speech enable indication and key for speech request. Loudspeaker included, 2 audio outputs 3,5 mm jacks for headphone connection. Half flush-mounting option with AC501. This unit is compatible with any central units of the Aula system.



K-DVB320-P

Chairman microphone desk unit for discussion – AULA system. Electret microphone with 50 cm gooseneck and light ring. Speech and priority keys. Loudspeaker included, 2 audio outputs 3,5 mm jacks for headphone connection. Half flush-mounting option with AC501. This unit is only compatible with K-DVC305 central unit – AULA system.



K-DVB330-D

Delegate microphone desk unit for discussion, with display and vote keys – AULA system. Electret microphone with 50 cm gooseneck and light ring for speech enable indication. Three vote keys: YES/NO/ABSTENTION, key for speech request. Back-lit LCD Display with information about the conference and vote. Attendance registration through “touch memory” system (only with PC software). Loudspeaker included, 2 audio outputs 3,5 mm jacks for headphone connection. Half flush-mounting option with AC501. This unit is compatible with K-DVC310, K-DVC311 and K-DVC312 central units – AULA system.



K-DVB330-P

Chairman microphone desk unit for discussion, with display and vote keys – AULA system. Electret microphone with 50 cm gooseneck and light ring for speech enable indication. Three vote keys: YES/NO/ABSTENTION, key for speech and priority with enable/disable/vote sessions functions. Back-lit LCD Display with information about the conference and vote. Attendance registration through “touch memory” system (only with PC software). Loudspeaker included with volume control, 2 audio outputs 3,5 mm jacks for headphone listening of the selected channel Half flush-mounting option with AC501. This unit is compatible with K-DVC310, K-DVC311 and K-DVC312 central units – AULA system.



new

K-DVB340-D

Delegate microphone desk unit for discussion, with display, vote and translation channel selection keys – AULA system. Electret microphone with 50 cm gooseneck and light ring for speech enable indication. Switch for hearing channel number – from channel 0 (floor) to the max. number of channels set on the central unit. Three vote keys: YES/NO/ABSTENTION, key for speech request. Back-lit LCD Display with information about the conference, vote and translation. Attendance registration through “touch memory” system (only with PC software). Loudspeaker included with volume control, 2 audio outputs 3,5 mm jacks for headphone listening of the selected channel. Half flush-mounting option with AC501. To operate properly, this unit must be used with the K-DVC312 central unit.



new

K-DVB340-P

Chairman microphone desk unit for discussion, with display, vote and translation channel selection keys – AULA system. Electret microphone with 50 cm gooseneck and light ring for speech enable indication. Three vote keys: YES/NO/ABSTENTION, key for speech and priority with enable/disable/vote sessions functions. Back-lit LCD Display with information about the conference, vote and translation. Attendance registration through “touch memory” system (only with PC software). Loudspeaker included with volume control, 2 audio outputs 3,5 mm jacks for headphone listening of the selected channel. Half flush-mounting option with AC501. To operate properly, this unit must be used with the K-DVC312 central unit.

Interpreter Units

**K-DVB370-T** new

Interpreter desk top unit – AULA system. Electret microphone with 50 cm gooseneck and light ring. Management of headphone listening channels. CAT5 connections to CCU K-DVC312 via the 10Base-T Ethernet network switch (not included). Possibility to connect up to two headphones with A-B-C preset, up to max 3 channels. Selection up to 7 channel outputs and storage of channel A and B – main and secondary, interruption of unit enable, temporary microphone mute function. Back-lit LCD Display. Headphone volume and tone controls, 2 audio outputs 3,5 mm stereo jack connectors. Loudspeaker included, loudspeaker volume control. Microphone jack connector. RJ45 socket for connection to the Aula system network. Management of the channels between interpreter booth with inter-block, override, mix modes, with unencrypted information on the languages associated to the translation channels. Management of per max 3 interpreter units for booth. Optional half flush-mounting. 18-36 Vdc local power supply

27/4431-R Microphone gooseneck Aula and B1100 types. Total length cm 50, cables, Led, anti-breath capsule.

Technical Characteristics Summary – AULA Desk Microphone Units

MODEL	K-DVB340-D / K-DVB320-P	K-DVB330-D / K-DVB330-P	K-DVB320-D / K-DVB320-P
Vote	Yes	Yes	No
Display	Yes	Yes	No
Channel Selector	Yes	No	No
Microphone	Fixed, flexible gooseneck, electret capsule, length 50 cm		
Cables	Not included		
Mounting	Desk / Half Flush-mounting with optional AC501		
Dimensions (LxHxD)	155 x 20-60 x 105 mm		

Flush-Mounting Microphone Units

**K-DVP362-D**

Flush-mounting delegate unit for discussion – AULA system. Electret microphone with 50 cm gooseneck and light ring for speech enable indication. Key for speech request. 2 audio outputs 3,5 mm jacks for headphone connection. The delegate unit must be connected to a K-DVI352 dual audio interface. This unit is compatible with any central units of the Aula system.

**K-DVP360-D**

Flush-mounting delegate unit with display and vote keys – AULA system. Electret microphone with 50 cm gooseneck and light ring for speech enable indication. Three vote keys: YES/NO/ABSTENTION, key for speech request. Back-lit LCD Display with information about the conference and vote. Attendance registration through “touch memory” system (only with PC software). 2 audio outputs 3,5 mm jacks for headphone connection. The delegate unit must be connected to the K-DVI350 vote audio interface. This unit is compatible with the K-DVC310, K-DVC311 and K-DVC312 central units – AULA system.

**K-DVP360-P**

Flush-mounting chairman unit with display and vote keys – AULA system. Electret microphone with 50 cm gooseneck and light ring for speech enable indication. Three vote keys: YES/NO/ABSTENTION, key for speech and priority with enable/disable/vote sessions functions. Back-lit LCD Display with information about the conference and vote. Attendance registration through “touch memory” system (only with PC software). 2 audio outputs 3,5 mm jacks for headphone connection. The chairman unit must be connected to the K-DVI350 vote audio interface. This unit is compatible with the K-DVC310, K-DVC311 and K-DVC312 central units – AULA system.

Flush-Mounting Microphone Units



K-DVP361-D new

Flush-mounting delegate unit with display, vote and translation channel selection keys – AULA system. Electret microphone with 50 cm gooseneck and light ring for speech enable indication. Switch for hearing channel number – from channel 0 (floor) to the max. number of channels set on the central unit. Three vote keys: YES/NO/ABSTENTION, key for speech request. Back-lit LCD Display with information about the conference, vote and translation. Attendance registration through “touch memory” system (only with PC software). 2 audio outputs 3,5 mm jacks for and volume control for headphone listening of the selected channel. The delegate unit must be connected to the K-DVI351 translation audio interface. To operate properly, the delegate unit must be connected to the K-DVC312 central unit.



K-DVP361-P new

Flush-mounting chairman unit with display, vote and translation channel selection keys – AULA system. Electret microphone with 50 cm gooseneck and light ring for speech enable indication. Switch for hearing channel number – from channel 0 (floor) to the max. number of channels set on the central unit. Three vote keys: YES/NO/ABSTENTION, key for priority speech request. Back-lit LCD Display with information about the conference, vote and translation. Attendance registration through “touch memory” system (only with PC software). 2 audio outputs 3,5 mm jacks for and volume control for headphone listening of the selected channel. The delegate unit must be connected to the K-DVI351 translation audio interface. To operate properly, the delegate unit must be connected to the K-DVC312 central unit.



K-DVI352

Audio interface for discussions – AULA system. Management and audio contribution unit, up to 2 flush-mounting K-DVP362-D microphone units can be connected.



K-DVI350

Audio interface for votes – AULA system. Management and audio contribution unit, 1 flush-mounting K-DVP360-D or K-DVP360-P models can be connected.



K-DVI351

Audio interface for translations – AULA system. Management and audio contribution unit, 1 flush-mounting K-DVP361-P or K-DVP361-D models can be connected.



K-DVP363 new

Channel selection panel – AULA system. Flush-mounting on arms/backs of armchairs. The panel becomes active only at headphone jack insertion. Channel control +/- to select the translation language. Volume control. RJ45 connector for CAT5 connection to the system. Panel in self-extinguishing grey ABS.



K-DVP369

Flush-mounting 3W loudspeaker panel – AULA system, with plain mask and grid. Connection option for Aula Series flush-mounting panels, K-DVP360-D, K-DVP360-P, K-DVP362-D, K-DVP361-D and K-DVP361-P models.

Technical Characteristics Summary - AULA Flush-Mounting Microphone Units

MODEL	K-DVP361-D / K-DVP361-P	K-DVP360-D / K-DVP360-P	K-DVP362-D
Vote	Yes	Yes	No
Display	Yes	Yes	No
Channel Selector	Yes	No	No
Interface (compulsory)	K-DVI351	K-DVI350	K-DVI352
Microphone	Fixed, flexible gooseneck, electret capsule, length 50 cm		
Cables	Not included		
Mounting	Flush-mounting. The panel includes 1m flat cables to connect to an interface		
Dimensions (LxHxD)	155 x 20-60 x 105 mm		

System Accessories

K-DVC306

Additional on-line power supply. This power supply feeds the microphone units allowing the AULA system to expand the number of microphone units managed by the K-DVC310, K-DVC311, K-DVC312 central units. Automatic power-up controlled by Aula central unit. 230 Vac power supply

**K-DVM385**

Hand-held dynamic microphone with speech request and light indicator. The microphone needs 1 K-DVI352, and has the same functions as K-DVB320-D.

