

• I128SYS: IP-Addressable Ceiling Loudspeaker System

Features:

- Use with InformaCast software, Cisco PoE networks & Cisco IP Telephones to create extremely versatile paging and messaging systems
- Highly efficient 8" dual cone loudspeaker system provides 94 dB average SPL @ 1W/1M and is capable of 103 dB @ 1 meter via the rated power of the internal IP addressable amplifier
- 105° dispersion in the 2kHz octave band (-6 dB)
- Wide frequency response of 86Hz ~ 8kHz (-3 dB) is perfect for speech and general messaging playback
- Built in 9W 8Ω PCB amplifier / control board



Amplifiers

Audio Signal Processing

Audio Signal Generation

Audio System Tools

Loudspeaker Specifications:

Model:	I128SYS
Speaker Size	8" (203mm)
Power Handling	15W
Sensitivity (SPL @ 1W/1M)	94dB
Frequency Response ¹	86Hz ~ 8kHz
Dispersion ²	105°
Mounting Dimensions	194 mm Bolt Circle
Diameter & Depth	206(Ø) x 73(D) mm
Weight	0.9kg

¹ Measured in recommended enclosure

² 3dB down point, 2kHz octave band

Microphones (Wired)

Microphones (Wireless)

Baffle Specifications:

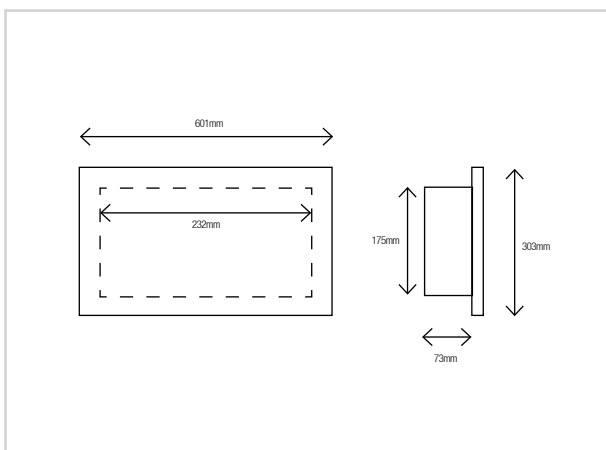
Model:	I128SYS
Baffle Material	18-gauge CRS
Speaker Grille Material	22-gauge Perforated Steel
Colour	White
Loudspeaker cut-out dimension	232(W) x 175(H)mm
Dimensions	601 (W) x 303 (H) mm
Depth (Front of Baffle to Rear of Enclosure)	124mm

Portable P.A.

Amplifier/Controller Specifications:

Model:	I128SYS
Power Rating	9W RMS into 8Ω Load with 9v DC in
Inputs	RJ-45 Female on PCB accessible from rear of baffle
Outputs	2 Wire Main ± terminated to loudspeaker
Power Source	Cisco IEEE 802.3AF compliant POE network switches local 12 ~ 18v DC PSU
Network Control	Informacast on multicast enabled networks

Soundfield



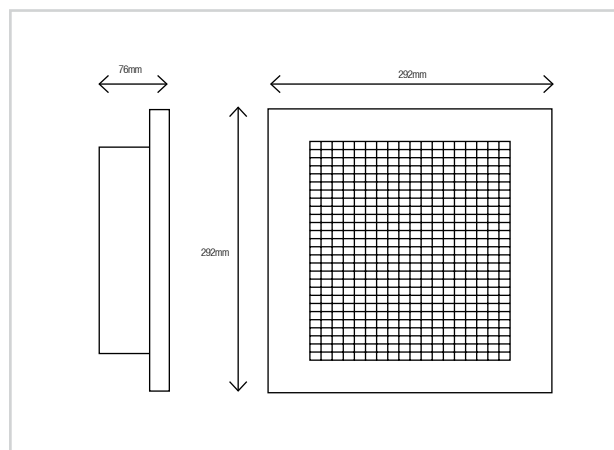
Induction Loops

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• I8S: IP-Addressable Ceiling Loudspeaker System

Features:

- Use with InformaCast software, Cisco PoE networks & Cisco IP Telephones to create extremely versatile paging and messaging systems
- Highly efficient 8" dual cone loudspeaker system provides 94 dB average SPL @ 1W/1M and is capable of 103 dB @ 1 meter via the rated power of the internal IP addressable amplifier
- 105° dispersion in the 2kHz octave band (-6 dB)
- Wide frequency response of 86Hz ~ 8kHz (-3 dB) is perfect for speech and general messaging playback



Loudspeaker Specifications:

Model:	I8S
Speaker Size	8" (203mm)
Power Handling	15W
Sensitivity (SPL @ 1W/1M)	94dB
Frequency Response ¹	86Hz ~ 8kHz
Dispersion ²	105°
Weight	0.9kg
Diameter & Depth	206(Ø) x 73(D) mm
Mounting Dimensions	194mm Bolt Circle

¹ Measured in recommended enclosure

² 3dB down point, 2kHz octave band

Baffle Specifications:

Model:	I8S
Baffle Material	18-gauge CRS
Overall Width x height	292 x 292 mm
Depth (Front of Baffle to rear of speaker)	76mm
Colour	White

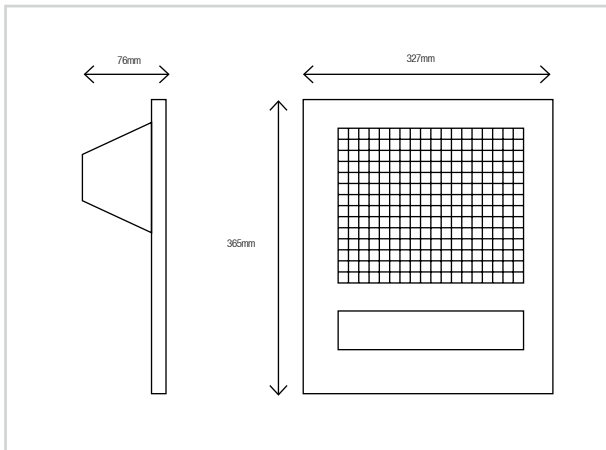
Amplifier/Controller Specifications:

Model:	I8S
Power Rating	9W RMS into 8Ω Load with 9v DC in
Inputs	RJ-45 Female on PCB accessible from rear of baffle
Outputs	2 Wire Main ± terminated to loudspeaker
Power Source	Cisco IEEE 802.3AF compliant POE network switches local 12-18v DC PSU
Network Control	Informacast on multicast enabled networks

- **I8SC:** IP-Addressable Loudspeaker System with Clock
- **I8SCM:** IP-Addressable Loudspeaker System with Clock & Microphone

Features:

- Use with InformaCast software, Cisco PoE networks & Cisco IP Telephones to create extremely versatile paging and messaging systems
- Highly efficient 8" dual cone loudspeaker system provides 94 dB average SPL @ 1W/1M and is capable of 103dB @ 1 meter via the rated power of the internal IP addressable amplifier
- 105° dispersion in the 2kHz octave band (-6dB)
- Wide frequency response of 86Hz ~ 8kHz (-3dB) is perfect for speech and general messaging playback
- Network controlled, high visibility red LED clock
- Built-in microphone for ½ duplex communication (I8SCM model only)



Loudspeaker Specifications:

Model:	I8SC / I8SCM
Speaker Size	8" (203 mm)
Power Handling	15W
Sensitivity (SPL @ 1W/1M)	94dB
Frequency Response ¹	86Hz ~ 8kHz
Dispersion ²	105°
Diameter & Depth	206(Ø) x 73(D) mm
Mounting Dimensions	194 mm Bolt Circle

¹ Measured in recommended enclosure
² 3dB down point, 2kHz octave band

Baffle Specifications:

Model:	I8SC / I8SCM
Baffle Material	18-gauge CRS
Speaker Grille Material	22-gauge Perforated Steel
Loudspeaker cut-out dimension	232 x 175 mm
Overall Width x Height	327(W) x 365(H) mm
Depth (Front of Baffle to Rear of Speaker)	76 mm
Depth (Rear of Baffle to Rear of Speaker)	71 mm
Colour	White

Amplifier/Controller Specifications:

Model:	I8SC / I8SCM
Power Rating	9W RMS into 8Ω Load with 9VDC in
Inputs	RJ-45 Female on PCB accessible from rear of baffle
Outputs	2 Wire Main ± terminated to loudspeaker
Power Source	Cisco IEEE 802.3AF compliant POE network switches local 12-18VDC PSU
Network Control	Informacast on multicast enabled networks

Clock Specifications:

Model:	I8SC / I8SCM
Characters	5
LEDs per character	21
Character Height	64mm
Character Width	32mm
Viewable clock surface dimensions	241(W) x 64(H) mm
Clock Control	InformaCast on multicast enabled networks

Microphone Specifications (I8SCM model only):

Model:	I8SCM
Microphone Type	Omni directional subminiature electret condenser
Diameter	6mm

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Microphones (Wired)

Microphones (Wireless)

Portable P.A.

Soundfield

Induction Loops

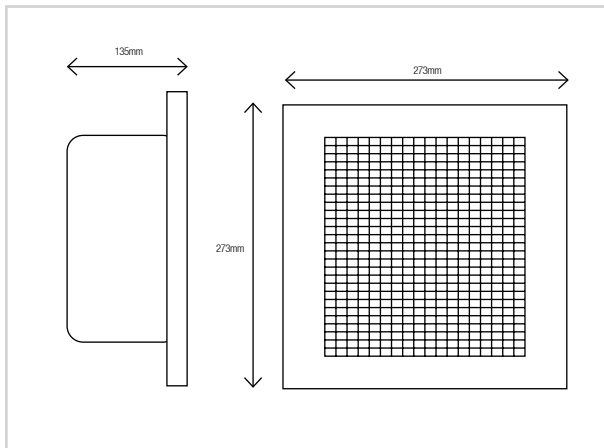
• IHVP: IP-Addressable Horn Loudspeaker

Features:

- Use with InformaCast software, Cisco PoE networks & Cisco IP Telephones to create extremely versatile paging and messaging systems
- Highly efficient APF horn loudspeaker system provides 104 dB average SPL @ 1W/1M and is capable of 113 dB @ 1 meter via the rated power of the internal IP addressable amplifier
- 95° dispersion in the 2kHz octave band (-6 dB)
- Frequency response of 700Hz ~ 5.5kHz (± 5 dB) is perfect for high intelligibility speech and general messaging playback

Please Note:

- Model IHVP is not designed for use outdoors or in applications where the product might be exposed to moisture or high humidity



APF-15 Loudspeaker Specifications:

Model:	IHVP
Power Handling	15W continuous
Sensitivity	120dB at 15W (peak), 114dB at 1W / 1m (avg) 700 ~ 5.5kHz, 104dB 1W / 1m (avg) 700 ~ 5.5kHz
Frequency Response	600 ~ 14,000Hz (nominal), 700 ~ 5.5kHz ± 5 dB
Dispersion	95° (-6dB, 2000Hz octave band)
Finish	Grey baked epoxy

Baffle Specifications:

Model:	IHVP
Baffle Material	Cast aluminium
Speaker Grille Material	22-gauge perforated stainless steel
Overall Dimensions	273(W) x 273(H) x 135(D) mm
Colour	White

Amplifier/Controller Specifications:

Model:	IHVP
Power Rating	9W RMS into 8 Ω Load with 9v DC in
Inputs	RJ-45 Female on PCB accessible from rear of baffle
Outputs	2 Wire Main \pm terminated to loudspeaker
Power Source	Cisco IEEE 802.3AF compliant POE network switches local 12-18v DC PSU
Network Control	Informacast on multicast enabled networks

• Enclosures for Atlas Sound InformaCast: IP-Compliant Loudspeaker Systems

Features:

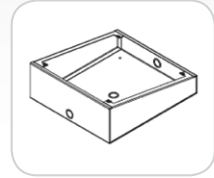
- Enclosures specifically designed for optimum performance and installation ease with Atlas Sound InformaCast compliant loudspeaker systems
- Choice of surface or flush models and straight or slant front styling (I8S and I8SC enclosures only)

Applications:

- Install Atlas Sound InformaCast IP loudspeaker enclosures wherever requirements call for model I8S, I8SC, I8SCM, or IHVP loudspeaker/baffle/PCB amp control board systems. Units are particularly suited for use in classrooms, cafeterias, convention and medical facilities.

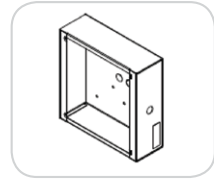
• SEA-I8S

Slanted surface-mount enclosure is designed for use only with Atlas Sound loudspeaker system models I8S & I8SM. The slope front design allows for directional sound dispersion. The enclosure is constructed of 20-gauge CRS and finished in textured white epoxy.



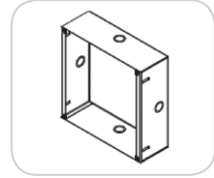
• SEST-I8S

Straight surface-mount enclosure is designed for use only with Atlas Sound loudspeaker system models I8S & I8SM. The unit provides an architecturally pleasing appearance with crisp lines that blend well with most building interiors. The enclosure is constructed of 20-gauge CRS and finished in textured white epoxy.



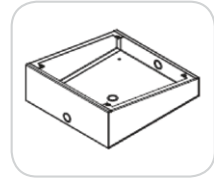
• FEST-I8S

Flush mount enclosure is designed for use only with Atlas Sound loudspeaker system models I8S & I8SM. The unit includes a slot style mounting system to accommodate most any material thickness. The enclosure is constructed of 20-gauge CRS and finished in textured white epoxy.



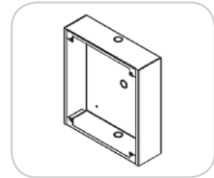
• SEA-I8SC

Slanted surface mount enclosure is designed for use only with Atlas Sound loudspeaker system models I8SC & I8SCM. The slope front design allows for directional sound dispersion. The enclosure is constructed of 20-gauge CRS and finished in textured white epoxy.



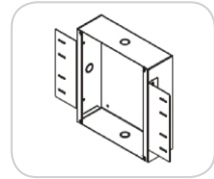
• SEST-I8SC

Straight surface mount enclosure is designed for use only with Atlas Sound loudspeaker system models I8SC & I8SCM. The unit provides an architecturally pleasing appearance with crisp lines that blend well with most building interiors. The enclosure is constructed of 20-gauge CRS and finished in textured white epoxy.



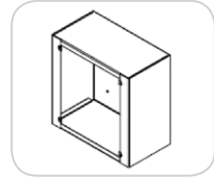
• FEST-I8SC

Flush mount enclosure is designed for use only with Atlas Sound loudspeaker system models I8SC & I8SCM. The unit includes a slot style mounting system to accommodate most any material thickness. The enclosure is constructed of 20-gauge CRS and finished in textured white epoxy.



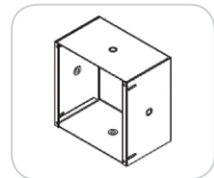
• SEST-IH

Straight surface mount stainless steel enclosure is designed for use only with Atlas Sound loudspeaker system model IHVP. The enclosure is constructed of 18-gauge stainless steel and finished in textured white epoxy.



• FEST-IH

Flush mount stainless steel enclosure is designed for use only with Atlas Sound loudspeaker system model IHVP. External mounting wings allow for easy installation into stud material. The enclosure is constructed of 18-gauge stainless steel.



Amplifiers

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Microphones (Wireless)

Portable P.A.

Soundfield

Induction Loops

- **IPS-ZC1:** Single-zone IP-Compliant System Line Level Interface
- **IPS-ZC2:** Two-zone IP-Compliant System Line Level Interface

For larger applications where installation of multiple IP Loudspeakers is both impractical or cost prohibitive.

Providing the same function and control of the standard InformaCast IP devices, the IPZ 1/2 interfaces to conventional high impedance amplification systems at line level, thus allowing IP control and messages to be broadcast over mass / multiple loudspeaker networks.

Ideal for warehouse, large zone, site wide distribution applications.

Features:

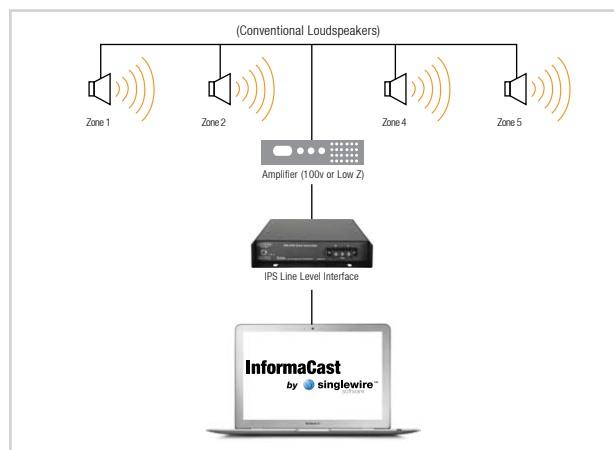
- Use with InformaCast software, Cisco POE networks & Cisco IP Telephones to create extremely versatile paging and messaging systems
- Balanced line output to drive Atlas CP, Pa or AA series amplifiers
- Modular 1RU design allows for easy rack mounting and cable access
- Systems available with single (IPS-ZC1) or dual module (IPS-ZC2) configurations



IPS-ZC1



IPS-ZC2



Specifications:

Parameter:	Specification	Conditions / Comments
Analog Output	Transformer balanced	3-Pole Terminal Block
Output Trim Range (Software Controlled)	+16 to -30 (Plus Mute)	½dB steps, gain above unity is digital, attenuation below unity is analog
Impedance	600Ω	Each leg to ground
Maximum Level	+23 (+24 Unloaded) dBu @ 1kHz, 2kΩ load	
Frequency Response	20Hz to 20kHz ± 1dB	
Dynamic Range	105dB min	A-Weighted
IM Distortion (SMPTE)	<0.01 0.01% 60Hz/7kHz, 4:1, +4dBu	
Crosstalk	100dB typ. 1kHz bandpass	
Audio Convertors	24 bit	
Audio Processing	24 bit and higher	
Propagation Delay	1.58ms min	
Ethernet	10Base-T	10 Mb/sec, RJ-45 connector
Max Cable Length	328ft / 100 meters	Standard Ethernet Cat 5 Cable Length Limits
Power Requirements	12 ~ 18v DC	Cisco IEEE 802.3AF compliant POE switches or local 12 ~ 18VDC PSU
Max Current Draw	800mA	
Construction	18 guage CRS	
Size	483(W) x 44(H) x 209(D) mm	1RU High with one or two modules installed
Weight	1.7kg	



Mixer Amplifiers	58 ~ 67
Power Amplifiers	68 ~ 70
Cat5 Distributed PA System	72 ~ 73
Low Z Multi-Channel Amplifiers	74 ~ 77
Compact Stereo Amplifiers	78 ~ 80

• PA935A: 35W Mixer Amplifier

Simple, compact mixer amplifier ideal for use in smaller installations such as waiting rooms, offices, factories, educational and retail applications.

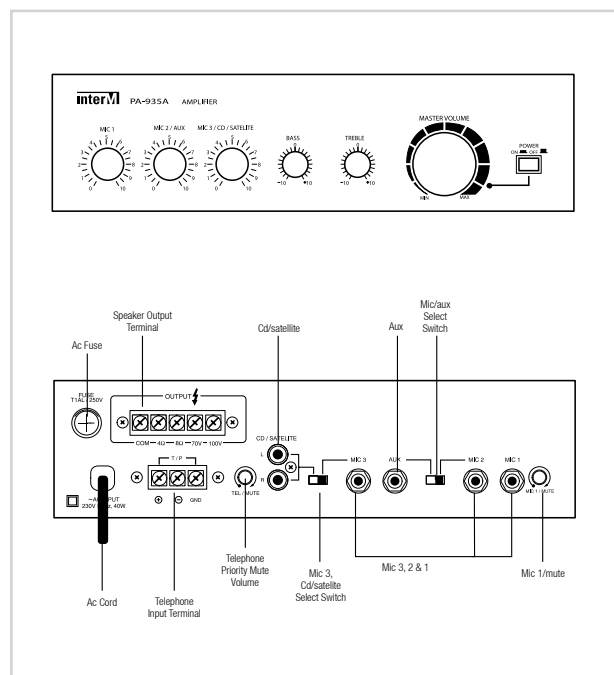
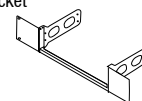
Provides clear voice and full range BGM reproduction.

Features:

- Compact design
- 1 Mic input (¼" jack)
- 2 Mic/AUX switchable (¼" jack/stereo phono)
- Priority inputs, telephone, mic 1
- Bass/treble control
- 100v/8Ω/4Ω Low Z output option
- Optional 19" rack kit (BKT-PA935A)



19" Rack Mount Bracket
Option: BKT-PA935A
Bracket



Specifications:

Model:	PA935A
Output Power	35W RMS @ 100v 35W RMS 8Ω/4Ω
Inputs	1 x Mic (¼" jack) 1 x Mic/Aux (¼" jack) 1 x Mic/Aux ~ Sat (¼" jack and stereo phono) Telephone (screw terminal)
Priority	Telephone, Mic 1
Input Sensitivity/Impedance	Mic 1,2,3 ~ -50dB/600Ω Aux ~ -15dB/10kΩ Sat ~ 0dB/10kΩ Telephone ~ 0.775v/600Ω
Frequency Response	80Hz ~ 15kHz
Power Requirement	230v AC, 50Hz
Rack Height	2U
Dimensions	290(W) x 76(H) x 185(D) mm
Weight	4.4kg

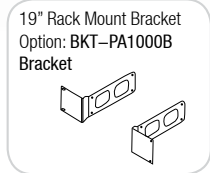
• **PA1000B: 30W Mixer Amplifier**

Simple mixer amplifier ideal for use in reception areas, waiting rooms, factories, education, AV and retail applications.

Full range frequency response makes the unit ideal for any voice or background music system.

Features:

- 2 Mic inputs (1/4" jack ~ 3 pin XLR)
- 1 AUX input (1/4" jack)
- Line in ~ line out
- Priority inputs, telephone, mic 1
- Bass and treble control
- 100v Loudspeaker output
- 4, 8Ω Low Z output option
- Remote chime option
- Optional 19" rack kit (BKT-PA1000B)
- 2U high



Amplifiers

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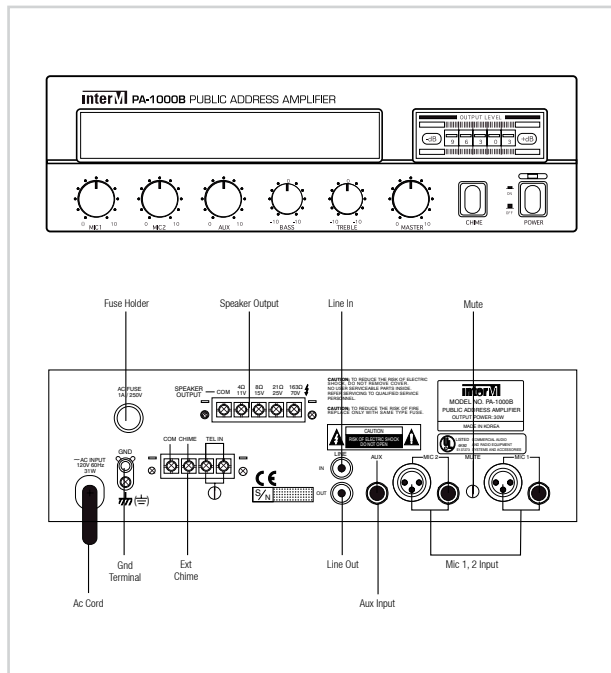
Microphones (Wired)

Microphones (Wireless)

Portable P.A.

Soundfield

Induction Loops



Specifications:

Model:	PA1000B
Output Power	30W RMS @ 100v 30W RMS 8Ω/4Ω
Inputs	1 x Mic (1/4" jack and 3 pin XLR) 1 x Aux (1/4" jack) 1 x Telephone (screw terminal)
Priority	Telephone, Mic 1
Input Sensitivity/Impedance	Mic: 1, 2 = 1/4" jack ~ 1mV/10kΩ Mic: 1, 2 = 3 pin XLR ~ F Aux ~ 100mV/10kΩ Telephone ~ 0.775V/600Ω
Frequency Response	60Hz ~ 20KHz
Line In	1V/10kΩ
Line Out	1V/600Ω
Power Requirement	230V AC, 50Hz
Rack height	2U
Dimensions	300(W) x 88(H) x 268(D) mm
Weight	4.6kg

- **A60:** 60W Mixer Amplifier
- **A120:** 120W Mixer Amplifier

This simple, economical desktop amplifier series provides a cost effective solution to basic PA and background music applications.

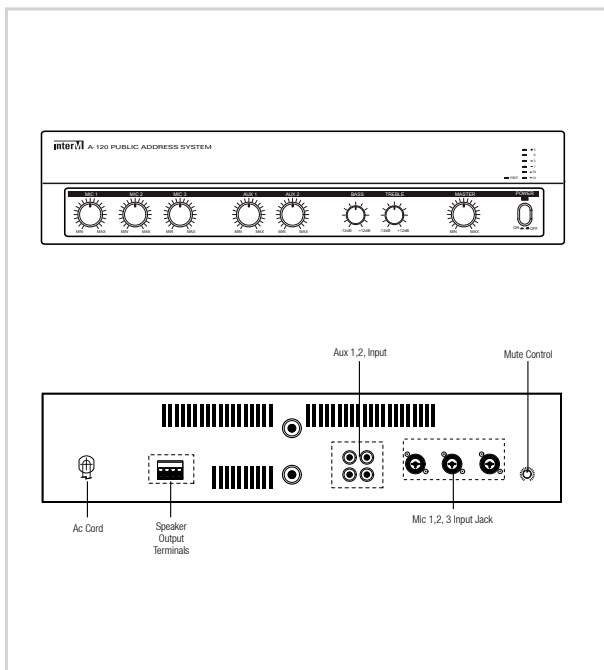
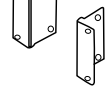
A60/A120 amplifiers are extensively used throughout the UK's leading high street and supermarket retail outlets.

Features:

- Clean, functional design
- 3 Mic inputs (combi XLR / ¼" jack)
- 2 AUX inputs (stereo phono)
- Bass and treble control
- Priority input ~ Mic 1
- Phoenix screw terminals for loudspeaker connection
- 2U high
- Optional 19" rack (BKT-A120) (Also fits A60 Amplifier)



19" Rack Mount Bracket
Option: BKT-A120
Bracket



Specifications:

Model:	A60	A120
Output Power	60W RMS @ 100v 60W RMS @ 4Ω	120W RMS @ 100v 120W RMS @ 4Ω
Inputs	3 x Mic (combi ¼" XLR) 2 x Aux (stereo phono)	3 x Mic (combi ¼" XLR) 2 x Aux (stereo phono)
Priority	Mic 1	Mic 1
Input Sensitivity/Impedance	Mic: 1,2,3 ~ -60dB/600Ω Aux: -10dB/10kΩ unbalanced	Mic: 1,2,3 ~ -60dB/600Ω Aux: -10dB/10kΩ unbalanced
Frequency Response	80Hz ~ 16kHz	80Hz ~ 16kHz
Power Requirement	230v AC 50Hz	230v AC 50Hz
Rack Height	2U	2U
Dimensions	420(W) x 88(H) x 320(D) mm	420(W) x 88(H) x 320(D) mm
Weight	8.9kg	10.3kg

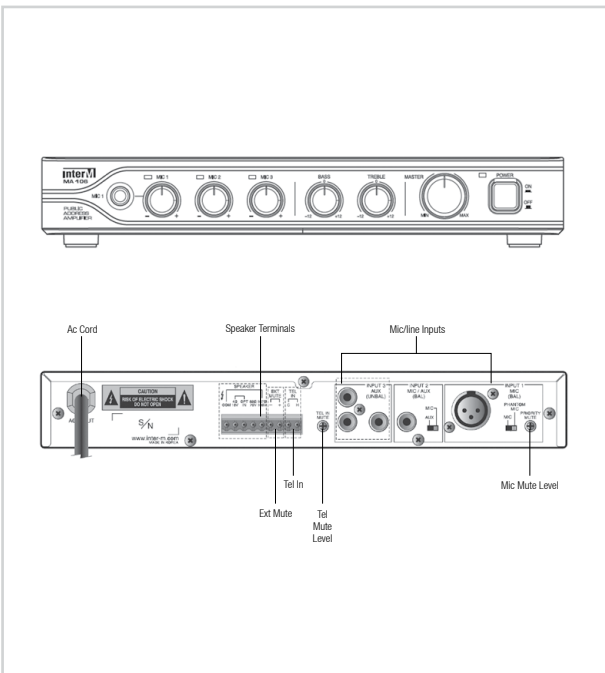
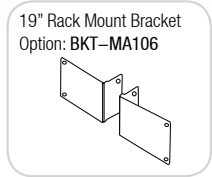
• **MA106: 60W Compact Mixer Amplifier**

Inter-M's new MA106 is a highly compact 100v line/Low Z switchable desktop amplifier for standard PA and background music applications and is ideally suited to retail installations or where space is at a premium.