**K-AC301**

Splitter for branching of Aula system main lines. 2x Line doubler (1 input and 2 outputs), metal flight case with mounting holes. Parallel cabling with flat connectors. Dimensions 60x25x40mm (LxHxD).

K-AC303 Kit 5 optional line ends.**AC305** N.10 anti-breath caps for microphone capsule**K-DVI358**

Analogue audio interface – AULA system. Extraction of the translation channels present in the Aula system, for external systems. Balanced line signals, 8-channel D/A conversion. Rack mounting (H 1U)

Cables

CV301-C 1,5 m butt cable. Aula system connection cable, three pairs, each shielded, DB 9-pole connector. Extra-flexible dark grey sheath.**CV305-C** 5 m. butt cable. Aula system connection cable, three pairs, each shielded, DB 9-pole connector. Extra-flexible dark grey sheath.**CV310-C** 10 m butt cable. Aula system connection cable, three pairs, each shielded, DB 9-pole connector. Extra-flexible dark grey sheath.**CV320-C** 20 m butt cable. Aula system connection cable, three pairs, each shielded, DB 9-pole connector. Extra-flexible dark grey sheath.**31/140-100** Multi-pole cable for connection extensions. Hank of 100 m**AC304** Pair of m+f connectors for Aula system cable. For 31/135-GR cable.

“BASE” Version Software for Systems with K-DVC311 and K-DVC312 Central Units

**K-SWPC**

AULA system “BASE” Software. System set-up, microphone management (enable/disable from PC), delegates database (with list of speech-authorized subscribers), vote (attendance control, secret/open vote, majority count formulae), vote results printing (with date/hour/agenda/quorum/calculated majority), voters list divided by preference, final result. Report storage. Control and direction through PC for CCTV video tracks. Monitor with minimum 800x600 pixels resolution.

“PRO” Version Software for Systems with K-DVC311 and K-DVC312 Central Units



K-SWDS

AULA system “PRO” Software. Visualization in synoptic table (icons representing the microphone units displayed both graphically and geographically). In-line menu, system set-up, microphone management (enable/disable from PC), delegates database (with list of speech-authorized subscribers), vote (attendance control, secret/open vote, majority count formulae), vote results printing (with date/hour/agenda/quorum/calculated majority), voters list divided by preference, final result. Report storage. Control, setting and direction through PC for CCTV video tracks. Monitor with minimum 1024x768 pixels resolution.

Attendance registration



K-AC300

10 badges for attendance and individual rights registration (attendance with/without vote). “Touch-memory” technology. Programmable with K-AC302 and PC.



K-AC302

Programmer for “touch-memory” badges (PC version) and CD installer.

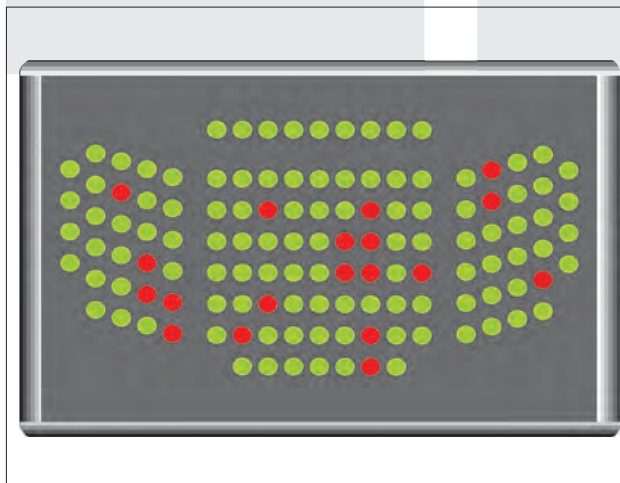
Hall Illuminated Boards

XK-DVT301

Alphanumeric LED board. Display of the vote results, with sum of pro votes (in green), against votes (in red) and abstention votes (in yellow). Real-time duration of the intervention. If connected to an Aula series software, an operator can send short messages (max 16 characters). Wall-mounting option. Dimensions (LxHxD) 1630x200x130 mm

XK-DVT310

Alphanumeric board with 5 2-digit displays. Display of the vote results, with sum of pro votes, against votes and abstention votes, total number of participants, total number of vote-authorized delegates. Real-time duration of the intervention. If connected to an Aula series software, an operator can send short messages (max 16 characters). Wall-mounting option. Dimensions (LxHxD) 1630x200x130 mm



XK-DVGNNN

Geographic synoptic board. Bi-chromatic LED red, green and yellow (yellow= red+green), for Aula systems with max 50 delegate units. The board shows the preferences with manifest vote (YES/NO/ABSTENTION), or the number of voters with secret vote. Connection cables not included. Wall-mounting option. Dimensions (LxHxD) 1200x800x120mm.

Automatic Video tracking of speakers

**XK-DVD300**

PTZ Dome camera for AULA conference system with 2 up to 8 CCTV required. 1/4" High resolution IT CCD with 440,000 effective pixels with 25x optical zoom lens, Motion Detection, IR Cut Filter ON/OFF, Super LoLux™ sensitivity, Extended dynamic range (ExDR), Variable Pan/Tilt speed, 180 degree Auto flip/Digital flip, pre-set positions, 360 degree endless rotation. 24Vac power supply and brackets for wall mounting not included. Dimension 152 x 190 mm. Weight 2,4 kg.

XK-DVD301

PTZ Dome camera and AULA central unit chipset for AULA conference system with only one CCTV required. Automatic video tracking of the speaker through an AULA system. 1/4" High resolution IT CCD with 440,000 effective pixels with 25x optical zoom lens, Motion Detection, IR Cut Filter ON/OFF, Super LoLux™ sensitivity, Extended dynamic range (ExDR), Variable Pan/Tilt speed, 180 degree Auto flip/Digital flip, pre-set positions, 360 degree endless rotation. 24Vac power supply and brackets for wall mounting not included. Dimension 152 x 190 mm. Weight 2,4 kg.

XK-DVD304

Video matrix unit. 4 CCTV-cameras. Video I/O: 4/2 BNC (prg pre), n. 4 connectors, 24 Vac power supply and RS485 data. Aula PC SW console emulation. CCTV excluded. 230 Vac. (H 2U)

XK-DVD308

Video matrix unit. 8 TV-cameras. Video I/O: 8/2 BNC (prg pre), n. 8 connectors, 24 Vac power supply and RS485 data. Aula PC SW console emulation. CCTV excluded. 230 Vac. (H 2U)

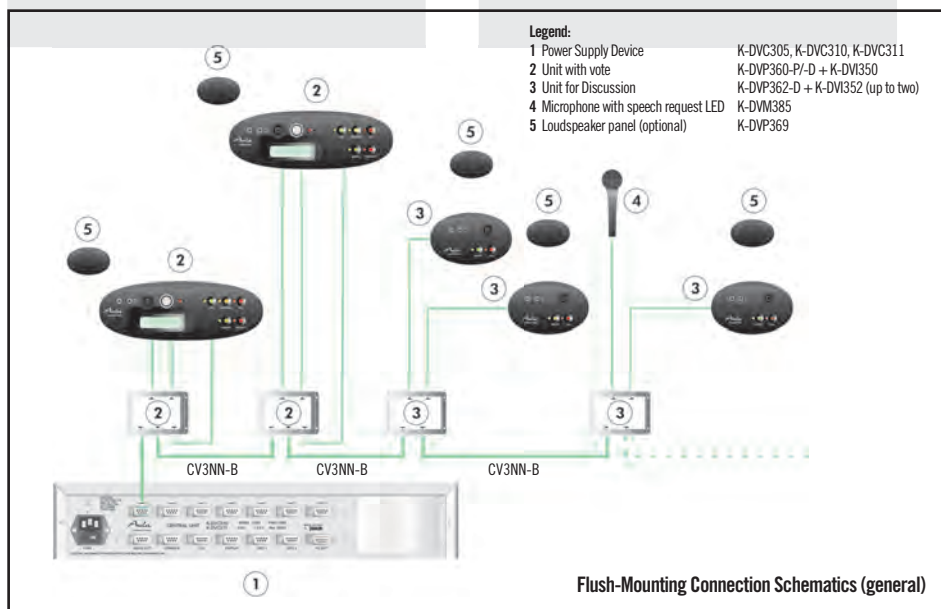
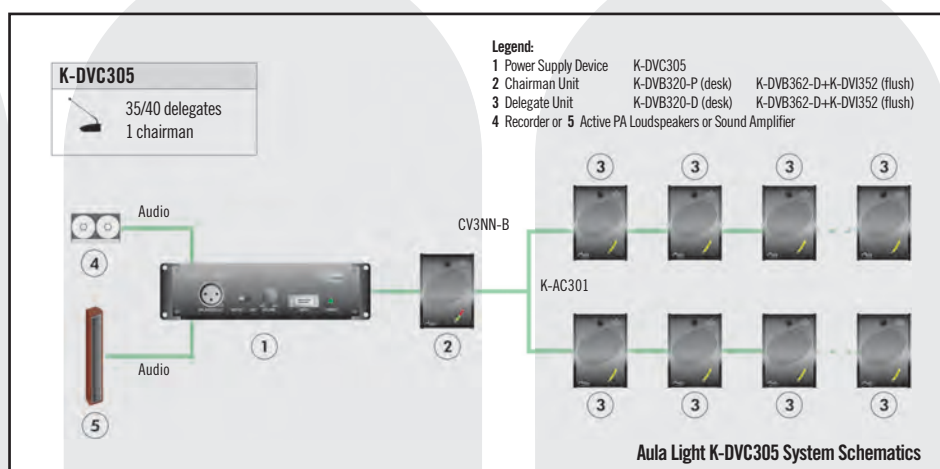
TV-Cameras / System Table