Only 1U in height and just 30cm wide, this newly-styled 60W D-class amplifier provides both power output and features beyond the expectations of a unit so small.

Features:

- Highly compact, desktop unit
- Stylish new design
- Phantom Power to Mic Input 1
- Separate Bass and Treble tone controls
- 100v line/4Ω switchable
- External mute and Telephone In
- Optional 19" Rackmount Kit



Specifications:

Model:	MA106
Output Power	60W RMS @ 100v/4Ω
Inputs	1 x balanced Mic (phono/XLR) complete with optional power 1 x balanced Mic/Aux (¼" jack) 1 x unbalanced Aux (¼" jack/dual phono)
Priority	1 = Tel Input, 2 = Mic 1
Frequency Response (±3dB)	80Hz ~ 15kHz
Operating Temperature	-10°C ~ +40°C
Power Requirement	230v AC, 50 ~ 60Hz
Rack Height	1U
Dimensions	300(W) x 44(H) x 230(D) mm
Weight	2.35kg

- **MA206:** 60W Mixer Amplifier
- **MA212:** 120W Mixer Amplifier
- **MA224:** 240W Mixer Amplifier

Utilising efficient D-class amplifier technology, the latest generation of Inter-M's market-leading range of professional installation mixer amplifiers are smaller, lighter, more feature-full and have been stylishly remodelled for today's more demanding professional audio installation market.

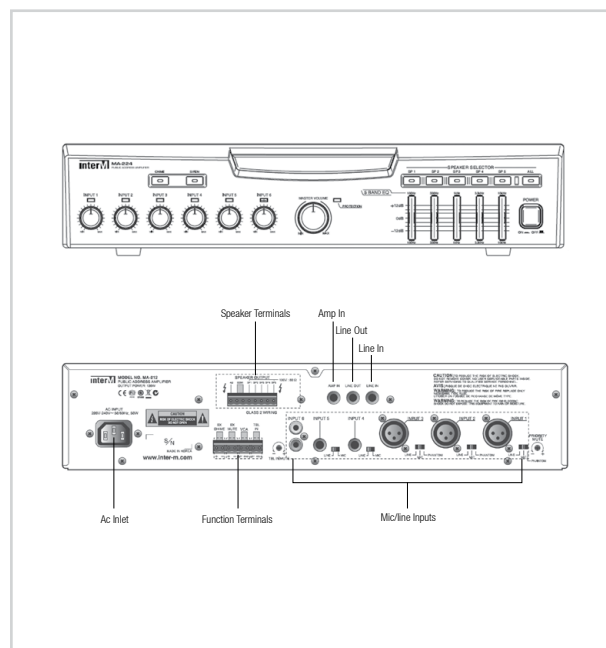
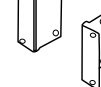
With 5 selectable speaker outputs, 6 individually-controlled mic/line inputs, 5-band equaliser and numerous other features all as standard, the new MA200 Series is ideal for user-manageable, zoned PA and background music in applications such as retail, education, corporate and church installations.

Features:

- 6 Mic/Line Inputs (3pin XLR / ¼" jack / dual phono)
- Priority Mute (Tel Input & Input 1)
- Link input (¼" jack)
- Amp In (¼" jack)
- Pre Amp Out (¼" jack)
- Chime/Siren
- External Mute (screw terminal)
- Remote Volume Control (screw terminal)
- Telephone In (screw terminal)
- Phantom Power (Inputs 1, 2 & 3)
- 'Active' LED display per input channel
- 5 Zone + All Loudspeaker Selector
- Optional 19" Rackmount Kit



19" Rack Mount Bracket
Option: BKT-A120
Bracket



Specifications:

Model:	MA206	MA212	MA224
Output Power	60W RMS @ 100v/4Ω	120W RMS @ 100v/4Ω	240W RMS @ 100v/4Ω
Inputs		3 x Mic/Line (3 pin XLR-F) 2 x Mic/Line (¼" jack) 1 x Line (dual phono) 1 x Telephone (screw terminal)	
Priority		1 = Tel Input, 2 = Mic 1	
Input Sensitivity/Impedance		Inputs: 1 ~ 5: Mic -50dBv/2kΩ, Line -10dBv/2kΩ Input 6: -10dBv/20kΩ Telephone: 0.775dBv/10kΩ	
Frequency Response (±3dB)		80Hz ~ 15KHz	
Operating Temperature		-10°C ~ +40°C	
Power Requirement		230v AC, 50Hz	
Rack Height		2U	
Dimensions		420(W) x 88(H) x 328(D) mm	
Weight	5.4kg	6.7kg	8.0kg

- **PA2000A:** 60W Mixer Amplifier
- **PA4000A:** 120W Mixer Amplifier
- **PA6000A:** 240W Mixer Amplifier

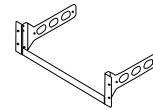
Ground-breaking amplifier series which, when released, set new standards in the industry; its outlook and host of features pushed it to the forefront of the PA, education, AV and church markets, where it remains today!

Features:

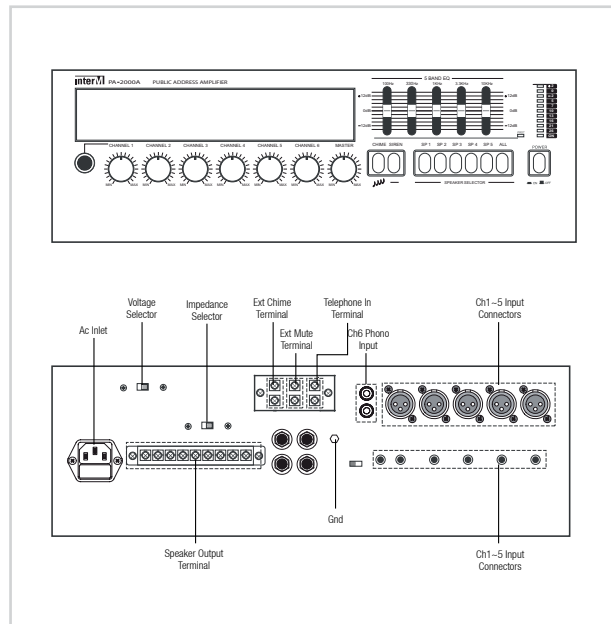
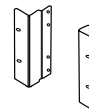
- 6 Inputs (5 x 3 pin XLR, 1 x stereo phono)
- Telephone input (screw terminals)
- Priority-telephone, mic 1, mic 2
- 5 Band graphic equaliser
- Line in
- Line out
- 5 Zone speaker selection
- Chime & Siren
- External mute terminal
- Bar graph LED output VU meter
- Optional 19" rack kits (BKT-PA2000A, BKT-PA4000A)



19" Rack Mount Bracket
Option: BKT-PA2000A



19" Rack Mount Bracket
Option: BKT-PA4000A/
PA6000A



Specifications:

Model:	PA2000A	PA4000A	PA6000A
Output Power	60W RMS @ 100v 60W RMS @ 4Ω/8Ω	120W RMS @ 100v 120W RMS @ 4Ω/8Ω	240W RMS @ 100v 240W RMS @ 4Ω/8Ω
Inputs	5 x Mic/line (3 pin XLR-F) 1 x Mic/Aux (stereo phono) 1 x Telephone (screw terminal)	5 x Mic/line (3 pin XLR-F) 1 x Mic/Aux (stereo phono) 1 x Telephone (screw terminal)	5 x Mic/line (3 pin XLR-F) 1 x Mic/Aux (stereo phono) 1 x Telephone (screw terminal)
Priority	Telephone, Mic 1, Mic 2	Telephone, Mic 1, Mic 2	Telephone, Mic 1, Mic 2
Input Sensitivity/Impedance	Inputs 1 ~ 6: 1mv / 10kΩ Telephone -2dB/600Ω	Inputs 1 ~ 6: 1mv / 10kΩ Telephone -2dB/600Ω	Inputs 1 ~ 6: 1mv / 10kΩ Telephone -2dB/600Ω
Frequency Response	60Hz ~ 20KHz	60Hz ~ 20KHz	60Hz ~ 20KHz
Link in/out	In: 0dB, 47kΩ Out: -6dB, 600Ω	In: 0dB, 47kΩ Out: -6dB, 600Ω	In: 0dB, 47kΩ Out: -6dB, 600Ω
Power Requirement	230v AC, 50Hz	230v AC, 50Hz	230v AC, 50Hz
Rack Height	2U	2U	2U
Dimensions	420(W) x 100(H) x 320(D) mm	420(W) x 133(H) x 320(D) mm	420(W) x 133(H) x 320(D) mm
Weight	10kg	12kg	13.5kg

• PAM120A: 120W Modular Mixer Amplifier

Best selling mixer amplifier providing a versatile and flexible solution for many applications including AV, church and high end retail installations.

Optional music modules add to the outstanding features of this market-leading product (see page 66 for details).

Features:

- 6 Mic/line inputs (3 Pin XLR)
- 2 Module option slots
- Link input (1/4" jack)
- Amp in (1/4" jack)
- Pre amp out (1/4" jack)
- External chime (screw terminal)
- External mute (screw terminal)
- Individual EQ per input channel
- Individual phantom power (per mic input)
- Priority mic 1, mic 2 (switchable)
- 5 Zone loudspeaker selector
- Bar graph VU metre
- 230v AC/24v DC powered
- Optional 19" rack kit (BKT-PAM)
- 3U high



CD/USB/MP3 Player and Tuner Module:
PAM-MPM4



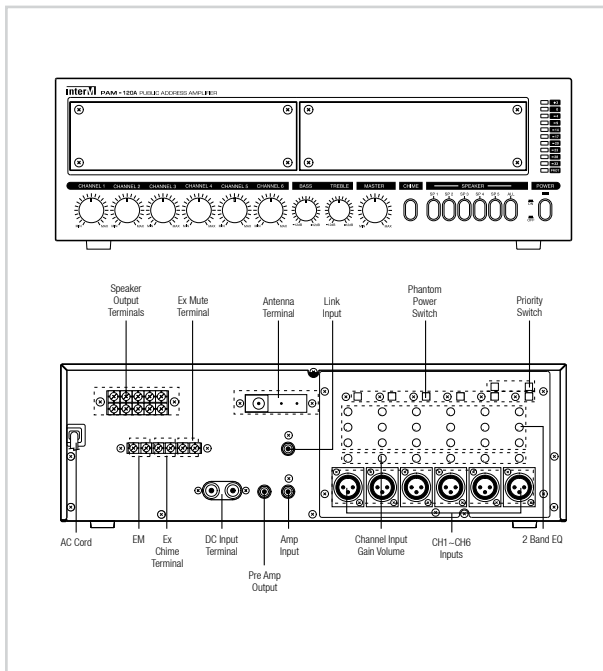
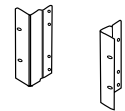
CD Player: PAM-CDM



Tuner: PAM-T



19" Rack Mount Bracket Option: BKT-PAM Bracket



Specifications:

Model:	PAM120A
Output Power	120W RMS @ 100v 120W RMS @ 4Ω
Inputs	6 x Mic/line (3 pin XLR)
Priority	Mic 1, Mic 2
Phantom Power	22v DC individually switched per input
Input Sensitivity/Impedance	Inputs: 1 ~ 6 -60dB ~ 16dB 1mV/10kΩ
Frequency Response	80Hz ~ 20kHz
Link In	100mV/10kΩ
Amp In	1V/600Ω
Power Requirement	230v AC, 50Hz, 24v DC
Rack Height	3U
Dimensions	420(W) x 132(H) x 360(D) mm
Weight	13kg

- **PAM340A:** 340W Modular Mixer Amplifier
- **PAM480A:** 480W Modular Mixer Amplifier

Larger power/output versions of the PAM120A, however with a number of subtle differences;


No 24v DC power option, no low impedance 4Ω loudspeaker option, but with the addition of a multi-zone paging mic interface allowing simple 5 zone paging using optional RM-05A (see page 66 for details).

Features:


- 6 Mic/line inputs (3 pin XLR)
- 2 Module option slots
- Link input (1/4" jack)
- Amp input (1/4" jack)
- Pre amp out (1/4" jack)
- External chime (screw terminal)
- Zone mic interface (15 pin D-type)
- External mute (screw terminal)
- Individual EQ per input channel
- Individual phantom power (per mic input)
- Priority mic 1, mic 2 (switchable)
- 5 Zone loudspeaker selector
- Bar graph VU metre
- Optional 19" rack kit (BKT-PAM)
- 3U high




CD/USB/MP3 Player and Tuner Module:
PAM-MPM4




CD Player: **PAM-CDA**



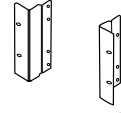
Tuner: **PAM-T**

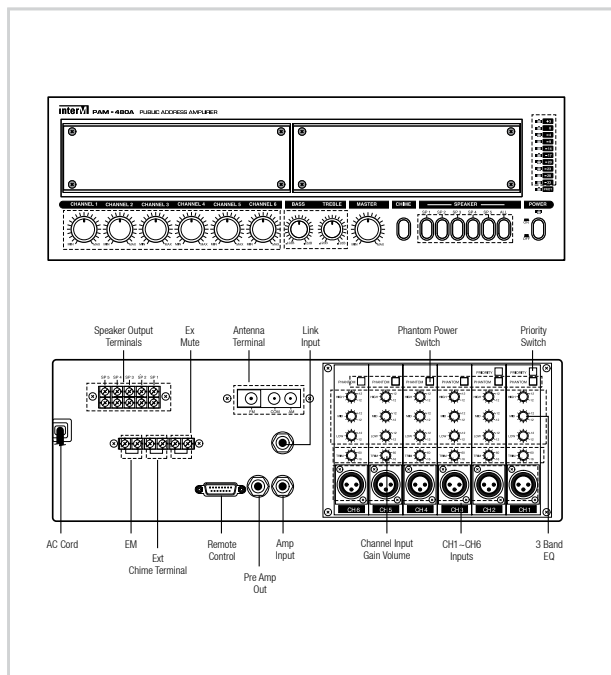


RM-05A



19" Rack Mount Bracket Option: **BKT-PAM Bracket**





Specifications:

Model:	PAM340A	PAM480A
Output Power	340W RMS @ 100v	480W RMS @ 100v
Inputs	6 x Mic/Line (3 pin XLR)	6 x Mic/Line (3 pin XLR)
Priority	Mic 1, Mic 2	Mic 1, Mic 2
Phantom Power	22v DC individually switched per input channel	22v DC individually switched per input channel
Input Sensitivity/Impedance	Inputs: 1 ~ 6 -60dB ~ -16dB 1mw/10kΩ	Inputs: 1 ~ 6 -60dB ~ -16dB 1mw/10kΩ
Frequency Response	80Hz ~ 20kHz	80Hz ~ 20kHz
Power Requirement	230v AC 50Hz	230v AC 50Hz
Rack Height	3U	3U
Dimensions	420(W) x 132(H) x 360(D) mm	420(W) x 132(H) x 360(D) mm
Weight	13.5kg	15.5kg



• PAM-MPM4: CD/USB/MP3 Player and Tuner Module for PAM Series

Features:

- CD/USB/DRP (Digital Record and Playback : SD Memory)
- CD+USB, DRP (SD Memory) Portable FM Tuner
- CD Long-Life Function
- CD Copy Function (CD → USB or DRP)
- USB Hosting Function (USB ↔ DRP)
- FM 30 Memories



• PAM-CDM: CD/MP3 Player Module for PAM Series

Features:

- Single Compact Disc Player
- Random play function, music scan, time counter, repeat, forward track, reverse track, music search, play and pause
- CD-DA / CD-R / CD-RW / MP3 / WMA Player



• PAM-T: Tuner Module for PAM Series

Features:

- AM/FM Digital Tuner with 30 station memory
- It is recommended that an external antenna is fitted for optimum performance



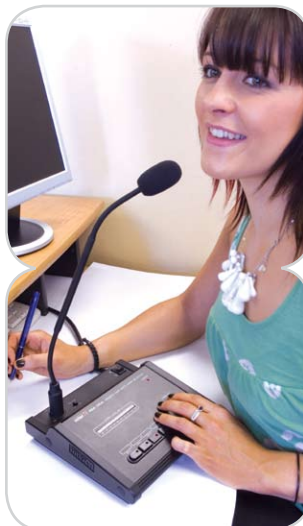
• RM-05A: Remote 5 Zone Microphone

The RM-05A operates exclusively with the PAM-340A/480A and PCT-610/620 amplifiers and provides the facility of a simple 'one cable' multi-zone solution. The paging unit also includes output level LED VU metre, gain/level control and chime facility.

Power is provided by the host amplifier.

Features:

- Individual channel selection or all-call
- Flexible condenser-type gooseneck microphone
- Pre-announcement chime
- LED output level indicator



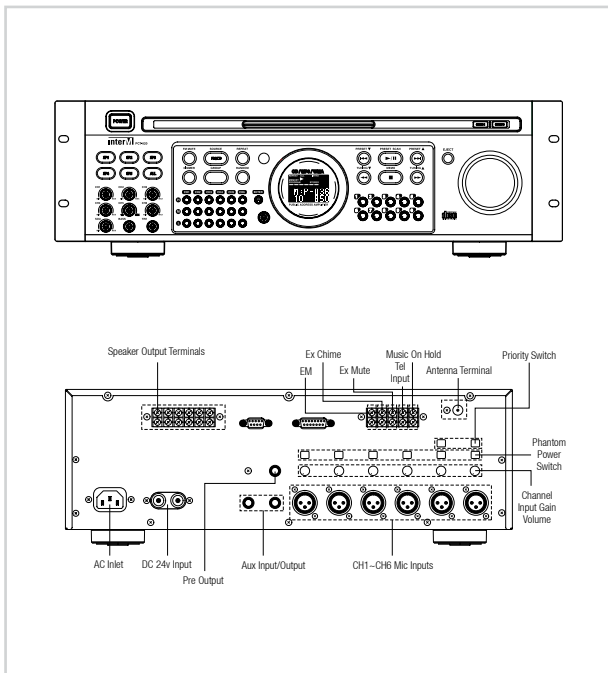
- **PCT-610: 120W Integrated Mixer Amplifier**
- **PCT-620: 240W Integrated Mixer Amplifier**

Fully integrated mixer amplifiers incorporating mic/line inputs with in-built Tuner and CD music sources.

With a whole host of functions, the PCT Series is ideal for high specification PA systems, church and AV applications using the RS232 control option for remote access and control.

Features:

- 120/240W Output
- 6 Inputs (Mic/Line XLR)
- Individual phantom power per input
- Priority mic 1, mic 2
- Telephone input (screw terminals)
- External mute (screw terminals)
- External chime (screw terminals)
- RM-05A Mic input (D-type) (see page 66 for details)
- RS232 Control (D-type)
- 230v AC/24v DC powered
- Aux in/out (1/4" jack)
- In-built CD and tuner music sources
- IR Remote control (optional)
- 3U high, 19" rack mounting



Specifications:

Model:	PCT-610	PCT-620
Output Power	120W RMS @ 100v	240W RMS @ 100v
Inputs	6 x Mic/Line Selectable (3 pin XLR)	6 x Mic/Line Selectable (3 pin XLR)
Priority	Mic 1, Mic 2, Chime, EM, Telephone Input	Mic 1, Mic 2, Chime, EM, Telephone Input
Phantom Power	Individually switched per input	Individually switched per input
Input Sensitivity/Impedance	Inputs 1-6 -60dB--16dB 1mv/10kΩ	Inputs 1-6 -60dB--16dB 1mv/10kΩ
Frequency Response	80Hz ~ 20kHz	80Hz ~ 20kHz
Link In	100mv/10kΩ	100mv/10kΩ
Amp In	1v, 47kΩ	1v, 47kΩ
Pre Amp Out	1v, 600Ω	1v, 600Ω
Power Requirement	230v AC, 50Hz, 24v DC	230v AC, 50Hz, 24v DC
Rack Height	3U	3U
Dimensions	482(W) x 132(H) x 380(D) mm	482(W) x 132(H) x 380(D) mm
Weight	8.5kg	9.5kg

- **PA9312:** 120W Power Amplifier
- **PA9336:** 360W Power Amplifier
- **PA9348:** 480W Power Amplifier

For installations which require pure power, the Inter-M PA9000 Series of power amplifiers are reliable, robust work horses.

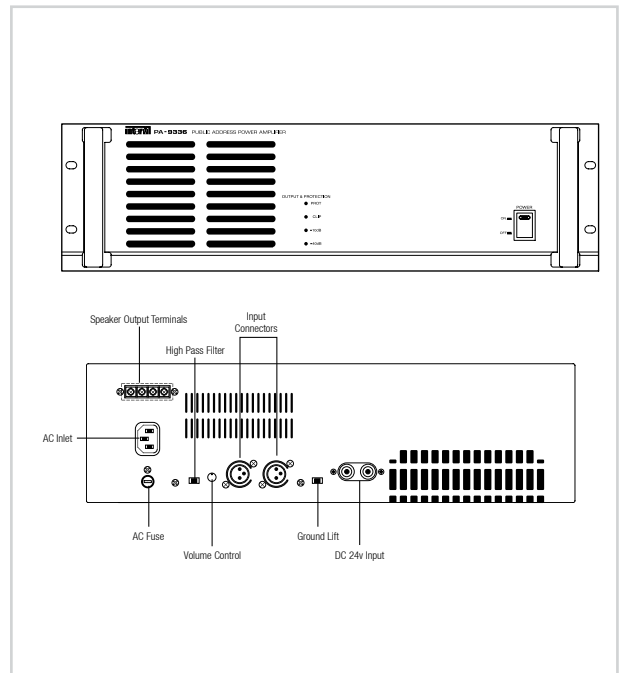
Units can be mains or DC powered so can easily operate in a critical system or in event/hire applications using battery power.

Connections and controls are rear panel mounted to deter tampering or accidental adjustment.

Features:

- 120W/360W/480W Output power (100v and 4Ω*/ 8Ω)
- Audio/line in - (3 pin XLR)
- Audio/line out - (3 pin XLR)
- Input level control (on rear)
- Ground lift and HPF switches
- Fan cooled
- Thermal protection circuit
- DC power terminals
- 3U high, 19" rack mounting

* PA9312 only has 4Ω low Z output.
PA9336 / PA9348 have 4Ω and 8Ω options.



Specifications:

Model:	PA9312	PA9336	PA9348
Output Power	120W RMS @ 100v and 4Ω	360W RMS @ 100v and 4, 8Ω	480W RMS @ 100v and 4, 8Ω
Input Sensitivity/Impedance	1v/10kΩ	1v/10kΩ	1v/10kΩ
Output Sensitivity/Impedance	1v/10kΩ	1v/10kΩ	1v/10kΩ
Frequency Response	70Hz ~ 18kHz	70Hz ~ 18kHz	70Hz ~ 18kHz
Power Requirement	230v AC, 50Hz, 24v DC	230v AC, 50Hz, 24v DC	230v AC, 50Hz, 24v DC
Rack Height	3U	3U	3U
Dimensions	482(W) x 132(H) x 280(D) mm	482(W) x 132(H) x 280(D) mm	482(W) x 132(H) x 280(D) mm
Weight	14kg	21kg	22kg

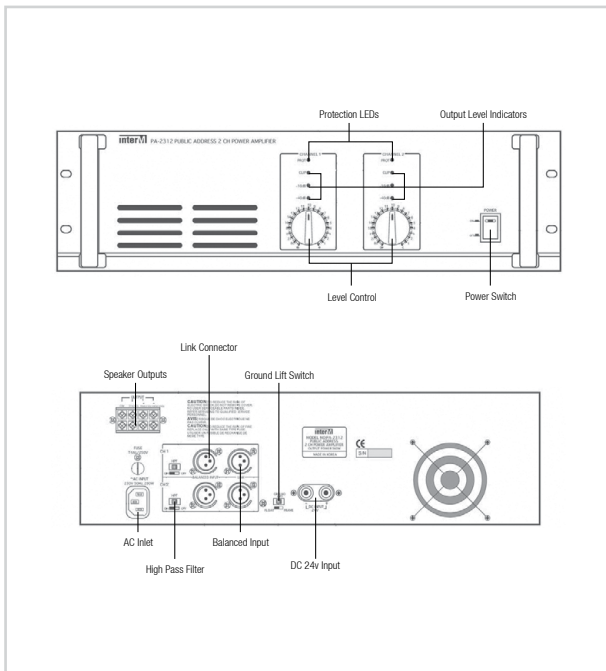
• **PA2312: 2 x 120W Dual Channel Power Amplifier**

A reliable dual-channel 100v line power amplifier for PA systems requiring 2 zones, or for space-saving integration into multi-zone rack builds.

The PA2312 can be mains or DC powered and will also operate, therefore, in critical system or portable event/hire applications using battery power.

Features:

- 2 x independent 120W output power
- 2 x XLR Balanced inputs
- 2 x Link outputs
- Thermal protection circuit
- High pass filter
- Fan cooled
- Ground lift switch
- 230v AC/24v DC powered
- 3U high, 19" rack mounting



Specifications:

Model:	PA2312:
Output Power (THD 1%)	2 x 120W, 100v/28Ω
Frequency Response (+1/-3dB)	70Hz ~ 18kHz
THD at 1KHz Rated Output	Less than 1%
HPF	6dB/Oct at 400Hz
Signal to Noise Ratio	Better than 95dB
Input Sensitivity/Impedance	1v/10kΩ Balanced
Power Source	230v AC, 24v DC, 50Hz
Pack Height	3U
Dimensions	482(W) x 132(H) x 280(D) mm
Weight	20kg



Need help choosing the right product?
Call our technical support team now on:

Tel. +44(0)115 977 0075

• DPA-430H: 4 Channel 100v Line Power Amplifier (4 x 300W)

An ideal 100v line installation amplifier for applications where space is at a premium and for systems with multiple zones or requiring individual level control of each loudspeaker group.

The DPA-430H can operate as 4 individual channels or 2 x bridged channel amplifiers.

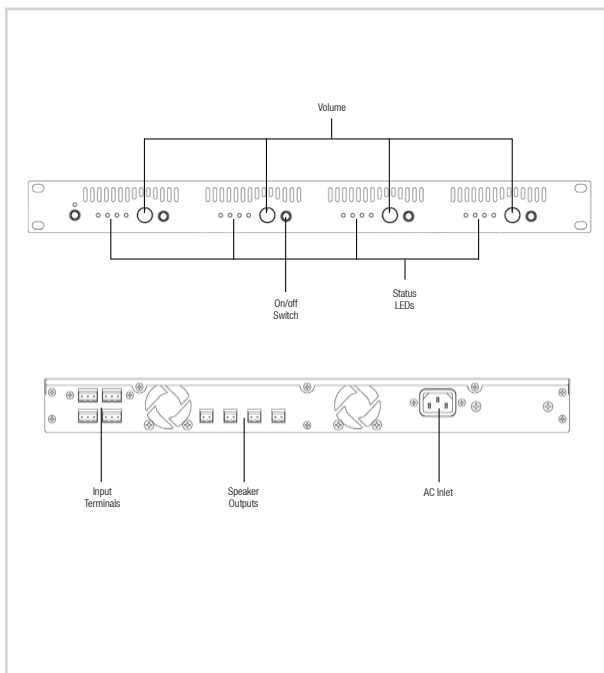
Featuring thermal, DC and overdrive protection, this powerful 4 x 300W amplifier is contained in a highly compact 1U 19" rack mounting enclosure.

Features:

- 4 x independent 300W output power
- 4 x Balanced inputs on phoenix connectors
- Thermal protection circuit
- High pass filter
- Fan cooled
- Individual volume and trim (internal) control per channel
- 1U high, 19" rack mounting



Ideal for use in conjunction with PX8000 Audio Matrix (see page 85)



Specifications:

Model:	DPA-430H:
Inputs	300W x 4 channels
Output Voltage/Impedance	100v/33.3Ω
T.H.D (AES17)	
- Prated (300W, 1kHz)	Less than 0.1%
- 1/3 Prated (100W, 1kHz)	Less than 0.03%
High Frequency Response (+1, -3dB)	More than 20kHz
High Frequency Response	- High Pass Filter Off (-3dB ±2dB): 65Hz - High Pass Filter On (-3dB ±2dB): 400Hz
S/N (20kHz LPF, A-WTD)	Better than 100dB
Input Sensitivity/Impedance	1v/10kΩ Balanced
Operating Temperature	-10° ~ +40°C
Power Source	220 ~ 240v AC, 50/60Hz
Power Consumption	250W
Rack Height	1U
Dimensions	482(W) x 44(H) x 420(D) mm
Weight	9.6kg

Nottingham Magistrates' Court

Sited in the stylish canalside area of the City, the elegant yet imposing Nottingham Magistrates' Court features full PA and voice evacuation systems utilising the best of the Inter-M PA product range.