CODE	DESCRIPTION	TV-CAMERAS NUMBER	QUANTITY
XK-DVD301	CCTV Speed-dome and integration chipset	1	1
XK-DVD304 XK-DVD300	Rack unit with con integration chipset and video output switch for 4 CCTV inputs CCTV Speed-dome	from 2 to 4	1 from 2 to 4
XK-DVD308 XK-DVD300	Rack unit with con integration chipset and video output switch for 8 CCTV inputs CCTV Speed-dome	from 5 to 8	1 from 5 to 8

Warning: an alternative to the XK-DVD301 kit

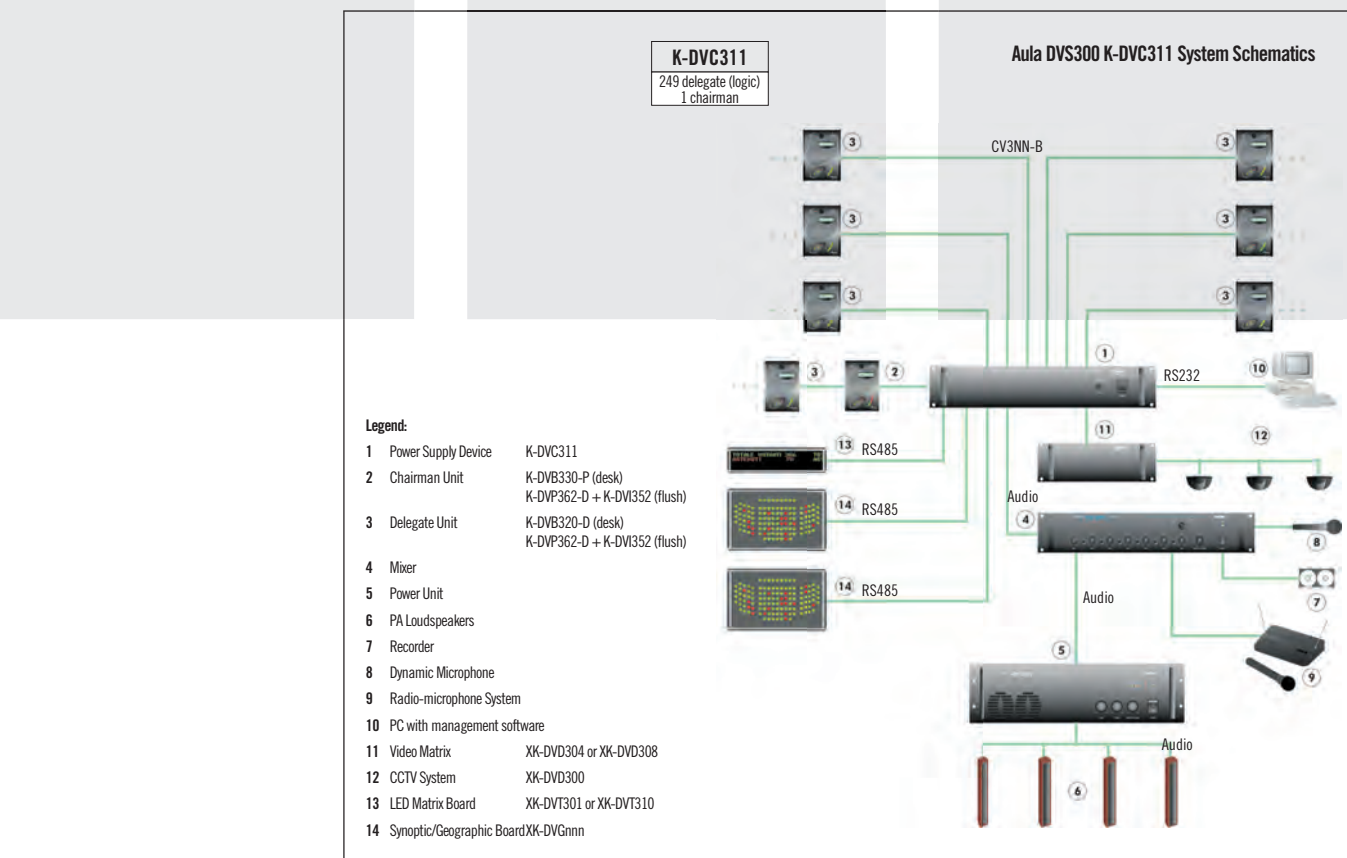
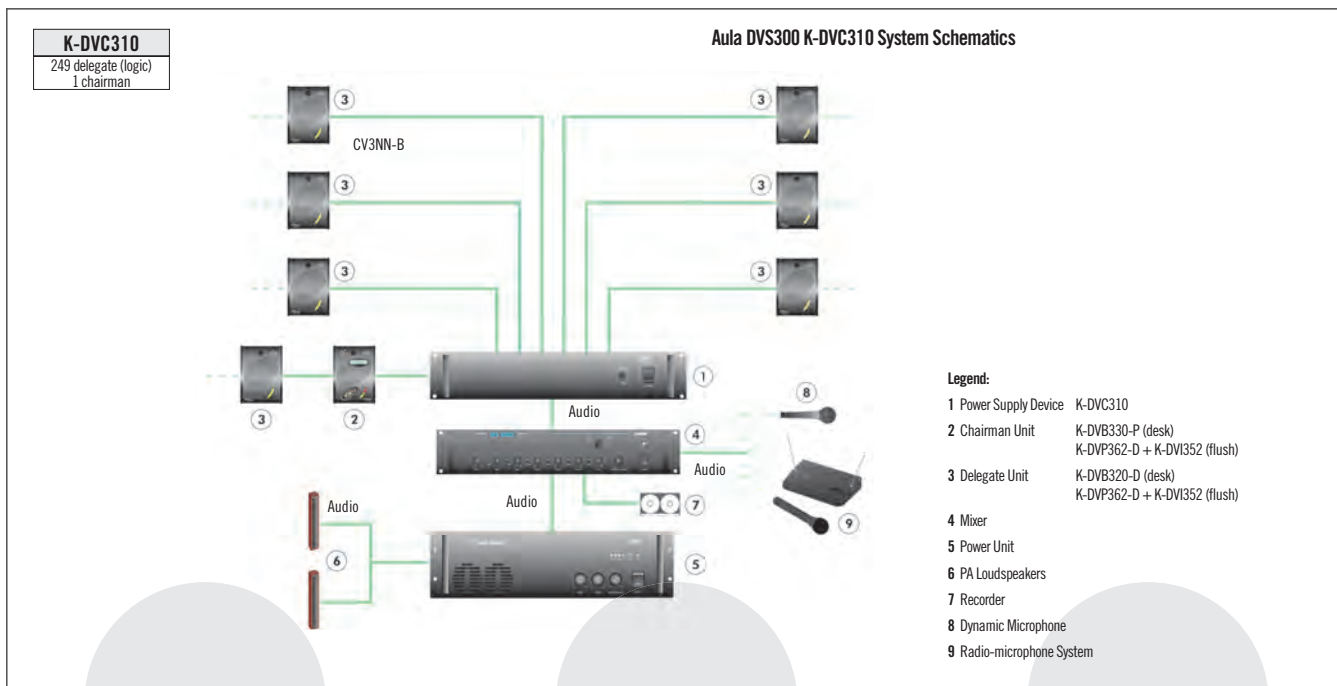
In single camera systems, the integration chipset (Cod. K-SWDC) can be purchased separately from the camera itself (Cod. XK-DVD300): this allows the users to use cameras different from XK-DVD300*.

*Consult PASO to obtain a list of the cameras compatible with the Aula system.

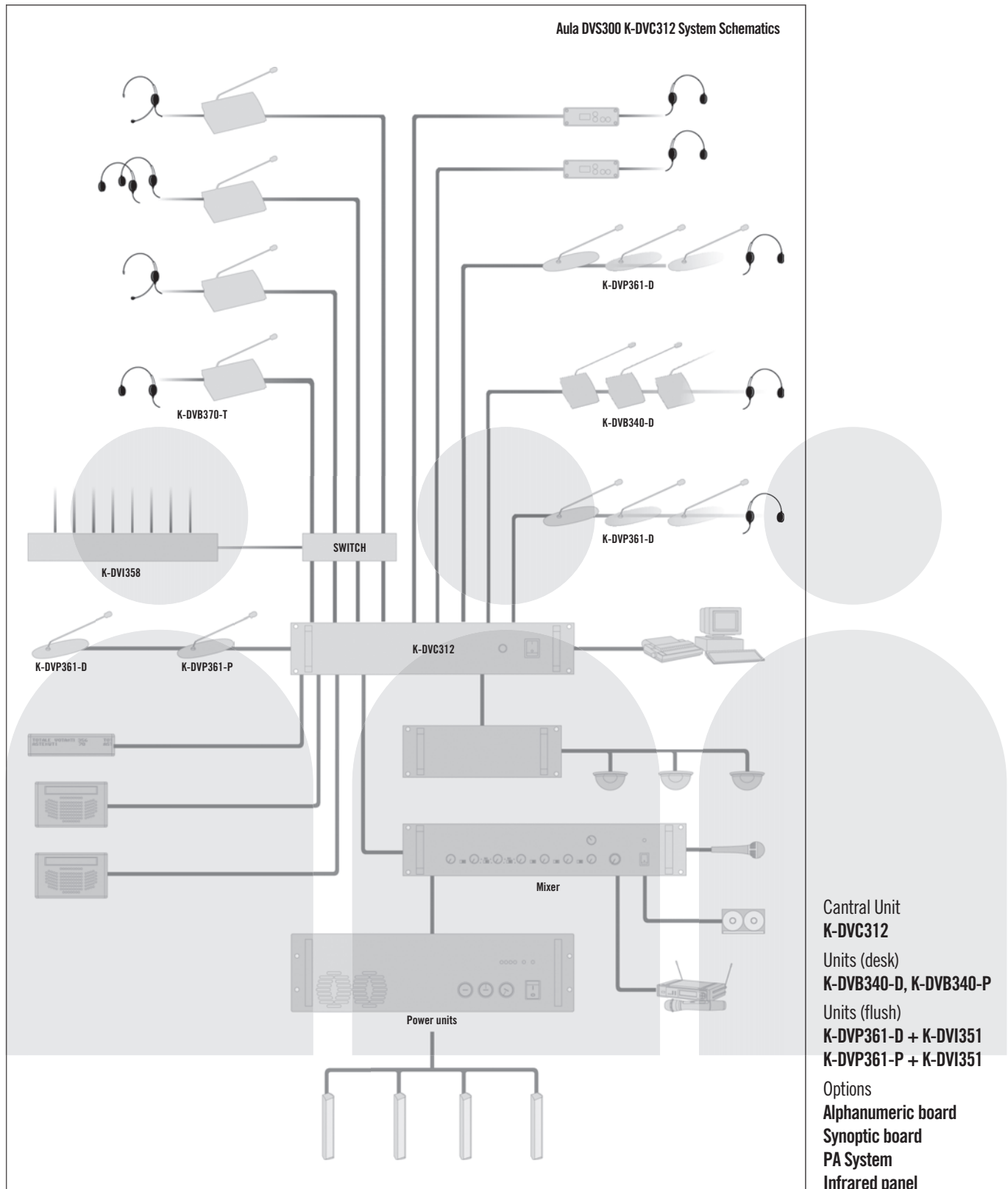


Typical Connection Schematics

Typical Connection Schematics



Typical Connection Schematics



Simultaneous Translation Systems

The Aula® translation system offers conference characteristics similar to the above-mentioned systems, adding the possibility for the participants to select and listen to up to 7 languages, in addition to the native language of the lecturer (floor); non-active participants can use selector panels that can be flush-mounted in the arms and backs of armchairs. The heart of the translation system consists of the interpreter units and the central board, connected with standard 10Base-T Ethernet network connections and using the same components, such as CAT.5 STP cables, 100 switches.

CS2100 Central unit for discussion and voting



new



CS2100

Central unit for discussion and voting - CS2100 system. Automatic management and powering of up to 98 delegate stations (with/without voting rights) and secretary stations and two chairperson stations for a total of 100 stations. Connection of up to 4 CL2100 consoles and 5 display panels. 6 RJ45 outputs for cascade connections to the stations /consoles/display panels by means of CAT5e SFTP shielded cable. General station and MIC/AUX and TAPE input volume control. The system set-up and the operations are managed through CL2100 console and/or the specific SWCS2.0 software (to be ordered separately) installed on a PC. 'Manual', 'automatic' and 'open' conference modes. Queuing to speak; speech enabled by the operator (manual) or following a pre-set timeout (automatic); the delegate stations are enabled to speak in the order in which they are queued. In the 'open conference' mode, all the stations can talk at the same time. The chairperson stations can take part in the discussion at the same time as the delegates either using the 'Conversation' function or by activating the 'Priority' function. Open voting or by ballot. The SWCS2.0 software manages the microphones with a list of names of people attending, prints reports on the votes and records the order of speaking, the voting, the agenda and the issues voted on in a database (connection RS232). The system must necessarily be configured either with at least one console or with the.

Colour: sandy black. Provisions for rack mounting, 1U

Microphone desk units

B2100-D

Desktop delegate microphone unit for discussion and voting - CS2100 systems. Cardioid electret microphone with 50 cm flexible stem and ring that lights up to indicate permission to speak, key for requesting to speak. Cascade connection to the other stations or to the central unit by means of CAT5e SFTP shielded cable. Loudspeaker volume control keys. Three keys for voting with acknowledgement and acceptance LEDs, shield for ensuring privacy. Built-in loudspeaker, 1 3.5 mm jack for listening via headphones, excluding the loudspeaker, 2 RJ45 IN/OUT connectors . Size (LxHxD) 114x436x200 mm.

B2100-P

Desktop chairperson unit for discussion and voting - CS2100 systems. Cardioid electret microphone with 50 cm flexible stem and ring that lights up to indicate permission to speak, key for requesting to speak, priority call key enabling the chairman to break into the discussion and red indicator lamp indicating its activation. Cascade connection to the other stations or to the central unit with CAT5e SFTP shielded cable. Loudspeaker volume control keys. Three voting keys with acknowledgement and confirmation LEDs, shield for ensuring privacy. Built-in loudspeaker, 1 3.5mm jack for listening via headphones, excluding the loudspeaker. 2 RJ45 IN/OUT connectors. Size (LxHxD) 114x436x200 mm.

B2100-S

Desktop secretary/delegate microphone unit without voting rights - CS2100 systems. Cardioid electret microphone with 50 cm flexible stem and ring that lights up to indicate permission to speak. When the unit is configured as a secretary station, it can break into the discussion at any time, albeit subject to the chairperson station's priority control. When it is configured as a delegate station it has the functions of the B2100-D station without voting rights. Cascade connection to the other stations or to the central unit with CAT5e SFTP shielded cable. Loudspeaker volume control keys. Three voting keys with acknowledgement and confirmation LEDs, shield for ensuring privacy. Built-in loudspeaker, 1 3.5mm jack for listening via headphones, excluding the loudspeaker. 2 RJ45 IN/OUT connectors. Size (LxHxD) 114x436x200 mm.

Operator unit

CL2100

Operator monitoring and control unit - CS2100 systems. Management of the discussion, of voting and of out-of-queue activation of a speaker station. Visual signalling of the status of each microphone and of the results of voting. Cascade connection to the other stations or to the central unit with CAT5e SFTP shielded cable. Programming and control of the system, as an alternative to or combined with the SWCS2.0 control software for PC. The (multi-lingual) backlit LCD of the console shows the number of the microphone that is active and of the next in the queue, and the number of stations queued to speak. At the end of each electronic voting session it shows the number of abstentions and the numbers of votes for and against the motion. Numerical keypad: 0-9. Key for selecting conference mode, key for starting/ending the voting session, key for passing on to the next item for discussion, key for displaying language-selection menu, for selecting the length of contributions and recalling the service function. 2 RJ45 IN/OUT connectors. Size (LxHxD) 114x436x200 mm.



System for discussion / voting / with operator / software facilities

Software CS2100 Manager



SWCS 2.0

CS2100 system configuration and management software for PC. The microphones are controlled by displaying the name of the speaker with an activation/deactivation control. Graphic menu for implementing the functions. Printout of a list of the names according to groups or in alphabetical order. Printout of roll-call by pressing the attendance key. Configuration of open voting or by ballot. Formula for calculating the majority, printout and saving of all data. Length of contributions and of voting sessions. Determination of approval or rejection of motions. Set-up on PC with Windows® XP-Professional®. Software protected by hardware key included in the package.

Display Panel



CT2001

Fixed-field alphanumeric display panel –CS2100 systems. Indication of the total number of favourable and unfavourable votes and abstentions at the end of the voting procedure. Furthermore, during the discussion (except in the case of OPEN conferences), it indicates the ID number of the microphone that is enabled, the ID number of the next in the queue and the total number of speakers queued to speak. Cascade connection to the stations or to the central unit with CAT5e SFTP shielded cable. 2 RJ45 IN/OUT connectors. Mains power supply 230 VAC. Interchangeable wordings in the selected language. Size (LxHxD) 1050 x 500 x 40 mm.