The suite of audio racks were designed and built entirely by CIE-Group's technical services team; ready to deliver to site for an almost 'plug-and-play' result. The system also features i-ceilings Sound Panels and Amina bespoke-built loudspeakers throughout.



• Inter-M IPC System

'One of the most advanced, user-friendly paging and BGM systems that has ever been made to a realistic budget...'

Ideal for campus environments, the digital IPC System from Inter-M provides a highly functional, fully flexible, programmable means of broadcasting paging announcements, messages, class change and media files over a multi-zone site.

The IPC can be configured to operate as a standard centralised system, with all areas/zones wired back to a single point/location. However, the IPC comes into its own when installed as a distributed or de-centralised system, improving flexibility and reducing expensive wiring costs.

Features:

- Cat-X wiring structure
- 8 channel Matrix
- Easy to use Touch Screen Interface
- Up to 128 independent zone capability
- Fully programmable
- In-built Digital File Player and Scheduler
- Compact Multi-channel Digital Amplifiers
- Optional Remote Console options
- Stable, embedded Windows-XP platform
- Remote control, broadcasting & monitoring via standard Ethernet network

• SI-100: System Integration Main Controller

- 8 x MIC/Line Inputs
- Linkable with SR-100 Remote MIC Station (up to 8 x SR-100 Connections)
- USB Port built-in for external memory interface
- 16 x Contact input circuits for emergency broadcasting
- Audio matrix function
- AMX/Creston port for external source equipment (CD/Tuner, etc) control
- Weekly program timer/scheduler function



• SM-100: System Monitor

- 15" LCD and Touch Screen Monitor Panel
- Emergency MIC on front panel with cover
- Built-in Loudspeaker for monitoring input source and output signals to zones



Specifications:

Model:	SI-100:
Input Sensitivity ($\pm 3\text{dB}$)	BGM XLR MIC: $-50\text{dB}/600\Omega$ BGM Phone MIC: $-20\text{dB}/20\text{k}\Omega$
Frequency Response	100Hz~15kHz
T.H.D	1.0%
S/N (20kHz LPF, BGM XLR MIC AUX, CD/MP3/AC97)	65dB
BGM AUX	$-10\text{dB}/20\text{k}\Omega$
CDP/MP3/AC97	0dB/10k Ω

Specifications:

Model:	SP-100:
Link Input	Load Output: @1kHz, 166.7 Ω
Rated Power (THD $\leq 1\%$, 20kHz LPF)	60W
Input Level	0dBv
S/N (20kHz LPF, A-WTD)	More than 80dB
Frequency Response ($\pm 3\text{dB}$)	100Hz ~ 15kHz

Model:	SR-100:
Input sensitivity/Impedance (MIC)	$-60\text{dB}/\text{Balanced Input}$
T.H.D(20kHz LPF, MIC)	0.5%
S/N(20kHz LPF, MIC)	50dB
Frequency Response (MIC)	300Hz~10kHz

• **SP-100: 60W System Digital Amplifier**

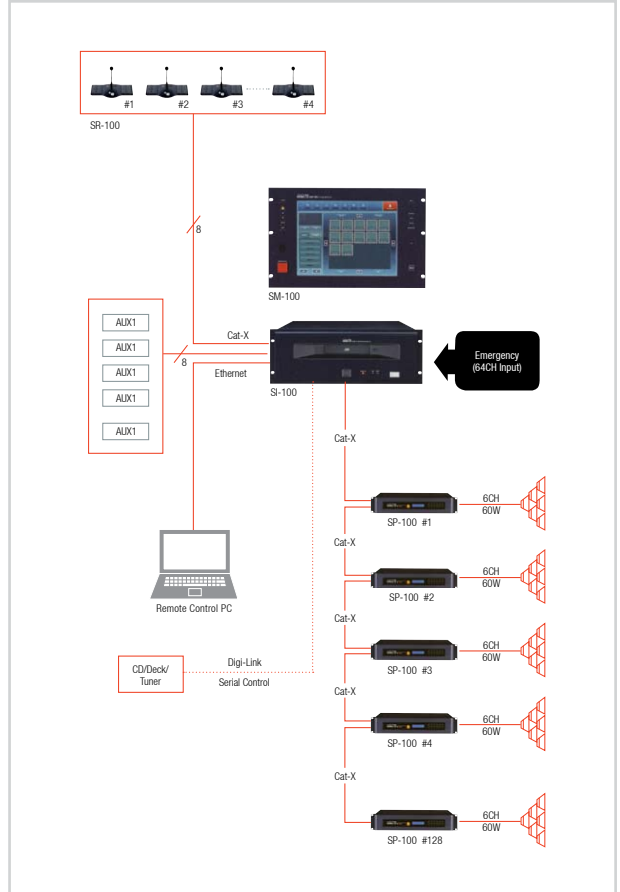
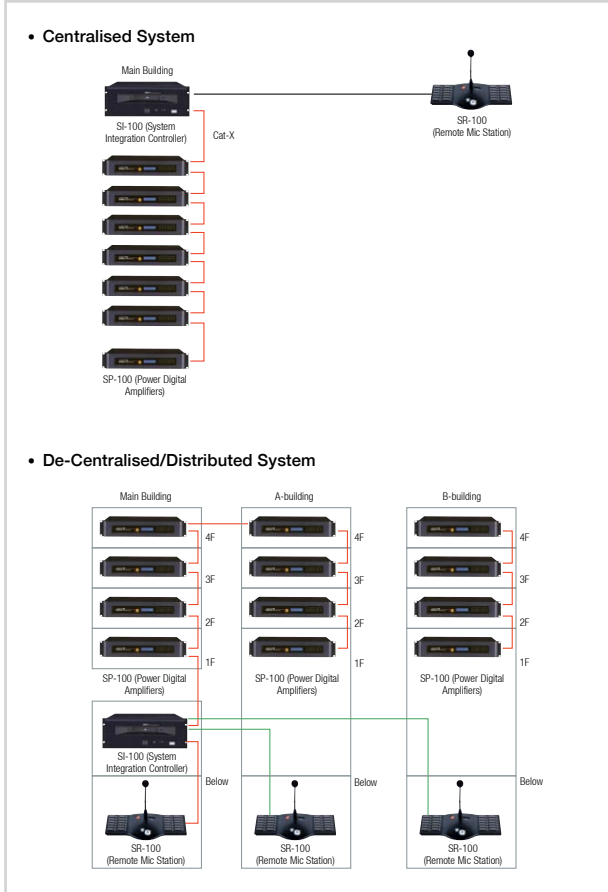
- 6 channel digital amplifier
- 6-bus broadcasting available via Cat5e connection
- Volume Control per channel and 5 band EQ
- Local input facility (Mic in or Aux in)
- AUTO/Manual I.D. allocation
- Interface with other units using control input and control output contacts



• **SR-100: System Remote Mic Station**

• **SR-100KP: 12-Key Mic Station Keypad**

- MIC/AUX/Speaker volume adjustable
- Simple interface via Cat-X connection
- One-touch broadcasting function using the [TALK] button
- Internal loudspeaker for BGM/Zone monitoring
- Expansion of zones using SR-100KP Expansion Keypad



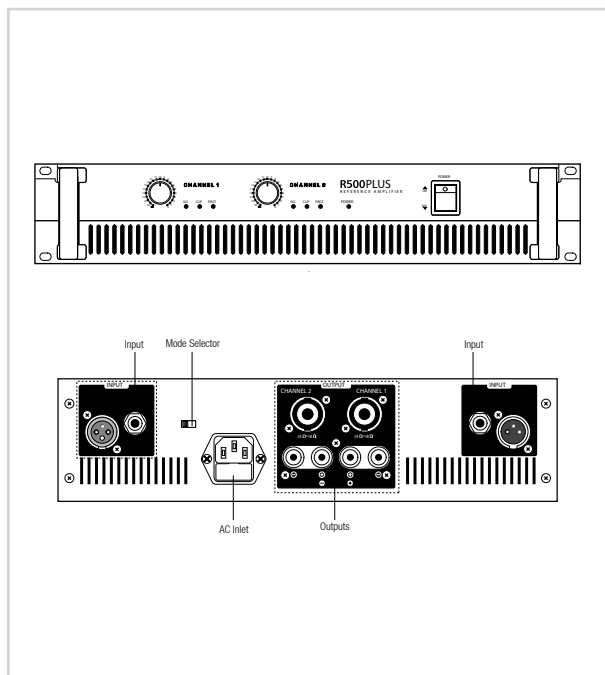
- **R150 PLUS:** 2 x 75W Stereo Reference Amplifier
- **R300 PLUS:** 2 x 150W Stereo Reference Amplifier
- **R500 PLUS:** 2 x 250W Stereo Reference Amplifier

A series of 2 channel, convection-cooled (no fans) low impedance amplifiers.

The units are ideal for 'silent' systems in church, audio visual and recording studios, etc. Simple controls and visual clip/signal/protection LEDs complete a versatile, cost effective package.

Features:

- Convection cooled
- Stereo operation (4/8Ω)
- Bridged mono operation (8Ω)
- Inputs (XLR~¼" jack)
- Outputs (speakon~binding posts)
- Mains powered
- 2U high, 19" rack mounting



Specifications:

Model:	R150 PLUS	R300 PLUS	R500 PLUS
Output Power/Per Channel	50W @ 8Ω, 75W @ 4Ω	100W @ 8Ω, 150W @ 4Ω	160W @ 8Ω, 250W @ 4Ω
Output Power/Bridged Mono	150W @ 8Ω	300W @ 8Ω	500W @ 8Ω
Input/Sensitivity	0dB/0.775mv	0dB/0.775mv	0dB/0.775mv
Frequency Response	20Hz ~ 20kHz	20Hz ~ 20kHz	20Hz ~ 20kHz
Power Requirement	230v AC, 50Hz	230v AC, 50Hz	230v AC, 50Hz
Rack Height	2U	2U	2U
Dimensions	482(W) x 88(H) x 317(D) mm	482(W) x 88(H) x 317(D) mm	482(W) x 88(H) x 317(D) mm
Weight	7.2kg	8.4kg	10.4kg

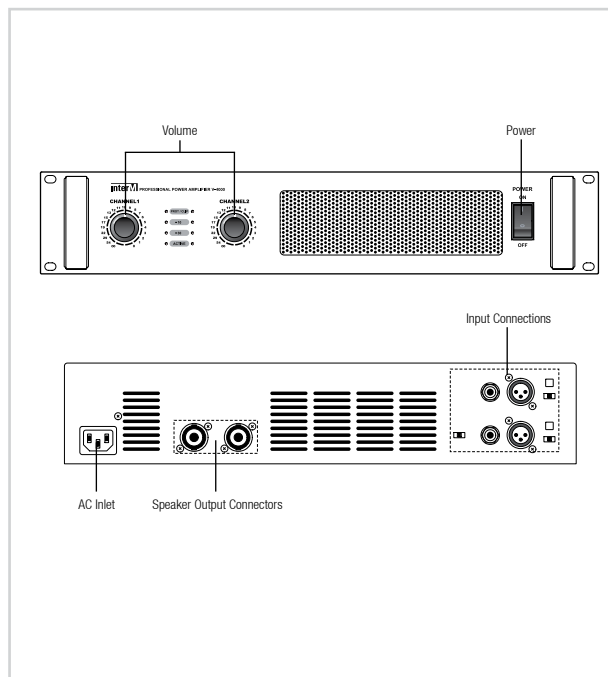
- **V1000:** 2 x 340W Professional Low Z Amplifier
- **V2000:** 2 x 550W Professional Low Z Amplifier
- **V3000:** 2 x 1000W Professional Low Z Amplifier
- **V4000:** 2 x 1300W Professional Low Z Amplifier

High quality professional power amplifiers ideal for most low impedance systems and applications.

Combining compact size with power and flexibility, the V Series will operate down to 2Ω, and is further enhanced with comprehensive protection circuits for over-driving, DC and short circuit, as well as variable fan cooling.

Features:

- Variable fan cooling
- Comprehensive protection circuits
- Low impedance output (2/4/8Ω)
- Bridge mono option
- Balanced inputs (XLR-¼" jack)
- Outputs (speakon-binding post)
- Mains powered
- 2U high, 19" rack mounting



Specifications:

Model:	V1000	V2000	V3000	V4000
Continuous average output power per channel	180W	300W	550W	750W
STEREO mode (1kHz, both channels driven)	4Ω: 340W 2Ω: 600W	550W 900W	1000W 1650W	1300W 2100W
Bridged Mono Mode	(THD 0.1%) 8Ω: 700W (THD 0.5%) 4Ω: 1200W	1100W 1900W	2000W 3300W	2600W 4200W
Input Sensitivity (Rated output power @ 4Ω)	1v	1v	0.94v	1.04v
Frequency Response (1W @ 8Ω)	20Hz ~ 20kHz: ±0.3dB	20Hz ~ 20kHz: ±0.3dB	20Hz ~ 20kHz: ±0.3dB	20Hz ~ 20kHz: ±0.3dB
Signal to Noise Ratio (Rated output power 8Ω)	107dB	107dB	105dB	106dB
Input Impedance	12kΩ Balanced	12kΩ Balanced	12kΩ Balanced	12kΩ Balanced
Indicators	Active, Clip/Port	Active, Clip/Port	Active, Clip/Port	Active, Clip/Port
Protection Circuitry	Full Short Circuit, Thermal Protection, Power ON/OFF Muting, DC Output Protection	Full Short Circuit, Thermal Protection, Power ON/OFF Muting, DC Output Protection	Full Short Circuit, Thermal Protection, Power ON/OFF Muting, DC Output Protection	Full Short Circuit, Thermal Protection, Power ON/OFF Muting, DC Output Protection
Cooling	Variable Speed Fans, front to rear air flow	Variable Speed Fans, front to rear air flow	Variable Speed Fans, front to rear air flow	Variable Speed Fans, front to rear air flow
Power Source	230v AC, 50Hz	230v AC, 50Hz	230v AC, 50Hz	230v AC, 50Hz
Rack Height	2U	2U	2U	2U
Dimensions	482(W) x 88(H) x 407(D) mm	482(W) x 88(H) x 407(D) mm	482(W) x 88(H) x 407(D) mm	482(W) x 88(H) x 407(D) mm
Weight	10.3kg	10.5kg	11.7kg	11.8kg

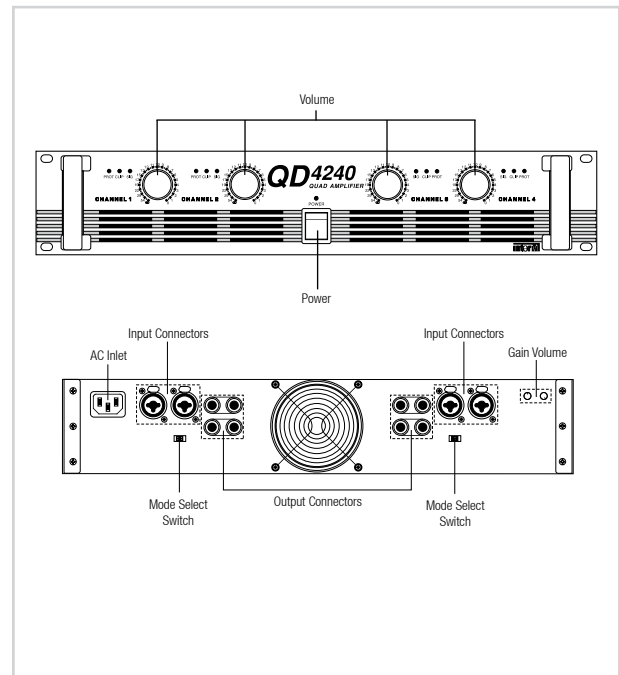
- **QD-4240:** 4 Channel Low Z Amplifier (4 x 60W)
- **QD-4480:** 4 Channel Low Z Amplifier (4 x 120W)
- **QD-4960:** 4 Channel Low Z Amplifier (4 x 240W)

Ideal products if space is a premium, or if the system requires multiple zones or individual control of loudspeakers. Units can operate as 4 individual channels or as 2 stereo (2 channel) amplifiers.

Features include delayed switch-on function, protection circuits for overdrive, overheating and DC detection, as well as variable speed fan cooling, all in a compact 2U enclosure.

Features:

- 8Ω or 4Ω low impedance
- Fan cooled (variable speed)
- Inputs (XLR-¼" jack)
- Outputs (Binding post)
- LED indicators for clip/protection/signal
- Mains powered
- 2U high, 19" rack mounting
- 100v via optional OT Series Transformer Converters



Specifications:

Model:	QD-4240	QD-4480	QD-4960
Output Power Per Channel	40W @ 8Ω, 60W @ 4Ω	80W @ 8Ω, 120W @ 4Ω	170W @ 8Ω, 240W @ 4Ω
Output Power Bridged Mono	120W @ 8 Ω	240W @ 8Ω	480W @ 8Ω
Input/Sensitivity	0dBm/20kΩ Balanced	0dBm/20kΩ Balanced	0dBm/20kΩ Balanced
Frequency Response	20Hz ~ 50kHz	20Hz ~ 50kHz	20Hz ~ 50kHz
Power Requirement	230v AC, 50Hz	230v AC, 50Hz	230v AC, 50Hz
Rack Height	2U	2U	2U
Dimensions	482(W) x 88(H) x 369(D) mm	482(W) x 88(H) x 369(D) mm	482(W) x 88(H) x 369(D) mm
Weight	11.5kg	15.5kg	17kg

- **OT-4240:** Transformer Converter for QD-4240 Amplifier
- **OT-4480:** Transformer Converter for QD-4480 Amplifier
- **OT-4960:** Transformer Converter for QD-4960 Amplifier



Amplifiers

Audio Signal Processing

Audio Signal Generation

Audio System Tools

Microphones (Wired)

Microphones (Wireless)

Portable P.A.

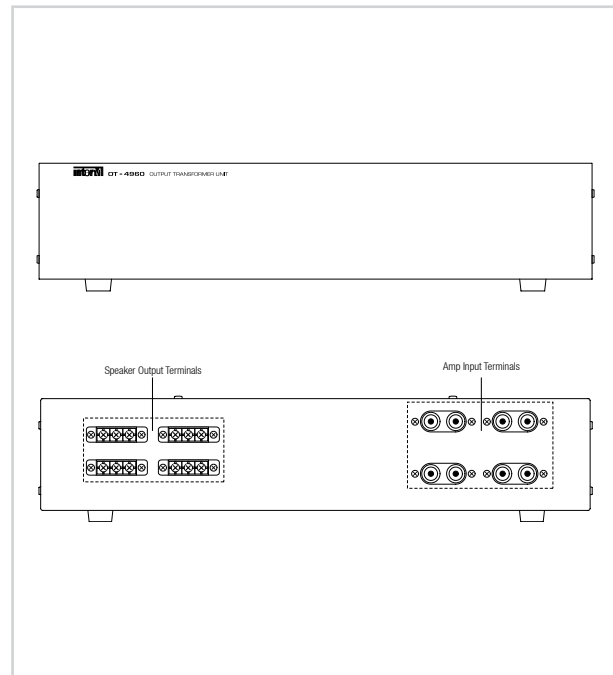
Soundfield

Induction Loops

Useful accessory for converting the 4 channel QD Series to power 100v line loudspeakers, offering space-saving benefits for amplifier systems with multiple loudspeakers or zones with small quantities of speakers.

Features:

- 4 x 100v Transformers
- Inputs (binding posts)
- Outputs (screw terminals)
- 2U high, rack mounting



Specifications:

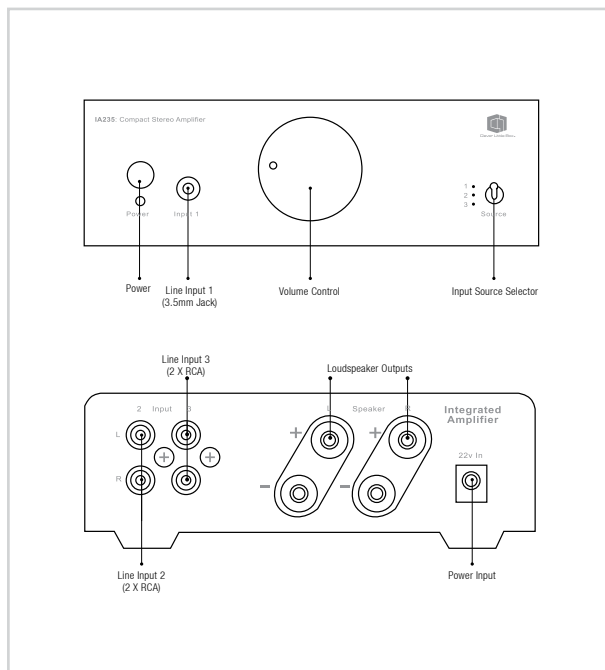
Model:	OT-4240	OT-4480	OT-4960
Output Power/Per Channel	60W 100v / 166.7Ω	120W 100v / 83.3Ω	240W 100v / 41.6Ω
Input Power/Impedance	60W @ 4Ω	120W @ 4Ω	240W @ 4Ω
Dimensions	482(W) x 88(H) x 310(D) mm	482(W) x 88(H) x 310(D) mm	482(W) x 132(H) x 310(D) mm
Weight	11.5kg	14.5kg	21.5kg

• IA235: 2 x 35W Compact Stereo Amplifier

New to the Clever Little Box range, this stylish, ultra-compact 35W stereo amplifier is ideal for AV sound reinforcement applications such as boardrooms, classrooms and training/presentation suites.

Features:

- 2 x 35W Low Z outputs @ 4Ω
- Stylish, ultra-compact housing for stand-alone or AV cabinet/PC tower integration
- 3 x Input sources;
 - Front - 3.5mm stereo jack
 - Rear - 2 x dual phonos
- Input source selection switch on front facia



Specifications:

Model:	IA235
Output Power	2 x 35W RMS @ 4Ω
Line Inputs	Stereo 3.5mm jack 2 x Dual Phonos
Frequency Response	20Hz – 20kHz
Input Sensitivity	220mv (±20)
Dimensions	140(W) x 48(H) x 160(D) mm

AVID: In-wall Amplifier System

Stylish, but discreet 2 x 12W stereo amplifier for wall or dado conduit mounting. An ideal solution for AV and single-room voice or sound reinforcement applications.

Features:

- Stereo amplifier fitted to UK 2-gang Wallplate
- New higher power 2 x 12W output (RMS)
- 3 x Input Sources; Stereo Phono, 3.5mm Stereo Jack (Jack has priority) and Wired Input Terminal (on rear PCB)
- Line Level Sensitivity Switch
- Control of ON/OFF and volume via illuminated push buttons located on the front panel
- Infrared remote control of ON/OFF, volume, balance and tone facilities (supplied as standard)
- Clear LED level indicator / setting status display
- Screw terminations on the rear of the unit for loudspeakers, power and wired line input
- Separate loudspeaker balance adjustment to allow system set up (control located on rear of unit)
- Includes Plugtop Power Supply
- Also includes Wallmounted Bracket for remote control



Systems also feature:
IR Remote Control



Systems also feature:
Remote Wall Bracket



Available Accessories:
AVID S BOX Surface-mount BackBox



Available Accessories:
AVID IL 2xRCA~3.5mm Stereo Lead (1.5m)



Also available as complete systems:



- **AVID SYSTEM W:** Featuring 2 x 15W, 8Ω wallmount loudspeakers.



- **AVID SYSTEM C:** Featuring 2 x 6W, 8Ω ceiling loudspeakers.

Specifications:

Model:	AVID
Output Power	2 x 12W RMS @ 8Ω
Line Inputs	Stereo Phonos (L & R) Stereo 3.5mm Jack (priority) Screw Terminal (Rear PCB in parallel with 3.5mm Jack Input)
Frequency Response	40Hz ~ 20KHz
Input Sensitivity	200mv/1v
Power Requirements	24v DC, 1.25A
Dimensions	165(W) x 100(H) x 35(D) mm
Weight	0.26kg

• CA9.2: Compact 12W Stereo Power Amplifier

This compact, lightweight but robust stereo amplifier is an ideal 'component' unit for machines requiring high quality sound reinforcement.

Features:

- Ideal for use in gaming, vending and gambling machines
- Switchable high pass/low pass/full range
- Stereo input via phono sockets
- Optional 230v power supply available
- Supplied with 12v power lead and speaker leads, both terminated with connector blocks



Specifications:

Model:	CA9.2
Output Power	2 x 12W RMS @ 4Ω
Signal to Noise Ratio	87dB @ 1kHz
Sensitivity	±3dBu, 550mv
Frequency Range	20Hz – 20KHz
Input Impedance (RCA)	1.5kΩ
Crossover Point	150Hz
Power	4A @ 12v DC
Dimensions	80(W) x 48(H) x 112(D) mm
Weight	0.3kg

• CA9.4: Compact 4 Channel 12W Power Amplifier

This compact and lightweight, but robust 4 channel amplifier is an ideal 'component' unit for machines requiring high quality sound reinforcement.

Features:

- Ideal for use in gaming, vending and gambling machines
- Switchable high pass/low pass/full range
- Stereo input via phono sockets
- 2 x level controls
- Optional 230v power supply available
- Supplied with 12v power lead and speaker leads, both terminated with connector blocks



Specifications:

Model:	CA9.4
Output Power	4 x 12W RMS @ 4Ω
Signal to Noise Ratio	87dB @ 1kHz
Sensitivity	±3dBu, 550mv
Frequency Range	20Hz – 20KHz
Input Impedance (RCA)	1kΩ
Crossover Point	150Hz
Power	5A @ 12v DC
Dimensions	80(W) x 48(H) x 140(D) mm
Weight	0.38kg



Mixer Pre-Amplifiers	82 ~ 84
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Graphic Equalisers	86
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Program Distributor	89
Loudspeaker Selector	90
Battery Charger	91
Microphone Mixers / Input Mainframes	92 ~ 94

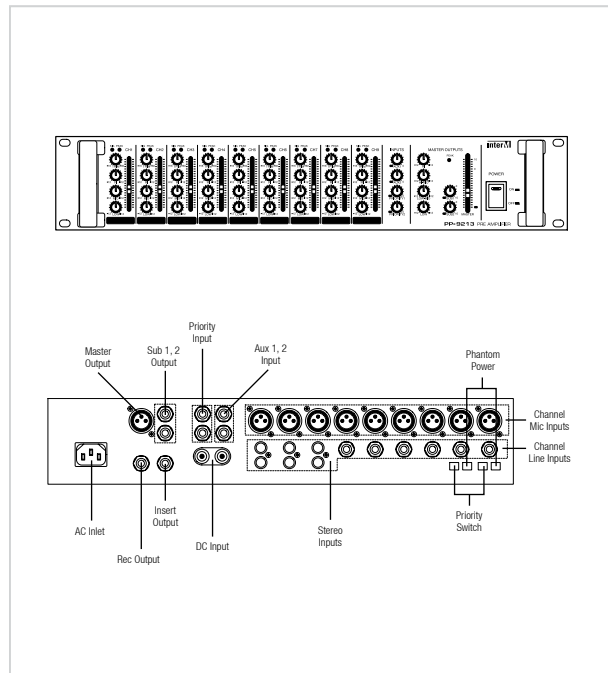
• PP9213: Mixer Pre-Amplifier

Comprehensive mixer pre-amplifier unit providing 12 inputs and outputs.

Ideal for multi-input applications such as church, conference, audio visual and complex PA systems where maximum system control is required.