CS2100 Range cables

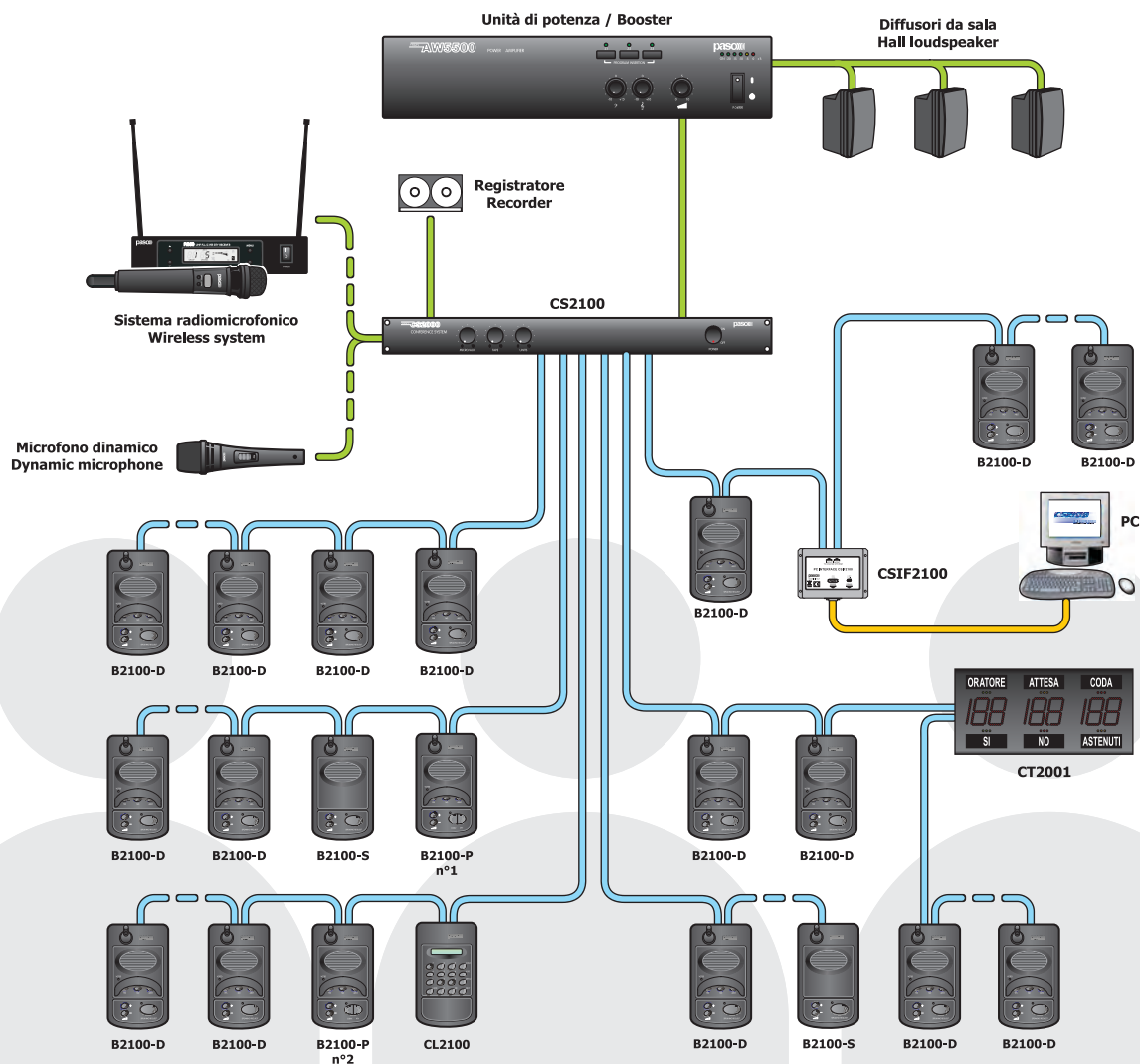
CV2002	2-metre connectorised cable, CAT5e SFTP, shielded, for connection to the microphone stations / console /display panels
CV2005	5-metre connectorised cable, CAT5e SFTP, shielded, for connection to the microphone stations / console /display panels
CV2010	10-metre connectorised cable, CAT5e SFTP, shielded, for connection to the microphone stations / console /display panels
31/142-100	CAT5e SFTP, shielded, 100 m in hanks

Remote interface for PC

CSIF2100	Interface for PC. This interface enables remote connection of a PC (with the SWCS2.0 control software) to the network linking up the microphone stations of the CS2100 system. 2 RJ45 IN/OUT connectors + 1 DB9 socket for RS232 serial connection to a PC.
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Summary of Technical specifications of the CS2100 System

Voting	yes
Max. n° of microphones	100
Set-up e mgt.	Via the CL2100 console and/or via PC with software
Provisions for	Up to 5 CT2001 display panels and up to 4 CL2100 units
RJ45 lines/connectors	6
Mounting options	desktop / in a rack 19" (H 1U)
Audio outputs	1 XLR line (1V) + 1 rca TAPE for recordings
Serial output	1 RS232 for PC
Power supply requirements	230Vca ±10% 50/60Hz
Audio inputs	1 XLR MIC, 1 RCA TAPE, 1 RCA AUX
Connectorised cables	Not included. 2, 5 and 10-metre CAT5e SFTP shielded cables are available for connection to the microphone units, to the CL2100 units, to the CT2001 display panels and to the remote interface for a PC



Systems for discussions / with chairman

CS2080 Central unit for discussions



CS2080

Central unit for open discussion - CS2080 systems. Automatic management and powering of up to a maximum of 80 microphone stations. 4 RJ45 outputs for cascade connection to the stations by means of a CAT5e SFTP shielded cable. General volume control of the stations and of the MIC/AUX and TAPE inputs. Direct activation of the stations in the OPEN CONFERENCE mode. Chairman station with priority. XLR input for local microphone (optional balanced line or wireless microphone system). TAPE and XLR outputs for amplification of a PA system. Colour: sandy black. Provisions for rack mounting: 1U.

Desktop microphone stations - CS2080 SYSTEMS



B2080-D

Delegate microphone unit for open discussion - CS2080 systems. Cardioid electret microphone with 50 cm flexible stem with ring that lights up to indicate permission to speak. Cascade connection to the other stations or to the central unit with CAT5e SFTP shielded cable. Freedom to speak during the discussion, internal loudspeaker for listening to other speakers. Built-in loudspeaker, 1 3.5mm jack for headphones with exclusion of the loudspeaker. 2 RJ45 IN/OUT connectors. Size (LxHxD) 114x436x200 mm.



B2080-P

Chairperson microphone unit for open discussion - CS2080 systems. Cardioid electret microphone with 50 cm flexible stem ring that lights up to indicate permission to speak. Cascade connection to the other stations or to the central unit with CAT5e SFTP shielded cable. Freedom to speak with temporary exclusion of all the active microphone stations thanks to the 'PRIORITY' function. 3.5 mm mono jack for headphones causing exclusion of the loudspeaker. 2 RJ45 IN/OUT connectors. Size (LxHxD): 114x436x200 mm.

CS2080 RANGE cables

CV2002

2-metre connectorised cable, CAT5e SFTP, shielded, for connection to the microphone stations / console /display panels

CV2005

5-metre connectorised cable, CAT5e SFTP, shielded, for connection to the microphone stations / console /display panels

CV2010

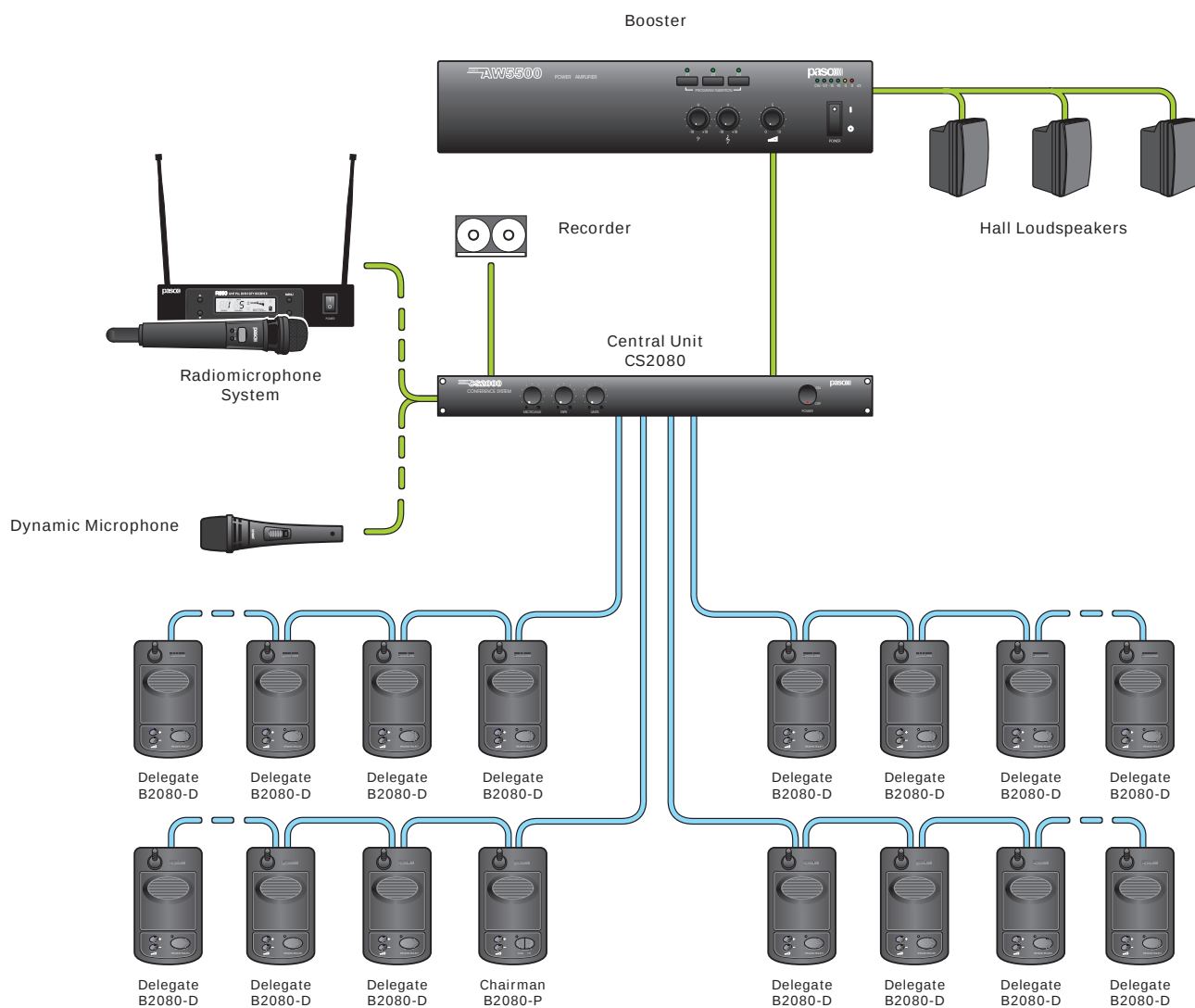
10-metre connectorised cable, CAT5e SFTP, shielded, for connection to the microphone stations / console /display panels