Features:

- 9 x Mic inputs (XLR)
- 6 x Line mono (1/4" jack)
- 3 x Line stereo (2 x 1/4" jack)
- Line out (XLR-M)
- Sub 1, 2 out (1/4" jack)
- Record out (1/4" jack)
- Phantom power, inputs 1 & 2 (18v)
- Trim control per input
- EQ control per input
- Input/output level via fader
- EQ control of output
- 24v DC Terminal (binding post)
- 2U high, 19" rack mounting



Specifications:

Model: PP9213	
Inputs	9 Mic (XLR) 6 Mono Line (1/4" Jack) 3 Stereo Line (2 x 1/4" Jack)
Input Sensitivity/Impedance	Mic: -60dB/600Ω Line: -30dB/10kΩ
Output Sensitivity/Impedance Master	+4dBm/600Ω Balanced
Sub Outs	+4dBm/600Ω Balanced
Rec Out	-10dB/10kΩ
Phantom Power	Mic: 1, 2 ~ 18v DC
Frequency Response	20Hz ~ 20kHz
Power Requirement	230v AC, 50Hz/24v DC
Rack Height	2U
Dimensions	482(W) x 88(H) x 280(D) mm
Weight	5kg

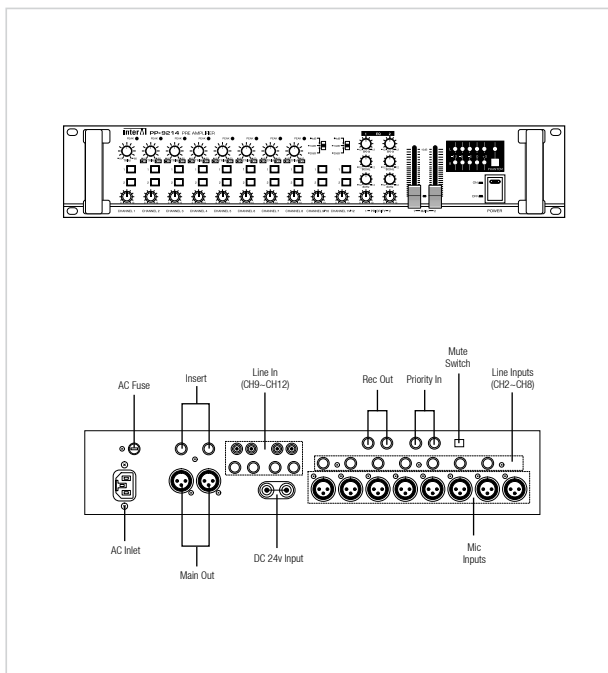
• PP9214: Mixer Pre-Amplifier

Two output pre-amplifier allowing any of the 10 input signals to be routed to either Output 1, Output 2 or both.

Ideal for dual zone applications in factories, leisure centres, hotels and general PA installations.

Features:

- 8 Mic inputs (XLR)
- 8 Line inputs (1/4" jack)
- 2 Stereo inputs (phono/1/4" jack)
- 2 Outputs (XLR)
- Phantom power (18v block switched)
- Record output (2 x 1/4" jack)
- Priority, mic 1, priority input 1, priority input 2
- 3 Band EQ per output
- Signal allocation per input channel
- 24v DC powered option
- 2U high, 19" rack mounting



Specifications:

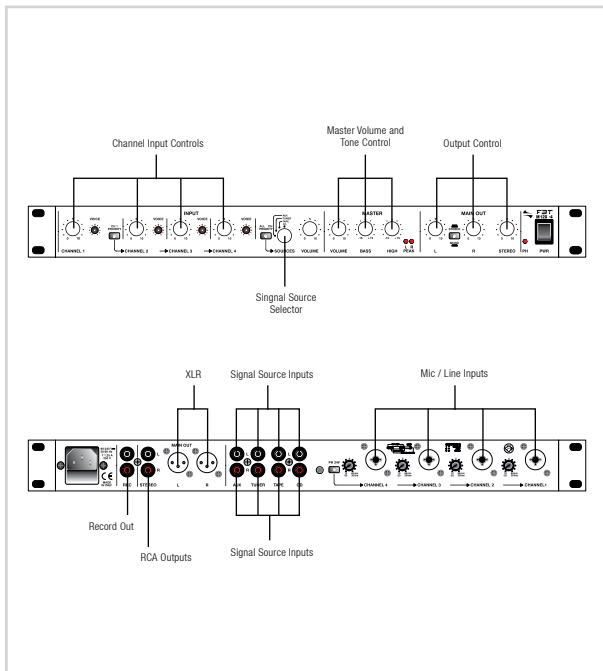
Model:	PP9214
Inputs	8 Mic (XLR) 8 Mono Line (1/4" Jack) 2 Stereo Line (2 x 1/4" Jack / 2 x Stereo Phono)
Input Sensitivity/Impedance	Mic: -60dB/600Ω Balanced Line: -30dB/10kΩ Balanced
Stereo	+4dB, -10dB, -20dB/10kΩ Unbalanced
Output Sensitivity/Impedance Master	+4dBm/600Ω Balanced
Rec Out	-6dB/10kΩ
Phantom Power	Mic: 1-8: 18v DC, Block Switched
Frequency Response	20Hz ~ 20kHz
Power Requirement	230v AC, 50Hz/24v DC
Rack Height	2U
Dimensions	482(W) x 88(H) x 280(D) mm
Weight	12.8kg

• M12X4 Pre Amplifier Mixer

Pre Amplifier with 8 inputs and 4 outputs.

Features:

- 4 Microphone/Line inputs (switchable)
- 4 Aux/Music inputs (only one selectable for use at a time)
- Priority microphone 1 over all inputs, 4 microphone inputs over Aux/Music inputs
- Microphone inputs 1 ~ 4 have selectable Phantom Power (24v)
- Master volume, stereo volume and tone controls
- Main output is mono or stereo selectable
- Seperate stereo and record outputs
- 19" Rack mounting, 1U high



Specifications:

Model:	M12X4
Mono Channels Microphone	Impedance k Ω : 2.2 Max input signal dBu: 0 Max gain (@ main Out) dB: 65 Equivalent input noise (EIN) (between 22Hz ~ 22kHz unweighted): -118 CMRR (@main out, Gain 75dB) dB: -65
Phantom Power	24v
Mono Channels Line	Impedance k Ω : 33 Max input signal dBu: 30 Max gain (@ main Out) dB: 25
Mono Channels Tone	Voice dB: \pm 12
Stereo Channels Line	Impedance k Ω : 22 Max input signal dBu: 10 Max gain (@ main Out) dB: 10
Stereo Channels Tone	High Shelving (@ 12kHz) dB: \pm 15 Low Shelving (@ 80kHz) dB: \pm 15
General Outputs	Impedance k Ω : 600 Max output (main out) dBu: 22 Distortion + noise @ 16dBu: 0.025% (main out, 40dB gain): 96 Signal/noise ratio 20dB: 20Hz Frequency response (@0/1dB): 20kHz
Power Source	230v AC with internal power supply unit
Rack Height	1U
Dimensions	482(W) x 44(H) x 160(D) mm
Weight	2.1kg

• PX8000: 8 x 8 Audio Matrix Controller

The InterM PX8000 provides a flexible, versatile, simple to operate multi-zone audio distribution system for applications such as hotels, leisure complexes, retail outlets and multi-room installations.

Features:

- 8 IN ~ 8 OUT Matrix Unit
- Simple and easy to use - clear LED indicators, illuminated buttons and fader-type volume controls
- BGM input level LED / output level meter (LEDs)
- Remote control per zone via LM8000 (selectable via front panel)
- Paging via remote MIC (up to 4 units) or via front panel zone control panel
- Auto address allocation for RM8000 / LM8000 on connection
- Monitor Loudspeaker - for monitoring the selected audio input source
- Emergency Message - in-built Digital Message Store allowing recording and broadcast of an emergency message, activated by dry contact closure per zone (If no emergency message is recorded, this facility can be used as an Emergency Mute)
- Multiple Units are linkable via D-sub 25pin



• RM8000: Remote Microphone Station (optional)



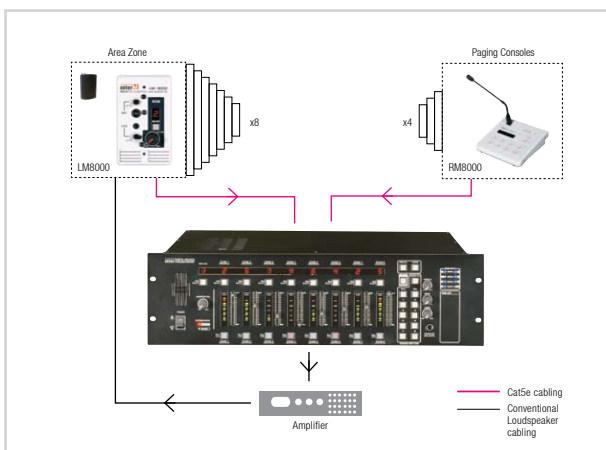
• LM8000: Remote Wall Controller with Audio Input (optional)



Specifications:

Model:	PX8000
Paging MIC	50dB (Balanced)
MIC Input	-
BGM Audio Input	8 x -10dB (Unbalanced)
Audio Output	0dB (Balanced)
Sampling Frequency	8kHz
Recording Duration	30 sec
Tone Control (Paging MIC)	±10dB @ 100Hz/10kHz
Tone Control (Audio Output)	±12dB @ 100Hz/10kHz
Total Harmonic Distortion	Less than 0.03% (20kHz LPF)
Signal to Noise Ratio	Greater than 75dB (20kHz LPF)
Power Source	230v AC
Rack Height	3U
Dimensions	482(W) x 132(H) x 380(D) mm
Weight	8.5kg

Model:	RM8000	LM8000
Paging MIC	-	-
MIC Input	60dB (Balanced)	-50dB (Balanced)
BGM Audio Input	-	-10dB (Balanced)
Audio Output	0dB (Balanced)	0dB (Balanced)
Sampling Frequency	-	-
Recording Duration	-	-
Tone Control (Paging MIC)	-	-
Tone Control (Audio Output)	-	-
Total Harmonic Distortion	-	-
Signal to Noise Ratio	-	-
Power Source	Powered from PX8000	Powered from PX8000 (option to fit to UK gang faceplate. Ref: PS/LM Plate)
Dimensions	200(W) x 70(H) x 206(D) mm	70(W) x 114(H) x 52(D) mm
Weight	1.4kg	0.13kg



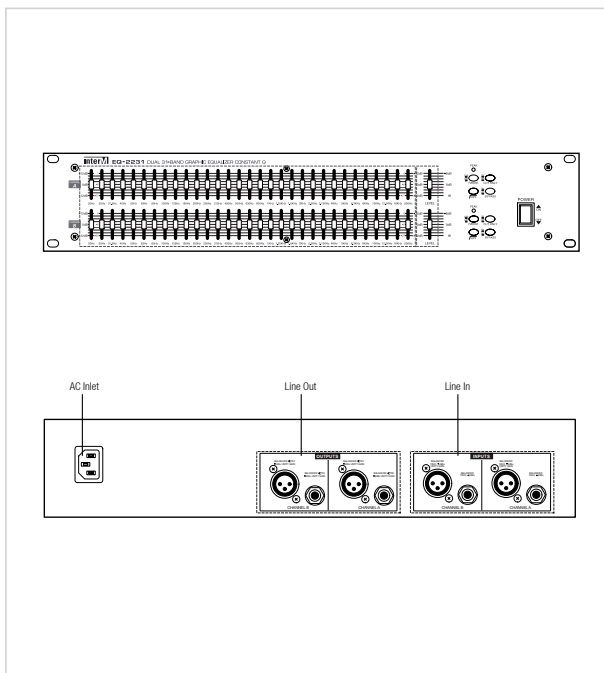
- **EQ2131:** 31 Band Graphic Equaliser
- **EQ2231:** 2 x 31 Band Graphic Equaliser

31 Band Graphic Equaliser (EQ-2131) and 31 Band Stereo EQ (EQ-2231) ideal for installations where detailed control of the sound is required, e.g. church, conference room or acoustically difficult environments.

Stereo operation, bypass and HPF are standard.

Features:

- 31 Band control (sliders/faders)
- Input gain/level (sliders/faders)
- Bypass switch (per channel)
- HPF Switch (per channel)
- Inputs (XLR-¼" jack)
- Outputs (XLR-¼" jack)
- Mains powered
- 2U high, 19" rack mounting



Specifications:

Model:	EQ2131	EQ2231
Channels	1 x 31 Band	2 x 31 Band
EQ Frequency	1/3 Octave	1/3 Octave
Input Level/Impedance	0dB/600Ω Balanced	0dB/600Ω Balanced
Output Level/Impedance	0dB/600Ω Balanced	0dB/600Ω Balanced
High Pass Filter/HPF	80Hz	80Hz
Frequency Response	20Hz ~ 20kHz	20Hz ~ 20kHz
Power Requirement	230v AC, 50Hz	230v AC, 50Hz
Rack Height	2U	2U
Dimensions	482(W) x 88(H) x 280(D) mm	482(W) x 88(H) x 280(D) mm
Weight	4.5kg	4.5kg

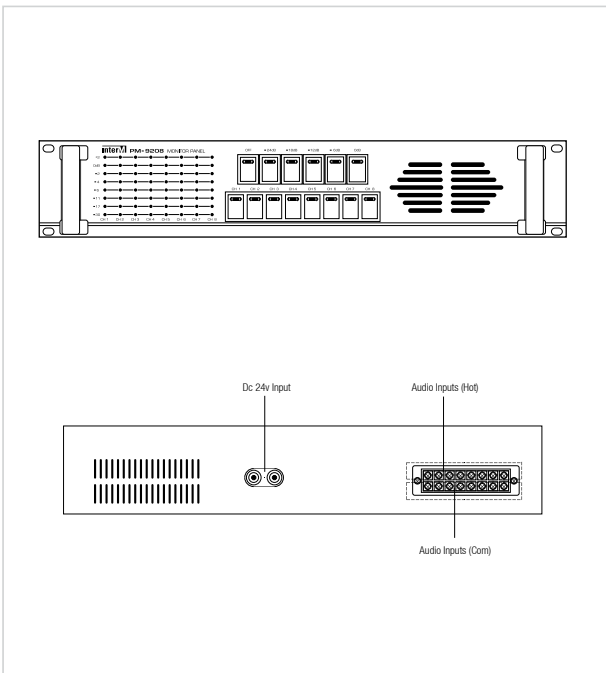
• **PM9208: 100v Line Monitor Panel**

Ideal for large commercial installations, the PM9208 allows 8 separate 100v signals (speaker lines/amplifier outputs) to be monitored, using simple push switch selection and internal loudspeaker to select and listen to the required signal.

Visual indication of output is also provided via 10 segment LED meter.

Features:

- 8 Zone selection
- Monitor loudspeaker (1.5W)
- 10 Segment LED output meter
- 100v input/output (screw terminal)
- 24v DC powered
- 2U high, 19" rack mounting



Specifications:

Model:	PM9208
Zones/Channels	8 x @ 100v Line
100v In / Out	Screw terminal on rear panel
Loudspeaker Power	1.5W
Visual Display	10 Segment LED
Power Requirement	24v DC
Rack Height	2U
Dimensions	482(W) x 88(H) x 280(D) mm
Weight	3.8kg

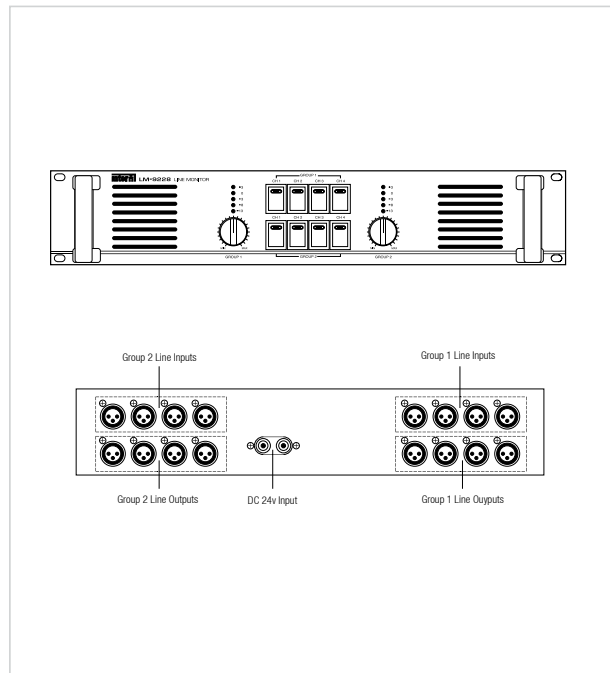
• LM9228: Line Level Monitor Panel

Similar in operation to the PM-9208, the LM-9228 will monitor up to 8 separate line level audio signals. Split into 2 groups of 4, each group has an individual line selector with visual LED indicator and volume control for the internal loudspeaker.

Inputs and outputs are XLR and the LM-9228 is easily integrated into any line level signal path.

Features:

- Group 1/4 individual channels
- Group 2/4 individual channels
- 2 x internal loudspeakers with volume control
- Inputs (XLR)
- Outputs (XLR)
- 24v DC powered
- 2U high, 19" rack mounting



Specifications:

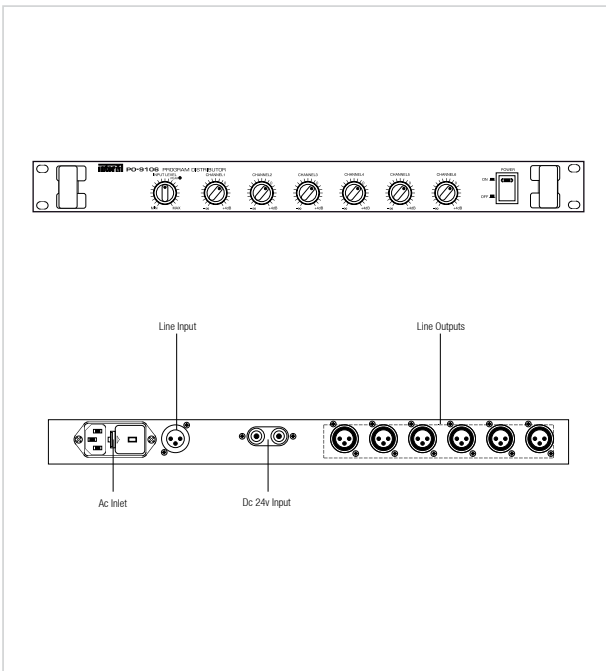
Model:	LM9228
Zones/Channels	8 x @ Line Level (2 x Groups of 4)
Line In / Out (per channel)	XLR
Loudspeaker Power	1.5W
Channel Activation	Latching Switch with in-built LED
Power Requirement	24v DC
Rack Height	2U
Dimensions	482(W) x 88(H) x 280(D) mm
Weight	7.5kg

• **P09106: Program Distributor**

Allows the distribution of a line level signal to six separate outputs, ensuring no loss of signal when using multiple amplifiers in larger industrial systems or for distribution of the level signals over long distances and/or to multiple destinations.

Features:

- 1 Input (XLR)
- 6 Outputs (XLR)
- LED output signal LEDs
- Independent level controls of input/output
- 230v AC/24v DC powered
- 1U high, 19" rack mounting



Specifications:

Model:	P09106
Input	1 Variable Level ~ XLR
Outputs	6 x Variable Level ~ XLR
Input Level/Impedance	1v/600Ω Balanced
Output Level/Impedance	1v/600Ω Balanced
Frequency Response	20Hz ~ 20kHz
Power Requirement	230v AC ~ 24v DC
Rack Height	1U
Dimensions	482(W) x 44(H) x 280(D) mm
Weight	4kg

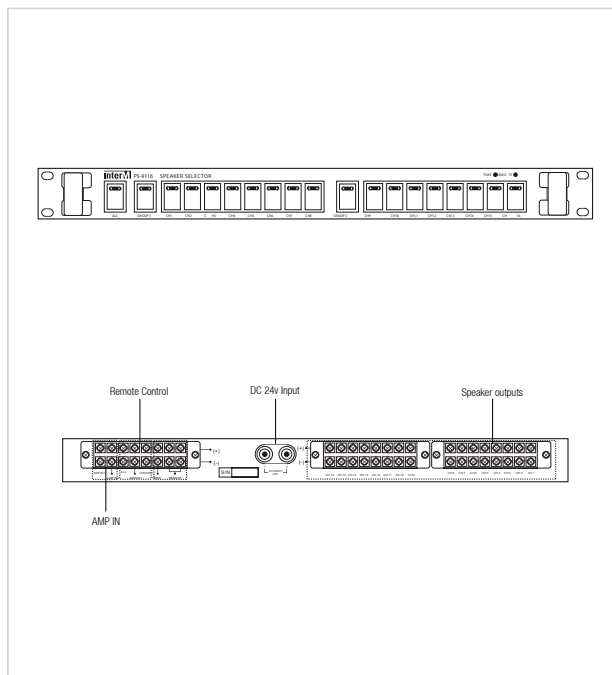
• PS9116: 100v Line Loudspeaker Selector

The PS-9116 allows the selection of up to 16 individual loudspeakers/zones fed by a 100v amplifier or 2 groups of 8 loudspeakers fed by 2 separate amplifiers.

Loudspeakers/zones are selected using switches with in-built LED indicators or groups can be activated via voltage-free contacts on the rear.

Features:

- 16 Individual zones
- LED indicator of selected zone
- Remote control of 2 x 8 groups via voltage-free contact
- 24v DC powered
- 1U high, 19" rack mounting



Specifications:

Model:	PS9116
Loudspeakers/Zones	16 Individual 2 x Groups of 8
Remote Control (All or 2 x Groups of 8)	Voltage-free contact ~ screw terminal on rear
Power Requirement	24v DC
Rack Height	1U
Dimensions	482(W) x 44(H) x 280(D) mm
Weight	4kg

• PB9207: Battery Charger

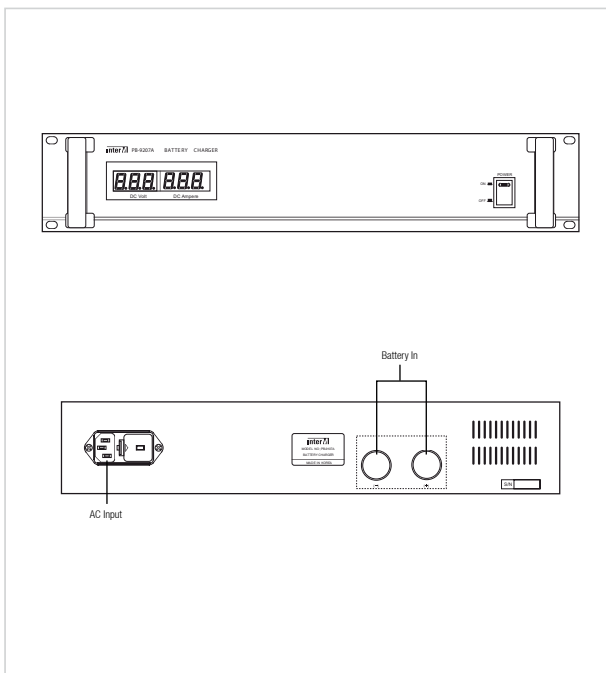
For use with all Inter-M power amplifiers, the PB9207 allows the use of DC batteries for systems which require back-up in the event of mains failure.

By continuous monitoring of the batteries, the PB9207 will automatically charge, thus keeping the batteries in good condition until needed.

Status and condition of the batteries is shown on a clear LED display on the front panel.

Features:

- 1 large LED status/display shows volts and amps
- DC input terminals (on rear)
- Mains powered
- 2U high, 19" rack mounting



Specifications:

Model:	PB9207
Charging Current	3A
Charging Voltage	27.3v DC
Display	LED, Volts and Amps
Protection	Overcurrent and Overcharge
Power Requirement	230v AC, 50Hz
Rack Height	2U
Dimensions	482(W) x 88(H) x 280(D) mm
Weight	6.2kg



Need help choosing the right product?
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• **AM81: Automatic Microphone Mixer**

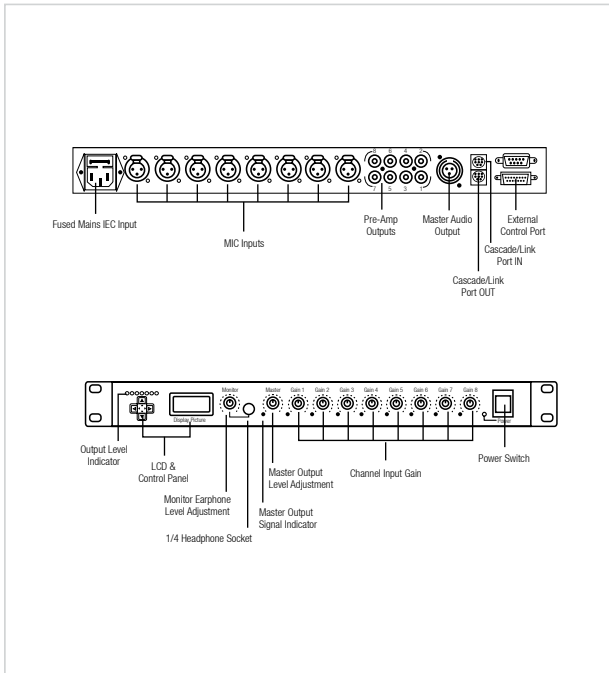
The Clockaudio AM81 is an 8 channel automatic microphone mixer ideal for multi channel microphone systems in conference and voice reinforcement applications.

By automatically sensing when a channel becomes active, the AM81 will simply control the level of the system dependent on the priority settings. The NOMA (Number of Open Microphones Attenuated) function will also control and adjust the mixer output to prevent feedback due to open microphone channels.

Expansion is easily achieved with up to 15 units able to be cascaded for medium to large system applications (120 microphones maximum).

Features:

- 8 x Microphone Inputs
- 1 x Aux/Music Input
- Individual Priority settings
- Main Output (Balanced)
- 8 x Individual Pre-Amp Outputs
- Simple LCD Display (to view and change settings and functions)
- Automatic or Manual operation
- NOMA facility (Number of Open Microphones Attenuated)
- Link In /Link Out for multi system use



Specifications:

Model:	AM81
Input Impedance	MIC: 4300Ω, AUX 50kΩ
Output Impedance (balanced)	MIC: 15kΩ, Line 220Ω
Output Impedance (unbalanced)	1kΩ
Pre-Amplifier Output Impedance	3.3kΩ
Max Input Level	MIC: -18dBv, AUX 6dBv
Max Output Level (Balanced)	MIC: -18dBv, Line 21.5dBv
Standard Input Level (Balanced)	MIC: -28dBv, Unbalanced: AUX 2.5dBv
Pre-Amplifier Output Level (Balanced)	MIC -25dBv, Line 0dB
Pre-Amplifier Output Level	-4.4dBv
Max Gain	62dB
Frequency Response	20Hz ~ 20kHz
Noise	All channels with the max gain position (220Ω) -85dB
THD+N	≤0.5%
S/N	75dB
Phantom Power	+48v
Controlling Output Voltage	5v
Power Voltage	220v AC
Current Consumption	25W
Rack Height	1U
Dimension	430(W) x 44(H) x 221(D) mm
Weight	3.2kg

• **MR88:** Digital Automatic Microphone Mixer

The MR88 Digital Automatic Microphone Mixer incorporates advanced DSP technology. It has been carefully designed to give outstanding performance and flexibility whilst maintaining simplicity of set-up and use.

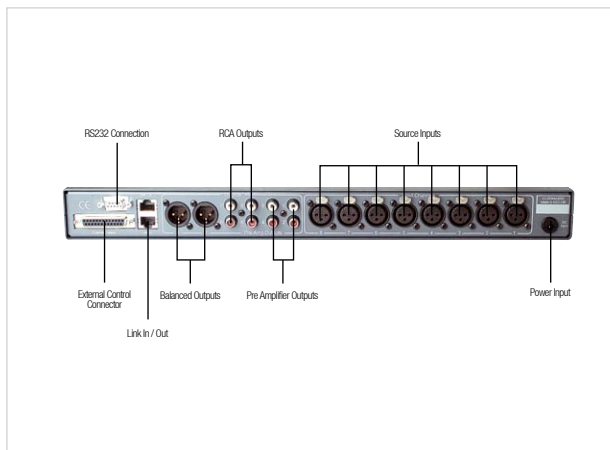
Eight input channels, fully adjustable for microphone and line level, can be output from either or both of the two channels. The MR88 incorporates advanced DSP technology and has been carefully designed to give outstanding performance and flexibility whilst maintaining simplicity of set up and use. It provides eight input channels, fully adjustable for microphone or line levels, and two output channels. Flexible routing gives easy use of mono or stereo sources. Each input channel can be assigned to a four-level priority system.

The MR88 provides full set-up and control of the mixer via a user-friendly LCD interface on the front panel, allowing the mixer settings to be selected and adjusted without the need to remove the case covers.

Mixers may be linked together to make a large multi-source system with priority and NOMA information extending throughout. All settings are retained, even when the mixer is disconnected from the power supply.