31/142-100

CAT5e SFTP, shielded, 100 m in hanks

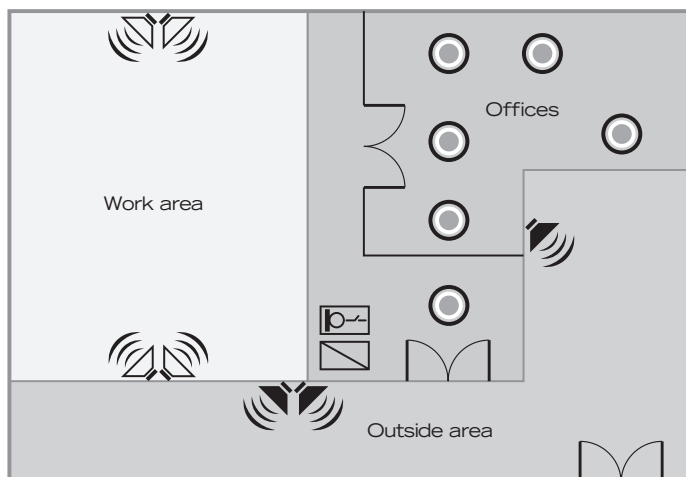
Summary of technical specifications of the CS2080 system

Voting	no
Max. n° of microphones	80
Lines/Rj45 connectors	4
Mounting of central unit	Desktop / in 19" rack (H 1U)
Audio outputs	1 XLR line (1V) + 1 TAPE output for recordings
Power supply	230Vca ±10% 50/60Hz
Audio inputs	1 MIC input, 1 TAPE input, 2 AUX inputs
Connectorised cables	Not included. Shielded 2/5/10-metre CAT5e SFTP cables available for connection to the microphone units



SMALL COMPANY, WORKSHOP, CONCESSIONARY CAR

- Announcement
- Service all-call
- Playing out of background music
- Suitable for room with false ceiling
- From total 1,000 to 1,500 sq. Metres



Products used



1 pz

B701-M
Microphone base



6 pz

C58/6-TB
6 W ceiling fixture, connected at 3 W



3 pz

TR30-TW
30 W aluminium horn, connected at 10 W



4 pz

C55
20 W sound projector, connected at 10 W

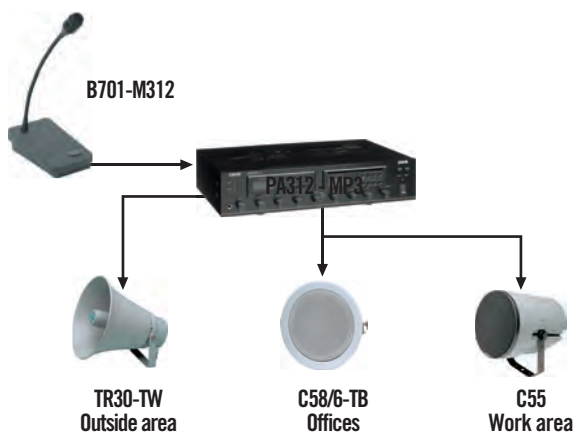


1 pz

PA312-MP3
Tuner/120 W amplified CD player

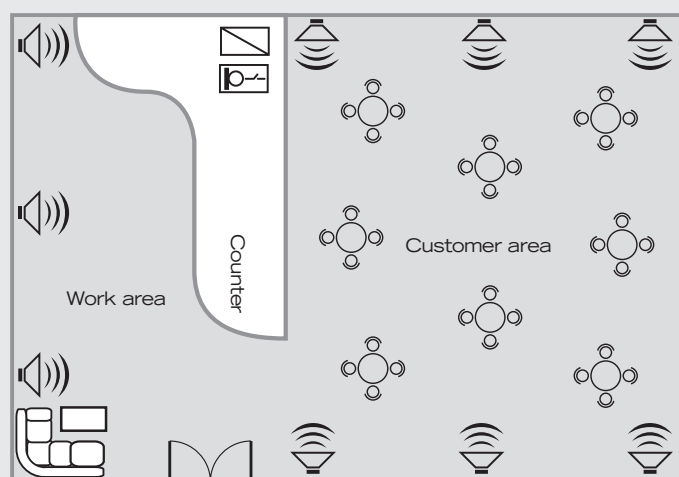


Wiring diagram



BAR, SHOP

- Announcement
- All-calls from microphone
- Playing out of background music
- Suitable for rooms with and without false ceilings
- From total 200 to 300 sq. Metres



Products used



1 pz

B701-M312
Microphone base



6 pz

C93/16-T
16 W 2-way speaker unit



3 pz

C36/6-T
6 W "Candy" wall/ceiling-mounted speaker unit

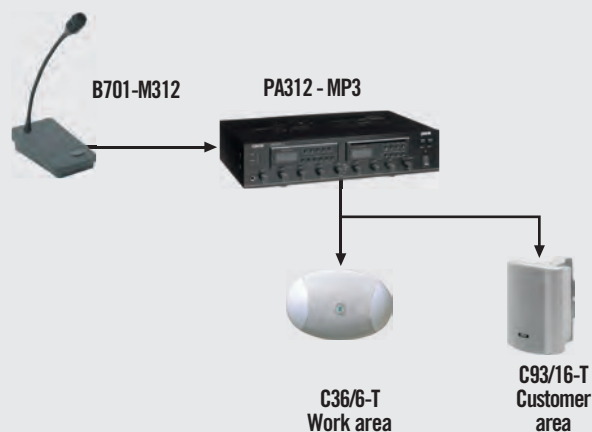


1 pz

PA312-MP3
Tuner/120 W amplified CD player

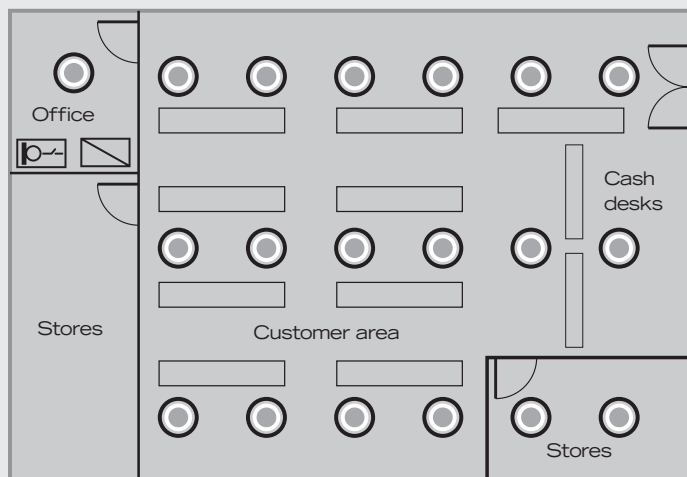


Wiring diagram



MARKET

- Announcement
- All-calls from microphone
- Calls from PABX
- Playing out of background music
- Suitable for rooms with and without false ceilings
- From total 700 to 900 sq. Metres



Products used



1 pz **B701-M312**
Microphone base



19 pz **C57-TB**
6 W ceiling fixture



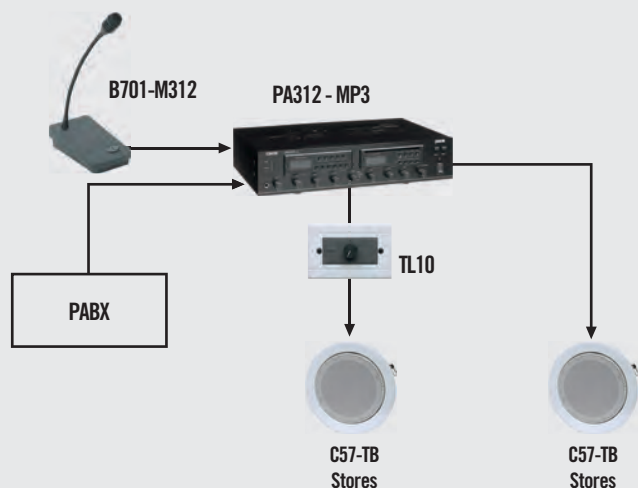
1 pz **TL12-E**
10 W volume controller



1 pz **PA312-MP3**
Tuner/120 W amplified CD player

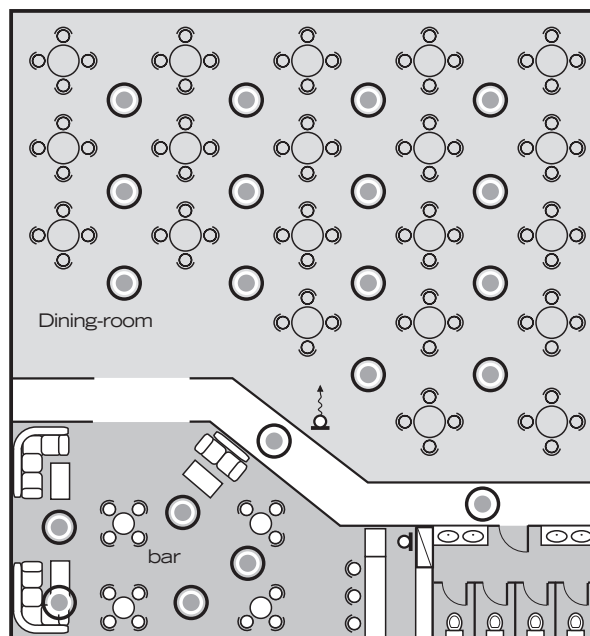


Wiring diagram



RESTAURANT

- Announcement
- All-calls from microphone
- Wireless microphone for entertainment
- Playing out of background music
- Suitable for rooms with and without false ceilings
- From total 800 to 1,000 sq. Metres



Products used



1 pz **B711**
Pre-amplified microphone base



21 pz **C53/10-T**
10 W ceiling fixture



1 pz **R850 + MA855**
UHF wireless microphone



1 pz **P8085-B**
CD player



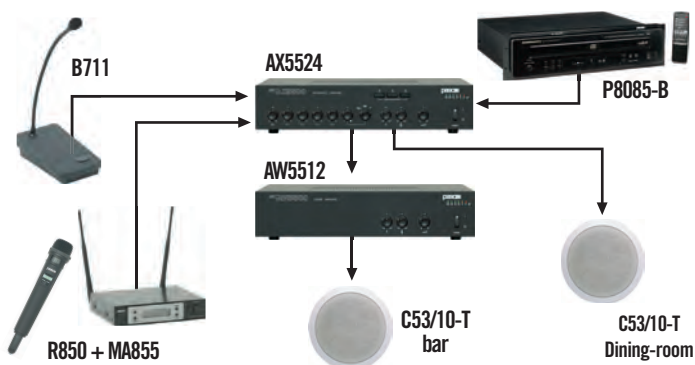
1 pz **AX5524**
Built-in 240 W amplifier



1 pz **AW5512**
120 W booster unit

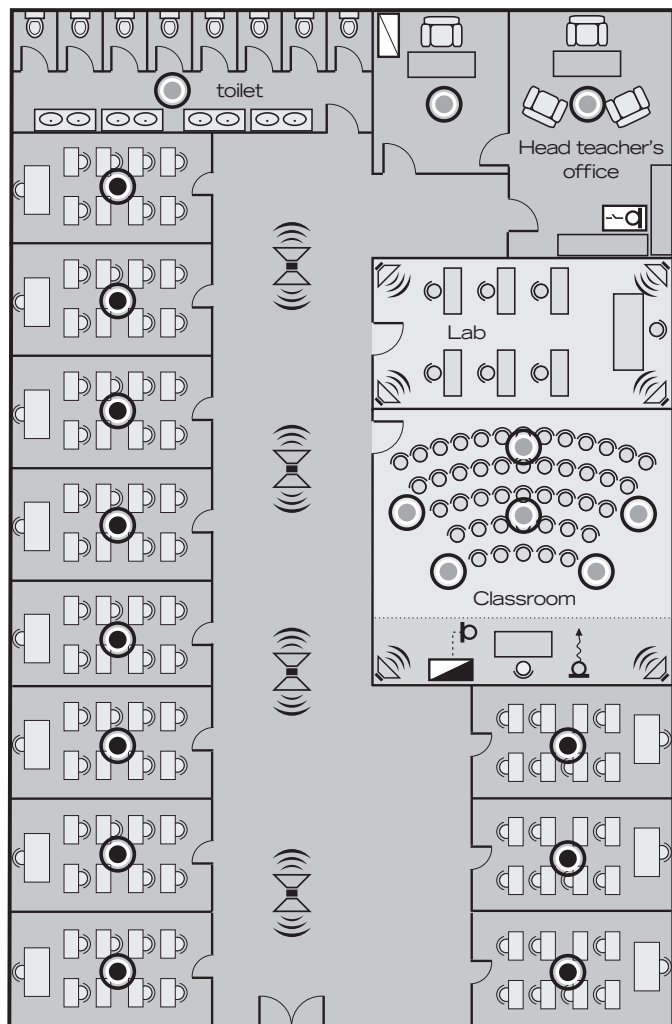


Wiring diagram



SCHOOL

- Announcement
- All-calls from microphone
Suitable for rooms with and without false ceilings
- Corridors
- Independent audio system
- Automatic message generator



Products used



1 pz **B711**
Pre-amplified microphone base



1 pz **DMG9016**
Message generator



9 pz **C58/6-TB**
6 W ceiling fixture



3 pz **C36/6-T**
6 W "Candy" wall/ceiling-mounted speaker unit



4 pz **C82/10-T**
10 W two-way speaker unit



4 pz **C48/6-2T**
6 + 6 W two-directional sound projector



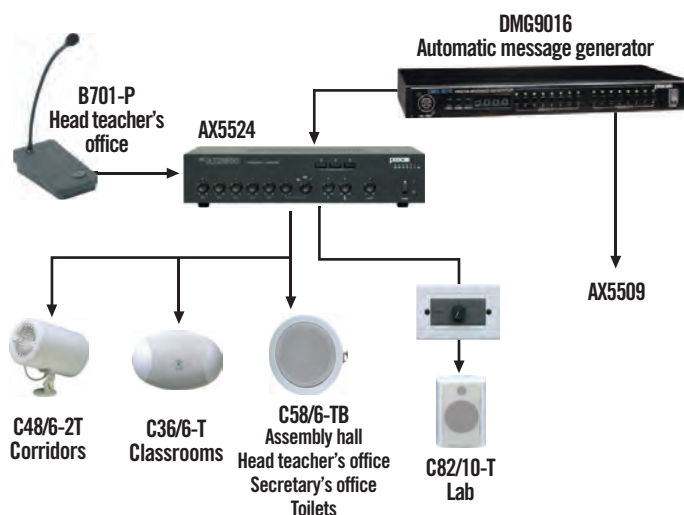
1 pz **AX5524**
Built-in 240 W amplifier



1 pz **TL50-E**
50 W volume controller



Wiring diagram



Local PA for the School Hall

- Reproduction of speech
- Wireless microphone for speaker
- Uniform broadcasting throughout the listening area
- 400 square metre



2 pz **C430-T**
30 W sound column



1 stuk **AX5509**
90 W built-in amplifier



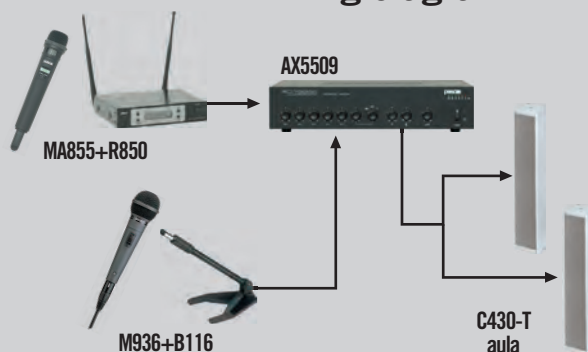
1 stuk **R850 + MA855**
UHF wireless microphone