Features:

- Easy set up with LCD display of all functions and settings from front panel and by PC through RS232 socket
- Fast, silent automatic microphone selection
- 8 Channel mic/line inputs on XLR connectors
- Record outputs for each input channel
- 2 Channel mic/line outputs on XLR connectors
- Output level LED meter
- 2 Band equalisation on each input channel
- Compression
- Multi-level channel priority system
- Easy use with mono or stereo inputs
- Dual mono or stereo outputs
- Security mode
- Adjustable limiters on each input prevent channel overloads
- Adjustable 'off' attenuation of each input channel
- Channel LEDs indicate active or locked out channels
- Select NOMA operation on/off
- Simple daisy-chain set up for multiple microphone operations
- 48v Phantom Power individually selectable for each channel
- Remote VCA control and RS232
- External TTL control and monitoring of channel selection
- 1U rack-mounting



Specifications:

Model:		MR88
Input Impedance		2.4kΩ differential
Output Impedance	Balanced: Pre-Amp Out:	50Ω 560Ω
Max Input Level	Mic Level: Line Level:	-23dBv +16dBv
Max Output Level		+19dBv
Nominal Output Level at 0dBv on Meter	Pre-Amp Out: Balanced:	-10dBv -60dBv ~ +4dBv
Frequency Response		20Hz ~ 20kHz
THD+N		-70dB
Max Noma Attenuation		20dB
Phantom Power		+48v
Power Supply		15v DC
Operating Temperature		0° ~ 40°C
Rack Height		1U
Dimensions		483(W) x 44(H) x 215(D) mm
Weight		1.98kg



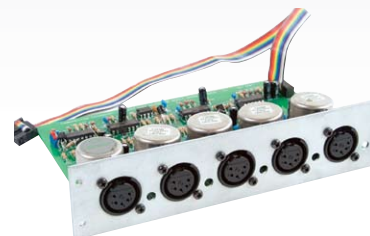
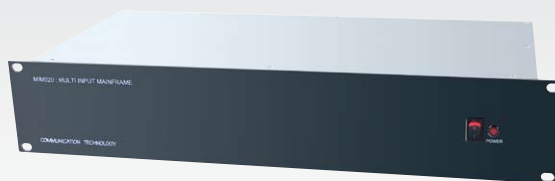
- **MIM020:** Multizone Microphone Input Mainframe
- **MPA050:** 5 Input Module

Communication Technology's MIM020 Multiple Input Mainframe is designed to provide a simple solution to microphone priority control for up to 20 inputs.

The multiple input mainframe is ideal for applications in conference and meeting room environments. Other applications include medical practices where each doctor will need to call 'next patient' using the system on a first come, first served basis.

MPA050 input modules feature 5 inputs each, where one input can be given priority over all others within the mainframe. This facility will allow the conference Chair to override delegates or, in the event of an emergency, a safety officer may take overall control throughout the whole building.

Each input has the benefit of automatic proximity bass cut and sound level limiting, so that all announcements will be more clearly reproduced.



MPA050: 5 input Microphone Module



Specifications:

Model:	MIM020	MPA050
Powering	24v DC @ 150mA interfaced to a 2.5 mm sockets	-
Output	Balanced 0dBm, 600W source or -20dBm, 60W source	-
Output Interface	5 pin XLR	-
Frequency Response	±3dB 50Hz ~ 12KHz	Unlimited: ±3dB 100Hz ~ 10kHz Bass cut in limit: variable with voice proximity to -18dB @ 100Hz
Output Access	Suitable for VOX activated host amplifiers or for electronic access systems	-
Gong Function	When onboard selected as an option, fully automatic on using mic PTT	-
Input Capacity	4 x MPA050, 5-input modules	5 inputs per module
Input Sensitivity	-	Suitable for most 600W mics, -65dB
Input Gating	-	From attached mic PTT, or switched, all inputs 1st-come 1st-served; 1 input is switchable for overall priority
System Access	-	Provision made for each attached mic to be signalled by LED, that the system is available for use
Microphone Input	-	5 pin XLR (supplied)
Rack Height	2U	1U
Dimensions	483(W) x 200(H) x 88(D) mm	-



CD Player	96
AM/FM Tuner	97
Chime/Siren Generator	98
Tone/Pulse Generator	99
Digital Audio Store	100



AUDAC

• MCD15: 5 Disc CD/MP3 Player

The MCD15 is a full-featured Multi CD/MP3 player, designed for fixed installation in commercial as well as professional sound system applications.

In addition to the standard functions of a CD MP3 player, the MCD15 offers a wide range of advanced functions.

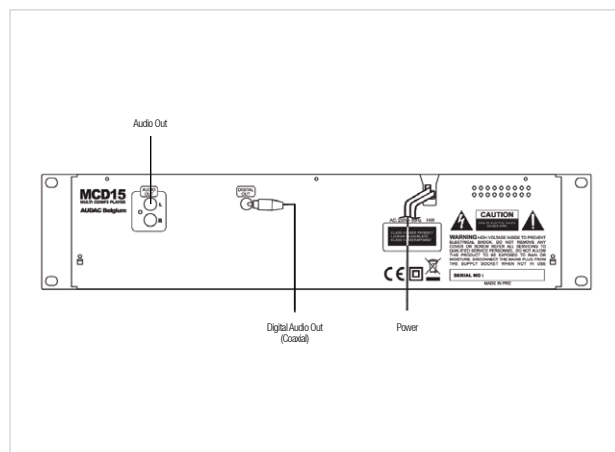
It contains a programmed play mode allowing the user to create programs with up to 32 tracks, several repeat modes such as repeat track / repeat disk / repeat all disks.

Features:

- 5 Disc CD changer
- Intelligent disc scan
- 32 Track program memory
- 3 Mode random playback
- Low power consumption
- 20 bit and 8x oversampling digital filter
- Direct track selection
- 3U high, 19" Rack mounting kit available



19" Rack Mount Bracket
Option: MCD-15BKT



Specifications:

Model:	MCD15
Power consumption	14W
Discs	Audio compact discs 8cm, 12cm
Number of discs	5
Channels	2
Frequency Characteristics	20Hz - 20kHz
Dynamic Range	98dB
Signal/Noise Ratio	102dB
High Frequency Distortion	0.006%
Separation	95dB
Frequency Response	20Hz - 20kHz
Power Requirement	230v AC, 50Hz
Rack Height	3U
Dimensions	435(W) x 115(H) x 388(D) mm
Weight	6.2kg

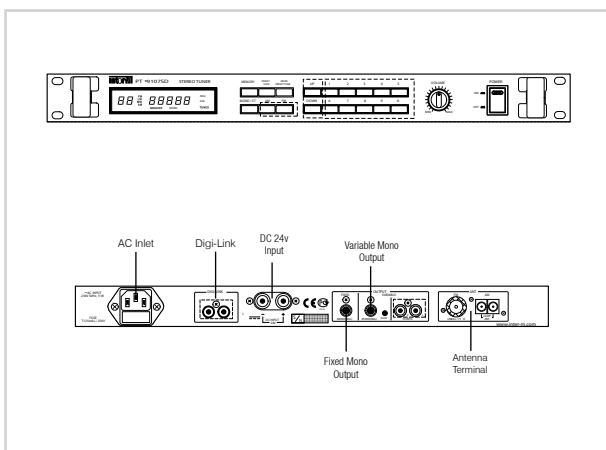
• PT9107S: AM/FM Tuner

Slimline 19" rack-mounting tuner operating on AM and FM bands. 20 pre-set stations make the unit ideal for many commercial installations requiring radio broadcast.

Fixed/variable and stereo/mono output options are also available.

Features:

- AM/FM bands
- 20 Pre-set stations
- Mono output /fixed (1/4" jack)
- Mono output/variable (1/4" jack)
- Stereo output/variable (stereo phonos)
- 230v AC/24v DC powered
- 1U high, 19" rack mounting



Specifications:

Model:	PT9107S
AM Range	522 ~ 1611kHz
FM Range	87.5 ~ 108.0MHz
Pre Set Stations	20
Output Levels	FM Stereo ~ 500mv Balanced FM Mono ~ 1v Balanced AM Mono ~ 240mv Balanced
Power Requirement	230v AC, 50Hz/24v DC
Rack Height	1U
Dimensions	482(W) x 44(H) x 280(D) mm
Weight	3.5kg

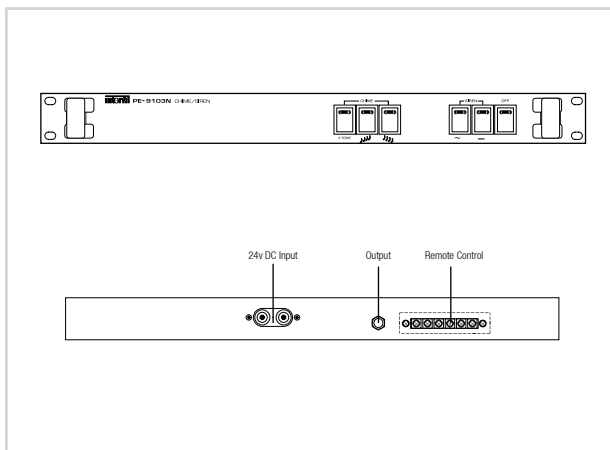
• PE9103A: Chime/Siren Generator

Tone Generator allowing the selection of 4 chime/tone options or 2 siren options. It can be used as part of a larger system or can be used as a stand-alone generator.



Features:

- Chime/tone options: Rising 4 note, falling 4 note, 2 note
- Siren options: Continuous, oscillating
- Activation on front panel
- Rear panel remote access for chime options (screw terminals)
- Line level output (1/4" jack)
- 24v DC powered
- 1U high, 19" rack mounting



Specifications:

Model:	PE9103A
Chime Options	4 note ascending, 4 note descending and 2 tone (ding dong)
Siren Options	Continuous and oscillating
Remote Control (Chime only)	Screw terminal on rear panel
Output Level/Impedance	1v/10kΩ unbalanced
Power Requirement	24v DC
Rack Height	1U
Dimensions	482(W) x 44(H) x 280(D) mm
Weight	2.8kg

• **TPG-5: Tone/Pulse Generator**

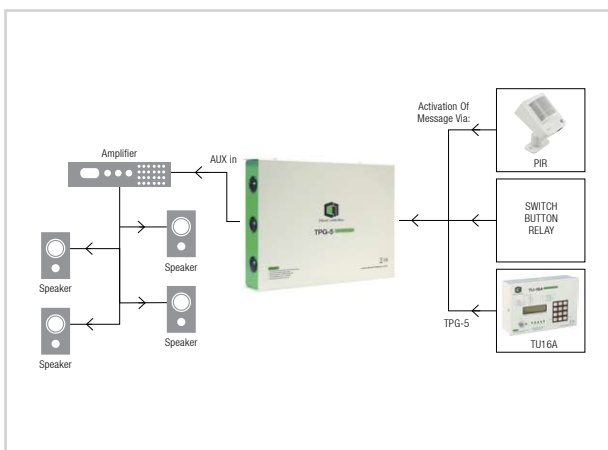
The TPG-5 device holds 5 factory-set/embedded alarms and tones which can be used in schools, factories and retail sectors for class change, shift start & stop or security signalling purposes.

Activation of the tones is via voltage-free NO or NC contacts, buttons, switches, PIR devices, or via the TU-16A Timer Unit. A pulsed activation will allow just one loop of the required tone; however, if the activation contact remains, the tone will play continually until disengaged.

A line level audio output signal is provided for interface to the amplifier.

Features:

- 5 factory-set alarms and tones
- Activation via NO/NC contacts
- Screw terminals for fast, simple on-site installation
- Strong, robust, compact unit



Specifications:

Model:	TPG-5
Audio Output	0.7v RMS over the frequency range
Output Configuration	Unbalanced
Activation	Voltage-free contact closure
S.P.C.O Rating	1A @ 24v DC, 0.5A @ 125v AC
Connections	Screw Terminals on PCB
Power Consumption	3vA @ 240v AC, 50mA @ 24v DC
Case Material	Powder coated steel
Dimensions	220(W) x 162(H) x 44(D) mm
Weight	1.8kg

• LB-5A: Digital Audio Storage and Replay Unit

This latest generation of Clever Little Box incorporates MP3 technology to store and replay recorded voice messages, music or tones for security/safety, retail, museum/leisure and advertising applications.

Files are stored on an internal USB memory stick with an 8 hour* memory capacity allowing material to be changed or replaced easily.

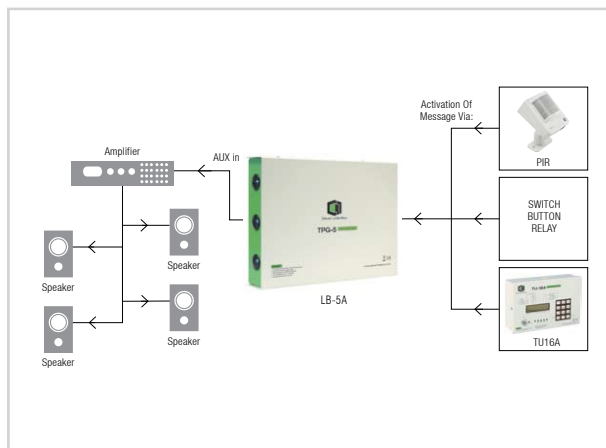
The 15 channels can be individually accessed or activated by voltage-free NO or NC contacts, buttons, switches, PIR devices, or via the TU-16A Timer. A pulsed activation will allow just one loop of the required recording; however, if the activation contact remains, the recording will play continually until disengaged (Groups 1 & 2 only).

A line level audio output signal is provided for interface to the amplifier.

Features:

- MP3 audio storage technology
- Three configurable Groups of 5 Messages, 5 Chimes & 5 Tones
- Additional BGM music facility
- Audio File Group 1 has priority over 2, 3 & BGM; Groups 2 & 3 have priority over BGM
- Audio files stored on internal USB memory stick for fast, easy updates via Windows/Mac/PC
- Sample audio files supplied
- Line level output via stereo phonos or balanced mono screw terminals
- 3.5mm 'monitor' headphone jack socket
- 12v DC powered (supplied with mains adaptor)
- Adjustable interval timer
- Signal 'Looping' or 'One-shot' operation
- Secure, robust and stylish steel case (wall mountable)

*Dependent on memory stick storage capacity



Specifications:

Model:	LB-5A	Comments
Directly Accessible Audio Files	Total 15	Split into three banks of five
Background Music Files	256 (Using 1Gb Memory Stick supplied)	Played in random order
Audio File Format	MP3	MPEG1 audio layer 3
MP3 Bit Rate	Up to 320Kbs	Any standard MP3 bit rate
Min Contact Closure Time	< 300mS	-
Wiring Termination Type	PCB screw terminals	-
USB Memory Stick Capacity	32Gb Maximum	Supplied with 1Gb
USB Memory Stick Format	FAT 16, FAT 32	-
Audio Outputs	Phono sockets Screw terminals 3.5mm stereo jack	Unbalanced stereo / mono Balanced mono Headphone monitoring
Audio Output Level	Line Level (775mv RMS)	Excl. headphone
Audio Frequency Response	30Hz ~ 18kHz ± 3dB	Affected by bit rate
Audio Output Impedance	Less than 1KΩ	-
Power Supply Input	12v DC ±15% @ 300mA	Unit supplied with plug top power supply fitted with 2.1mm DC Power Jack
PIR Supply Output	12v DC ±15% @ 100mA	The supplied PSU will power up to 3 PIRs
Power Consumption	2.5W typical	5.5W maximum
Operating Environmental Temperature	10°C ~ 35°C	-
Case Material	Painted mild steel	-
Dimensions	210(W) x 160(H) x 42(D) mm	Excl. power supply
Weight	1kg	-



Cat5 Audio Distribution System	102
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Loudspeakers

Amplifiers

Audio Signal
Processing

Audio Signal
Generation

Audio System
Tools

Microphones
(Wired)

Microphones
(Wireless)

Portable P.A.

Soundfield

Induction Loops



• SONET4: Cat5 Audio Distribution System - 4 in / 4 out

The highly successful 'So.net' Sound-over-Ethernet System has been designed to simplify and speed up installations where multiple microphone or line level inputs need to be situated a distance from the amplifier equipment.

Types of installation include churches, schools, theatres and corporate boardrooms.

This extremely versatile and cost effective installation device removes the need for multiple cable runs from remote audio inputs to the amplifier equipment. The SONET4 System can transmit up to four microphone or line level signals down one screened Cat5e cable for up to 1000m.

Each input and output can be independently configured for balanced or unbalanced signals as well as line level or microphone level. There is also an option to provide phantom power to the microphone inputs independently.

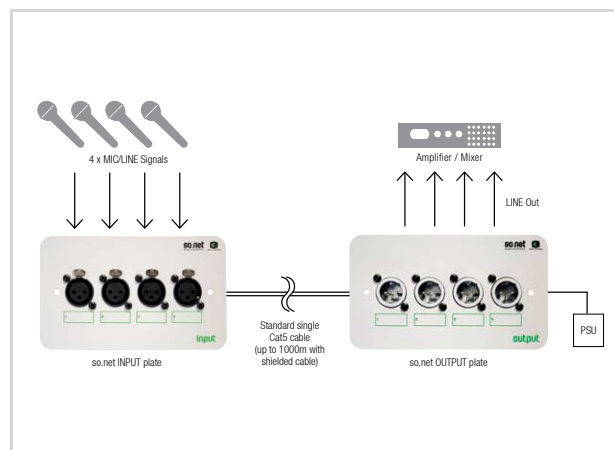
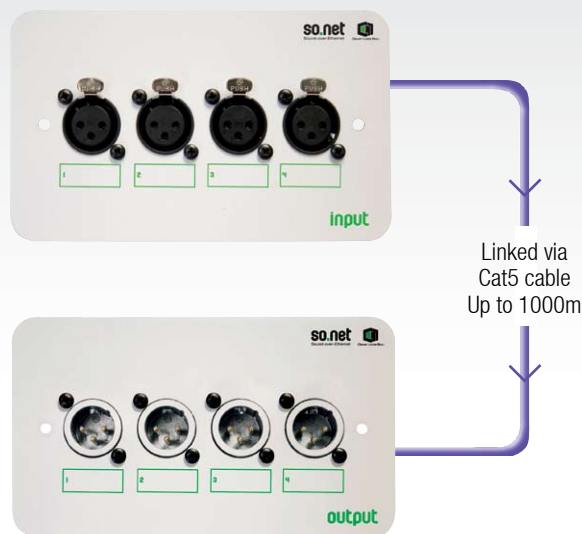
Each unit fits neatly into a standard UK double-gang back box and only requires a power supply at the output or amplifier end (PSU supplied as part of system).

Features:

- Reduces installation time
- Up to 1000m between Input and Output plates achievable
- Very high interference immunity
- Balanced or unbalanced inputs & outputs
- Line or Microphone level inputs & outputs
- Phantom power (max. 15v DC)
- Four XLR sockets on standard 2 gang plates
- No power required at input module
- Power Supply included as part of system

Please Note:

- When using Cat5 UTP (unshielded) cable, the So.Net system is only capable of transferring up to 3 channels. STP (shielded) Cat5 cable will allow for the maximum 4 channels.



Specifications:

Input Module:

Power	Over Cat5 cable
Ground	Over Cat5 cable screen (or spare pair)
Inputs x 4	Balanced XLR female
MIC/LINE in	Selectable by jumper
Phantom Power	15v jumper selectable
MIC Impedance	600Ω
MIC Level Input	10mv RMS
LINE Impedance	50kΩ
LINE Input Level	700mv RMS (1.5v RMS max)
Cat5 Termination	Screw terminals

Output Module:

Power Requirements	24v DC @ 100mA (regulated linear power supply recommended)
Outputs x 4	Balanced XLR male
MIC/LINE Out	Selectable by jumper
MIC Out Impedance	600Ω
MIC Level Output	20mv RMS (into 600Ω)
LINE Out Impedance	20kΩ
LINE Level Output	700mv RMS (into 20K)

General:

Channels	Four, individually configurable
Bandwidth	100Hz ~ 20kHz (-3dB)
Crosstalk	>60dB
Signal to Noise Ratio	>60dB
Cable Spec	Screened Cat5e cable (UTP can be used, but one pair required for ground, meaning only three channels would be available)
Cable Length	1000m maximum
Cat5 Termination	Screw terminals

Protected against short circuit on Cat5 cable to ground

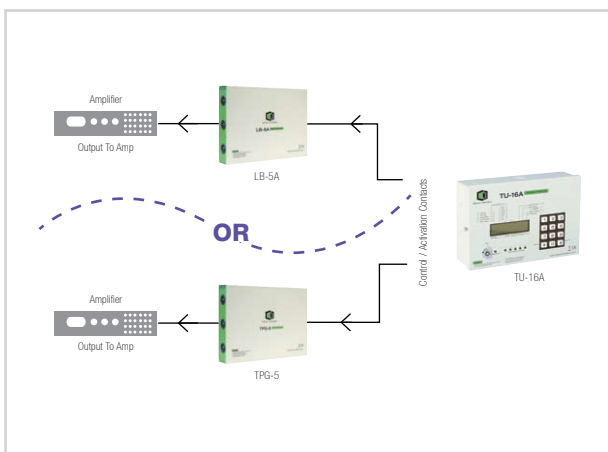
• **TU-16A: 16 Event Timer Unit**

The TU-16A is a versatile timer used to provide control of external equipment such as the TPG-5 and LB-5A units for schools, factories and retail sectors to signal class change, shift start & stop or security warning/announcement purposes.

A total of 16 events or activations can be programmed over a 24 hour time frame and duplicated over a 7 day period. 5 separate outputs allow activation of different sources at the predetermined times, set via a clear LCD interface.

Features:

- 16 events per day, 112 events per week
- 5 separate programmable outputs
- Latched or pulsed outputs
- Active output indication
- 40 year memory
- Illuminated display
- Anti-tamper key for programming security
- Screened metal enclosure



General:	TU-16A
Number of Time Events	16
Number of Output Channels	5
Number of Timing Modes	2 (Pulsed & Latched)
Operating Modes	24 hours or 7 days
Case Material	Powder coated steel
Power	230v AC or 24v DC
Dimensions	220(W) x 160(H) x 40.5(D) mm
Weight	1.8kg

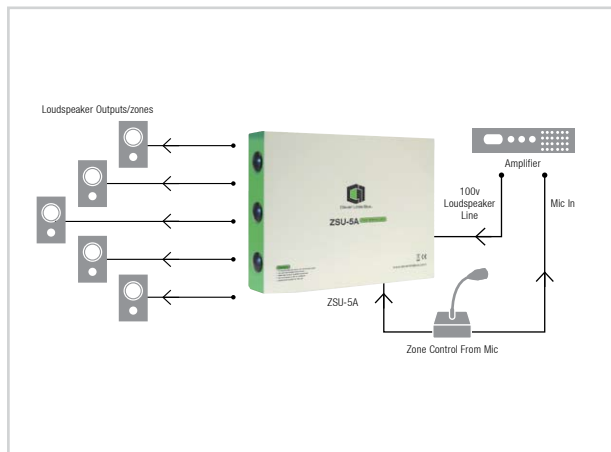
• ZSU-5A: Zone Selector Unit

The ZSU-5A provides the facility to take a high impedance 100v loudspeaker output from an amplifier and split it into 5 separate zones.

Each zone can be selected using either voltage-free contacts or ideally a multi-zone paging microphone.

As well as zoning capability, the ZSU-5A will also provide a switched 24v DC output and a voltage-free relay contact active whilst the unit is in use.

Ideal for small to medium sized commercial audio installations, units can also be linked to provide and meet larger system requirements.



Specifications:

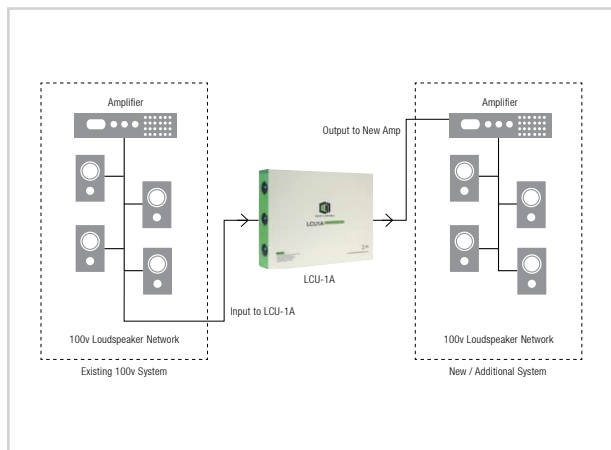
Model:	ZSU-5A
Case Material	Powder coated steel
Power	230v AC or 24v DC
Dimensions	220(W) x 162(H) x 44(D) mm
Weight	1.8kg

• LCU-1A: Line Level Converter

This versatile interface is designed to convert a high impedance 100v loudspeaker signal to either a balanced variable line level or microphone level signal.

Especially useful if extending or adding to existing installations as it negates the need to run new cables from the existing amplifier or main equipment; simply tag onto the 100v loudspeaker circuit and feed the output into a local amplifier.

The unit provides two independent Mic or Line outputs, as well as including a DC capacitor to allow connection to VA or monitored systems.



Specifications:

Model:	LCU-1A
Case Material	Powder coated steel
Power	Passive (no power required)
Dimensions	220(W) x 162(H) x 44(D) mm
Weight	1.2kg

• **PPS-2:** Phantom Power Supply

The PPS-2 is a mains-operated microphone phantom voltage power supply designed to power electret-type microphones via the signal cable.

It has two independent channels which can be internally configured to provide a balanced 48v, 24v or 12v DC supply to the microphone.

The default setting is 48v, which is the de-facto standard, and is therefore suitable for the majority of electret or condenser type microphones.



Specifications:

Model:	PPS-2
Number of Channels	2
Phantom Voltage	12, 24 or 48v (selectable)
Input Configuration	Balanced
Input Connectors	2 x Female 3 pin XLR
Output Connectors	2 x Male 3 pin XLR
Insertion Loss	Negligible with <math><600\Omega</math> mics
Power Supply	230v 50Hz (110v option)
Consumption	<math><3W</math>
Case Material	Metal
Complies With	DIN spec 45596 (P48)
Dimensions	156(W) x 80(H) x 203(D) mm
Weight	1.03kg (including mains lead)

• **PAM-10:** Barrier Interface

This BT-approved device provides an isolated barrier between amplifiers and telecoms equipment or acts as a coupling device for sending and receiving long distance line level signals.

Traditionally used in applications such as military camps, trackside communications, music-on-hold and telecommunications.



Specifications:

Model:	PAM-10
Case Material	ABS
Power	Passive (no power required)
Dimensions	120(W) x 60(H) x 40(D) mm
Weight	0.5kg

• EPA100: Telephone/PA Paging Interface

Public address access from a telephone extension can benefit most fast-moving enterprises.

Ezi-Page is designed to allow an analogue telephone extension port to which it is connected to be dialled from any other on the same PBX switch system, providing a paging announcement over a public address system. The user simply dials the extension number designated for Ezi-Page, waits for the ring tone to cease and then makes the required announcement.

Features:

- VOX access electronics maintain the line connection until the end of the announcement, approximately 5 seconds after Ezi-Page automatically clears down
- Connected to a PA system using either a designated microphone or line level amplifier input, this input can be VOX or electronic gate accessed
- Fully approved, it includes an optically isolated barrier transformer input and uses standard BT 4/500 interface plug connections
- Requires 24v regulated DC powering from the host PA system or plug-top power supply PSU24V
- Provided with a wall-mounting facility; interface connection is from below or can be housed within the PA system rack
- Installation is made simple; all terminations use standard interface connections



Specifications:

Model:	EPA100
Designated Extension	Analogue via BT 4/500 interface, 3m BT cable supplied
PA Output	700mv or 70mv, for line or microphone level amplifier input, VOX access amplifiers need no further connections. However, amplifiers with electronic access will require a contact closure available as 'volt free' on Ezi-Page interconnections
Powering	24v DC regulated from Communication Technology power supply type PSU24v or from the host PA amplifier
Dimensions	120(W) 180(H) x 70(D) mm

• ANS-1: Ambient Noise Sensor/Level Regulating Module

This level regulating/ambient noise-following module is designed to receive audio signals from an ambient sensing microphone and, where required, adjust signal levels to the power amplifier of the public address installation.

The output level of the module will automatically and constantly adjust to follow the average rise and fall in the ambient noise in the area served by the host amplifier (airports, hotel reception areas, transport terminals, sports stadiums, etc). The ambient noise will be continuously sampled by the sensing microphone/s, sited as close to the source of change as possible.

Where large areas have various localised sources of variable 'ambient' noise, it may be desirable to cover each with a separate sensor, (for example, an underground railway would benefit from having one sensor at each end to detect the noise of trains arriving from either direction).