1+1 stuk **M936+B116**
One-directional microphone + base



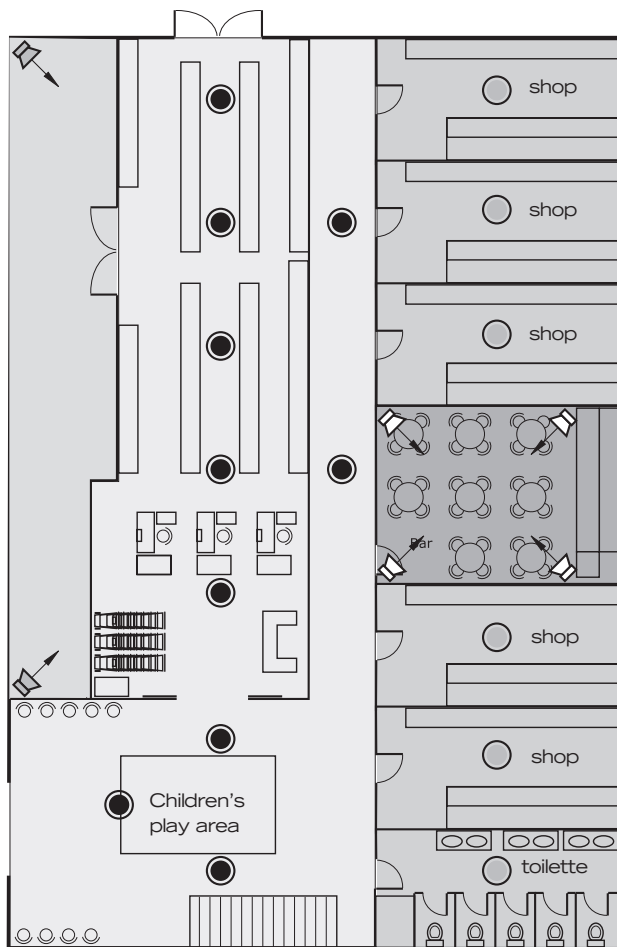
Wiring diagram



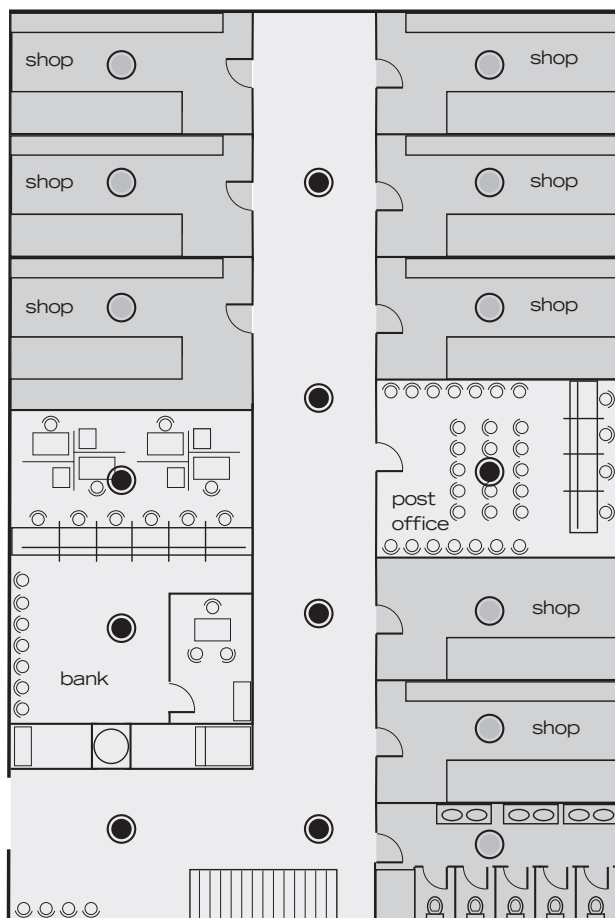
SHOP CENTER

- Announcement
- All-calls from microphone
- Selective zone calls
- Playing out of background music

- Suitable for rooms with and without false ceilings
- Corridors
- Automatic message generator



Ground floor



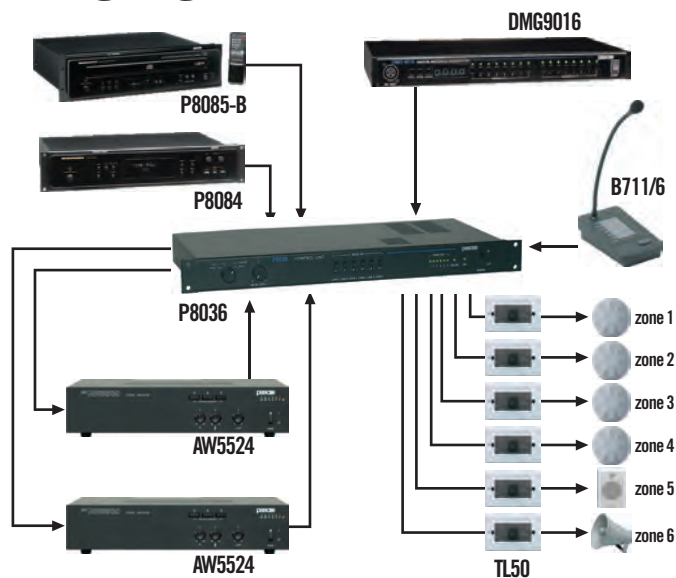
First floor

Products used

	1 pz	B711/6 Pre-amplified microphone base	
	15 pz	C68/6-T 6 W (3 W) ceiling fixture	
	18 pz	C68/12-T 12 W (6 W) ceiling fixture	
	33 pz	C668 Grille + 33 pz AC960 Pair of spring supports for quick mounting	
	4 pz	C82/10-T 10 W 2-way speaker unit	
	2 pz	TR30-TW 30 W aluminium horn	
	1 pz	P8085-B CD-player	
	1 pz	P8084 AM/FM Stereo tuner	
	1 pz	P8036 6-zone voice/music control unit	
	1 pz	DMG9016 Message Generator	
	1 pz	AW5524 240 W booster unit	

	1 stuk	AW5524 240 W booster unit	
	1 stuk	TL50-E 50 W volume controller	

Wiring diagram



code	page
27/2466	25
27/2469	25
27/360	40
27/4555	26
27/59	9
27/901	39
27/94	30
31/140	52/63
31/140-100	52/63
31/142	9
31/142-100	69/71
31/2-100	9
31/65-250	9
31/84	9

A

A13-N	8
AC20	20
AC2024	52
AC2095	51
AC21	20
AC25	20
AC29-BNC	11
AC304	52
AC305	63
AC32	51
AC33	51
AC34	51
AC36	51
AC37	51
AC38	51
AC39	51
AC40	51
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PASO S.p.A. - Via Mecenate, 90 - 20138 Milano ITALIA

Phone +39 02 58077 1 - Fax +39 02 58077 277

e-mail: info@paso.it - website: www.paso.it

PASO SOUND PRODUCTS, INC. 4750F Goer Drive Charleston, South Carolina - 29406-6511 USA

Phone: 843 308 9005 - Fax: 843 308 0904

e-mail: info@pasosound.com - website: www.pasosound.com

PASO DEUTSCHLAND - Augustinusstrasse 9D D - 50226 Frechen DEUTSCHLAND

Phone +49 (0) 2234 690827 - Fax +49 (0) 2234 690828

e-mail: sales.logistics@paso-de.com - website: www.paso-de.com

OUR COMPANY

- Research and Development
- Planning and Manufacturing
- Logistics and Warehouse
- Management and Data Processing Centre
- Marketing Premises Italy/Foreign Countries
- Pre and post sales support
- Test and training courses
- Technical support

*Our sale network has covered the whole Italian territory
through 18 regional agencies and foreign countries
with distributors all over the world*



PASO S.p.A., Company certified EN ISO 9001:2000; the company owns a design, manufacturing and industrial know-how matured over more than 70 years of activity and strengthened thanks to continuous researches in the field of technological innovation. A precious fund of technical knowledge, competence and experience has allowed the Company to enjoy the confidence and appreciation of the main world markets, in which the Company operates also through its American Subsidiary Company PASO Sound Products Inc.

PASO S.p.A. is owner of the intellectual property, brand names and patents of GELOSO.

PASO is one of the few company of this sector that can boast its own integrated system of original design, industrialization and manufacturing for a full range of products, from the most complex and sophisticated systems and devices to the most simple accessories.



Worldwide Test

ATTESTATION OF CONFORMITY ATTESTATO DI CONFORMITÀ N° 1374-1/03

Voice Evacuation System

Equipment
Apparato

Applicant
Richiedente

Manufacturer
Costruttore

Model/type
Modello / Tipo

Additional information
Informazioni aggiuntive

The tested equipment was
found complying the
requirements of the
standards
L'apparato provato è risultato
conforme alle norme

Results of performed test are
shown in the test report(s)
I risultati delle prove eseguite sono
riportati nell(i) rapporto(i) di prova

Date of issue:
Data di emissione

PASO S.p.A.

Via Mecenate 90

20138 MILANO - Italy

PASO S.p.A.

Via Mecenate 90

20138 MILANO - Italy

PMS2000-VES

none

EN 60849

ITE 1374-1/03 dated 08-09-2003
ITE 1374-2/03 dated 08-09-2003

09-09-2003

In addition to being a mark of the continuous commitment of the Company, this new general catalogue, which includes totally innovative product lines, aims at being a useful instrument for the planning and creation of public address systems for small, mid and large scale applications.

PASO also offers complete audio solutions for sound systems applied to emergency services and conference systems.

PMS2000 Sound Broadcasting System

Sound installations, especially if complex and needing high safety and flexibility levels, must be more and more often integrated with sophisticated management and diagnostics systems of the various components, line surveillance, power supplies and amplifiers, with flexible input/output selection systems and with interfacing systems with external peripherals. The PASO PMS2000 is aimed at these and more exacting applications; this is a professional modular amplification "system", extremely versatile and able to meet the most complex installation specifications.

PMS2000-VES Public address and Sound Emergency System - Certified EN 60849

In overcrowded environments, an adequate sound broadcast system is paramount that, when activated from the fire-detection system, is able to manage any emergency situations, allowing a guided and controlled evacuation of the premises. The European EN 60849 standards in force, precisely defines the design and installation terms, so that they can meet the safety and reliability requirements provided for.

The PMS2000-VES Public address and Sound Emergency System is the present PASO answer to the requirements specified by the EN 60849 standards.

Conference systems

The secret of an orderly and successful conference also lies in the possibility to manage it as best as possible, giving a logical order to the events, regulating times and modes, requesting and getting fast and clear answers from the assembly on specific motions, together with a perfectly clear and understandable sound message. An AULA and PASO conference system can satisfy these needs in an easy and elegant way.

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Via Trento e Trieste, 116 Tel. +39 03922012.01 r.a.
I - 20046 Biassono (MI) Telefax +39 0392753240

Web Site: www.paso.it
e-mail: segreteria@pasos.it

pasos S.p.A.

Via Mecenate, 90 - 20138 Milano - Italy

Tel. + 39 02 58077.1 (15 lines)

Fax + 39 02 58077.277

info@pasos.it www.pasos.it

Detailed technical specifications,
operation schemes and user
manuals of the main products
are available at www.pasos.it



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