Features:

- Microphone input (sensor)
 - a. 200µv balanced low impedance
 - b. 150mv unbalanced high impedance
- Audio In/Out - 500mV, unbalanced
- Reaction time - 20seconds, 10dB range
- XLR IN (Female) OUT (Male)



Specifications:

Model:	ANS-1
Power Supply	24v DC @ 40mA, this can be derived from the host system, or plug top power supply PSU24v
Microphone Sensor Input Sensitivity	200µv balanced low impedance 150mv, unbalanced high impedance
Audio Input / Output Preferred Level	500mv unbalanced
Reaction Time (to noise change)	20 secs, 10dB range
Interface Connections	All signal & powering interfaces are XLR, inputs are female, output male
Dimensions	120(W) x 180(H) x 70(D) mm

• VCA-1A: Voltage-controlled Attenuator

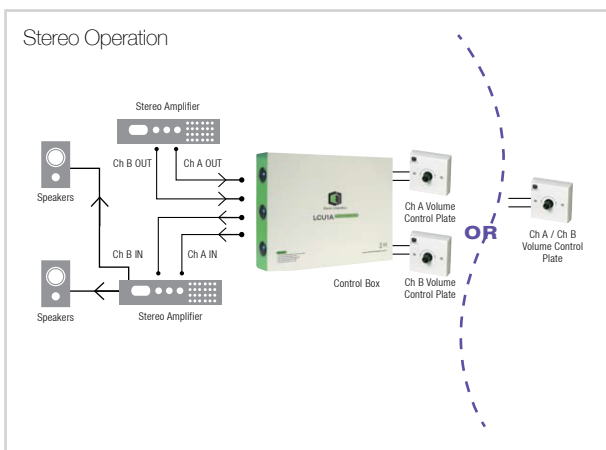
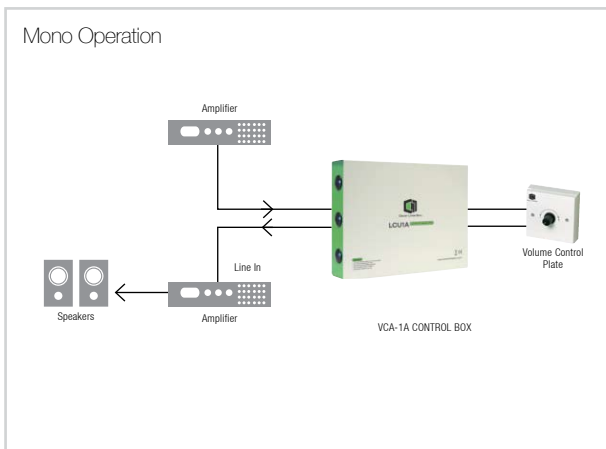
The VCA-1A is ideal for both commercial public address amplifiers and professional stereo amplifiers, allowing remote control of the volume levels via a remote 2 core cable link.

Comprising of a two-channel control box and two volume control plates, the main unit is positioned between the amplifier and pre amplifier/mixer increasing or decreasing the signal between the units.

Applications include bars, retail sites, classrooms and industrial sites.

The system can be configured to operate as:

- Mono (1 channel in use)
- Stereo A (2 independent channels in use)
- Stereo B (1 plate controlling both channels simultaneously)



Specifications:

Model:	VCA-1A
Case Material	Powder coated steel
Power	230v AC or 24v DC
Dimensions	220(W) x 162(H) x 44(D) mm
Weight	1.5kg

- **SLA50:** 50W 100v Line Volume Control
- **SLA100:** 100W 100v Line Volume Control

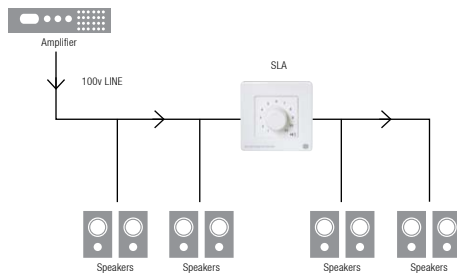
The SLA range of 100v Line Attenuators (volume controls) offer the ability to control the level of individual loudspeaker lines via an elegant, flush-mounting wall control plate.

Both Models - SLA50 (50W) and SLA100 (100W) - feature 10-step plus off-position notched control knobs, connected to high quality audio transformer and fitted to attractive single gang (SLA50) or double gang (SLA100) faceplates with contemporary screwless finish.

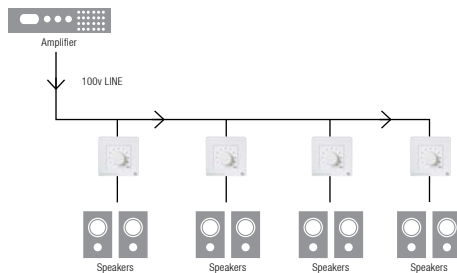
As well as volume adjustment, the units incorporate volume restoration facility, which will override the setting of the control knob and output the volume to full, when presented with a 24v DC control voltage.



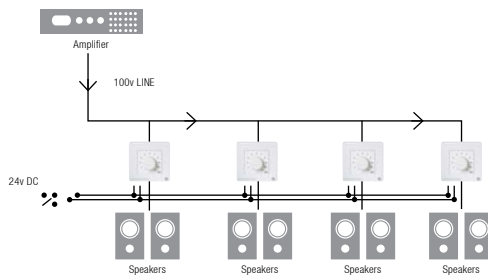
Adding the SLA to your loudspeaker network as shown will allow control of the loudspeakers located after the insertion point.



Adding the SLA to individual loudspeaker feeds will allow each unit to be set/controlled.



Switched 24v DC (eg. from fire alarm or emergency panel) will override the SLA individual settings and output the volume to full power.



Specifications:

Model:	SLA50	SLA100
Power Rating	50W RMS	100W RMS
Settings/Steps	Off, 1 x 6dB, 9 x 3dB Steps	Off, 1 x 6dB, 9 x 3dB Steps
Paging Override Voltage	24v DC	24v DC
Colour	White	White
Termination	Rear-mounted screw terminals	Rear-mounted screw terminals
Dimensions	86(W) x 86(H) x 44(D) mm	95(W) x 165(H) x 44(D) mm

- **LVC-25:** 25W 100v Line Volume Control
- **LVC100:** 100W 100v Line Volume Control
- **LVC300:** 300W 100v Line Volume Control

A range of 50/70/100v line remote volume controls for loads of 25, 100 and 300W with provision for local volume restoration for paging announcements by built-in 24v relay override.

Each control has been designed to provide excellent frequency response with minimum quiescent power loss, using uniquely wound auto-transformers for maximum efficiency.

LVC025/VA and LVC100/VA models include all the same features of the standard LVC025 and LVC100 products; the main difference is that the override relay is energised when the Volume Control is in normal use and de-energises in fail/safe override condition, to provide full volume restoration for emergency broadcasts.

Both controls are suitable for low frequency and DC line surveillance monitoring systems, normally associated with Voice Alarm facilities and are site adjusted.

Features:

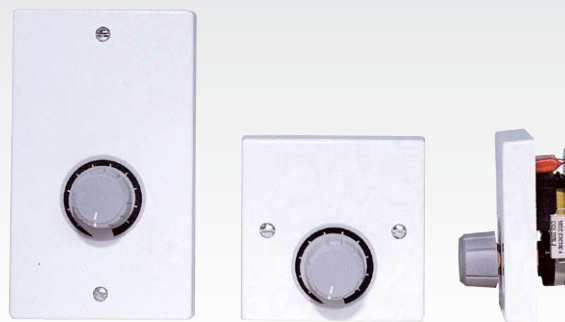
- A rugged, stepped, user control
- Collet fixed knobs
- Permanent push-on wiring connectors conveniently at one end of the PC board
- Easily adjustable, colour coded, on-board header receptacles for option selection (300W excluded, use terminal selection)
- Detailed diagrammatic instructions make preparation and installation easy
- Also suitable, by 'on-board' option selection, for three wire amplifier sourced paging override systems, TRI-WIRE
- LVC025 and LVC100 volume controls are fitted to ivory ABS UK switchplates
- Various metal front panel options are available at extra cost

Order Codes:

Model:	
LVC025/VA:	25W, including UK front panel, single switchplate - VA compliant
LVC025:	25W, including UK front panel, single switchplate
LVC025/PC:	25W, 'bare bones' PC only
LVC100/VA:	100W, including UK front panel, double switchplate - VA compliant
LVC100:	100W, including UK front panel, single switchplate
LVC100/PC:	100W, 'bare bones' PC only
LVC300:	300W, including front panel to mate with MK 5268 ALM flush backbox
LVC300/PC:	300W, 'bare bones' chassis only
LVC300/SM:	300W, mounted in surface fixing backbox
LVC600:	6W LowZ including UK front panel, single switchplate

Specifications:

Model:	LVC-25	LVC100	LVC300
Rated Input	25W, 100v	100W, 100v	300W, 100v
Maximum Load	30W	120W	330W
Maximum Input Voltage	100v, RMS 140v Peak (intended for use on 50, 70, 100v line distribution systems)		
Minimum Nominal Input Voltage	50v	50v	50v
Control Attenuation	60dB, in 12 steps, including 'Off'		
Paging Attenuation	12dB, in 4 steps (relay override function only)		-
Operating Frequency Range	150Hz ~ 15KHz	150Hz ~ 15KHz	40Hz ~ 15KHz
Override Relay: Consumption	400mW	400mW	900mW
Termination	Push-on screw terminations, fixing to PCB header pins. max cable size 2.5mm ² , stripping length 6mm		Screw termination max cable size 4mm ²
Finish	Ivory plate with grey rotary switch		
Dimensions	87(W) x 87(H) x 38(D) mm	87(W) x 145(H) x 38(D) mm	122(W) x 178(H) x 84(D) mm



- **TW1010:** TRI-Wire Override Interface
- **TVC25:** 25W 100v Line Volume Control

TRI-WIRE TW1010 is an interface between the amplifier and loudspeaker(s) to allow low cost overall paging override and volume restoration, where a number of individual loudspeaker line volume controls are to be installed.

Without TRI-WIRE, each volume control would need to be fitted with an override relay requiring centrally sourced powering, involving 4 wire cabling. As the name suggests, the TRI-WIRE system uses only three wires linked to the volume controls, enabling a lower cost of installation.

A special TRI-WIRE line volume control, TVC25 is recommended for use with this system, though any of the Communication Technology Volume Control range is compatible.

TW1010 has the advantage of being low profile and suitable for all back boxes of at least 20mm depth, supplied standard with an ivory white plastic front panel. For installation in close proximity to the host amplifier.

Features:

- No remote relay powering necessary
- Lower cost of each volume control
- Compatibility with all types of paging access system, including VOX gates, passive or electronic access
- Requires only a few milliamperes, can be powered from a 24v plug top supply, or the host amplifier
- TW1010 can easily be installed in a UK double switchplate back box or within the host amplifier
- May also be used to terminate all amplifier and loudspeaker cabling
- Auxiliary outputs for speech (paging) only, music only in addition to normal outputs are provided



Specifications:

Model:	TW1010
Supply Voltage	18 ~ 35v negative ground, 24v nominal
Supply Current	20mA on override
System Function	By direct 'PRESS TO TALK' connection on paging microphone or by grounded 24v access system
Volume Restoration Relay: Contacts	Silver nickel 2 Amp. Maximum switching voltage 150v AC
Maximum Input Power	120W RMS, 50, 70 or 100v line
Dimensions (face plate)	145(W) x 85(H) x 15(D) mm (2 gang plate) requires at least 25mm depth back box/enclosure

Model:	TVC25
Rated Input	25W
Maximum Load	30W
Maximum Input Voltage	100v RMS 140v Peak
Control Attenuation	60dB in 12 steps, including 'Off'
Operating Frequency Range	150Hz ~ 15kHz
Operating in Systems	Attenuation recommended below 150Hz
Terminations	Screw terminals; maximum cable size 3.5mm ²
Dimensions	PCB: 65(H) x 50(D) mm. Overall depth 30mm. When mounted to supplied UK single gang switchplate, depth behind panel is 20mm

• AVB5: Audio-via-Bluetooth Wireless Receiver

The new AVB5 is a low cost, simple, yet effective unit which allows wireless connection between any amplifier (or any device with a line input) and Bluetooth enabled devices, such as:

- MP3 Players
- Mobile Phones
- PC/Laptop Computers
- Microphone/Headsets

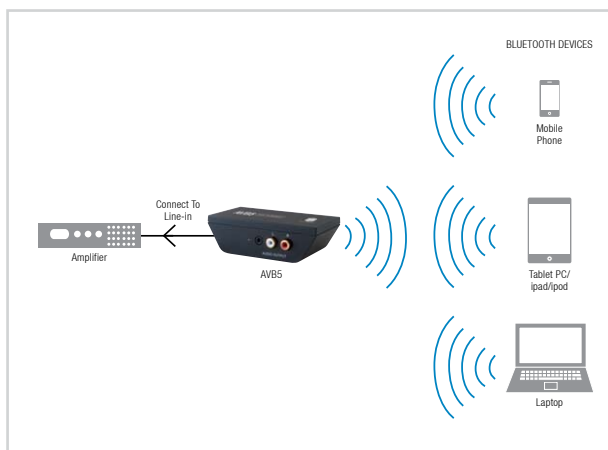
Each AVB5 unit has a unique pairing code to identify it, which is especially useful if operating multiple devices within a small area or location, the maximum operational range being 80 metres (dependent on the environmental conditions). A simple blue LED identifies when a connection to the AVB5 is successfully made.

Once paired, the unit streams the audio signal via a secure 2.4GHz A2DP protocol, avoiding any other Bluetooth enabled device within range.

Power is supplied by a 5vDC plugtop PSU (supplied) or via a USB A connection, which may be via a computer or other source with USB facility.

Features:

- Bluetooth Wireless link to amplifiers, pre-amps, HiFi, etc
- Unique pairing code to each unit
- Operating range up to 10 metres
- Powered via PSU or USB



Order Codes:

Model:	AVB5
Inputs	2.4GHz A2DP Bluetooth Protocol
Outputs	3.5mm Stereo Jack or 2 x Phono Connectors
Pairing/ID	ID code located on the bottom of the unit
Range	10m max. (optimum conditions)
Power	5v DC via supplied PSU or via USB A connector
Dimensions	105(W) x 32(H) x 56(D) mm
Weight	0.08kg (not incl PSU)



Need help choosing the right product?
Call our technical support team now on:

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Switchcraft

- **SC700:** AV Direct Box - Fully-shielded Jensen Isolation Transformer
- **SC700CT:** AV Direct Box - Fully-shielded Isolation Transformer

The SC700 Series gives you all the inputs and outputs you need to connect MP3 players, PCs, laptops, CD players and other audio devices to audio consoles, mic preamps, effects processors, house sound systems and other equipment with 3-pin XLR inputs.

Both the SC700 and SC700CT convert the outputs of your high-impedance stereo or mono line level audio devices and musical instrument to low-impedance, balanced and isolated mic level signals. All stereo inputs are summed to mono and output to a single 3-pin XLR connector.

The SC700 AV Direct Box from Switchcraft comes loaded with genuine Jensen transformers, which provide optimal impedance and an impressively extended frequency range (10Hz ~ 40kHz).

Features:

- Left and right RCA inputs
- Left and right RCA thruputs
- 3.5mm stereo input
- Left and right 1/4" TS (unbalanced) inputs
- 20dB pad
- Pin-1 ground lift
- Recessed I/O panel
- Ultra-rugged extruded aluminium enclosure



Specifications:

Model:	SC700 / SC700CT
Type	Passive DI
Channels	1
Inputs	2 x RCA, 1 x 2.5mm stereo, 2 x 1/4" jack
Outputs	1 x XLR, 2 x RCA thru
Dimensions	53(H) x 85(D) x 105(W) mm
Weight	0.27kg

- **SC800:** Instrument Direct Box - Fully-shielded Jensen Isolation Transformer
- **SC800CT:** Instrument Direct Box - Fully- shielded Isolation Transformer

Switchcraft's SC800 Direct Box Series efficiently converts your instrument's high-impedance line-level signal to a balanced and isolated microphone-level signal. That way, you can put an SC800 between your audio devices or instruments, then connect your line-level equipment to other equipment, such as audio consoles, preamplifiers, effects processors and recording gear.

The Switchcraft SC800 even employs Jensen transformers, for a high-quality design.

Features:

- Instrument direct box (SC800 Model only with Jensen transformer)
- Common Mode Rejection: Greater than 100dB at 60Hz
- Input Impedance: Greater than 150k at 1kHz
- Output Impedance: Less than 170k at 1kHz
- Phase Response: Less than 3 degrees at 20Hz, Less than 1 degree at 1kHz, Less than 16 degrees at 20kHz
- Total Harmonic Distortion + Noise: Less than .05% (At 20Hz, +4dBu), Less than .006% (At 1kHz, +4dBu)
- Maximum Input Level: +21dBu (At 20Hz with 1% THD), +41dBu (With 20dB Pad Engaged)
- Frequency Response: 10Hz to 40kHz (±0.3dB, ref 1kHz)
- Voltage Gain: -23dB, -43dB (With 20dB Pad Engaged)



Specifications:

Model:	SC800 / SC800CT
Type	Passive DI
Channels	1
Inputs	1 x ¼" jack
Outputs	1 x XLR, 2 x ¼" jack thru
Dimensions	53(H) x 85(D) x 105(W) mm
Weight	0.27kg

Switchcraft®

- **SC900:** Instrument Box with Phantom Lift (Jensen Isolation Transformer)
- **SC900CT:** Instrument Box with Phantom Lift (Switchcraft Isolation Transformer)

Switchcraft SC900 Series are the first passive direct boxes with remote-controllable ground-lift switch. This ground-lift switch (called Phantom Lift) allows you to instantly disconnect the SC900's ground circuit by simply engaging +48v phantom power from the board. That way, if an irritating buzz starts to show up in the middle of the show, you don't have to fight the crowd and appear onstage to fix the issue!

Just flip on phantom power and the SC900CT cuts its ground. It's that simple! The SC900 Series also comes equipped with either Pro grade Jensen or Switchcraft's own custom transformers, so you get amazing isolation, impedance matching and extended frequency response.

Features:

- Phantom Lift - remote-controllable ground lift uses phantom power to trip ground line
- LED indicator illuminated to show lifted ground
- Two ground lift modes: manual and +48v lift
- Frequency response 20Hz ~ 20kHz
- Super-rugged all-metal design
- Unbalanced ¼" in and through connectors
- Balanced XLR output
- Switchable -20dB pad



Specifications:

Model:	SC900 / SC900CT
Type	Passive DI
Channels	1
Inputs	1 x ¼" jack
Outputs	1 x XLR, 1 x ¼" jack thru
Dimensions	53(H) x 85(D) x 105(W) mm
Weight	0.27kg

• **RMAS8: 3-way Microphone Splitter with Dual-transformer Isolated Outputs**

Switchcraft's RMAS8 is perfect for any situation where you need to send duplicate signals to different places with no degradation of the signal.

The front panel of the RMAS8 is equipped with eight XLR inputs and the back panel sports eight channels of inputs on DB25 with corresponding direct outs, also on DB25.

Transformer-isolated outputs (also on DB25) lets you send duplicate feeds to auxiliary tasks, such as monitor mixes or a recording deck. Two ground lift toggles per input and a 40dB pad complete the RMAS8's features.

Features:

- 8 input, 24 output dual transformer isolated audio splitter
- 8 Switchcraft front panel XLR inputs
- 40dB Line level pad on each channel
- Two ground lift toggle switches on each channel (1 for each transformer isolated output)
- 4 DB25 connectors (TASCAM pinout) to accommodate all of the units Inputs/Outputs



Amplifiers

Audio Signal Processing

Audio Signal Generation

Audio System Tools

• **RMAS8PRO: 3-way Microphone Splitter with Dual-transformer Isolated Outputs on DB25**

Switchcraft's RMAS8PRO sends duplicate signals to different places with no degradation of the signal.

The RMAS8PRO's front panel is equipped with eight XLR inputs and the back panel sports eight channels of inputs on DB25 with corresponding direct outs, also on DB25. Jensen magnetically shielded (MU Metal) dual-isolated audio transformers let you send duplicate feeds to auxiliary tasks, such as monitor mixes or a recording deck.

Two ground lift toggles per input, a third set of Euro style terminal blocks, and a 40dB pad complete the RMAS8PRO's features.

Features:

- 8 input, 24 output dual transformer isolated audio splitter
- 8 Switchcraft front panel XLR inputs
- Line level pad on each channel
- Two ground lift toggle switches on each channel (1 for each transformer isolated output)
- 4 DB25 connectors (TASCAM pinout) to accommodate all of the units Inputs / Outputs
- Additional set of I/O connections utilising Euro style terminal blocks
- Jensen magnetically shielded (MU Metal) dual isolated audio transformers



Microphones (Wired)

Microphones (Wireless)

Portable P.A.

Soundfield

Induction Loops

Global Banking Group

The refurbishment of a major global banking Group's New York offices called for high quality, discreet microphones throughout its boardrooms. The Clockaudio CS-RF boundary layer mics were specified throughout to guarantee the very highest quality results.





Slimline Gooseneck Microphones	118 ~ 120
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• C2 Series: Cardioid/Hypercardioid Condenser Gooseneck Microphones

Cardioid Gooseneck microphone designed for use in controlled acoustic environments such as schools, universities and public address paging system.

Hypercardioid version for noisy environments such as financial establishments, transport termini and factory communications.

Features:

- Optimised for speech clarity
- Unobtrusive slimline design
- Fully flexible or semi-rigid shafts
- Choice of shaft length
- Choice of XLR or base-mounting
- Hypercardioid ideal for use in high ambient noise environments
- Engineered in high quality brass
- Finished in satin black

Model Dimensions:

Model:	Overall Length:	Shaft Diameter:
C22E/CT22E	180mm	8mm
C22/CT22	200mm	8mm
C23E/CT23E	280mm	8mm
C23/CT23	300mm	8mm
C24E/CT24E	380mm	8mm
C24/CT24	400mm	8mm
C25E/CT25E	480mm	8.5mm
C25/CT25	500mm	8.5mm

C=Cardioid / CT=Hypercardioid



Includes W2 Windshield:



Available Gooseneck Options

XLR Connector Mount



XLR Connector Mount: 3 or 5 pin male XLR, includes universal Phantom Power supply adaptor 9 ~ 48v with *selectable base cut filter and -10dB pre attenuation pad (*Non RF models only)

LED Halo



LED Halo: High bright Halo LED for speaker identification

ON/OFF Switch



ON/OFF Switch: Silent, magnetic ON/OFF switch with LED indicator (RF models only)

Knuckle Joint



Knuckle Joint: Unique design feature allowing horizontal rotation and verticle angle adjustment

RF-Immunity



RF-Immunity Immune to RF artefacts - fully shielded against Radio Frequency Interference (RFI) from GSM devices operating in the 800MHz ~ 1.2GHz band width

Specifications:

Model:	C2 Series	
Type	Condenser (back electret)	
Polar Pattern	Cardioid (C)	Hypercardioid (CT)
Frequency Response	70Hz ~ 14kHz ±3dB @ 1kHz (0dB = 1v/Pa)	60Hz ~ 12kHz ±3dB @ 1kHz (0dB = 1v/Pa)
Sensitivity	-47dB	- 51dB
Impedance	"E" Type Open Ended Type	200Ω 1.6kΩ
S/N Ratio		64dB(A)
Maximum SPL		115dB 1% THD
Power Requirements	"E" Type Open Ended Type Open ended 1.5	9 ~ 48v Phantom Power 1.5 ~ 9v max. through series resistor
Optimum Operating Voltage	Open Ended Type	6v
Switchable Bass Filter	"E" Type	- 4dB per octave at 400Hz to - 6dB per octave at 100Hz
Switchable Pad	"E" Type	- 10dB
Cable	Open Ended Type	1m
Termination	"E" Type Open Ended Type	XLR M10 x 1 Thread with shake-proof washer and nut
Finish	Satin black	

• **C3100:** Short Gooseneck/C3 Slimline Gooseneck

Designed for use in boardrooms, conferencing and a wide variety of applications requiring easily detachable Gooseneck microphones with good consistent sound quality.

Features:

- Short flexible gooseneck
- Slimline unobtrusive design
- Engineered in high quality brass
- Tini QG connector for easy interchange
- Cardioid condenser microphone
- C3 series wideband quality
- Easy connection to SM20-RF, SM80-RF and SM80S-RF shock mounts, PPA-RF, S140-RF or CW9004 wireless microphone base
- Finished in satin black

Model Dimensions:

Model:	Length	Shaft
C3100	100mm	Semi-rigid
C310-R	100mm	Rigid
C312-SR	200mm	Semi-rigid
C313-SR	300mm	Semi-rigid
C314-SR	400mm	Semi-rigid



Includes W2 Windshield:



Specifications:

Model:	C 3
Type	Condenser (black electret)
Polar Pattern	Cardioid
Frequency Response	50Hz ~ 18kHz
Sensitivity	-47dB ± 3dB @ 1kHz (0dB = 1v/Pa)
Impedance	200Ω
S/N Radio	64dB(A)
Maximum SPL	125dB 1% THD
Power Requirements	SM20-RF, SM80/PPA-RF, SM80S/PPA-RF, PPA-RF, S140-RF, CW9004
Termination	3 pin female Tini QG connector
Accessories	W2 Windshield included
Head Diameter	12mm
Shaft Diameter	6mm
Overall Length	125mm
Net Weight	0.29kg
Finish	Satin Black



• C3 Series: Cardioid Condenser Gooseneck & Knuckle Joint Microphones

Cardioid Condenser Microphones designed for use in conference halls, places of worship, broadcasting and paging systems. The Halo versions have been designed for use in conference and other situations where speaker identification is required.

Features:

- Response optimised for consistent sound quality
- Unobtrusive slimline design
- Superior grade components
- Choice of XLR or open ended base mounting
- High bright LEDs
- Engineered in high quality brass
- Finished in satin black
- Fully flexible or semi rigid gooseneck shaft
- Choice of shaft length
- C301/C301E fitted with knuckle joint giving both horizontal rotation and vertical angle adjustment

Model Dimensions:

Model:	Overall Length	Shaft Diameter
C31E	180mm	8mm
C31	100mm	8mm
C32E	280mm	8mm
C32	200mm	8mm
C33E/C33E Halo	380mm	8mm
C33/C33 Halo	300mm	8mm
C34E/C34E Halo	480mm	8mm
C34/C34 Halo	400mm	8mm
C35E	580mm	8mm
C35	500mm	8.5mm
C36E	680mm	8.5mm
C36	600mm	8.5mm
C301E/C301E Halo	180mm (Knuckle Joint)	8.5mm

Available Gooseneck Options

XLR Connector Mount



XLR Connector Mount: 3 or 5 pin male XLR, includes universal Phantom Power supply adaptor 9 ~ 48v with *selectable base cut filter and -10dB pre attenuation pad (*Non RF models only)

LED Halo



LED Halo: High bright Halo LED for speaker identification

ON/OFF Switch



ON/OFF Switch: Silent, magnetic ON/OFF switch with LED indicator (RF models only)

Knuckle Joint



Knuckle Joint: Unique design feature allowing horizontal rotation and vertical angle adjustment

RF-Immunity



RF-Immunity Immune to RF artefacts - fully shielded against Radio Frequency Interference (RFI) from GSM devices operating in the 800MHz ~ 1.2GHz band width



Includes W2 Windshield:



Specifications:

Model:	C3 Series	
Type	Condenser (back electret)	
Polar Pattern	Cardioid	
Frequency Response	50Hz ~ 18kHz	
Sensitivity	-47dB +/- 3dB @ 1kHz (0dB = 1 V/Pa)	- 51dB
Impedance	"E" Type Open Ended Type	200Ω 1.8kΩ
S/N Ratio	64dB(A)	
Maximum SPL	125dB 1% THD	
Power Requirements	"E" Type Open Ended Type	9 - 48 volts phantom power 1.5 - 9 volts max. through series resistor
Optimum Operating Voltage	Open Ended Type	6v
Switchable Bass Filter	"E" Type	- 4dB per octave at 400Hz to - 6dB per octave at 100Hz
Switchable Pad	"E" Type	- 10dB
Cable	Open Ended Type	1m (3')
Termination	"E" Type Open Ended Type Open Ended Type	Male 3 Pin XLR Male 5 Pin XLR M10 x 1 Thread with shake-proof washer and nut

HALO High Bright LED:

Operating Voltage	3.6v
Operating Current	30mA max.
Finish	Satin Black



• C800: Mini Shotgun Gooseneck Microphone

Slim, mini shotgun, hypercardioid microphones developed for speech purposes in a wide range of pro and live sound applications including places of worship, conference and leisure centres, banks and financial trading centres.

Features:

- Slim mini shotgun
- Optimised for speech clarity
- Superior grade components
- Unobtrusive slim design
- Engineered in high quality brass
- Finished in satin black

Models:

Model:	Termination:
C800	Unterminated
C800-E	XLR Connector
C800E-RF	XLR Connector, RF-immunity
C800ES-RF	XLR Connector, RF-immunity with ON/OFF switch & LED



Includes W8 Windshield:



Specifications:

Model:	C800 / C800E
Type	Condenser (back electret)
Polar Pattern	Hypercardioid
Frequency Response	50Hz ~ 18kHz
Sensitivity	-47dB +/- 3dB @ 1kHz (0dB = 1 V/Pa)
Impedance	C800E: 200Ω / C800: 1.8kΩ
S/N Ratio	64dB(A)
Maximum SPL	125dB 1% THD
Power Requirements	C800E: 9 - 48v Phantom Power C800: 1.5 - 9v max. through series resistor Optimum operating voltage 6v
Switchable Bass Filter	C800E: 4dB per octave at 400Hz to - 6dB per octave at 100Hz
Switchable Pad	C800E: 10dB
Cable	C800: 2 metres
Termination	C800E: PPA Adaptor - Male XLR C800: M10 x 1 Thread with shakeproof washer and nut
Dimensions	C800E: 12(Ø)mm, 458mm overall length. With W8 windshield: 480mm C800: 12(Ø)mm, 375mm overall length. With W8 windshield: 397mm
Finish	Satin Black

• C801: Mini Shotgun Knuckle Joint Microphone

Slim, mini shotgun, hypercardioid condenser microphone suitable for speech in a wide range of pro and live sound applications including places of worship, conference and leisure centres, banks and financial trading centres.

Fitted with a knuckle joint giving both lateral and vertical adjustment.

Features:

- Slim mini shotgun fitted with a knuckle joint giving both lateral and vertical movement
- Optimised for speech clarity
- Superior grade components
- Unobtrusive slim design
- Engineered in high quality brass
- Finished in satin black

Models:

Model:	Termination:
C801	Unterminated
C801-E	XLR Connector
C801E-RF	XLR Connector, RF-immunity
C801ES-RF	XLR Connector, RF-immunity with ON/OFF switch & LED



Includes W8 Windshield:



Specifications:

Model:	C801 / C801E
Type	Condenser (back electret)
Polar Pattern	Hypercardioid
Frequency Response	50Hz ~ 18kHz
Sensitivity	-47dB +/- 3dB @ 1kHz (0dB = 1 V/Pa)
Impedance	C801E: 200Ω / C801: 1.8kΩ
S/N Ratio	64dB(A)
Maximum SPL	125dB 1% THD
Power Requirements	C800E: 9 - 48v Phantom Power C801: 1.5 - 9v max. through series resistor
Switchable Bass Filter	C801E: 4dB per octave at 400Hz to - 6dB per octave at 100Hz
Switchable Pad	C801E: 10dB
Cable	C801: 2 metres
Termination	C801E: PPA Adaptor
Base Mounting	C801: Open ended C801: M10 x 1 Thread with shakeproof washer and nut
Dimensions	C801: 12(Ø)mm, 150mm overall length. With W8 windshield: 172mm C801E: 12(Ø)mm, 262mm overall length. With W8 windshield: 285mm
Finish	Satin Black



- **C815E-RF:** Mini Shotgun Gooseneck Microphone
- **C816E-RF:** Semi-Rigid Mini Shotgun Gooseneck Microphone

Slimline, hypercardioid shotgun microphones for high quality speech in professional recording and live broadcasting applications.

Engineered in high quality brass and finished in satin black.

Features:

- Slim mini shotgun
- Optimised for speech clarity
- Superior grade components
- Unobtrusive slim design
- Engineered in high quality brass
- Finished in satin black



Includes W8 Windshield:



Specifications:

Model:	C815E-RF	C816E-RF
Type	Condenser (black electret)	Condenser (black electret)
Polar Pattern	Hypercardioid	Hypercardioid
Frequency Response	50Hz ~ 18kHz	50Hz ~ 18kHz
Sensitivity	-45dB +/- 3dB @ 1kHz (0dB = 1 V/Pa)	-45dB +/- 3dB @ 1kHz (0dB = 1 V/Pa)
Impedance	200Ω	200Ω
S/N Ratio	64dB(A)	64dB(A)
Maximum SPL	125dB 1% THD	125dB 1% THD
Power Requirements	9 - 48v phantom power	9 - 48v phantom power
Termination	Male 3 Pin XLR	Male 3 Pin XLR
Dimensions	Head: 10(Ø) mm Shaft: 17(Ø) mm Overall Length: 315 mm	Head: 10(Ø) mm Shaft: 17(Ø) mm Overall Length: 440mm
Finish	Satin Black	Satin Black

• **C420E: Twin Mount Cardioid Condenser Microphone**

Cardioid condenser microphones mounted on twin rigid shafts vertically adjustable, individually, through 180°. Individually powered, providing live redundant capability so often required in a live broadcast situation. Finished in satin black.

Features:

- Optimised for consistent sound quality
- Integrated Phantom Power Adaptor
- 5 pin XLR mounting
- Shaft angles independently adjustable

Includes W2 Windshield:



Specifications:

Model:	C420E
Frequency Response	50Hz ~ 18KHz
Sensitivity	-44dB ±3dB @ 1kHz (0dB=1v/Pa)
Impedance	200Ω
S/N Ratio	64dB(A)
Power Requirements	9 ~ 48v Phantom Power
Termination	Male 5 Pin XLR



• **C430E: Twin Mount Cardioid Condenser Microphone**

Cardioid condenser microphones mounted on twin rigid shafts vertically adjustable, individually, through 180°.

Individually powered, providing live redundant capability so often required in a live broadcast situation. Finished in satin black.

Features:

- Integrated Phantom Power Adaptor
- 5 pin XLR mounting
- Shaft angles independently adjustable
- Three microphone head variants: C 900, C 3H & C 800H

Includes W2 Windshield:



Specifications:

Model:	C430E
Frequency Response	50Hz ~ 18KHz
Sensitivity	-44dB ±3dB @ 1kHz (0dB=1v/Pa)
Impedance	200Ω
S/N Ratio	64dB(A)
Power Requirements	9 ~ 48v Phantom Power
Termination	Male 5 Pin XLR



Capsule Options available:

<p>Rugged Cardioid condenser microphone capsule: C 900</p> 	<p>Slimline Cardioid condenser microphone capsule: C 3H</p> 	<p>Hyper-cardioid Mini shotgun condenser microphone capsule: C 800H</p> 
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• **C440E: Twin Mount Cardioid Condenser Microphone**

Cardioid condenser microphones mounted on twin rigid shafts vertically adjustable, individually, through 180°.

For use in a wide variety of applications including presentations, conferences, broadcasting and places of worship. Finished in satin black.

Features:

- Attractive slimline design
- Optimised for consistent sound quality
- Integrated Phantom Power Adaptor
- 3 pin XLR mounting
- Shaft angles independently adjustable

Includes W2 Windshield:



Specifications:

Model:	C440E
Frequency Response	50Hz ~ 18KHz
Sensitivity	-44dB ±3dB @ 1kHz (0dB=1v/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
Switchable Bass Filter & -10dB Switchable Pad	Yes
S/N Ratio	64dB(A)
Termination	Male 3 Pin XLR
Dimensions	450 mm overall length, 7(Ø) mm rigid shafts





• C900: Combination Series

A series of easily interchangeable microphones, stands and shafts giving flexibility in choice of microphone and accessories for a wide range of applications including broadcast, conference halls, places of worship, leisure centres, etc. Finished in satin black.

C3H: Includes W2 Windshield:



C 800H: Includes W8 Windshield:



C900



C3H



C800H

Microphones:

Model:	
C900	Rugged wide band cardioid condenser microphone for multiple use
C3H	Short slimline cardioid condenser microphone for use in controlled acoustic environments
C800H	Hyper-cardioid condenser mini shotgun microphone useful in a wide range of pro and live sound speech applications

Specifications:

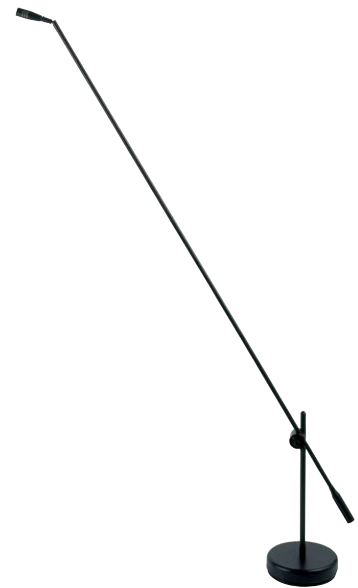
Model:	C900	C3H	C800H
Frequency Response	50Hz ~ 20kHz	50Hz ~ 18kHz	50Hz ~ 18kHz
Sensitivity	-48dB	-47dB ±3dB at 1kHz (0dB = 1v/Pa)	-47dB
Power Requirements	1.8KΩ	1.8KΩ All models 9 ~ 48v via a Phantom Power Adaptor (PPA)	1.8KΩ
S/N Ratio	68dB(A)	64dB(A)	64dB(A)
Termination	Male 3 pin Tini Q connector		
Dimensions	57 x 19 mm	45 x 12 mm	151 mm

- **CA700:** Floor Standing 700mm Long Shaft
- **CA700-RF:** Floor Standing 700mm Long Shaft
- **CA900:** Floor Standing 900mm Long Shaft
- **CA900-RF:** Floor Standing 900mm Long Shaft

Long, rigid shafts of 700mm and 900mm respectively. Each connects to a short (350mm) upright shaft by a separate, lockable swivel joint allowing adjustments to angle, height and reach.

Features:

- Long Shaft includes Phantom Power Adaptor at bottom end terminated in Male 3 pin XLR
- Knuckle joint at microphone end terminated with Tini QG 3 pin female connector
- Short shaft connects to SM 155 floor mounting, shock absorbing base



- **CA30:** Semi Rigid 300mm Shaft
- **CA30-RF:** Semi Rigid 300mm Shaft
- **CA40:** Semi Rigid 400mm Shaft
- **CA40-RF:** Semi Rigid 400mm Shaft

Semi-rigid 300mm and 400mm shafts fitted with Phantom Power Adaptor at the bottom end terminated in Male 3 pin XLR and knuckle joint at tip with Tini QG 3 pin Female connector.

Features:

- Integrated Phantom Power Adaptor
- Male 3 pin XLR termination
- Finished in satin black





- **CAK1:** Phantom Power Adaptor
- **CAK1-RF:** Phantom Power Adaptor

Phantom Power Adaptors with knuckle and Tini QG 3-pin Female connectors.



- **S750:** Table Mounting Microphone Base

Table microphone base fitted with knuckle and Tini QG 3-pin Female connector.

Terminated with 3m of cable requiring a Phantom Power Adaptor.

Diameter 75mm, height including connector 75mm.



- **SM155:** Floor Mounting Microphone Base

Floor mounting, shock absorbing microphone base with a diameter of 155mm and 42.5mm height.



- **C901E-RF:** Ready-made 900 Series Microphone
- **C901ES-RF:** Ready-made 900 Series Microphone with ON/OFF Switch & LED

These 'ready-made' C 900 Series Microphones feature the C 900 cardioid condenser capsule and CAK Phantom Power Adaptor with knuckle joint for horizontal rotation and verticle angle adjustment.

Features:

- Integrated Phantom Power Adaptor
- Male 3 pin XLR termination
- Finished in satin black



C901E-RF

C901ES-RF

Specifications:

Model:	C901E-RF / C901ES-RF
Frequency Response	50Hz ~ 20KHz
Sensitivity	-48dB ±3dB @ 1KHz (0dB=1v/Pa)
Impedance	200Ω
S/N Ratio	68dB(A)
Power Requirements	9 ~ 48v Phantom Power
Termination	Male 3 Pin XLR



• C3SE: Suspended Cardioid Microphones

Slim, wide band, cardioid condenser microphone designed to be suspended in places of worship, conference halls, theatres, etc.

Features:

- Response optimised for consistent sound quality
- Short, flexible shaft with knuckle joint for easy adjustment of vertical angle
- Made in high quality brass and finished in satin black or ivory
- 7.5m of cable attached
- Fully balanced and terminated in male 3 pin XLR
- Mounting plate option CP 73/73W

Models:

Model:	Colour
C3SE	Black
C3SE-RF	Black
C3SEW	Ivory
C3SEW-RF	Ivory

Includes W2 Windshield:



Specifications:

Model:	C3SE Series
Frequency Response	50Hz ~ 18kHz
Sensitivity	-47dB \pm 3dB @ 1kHz (0dB=1v/Pa)
Impedance	200 Ω
S/N ratio	64dB(A)
Power Requirements	9 ~ 48v Phantom Power
Termination	Male 3 pin XLR
Dimensions	Head:12(\emptyset) mm, Shaft: 6(\emptyset) x 100(L) mm



• C8SE: Suspended Hypercardioid Mini Shotgun Microphones

Slim, mini shotgun, hypercardioid condenser microphone designed to be suspended in places of worship, conference halls, theatres etc.

Features:

- Response optimised for consistent sound quality
- Short, flexible shaft with knuckle joint for easy adjustment of vertical angle
- Made in high quality brass and finished in satin black or ivory with 7.5m of cable attached
- Fully balanced and terminated in male 3 pin XLR
- Mounting plate option CP 73/73W

Models:

Model:	Colour
C8SE	Black
C8SE-RF	Black
C8SEW	Ivory
C8SEW-RF	Ivory

Includes W8 Windshield:



Specifications:

Model:	C8SE Series
Frequency Response	50Hz ~ 18kHz
Sensitivity	-67dB \pm 3dB @ 1kHz (0dB=1v/Pa)
Impedance	200 Ω
S/N ratio	64dB(A)
Power Requirements	9 ~ 48v Phantom Power
Termination	Male 3 pin XLR
Dimensions	Head:12(\emptyset) mm, Shaft: 6(\emptyset) x 300(L) mm



• CP73: Ceiling Mounting Plate

Available in black or ivory versions, this ceiling mounting plate is for use with our C3SE and C8SE Suspended Microphones.

Models:

Model:	Colour
CP73	Black
CP73W	Ivory

Plate Dimensions:

Model:	CP73 / CP73W
Diameter	73 mm
Depth	12 mm





• **SM20-RF: Microphone Shock Mount**

A low profile, through-table shock mount fitted with RF-immunity PPA with 3 pin Male Tini Q input connector.

Features:

- M25 threaded nut supplied
- Made in high quality brass, top
- Finished in satin black

Specifications:

Model:	SM20-RF
Height Above Surface	3mm
Diameter	31mm
Body Diameter	20mm
Depth Below Surface	75mm
Mounting hole	23.5mm



• **SM70: Microphone Shock Mount**

Smooth, low profile 74mm diameter, surface fitting, shock absorbing microphone holder and base. Finished in matt black.

Specifications:

Model:	SM70
Overall Diameter	74mm
Height Above Surface	10mm
Body Diameter	51mm
Depth Below Surface	50mm



• **SM75: Microphone Shock Mount with 3-pin XLR**
• **SM75x5: Microphone Shock Mount with 5-pin XLR**

75mm diameter shock absorbing microphone base for permanent fitting above or below the surface.

Features:

- Supplied with female XLR and conversion adaptor for 3/8" BSW or 10mm screw fittings
- Finished in matt black

Specifications:

Model:	SM75
Height	32mm 64mm including XLR
Base Diameter	75mm



• **SM80: Microphone Shock Mounts**

Low profile, table-mounted shock mounts fitted with flip cover to conceal connector when closed.

Features:

- 3 pin & 5 pin XLR connector versions available
- Finished in satin nickel or matt black
- RF option also available (3 pin Male Tini QG)



Specifications:

Model:	SM80 Series
Height Above Surface	3mm
Diameter	58mm
Body Diameter	51mm
Body Below Surface	XLR version 61mm RF version 166mm



Base Models:

Model:	
SM80	Standard
SM80S	Switch & LED
SM80-RF	RF-immunity



- **SM93:** Microphone Shock Mount - 3 pin XLR
- **SM95:** Microphone Shock Mount - 5 pin XLR

Low profile, recessed, shock absorbing microphone bases.

Features:

- 3 pin & 5 pin XLR connector versions available
- Wiring connections are made via 3-way/5-way screw terminal block
- Finished in matt black



Specifications:

Model:	SM93 / SM95	
Length	87mm	
Width	82mm	
Height Above Surface	9mm	
Depth Below Surface	SM 93:	32mm
	SM 95:	22mm

- **S133:** Microphone Shock Mount
- **S135:** Microphone Shock Mount
- **S140:** Microphone Shock Mount

These stylish, RF-Immune microphone bases feature fully-programmable touch pad switch & LED for PTT, PTM and latching.

Features:

- RF-immune
- Heavy die-cast construction
- Touch pad switch
- Fully programmable
- LED indicator

Models:

Model:	
S133	3 pin XLR in, 3 pin XLR out
S135	3 pin XLR in, 5 pin XLR out
S140	3 pin Tini Q in, 5 pin XLR out with integrated PPA



Specifications:

Model:	S133 / S135 / S140
Switching	Touch pad fully programmable for PTT, PTM & Latching
Indication	Red LED
Power Requirements	48v Phantom Power
Dimensions	120(L) x 100(W) x 32(H)mm (60mm with XLR)
Weight	0.64kg

- **S120:** Microphone Shock Mount
- **S120S:** Microphone Shock Mount with PTT Switch

Table microphone base fitted with M10x screw thread mounting hole.

Features:

- 'Press-to-Talk' or latching switch option



Specifications:

Model:	S120 / S120S
Height	32mm
Diameter	120mm
Weight	1.86kg

- **S120X Series:** Microphone Shock Mount

Table microphone base fitted with XLR connector.

Features:

- 'Press-to-Talk' or latching switch option
- 3 or 5 pin options

Models:

Model:	
S120X	3 pin XLR
S120XS	3 pin XLR & switch
S120X-2	3 pin XLR & 2m cable
S120XS-2	3 pin XLR, switch & 2m cable
S120X5	5 pin XLR
S120X5S	5 pin XLR & switch
S120X5-2	5 pin XLR & 2m cable
S120X5S-2	5 pin XLR, switch & 2m cable



Specifications:

Model:	S120X
Height	57mm (with XLR)
Diameter	120mm
Weight	1.86kg



• **CRM100-RF: Retractable Through-table Omni-directional Condenser Microphone**

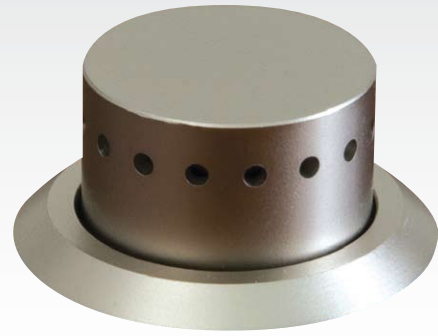
The CRM100-RF is a boundary layer, through-table, omni-directional condenser microphone with a built-in mechanism that will allow the user to make the microphone 'disappear' without having to physically remove it from the table.

This is achieved by simply pressing the top of the microphone downwards until it locks; then by pressing the microphone again it will raise itself back to its original position above the surface of the table.

Engineered in high quality brass with built-in shock mount and RF filter.

Features:

- Easy to install
- Low profile at surface level
- Unique ability to lock capsule away from sight when not in use
- Robust brass construction
- Omni-directional polar pattern
- Built-in RF filter
- Balanced output
- Supplied with 2m 2 core + screen cable
- Satin Nickel or Black Nextel finish



Specifications:

Model:	CRM100-RF
Type	Condenser (Back Electret)
Polar	Pattern Omni-directional
Frequency	Response 30Hz ~ 20kHz
Sensitivity	-42.5dB +/- 3dB @ 1kHz (0dB = 1v/Pa)
Impedance	200Ω
S/N Ratio	68dB(A)
Maximum SPL	120dB at 1kHz 1% T.H.D.
Power Requirements	9 ~ 48v Phantom Power
Termination	Open ended
Dimensions	Above Table: 15mm Diameter: 36mm Below Table: 111mm Diameter: 30mm

• **CRM102-RF: Retractable Through-table Cardoid Condenser Microphone**

The CRM102-RF is a boundary layer, through-table, cardoid condenser microphone with a built-in mechanism that will allow the user to make the microphone 'disappear' without having to physically remove it from the table.

This is achieved by simply pressing the top of the microphone downwards until it locks; then by pressing the microphone again it will raise itself back to its original position above the surface of the table.

Engineered in high quality brass with built-in shock mount and RF filter.

Features:

- Easy to install
- Low profile at surface level
- Unique ability to lock capsule away from sight when not in use
- Robust brass construction
- Cardioid polar pattern
- Built-in RF filter
- Balanced output
- Supplied with 2m 2 core + screen cable
- Satin Nickel or Black Nextel finish



Specifications:

Model:	CRM102-RF
Type	Condenser (Back Electret)
Polar	Pattern Half Cardioid
Frequency Response	50Hz ~ 18kHz
Sensitivity	-47dB +/- 3dB @ 1kHz (0dB = 1v/Pa)
Impedance	200Ω
S/N Ratio	64dB(A)
Maximum SPL	125dB at 1kHz 1% T.H.D.
Power Requirements	9 ~ 48v Phantom Power
Termination	Open ended
Dimensions	Above Table: 15mm Diameter: 36mm Below Table: 111mm Diameter: 30mm



• **CS-RF Series:** Series Boundary Layer Professional Microphones

The CS Series (Consultant Series) was developed as a result of input and recommendations from key consultants in boardroom AV integration. The goal was to minimise the number of microphones on the conference table, but also keeping in mind performance, ease of installation and aesthetics, essential considerations in such projects.

The results of these discussions are the CS2-RF, CS3-RF and CS4-RF microphones.

Features:

- Half cardioid polar pattern
- Fully balanced
- High quality engineering in solid brass
- Non-reflective black Nextel or satin nickel

• **CS2-RF:** Dual Element Boundary Microphone

The CS2-RF is a dual element boundary layer condenser microphone, with a half-cardioid polar pattern. It is designed to be placed in the middle of the conference table, with each element facing the participants.

This microphone accommodates bottom cable exit, for permanent mounting in boardroom situations.

These microphones are made of solid brass and include a 2m cable with open-ended termination. The Phantom Power Adaptor (PPA) is incorporated in the brass housing and will accept 9 ~ 48v DC (Phantom Power).



• **CS3-RF:** Triple Element Boundary Microphone

The CS3-RF microphone has the same characteristics as the CS2-RF with the addition of a third element.

This microphone is to be positioned closer to the end of the conference table in order to capture the participants facing each other and also the participant sitting at the extremity of the table.

If the participant at the end of the table is further away, it is then possible to use a combination of a CS2-RF and CS1-RF (single element version) to accommodate this situation.

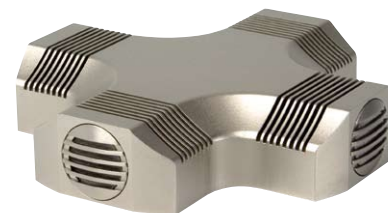


• **CS4-RF:** Quadruple Element Boundary Microphone

The CS4-RF is a new addition that completes the CS-RF Series microphone family, offering a 4-element microphone in a single housing. Like the CS2 and 3, the CS4-RF offers half cardioid polar patterns and a bottom cable exit.

The CS4-RF can be positioned in the centre of a round conference table, giving maximum coverage from a small footprint. Engineered from high quality solid brass and finished in a durable non-reflective black Nextel or satin nickel.

The CS4-RF is also available in other customised colours and special finishes upon request.



Specifications:

Model:	CS-RF
Microphone	Condenser (back electret)
Polar Pattern	Half cardioid
Frequency Response	50Hz ~ 18kHz
Sensitivity	-47dB ±3dB @ 1kHz (0dB=1v/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
S/N Ratio	64dB(A)
Termination	Open ended multi-core cable



• **C002E-RF: Low Profile Boundary Microphone**

Omni-directional, low profile, boundary layer condenser professional microphone. Ideal for applications such as conference tables, floors, pianos, etc.

Features:

- Omni-directional polar pattern
- Wide range, smooth response
- Very low profile
- Stone grey Nextel finish

Specifications:

Model:	C002E-RF
Frequency Response	50Hz ~ 18kHz
Sensitivity	-47dB ±3dB at 1kHz (0dB=1v/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
S/N Ratio	64dB(A)
Termination	Male 3 pin XLR
Dimensions	75(Ø) x 9(D)mm



• **C006E: Low Profile Boundary Microphone**

Half cardioid small, light, sensitive professional boundary layer condenser microphone for use in a wide range of AV applications, including conference, lectern and theatre.

Features:

- Half cardioid polar pattern
- Fully balanced
- Low profile
- Stone grey Nextel finish

Specifications:

Model:	C006E
Frequency Response	50Hz ~ 18kHz
Sensitivity	-48dB ±3dB at 1kHz (0dB=1v/Pa)
Impedance	200Ω
Power requirements	9 ~ 48v Phantom Power
Switchable Bass Filter & -10dB Switchable Pad	Yes
S/N Ratio	64dB(A)
Termination	Male 3 pin XLR
Dimensions	39(Ø) x 16(D)mm



• **C008E: Tabletop Boundary Microphone**
• **C008E-RF: Tabletop Boundary Microphone (RF)**

This cardioid boundary layer condenser microphone is particularly suitable for speech purposes in a wide range of pro and live sound applications including conference, lectern and theatre.

Features:

- Cardioid polar pattern
- Fully balanced
- High quality engineering in solid brass
- Concealed cable and fixing screw mounting
- Stone grey Nextel finish

Specifications:

Model:	C008E
Frequency Response	50Hz ~ 18kHz
Sensitivity	-47dB ±3dB at 1kHz (0dB=1v/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
S/N Ratio	64dB(A)
Termination	Male XLR
Dimensions	70(Ø) x 22(D)mm



• **C009E-RF: Large Surface Boundary Microphone**


Omni-directional boundary layer condenser microphone for easy use on large surfaces in a wide range of professional sound situations. Ideal for mounting on walls, floors, pianos, etc.

Features:

- Omni-directional polar pattern
- Wide range, smooth response
- Very low profile
- Stone grey Nextel finish

Specifications:

Model:	C009E-RF
Frequency Response	30Hz ~ 20kHz
Sensitivity	-42.5dB ±2dB at 1kHz (0dB=1v/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
S/N Ratio	68dB(A)
Termination	Male 3 pin XLR
Dimensions	160(Ø) x 9(D)mm

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- **C003E:** Through-table Boundary Microphone (Omni-directional)
- **C004E:** Through-table Boundary Microphone (Cardioid)

Omni-directional (C 003E) or Cardioid (C 004E) boundary layer condenser microphones designed for a wide range of installed audio, conferencing or security applications.

Features:

- Engineered in high quality brass
- Balanced output
- Simple through-table shock mounting
- Finished in satin black or matt white

Models:

Model:	Colour
C003E	Black
C003EW	White
C003E-RF	Black
C003EW-RF	White
C004E	Black
C004EW	White
C004E-RF	Black
C004EW-RF	White



Specifications:

Model:	C003E-RF	C004E-RF
Polar Pattern	Omni-directional	Cardioid
Frequency Response	20Hz ~ 20kHz	100Hz ~ 16kHz
Sensitivity	-42dB	-47dB
	±3dB at 1kHz (0dB=1v/Pa)	
Impedance	200Ω	200Ω
Power Requirements	9 ~ 48v Phantom Power	
S/N Ratio	58dB(A)	60dB(A)
Termination	Male 3 pin XLR	Male 3 pin XLR



- **C011E-RF:** Through-table Boundary Microphone (Omni-directional)
- **C012E-RF:** Through-table Boundary Microphone (Cardioid)

These through-table omni (C 011E-RF) and cardioid (C 012E-RF) microphones were created for applications demanding sonic quality, but also requiring an extremely robust housing within an extreme environment.

Features:

- RF-immune
- Balanced output
- Simple through-table shock mounting
- Finished in satin black or matt white

Models:

Model:	Colour
C011E-RF	Black
C011EN-RF	Nickel
C012E-RF	Black
C012EN-RF	Nickel

Specifications:

Model:	C011E-RF	C012E-RF
Polar Pattern	Omni-directional	Cardioid
Frequency Response	50Hz ~ 20kHz	50Hz ~ 18kHz
Sensitivity	-42dB	-47dB
	±3dB at 1kHz (0dB=1v/Pa)	
Impedance	200Ω	200Ω
S/N Ratio	58dB(A)	60dB(A)
Termination	Male 3 pin XLR	Male 3 pin XLR



- **C015E-RF:** Tabletop Boundary Microphone (Omni-directional)
- **C016E-RF:** Tabletop Boundary Microphone (Cardioid)

New style omni-directional (C 015E-RF) and cardioid (C 016E-RF) boundary layer condenser microphones featuring programmable touch pad switching for professional AV applications such as meetings, conference and lectern installations.

Optimised for speech clarity, these RF-immunity boundary microphones feature built-in Phantom Power module and are finished in satin black.

Specifications:

Model:	C 015E-RF	C 016E-RF
Type	Condenser (Back Electret)	
Frequency Response	50Hz ~ 20kHz	50Hz ~ 18kHz
Sensitivity	-42dB ±3dB @ 1kHz (0dB = 1vPa)	-47dB ±3dB @ 1kHz (0dB = 1vPa)
Impedance	200Ω	200Ω
Switching	Programmable for PTT PTM & Latching	
Power Requirements	48v Phantom Power	
S/N Ratio	58dB(A)	60dB(A)
Termination	Male 5 pin XLR (optional 3 pin XLR variant), with remote switch ability.	





• **C007E Series: 'Button' Boundary Microphones**

Omni-directional, boundary layer condenser microphones suitable for surveillance and recording in sensitive areas such as banks, airports, railway stations, law courts, conference and convention centres.

Very low profile and easily mounted with M12 x 1 nut and washer supplied.

Features:

- Non-reflective Delrin with non-conductive body (Non-RF only)
- Omni-directional
- High quality engineering

Models:

Model:	
C007	Unterminated
C007E	XLR Connector
C007E-RF	XLR Connector, RF-immune
C007E-LED-RF	XLR, RF-immune, LED



Specifications:

Model:	C007	C007E	C007E-RF
Frequency Response	50Hz ~ 20kHz	50Hz ~ 20kHz	50Hz ~ 20kHz
Sensitivity	-42.5dB ±2dB at 1kHz (0dB=1w/Pa)		
Impedance	1kΩ	200Ω	200Ω
Power Requirements	2 ~ 10v max through series resistor	9 ~ 48v Phantom Power	9 ~ 48v Phantom Power (12v DC for LED version)
Switchable Bass Filter & -10dB Switchable Pad	-	Yes	-
S/N Ratio	40dB(A)	40dB(A)	58dB(A)
Termination	Open-ended	Male 3 pin XLR	Male 3 pin XLR with PPA-RF
Dimensions: Head Diameter	20 mm	20 mm	20 mm
Dimensions: Overall Length	25 mm	25 mm	25 mm

• **CH32: (Litetouch) Dual Colour Halo Ring & Touch Pad Switch**

Comprising a dual-colour Halo ring and switch combination that can be used with all Clockaudio through-table products, the Litetouch allows users to easily identify the status of microphones, as well as mute the units for privacy.

With no moving parts, the switch is touch-sensitive, so there are no clicking noises when switching from one status to another. Both the switch and the Halo have been designed to operate remotely with all popular brands of electronic system control, so an integrator has complete freedom to assign function and LED colour.

Importantly, the Litetouch can be easily retrofitted to any Clockaudio through-table microphone product.

Features:

- Designed for remote switching
- Housing 32 LEDs to give 360° illumination
- 12, 24v DC operation
- Current consumption 40mA
- Retrofittable to all Clockaudio through-table microphones
- Fitted with 5 way socket terminal block supplied with fixing screws



Specifications:

Model:	CH32
Type	Dual Colour Halo Ring & Touch Sensitive Switch
LED Colour	Red and Green
Operating Voltage	12, 24v DC (Regulated). For 24v DC operation a 300Ω 1W resistor must be put in series with both the green and red LED wires.
Current Consumption	40mA
Termination	5 way socket terminal block (with fixing screws)
Dimensions	39(W) x 5(H) x 48(D) xmm
Hole Diameter	25 mm



- **C98:** Gooseneck Microphone (Cardioid)
- **C100:** Gooseneck Microphone (Omni-directional)

A range of microphones designed for use where voice clarity is an essential requirement and offering both moving coil and electret capsules fitted to fully flexible or part flexible/rigid goosenecks.

Capsules are mounted in a computer-matched acoustic chamber fitted with an 'anti pop' blast screen. A stainless steel mesh protects the capsule from physical damage.

Moving coil capsule: With a polar diagram approximating to cardioid, this capsule has a significantly flat frequency response within speech range, with an added 'presence' lift at 3kHz.

Electret capsule: The polar diagram is unidirectional in characteristic and has a wide frequency response.

• Mounting Options:

The mounting options for C98 and C100 are subject to additional cost and require the code suffix to be added to the order code:

- /UMC Circular universal mounting base; for right angled or parallel-with-surface mounting; 3 hole fixing to mounting surface.
- /UBC Block mounting base; providing 2 hole fixing to mounting surface and right angled or parallel-to-surface microphone assembly.

Other mounting accessories for XLR terminated microphones:

- DT37 XLR socket fitted to adjustable angle mount; for desk/lectern top fitting.
- AV260 Desk/lectern mounting anti-vibration mount; gooseneck XLR inserts firmly through centre, with compressing ring lock.
- DB-XLR XLR socket fitted to base with 'Press-to-Talk' switch and 5 pin XLR output.



UMC Mount



UBC Mount



DT37 Angle Mount



AV260 Anti-vibration Mount



Specifications:

Model:	C98	C100
Impedance @ 1kHz	300Ω floating	600Ω unbalanced
Polar Characteristic	Cardioid, approx	Omni-directional
Frequency Response	100Hz ~ 8kHz Presence lift @ 3kHz	100Hz ~ 15kHz
Polarising Voltage	-	1.5 ~ 9v DC from host amplifier or related source
Sensitivity	-72dB	-68dB

• F86 Series: Heavy Duty Gooseneck Microphones

The F86 range of gooseneck mounted, omni-directional, noise-reducing microphones provide maximum versatility combined with ease of installation.

Microphones for mobile and fixed use are included in the range, together with various end-fittings, alternative gooseneck lengths and accessories. Used in taxis and public service vehicle installations, they are also widely used for marine and heavy industrial applications.

Features:

- Computer-aided head design/capsule matching is used to obtain the required frequency response and maximum signal-to-noise characteristics
- A new one-piece head assembly, combined with the locking of the gooseneck to the head and end-fittings, deters tampering and vandalism
- The rugged dynamic microphone capsule provides optimum clarity over the speech frequencies and is fully protected for use in high humidity environments
- A line pre-amplifier is incorporated in the optional MFPA base-mounting
- A 'Press-to-Talk' switch can be fitted between the head and the gooseneck, or at the gooseneck base

Order Codes:

Model:	Description:
F86/C0	Dynamic gooseneck microphone, with head mounted PTT switch, 50mm
F86/15	Dynamic gooseneck microphone, forward facing, 150mm
F86/30	Dynamic gooseneck microphone, forward facing, 300mm
F86/45	Dynamic gooseneck microphone, forward facing, 450mm

Units are available in 600Ω and 2400Ω and can be fitted with a series of base options below Please state when ordering.

•/UM	Circular universal base
•/UB	Block mounting base
•/MFPA	Circular flange base with pre-amp
•/DB	Round heavy duty desk base
•/PTT	Single pole PTT switch, mounted at the top (/T) or base (/B) of the gooseneck



Specifications:

Model:	F86 Series	
Frequency Response	300Hz ~3.5kHz	
Impedance	600 or 2400Ω	
Output Level	-54dB @ 1kHz	
Finish	Anodised black	
Dimensions	Gooseneck length to capsule:	F86/15: 150 mm F86/30: 300 mm F86/45: 450 mm
Finish	Black PVC covered	

- **D33:** 300mm Dynamic Gooseneck
- **D34:** 400mm Dynamic Gooseneck

Dynamic cardioid gooseneck microphones designed for speech purposes in a variety of commercial audio applications.

Features:

- Rugged all-metal construction
- Response optimised for speech
- Fully flexible or semi-rigid shaft
- Finished in satin black

Model Dimensions:

Model:	Overall Length	Connection Type
D33	300mm	Base Mount
D33E	350mm	3 pin XLR
D34	425mm	Base Mount
D34E	475mm	3 pin XLR



Specifications:

Model:	D33	D34
Frequency Response	150Hz ~ 12kHz	
Sensitivity	-63.5dB ±3dB @ 1kHz (0dB=1v/Pa)	
Impedance	200Ω	
Termination	M10 x 1 thread with shakeproof washer and nut or Male 3 pin XLR	
Head Diameter	20 mm	
Gooseneck Diameter	10 mm	
Gooseneck Length	300 mm	400 mm

- **D43:** 300mm Dynamic Gooseneck
- **D44:** 400mm Dynamic Gooseneck

Dynamic cardioid gooseneck microphones suitable for speech purposes in a variety of commercial audio applications.

Features:

- Rugged all-metal construction
- Response optimised for speech
- Finished in satin black

Model Dimensions:

Model:	Overall Length	Connection Type
D43	300mm	Base Mount
D43E	350mm	3 pin XLR
D44	400mm	Base Mount
D44E	450mm	3 pin XLR



Specifications:

Model:	D43/E	D44/E
Frequency Response	150Hz ~ 12kHz	
Sensitivity	-60dB ±3dB @ 1kHz (0dB=1v/Pa)	
Impedance	200Ω	
Termination	M10 x 1 thread with shakeproof washer and nut or Male 3 pin XLR	
Head Diameter	22mm	20mm
Gooseneck Diameter	10mm	8mm
Gooseneck Length	300mm	400mm

- **BUD100:** Single-zone, moving coil Microphone
- **BUD200:** Two-zone, electret Microphone
- **BUD100E:** Single-zone, moving coil Microphone
- **BUD200E:** Two-zone, electret Microphone

These simple yet robust paging microphones are available in single and 2-zone versions. Featuring a gooseneck mounted microphone well known for its voice clarity in almost any operating environment.

Ideal for applications such as shops, offices, garages, showrooms, transport termini; wherever there is a need for an elegant, yet strong paging microphone able to withstand heavy duty usage.

Each microphone has a 2.5m lead and requires only the fitting of an interface connector to suit the host amplifier.

Features:

- Suitable for passive or electronic access amplifiers
- Microphone incorporates speech blast screen
- Soft-touch 'Press-to-Talk' button/s, with minimal noise transfer
- All steel construction, weighted base, finished in scratch and chip resistant powder coat paint
- Anti-slip feet
- Fitted with a moving coil microphone capsule, perfect for most amplifier input sensitivities. For less sensitive amplifiers an electret version is available; requires DC powering from host amplifier
- 2.5m lead (free end)



Specifications:

Model:	BUD100 / BUD200	BUD100E / BUD200E
Microphone	Moving Coil	Electret
Sensitivity	Suitable for all amplifiers with at least 500 μ V (0.5mV) sensitivity	Suitable for all amplifiers with at least 1mV sensitivity
Impedance	600 Ω	600 Ω
Characteristics	Polar diagram approximates to cardioid presence lift at 3kHz	Omni-directional
Frequency Response	\pm 6dB, 100Hz ~ 12kHz	\pm 6dB, 100Hz ~ 12kHz
Polarising Voltage	-	At least 4.5~9v max applied between polarised lead & ground
Polarising Current	-	400 μ A
Signal-to-Noise	-	Better than 40dB
Press-to-Talk Cabling Supplied	'Soft touch', momentary action, push button (2-on-2 zone) 2.5m screened mic pair + access pair/s	
Finish	Desk top: pearl white powder coat. Desk base: satin black powder coat Gooseneck & mic: matt black	
Dimensions	Base: 110(W) x 40(max H) x 140(D) mm Gooseneck length to capsule: 260mm	
Weight	0.7kg	



- **DM105/CT: Five-zone Paging Microphone**
- **DM110/CT: Ten-zone Paging Microphone**

Incorporating 'soft-touch' zone selection, 'Press-to-Talk' and 'All-Call' switches to ensure no pops or clicks are heard when activated. LED indicators are provided to show the user which zone has been selected.

The elegant, yet robust gooseneck allows the user to position the microphone in the optimum position for high quality speech reproduction.

Soft plastic feet stop the units from slipping around the reception desk/counter surface when being used and 'key hole' slots are provided on the base to allow wall mounting.

Designed to operate with conventional relay switch systems, both versions are supplied with 1.5m 15-way 'D' type-to-open end leads, making installation quick and simple.

Features:

- 5/10 zone paging
- All Call
- Flexible Robust Gooseneck
- Wall mounting feature



Specifications:

Model:	DM105/CT	DM110/CT
Output Sensitivity	Mic Level: 1mv Line Level: 500mv	Mic Level: 1mv Line Level: 500mv
Output Impedance	Mic Level: 60Ω Line Level: 600Ω	Mic Level: 60Ω Line Level: 600Ω
Characteristics	Polar diagram approx to cardioid, presence lift @ 3kHz	Polar diagram approx to cardioid, presence lift @ 3kHz
Frequency Response	±6dB, 100Hz ~ 8kHz	±6dB, 100Hz ~ 8kHz
'Press-to-Talk'/'All Call'	'Soft touch' momentary action push button	'Soft touch' momentary action push button
Zone Selection	'Soft touch' latching action	'Soft touch' latching action
Terminations	15 Way 'D' male to unterminated open end (1.5m)	15 Way 'D' male to unterminated open end (1.5m)
Finish	Desk top: grey Desk base: satin black powder coat Gooseneck & mic: matt black	Desk top: grey Desk base: satin black powder coat Gooseneck & mic: matt black
Dimensions	Base: 130(W) x 50(H) x 170(D) mm Gooseneck length to capsule: 260mm	

- **DPM102B:** Single-zone Pro Desk Paging Microphone
- **DPM202B:** Two-zone Pro Desk Paging Microphone

A range of pre-amplified paging microphones designed to meet the highest standards, where voice clarity is an essential requirement regardless of operating environment.

Aesthetic, elegant design is the first impression obtained from this high quality desk paging microphone series with fully flexible gooseneck. Available in single and two zone format.

Features:

- Pre-announcement 'gong'; switch selectable, this enables individual paging microphones within a system to prelude announcements with a simple, but attention grabbing, gong sound
- Paging sound level indicator, comprising a VU scaled composite 3 LED array
- Provision for plug-in digital sound processing (DSP) technology for automatic background noise level reduction (DSP350)
- 'Soft gate', noise-free, microphone audio activation and closure
- 'Press-to-Talk' button/s physically protected against accidental use
- 'Speak now' or 'system-in-use' LEDs, installer option
- Electronic or VOX access receptive to match host amplifier facilities
- Provision for local or remote powering
- Long line 0dBm 600Ω output, optionally available at 'microphone' level by on-board switch selection
- Basalt grey finish, satin silver base, anti-slip feet
- The standard capsule is moving coil electret, with noise-cancelling microphone capsule options available by special order
- Supplied with WC15W easy to connect wall connector plates



Wall Connection Plate:
WC15W



- **DSP350:** Digital Signal Processor

Eliminate noise with DSP350 technology:

Digital Signal Processing (DSP) technology is used to electronically remove unwanted background noise from speech which enables announcements to be more easily understood. The technology is self-adapting to changing noise environment, no 'training' of the noise filter is required.

Installers can adjust the level of noise suppression to system requirements; the residual background noise still sounds natural, but up to 30dB lower.

Models:

Model:	Description:
DPM102B:	Single-zone with 600Ω line pre-amplifier with proximity auto bass cut and limiter
DPM202B:	Two-zone with 600Ω line pre-amplifier with proximity auto bass cut and limiter
DSP350:	Digital signal processor; increases the difference between unwanted background noise and speech announcements, even where this noise is at the same level as the announcement; plugs into DPM102/202, preset noise attenuation of up to 30dB

Specifications:

Model:	DPM Series
Output Level	Switchable 0dBm, 600Ω source or -20dBm, 60Ω source
Matching Impedance	600Ω both @ microphone level and amplified line level option
Frequency Response	Unlimited: ±3dB 100Hz, bass-cut on limit variable with voice proximity to -18dB @ 100Hz, proximity level limiting max 26dB
Powering	24v DC; normal or phantom powering @ 100mA max when using DSP350, 20mA without. 15 way 'D' interface for easy system integration and facility selection. A 1.8m lead is supplied, free-end unterminated, stripped and tinned, for fitting an installation interface connector appropriate to the facilities required.
Dimensions	Base: 130(W) x 50(H) x 170(D) mm Gooseneck length to capsule: 290mm

- **DPM102B/FM:** Single-zone Wall-mount Paging Microphone
- **DPM202B/FM:** Two-zone Wall-mount Paging Microphone

Developed from the standard DPM102B/202B Pro-Series, these microphones offer the same functionality but in a flush mounting format.

Supplied with a recessed backbox (MK LN5268) as standard, the microphone panel is attached via tamper-proof security type screws.

The heavy-duty, 3mm powder-coated front plate is designed to be robust and withstand day-to-day use in retail, transport and industrial applications. The 130mm flexible gooseneck, whilst shorter than the standard unit fitted to the DPM102B/202B, allows the microphone to be firmly positioned for the user without sagging or movement.

Features:

- Pre-announcement 'gong'; switch selectable, this enables individual paging microphones within a system to prelude announcements with a simple, but attention grabbing, gong sound
- Paging sound level indicator, comprising a VU scaled composite 3 LED array
- Provision for plug-in digital sound processing (DSP) technology for automatic background noise level reduction (DSP350)
- 'Soft gate', noise-free, microphone audio activation and closure
- 'Press-to-Talk' button/s physically protected against accidental use
- 'Speak now' or system in use LEDs, installer option
- Electronic or VOX access receptive to match host amplifier facilities
- Provision for local or remote powering
- Long line 0dBm 600Ω output, optionally available at 'microphone' level by on-board switch selection



Order Codes:

Model:	
DPM102B/FM:	Single-zone 600Ω line pre-amplifier with proximity auto bass cut and limiter
DPM202B/FM:	Two-zone 600Ω line pre-amplifier with proximity auto bass cut and limiter

Specifications:

Model: DPM102B/FM / DPM202B/FM	
Output Level	Switchable 0dBm, 600Ω source or -20dBm, 60Ω source
Matching Impedance	600Ω both @ microphone level and amplified line level option
Frequency Response	Unlimited: ±3dB 100Hz, bass cut on limit variable with voice proximity to -18dB @ 100Hz, proximity level limiting max 26dB
Powering	24v DC; normal or phantom powering @ 100mA max when using DSP350, 20mA without
Dimensions	Base: 140(W) x 202(H) mm (Backbox 114(W) x 175(H) mm) Gooseneck length to capsule: 130 mm

- **PRE600/P:** Microphone-to-Line Pre-Amplifier

The PRE600/P provides the ability to convert a standard microphone output to a variable line level output, especially useful if the microphone is located a distance from the host equipment.

Features:

- PRE600/P can easily be retrofitted to a system to provide a solution to overcome low signal problems
- Housed in a robust metal housing which can be wall or desk mounted, the unit may be powered by 24v DC via the host equipment or local plug top power supply
- An internal bass cut and speech level limiter provides a stable output to the amplifier system whilst all connections are made via a 15W 'D'-type connector



Specifications:

Model: PRE600/P	
Input Sensitivity	Better than 500µV, suitable for 200, 600Ω microphone
Output Level	Switchable 0dBm, 600Ω sources or -20dBm, 60Ω source
Powering	24v DC, switch selectable for 'normal' or 'phantom' power sourcing, normal powering via in-built co-axial 2.5mm DC socket or on 15 way 'D'
Connectivity	15 Way male 'D' connector
Dimensions	130(W) x 50(H) x 168(D) mm

- **DPM105/CAT:** Self-cancelling 5-zone Paging Point
- **DPM110/CAT:** Self-cancelling 10-zone Paging Point
- **ZRU010/CAT:** 1U Rack-mounting Relay/Zone Processor

These new Pro-Range 5 and 10 zone self-cancelling paging points operate exclusively with the rack-mounted ZRU010 relay interface and central logic processor for up to 10 zones.

Whilst most system designers will switch zones of loudspeakers, this system is sufficiently versatile to operate between pre-amplifiers, 600Ω signal sources or with individual zone amplifiers.

Each paging point incorporates audio compression; an in-built pre-announcement 'gong' is a link-selectable option.

Communication and digital signalling between the ZRU010 central processor and each paging point uses standard CAT5 cabling - significantly saving on expensive cable installations!

Features:

- The system provides fully automatic 'All-Call'
- Pre-selection of zones prior to paging, self-cancelling after use
- Whilst waiting for paging access to the system, users can pre-select (reserve) their zones to be paged
- One paging point can be designated to have overall priority in the system
- Up to 8 paging points can comprise a multizone system (mixed 5 & 10 zones)
- 'Press-to-Talk'/'All-Call': momentary action button with LED indicating 'All-Call' or system occupied
- Zone selection: momentary action, electronic locking, buttons with individual LED to confirm selection acceptance
- Paging point output: utilises CAT5 cabling technology and is suitable for cabling lengths of up to 300m, unshielded



Now using CAT 5 connectivity



Specifications:

Model:	DPM105/CAT	DPM110/CAT
Press-to-Talk/All-Call	Momentary action button	Momentary action button
Zone Selection	Momentary action, electronic locking buttons with individual confirmation LEDs	Momentary action, electronic locking buttons with individual confirmation LEDs
Paging Point Output	0dBm, 600Ω, balanced, with pre-announcement gong provision	0dBm, 600Ω, balanced, with pre-announcement gong provision
Zone Relay Load	Will accept the output of a 250W amplifier, line voltage up to 100v or 600Ω line level switching	Will accept the output of a 250W amplifier, line voltage up to 100v or 600Ω line level switching
Power Requirement	24v DC ~ 30v 150mA	24v DC ~ 30v 150mA
Cabling Requirements	CAT5, 4 pair unshielded	CAT5, 4 pair unshielded
Finish	Microphone body: light grey Microphone top: basalt grey Microphone and Gooseneck: matt black	Microphone body: light grey Microphone top: basalt grey Microphone and Gooseneck: matt black
Dimensions	DPM105: 130(W) x 168(H) x 50(D) mm ZRU010: 483(W) x 170(H) x 43(D) mm	DPM110: 240(W) x 168(H) x 50(D) mm ZRU010: 483(W) x 170(H) x 43(D) mm
Weight	0.95kg	1.4kg



• DPS402: Store & Forward Paging Microphone

- Operating as a normal 'live' paging microphone, the paging announcement is made and stored for broadcast
- The delay between paging completion and broadcast is internally pre-set on installation to 5, 15, 30 or 60 seconds
- Announcements may be pre-set on installation to be automatically repeated once, twice, three or four times, after which they are self cancelled
- Announcements can be up to 2 minutes in duration
- An announcement can be manually cancelled at any time, including during the original recording, if an error is made or the operator is interrupted
- An internal chime can be selected to pre-announce any messages. Alternatively, any pre-announcement chime already included in the host system can be triggered by DPS402; the announcement is automatically paused until the chime sequence is completed
- DPS402 works with electronic or VOX accessed amplifiers. The microphone output can be at 'normal' or line level by 'D' pin selection
- If the host system is multi-tasked - various functional inputs - and is equipped with 'system busy' outputs, DPS 02 will not broadcast whilst the system is in another use; if a priority use activates during a DPS402 announcement this will override the announcement which will recommence from its beginning after priority use ceases



Wall Connection Plate:
WC15W



• DPS400: 3 Message Store & Forward Paging Microphone

This is identical in function to DPS402 except that a facility to record and store up to 3 announcements that require individual or collective timed repeat is incorporated.

Examples would be to advertise 'special offers' in stores and supermarkets or to announce a delay in flight departure at an airport.

- Timed repeats - The user can select a repeat time of 5, 15, 30 or 45 minutes between replays or they can be remotely triggered at any time, for an evacuation message for example.
- Simple to operate - To record an announcement for repeated use, the user simply selects 'ENABLE' mode and proceeds with the announcement, which can be up to 1 minute in duration and manually cancelled at any time

Specifications:

Model:	DPS400	DPS402
Audio Output	775mv, 600W source 5mv 600Ω source	775mv, 600W source 5mv 600Ω source
DC Powering	24v DC @ 100mA	24v DC @ 100mA
Interface	15 way 'D' male	15 way 'D' male
Interface DC Supply	2.5mm DC power socket, also available on 15 way connector	2.5mm DC power socket, also available on 15 way connector
Frequency Response	200Hz ~ 8kHz	200Hz ~ 8kHz
Access Out Port	Dry contact closure when DPS wishes to access host system	Dry contact closure when DPS wishes to access host system
Access In Port	Remote Advert start	-
Busy In Port	If activated will not allow DPS to access host system	If activated will not allow DPS to access host system
Pause for Chime Report	4 seconds to allow for host system chime; selectable option to in-built chime	4 seconds to allow for host system chime; selectable option to in-built chime
Activity Display Port	By 'hi-bright' LEDs	By 'hi-bright' LEDs
Facilities	Storage for up to 3 announcements/adverts each of up to 60 secs duration, these may be individually played, or as a sequenced group, at intervals of 5, 15, 30 or 45mins, front panel selected	Store'n'Forward of a paging announcement up to 2mins duration. 'Repeat Frequency': 1, 2, 3, 4 times 'Repeat Delay': 5, 15, 30, 60 secs 'Preset on Installation'
Desk Top	Basalt grey powder coat	Basalt grey powder coat
Desk Base	Satin black powder coat with anti-slip feet	Satin black powder coat with anti-slip feet
Gooseneck/Microphone	Matt black	Matt black
Base Dimensions	130(W) x 50(H) x 170(D) mm	130(W) x 50(H) x 170(D) mm
Weight	0.9kg	0.9kg

- **D500:** Cardioid Dynamic Handheld Microphone
- **D500S:** Cardioid Dynamic Handheld Microphone (with ON/OFF switch)

Versatile, professional dynamic cardioid hand held microphone designed for a wide variety of vocal, speech and instrument applications. It has a wide smooth response, with neodymium magnet for high sensitivity and balanced output.

The 500S model has a silent magnetic reed ON/OFF switch.

Features:

- Rugged die-cast metal construction
- Cardioid polar pattern
- Wide, smooth response
- Balanced output
- Black, soft-touch finish for reduced handling noise
- Supplied in a presentation case

Specifications:

Model:	D500
Frequency Response	50Hz ~ 16kHz
Sensitivity	-55dB ±3dB @ 1kHz (0dB=1v/Pa)
Impedance	500Ω balanced
Termination	Male 3 pin XLR



Includes SA 5 clip



- **C650E:** Cardioid Condenser Handheld Microphone

Professional cardioid condenser handheld microphone designed for vocal and speech applications.

Features:

- Rugged metal construction
- Wide response
- Shock mount suspension
- Balanced output
- Nextel finish

Specifications:

Model:	C650E
Frequency Response	50Hz ~ 20kHz
Sensitivity	-48dB ±3dB @ 1kHz (0dB=1v/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
Switchable Bass Filter & -10dB switchable Pad	Yes
S/N Ratio	68dB(A)
Termination	Male 3 pin XLR
Dimensions	Length: 225 mm Head: 49(Ø) mm



Includes SA 5 clip



- **C600:** Slimline Condenser Microphone

Professional slimline hand held cardioid condenser microphone designed for a wide range of vocal and speech applications. Also suitable for many musical instrument applications.

Features:

- Cardioid polar pattern
- Balanced output
- Engineered in high quality brass
- Finished in satin black

Specifications:

Model:	C600
Frequency Response	50Hz ~ 20kHz
Sensitivity	-47dB ±3dB at 1kHz (0dB=1v/Pa)
Impedance	200Ω
Power Requirements	9 ~ 48v Phantom Power
Switchable Bass Filter & -10dB Switchable Pad	Yes
S/N Ratio	64dB(A)
Termination	Male 3 pin XLR
Dimensions	Length: 165 mm Head: 20(Ø) mm



Includes SA 3 clip



• C850E: Shotgun Supercardioid Microphone

Supercardioid shotgun microphone for use in broadcast, film/video recording and theatre sound reinforcement.

Wide, smooth response and fully balanced output.

Features:

- Superior grade components
- Selectable bass roll-off and 10dB pad
- XLR termination
- Finished in satin black

Specifications:

Model:	C850E
Frequency Response	50Hz ~ 20kHz
Sensitivity	-48dB \pm 3dB @ 1kHz (0dB=1v/Pa)
Impedance	200 Ω
Power Requirements	9 ~ 48v Phantom Power
Switchable Bass Filter & -10dB switchable Pad	Yes
S/N Ratio	68dB(A)
Termination	Male 3 pin XLR



Includes W 85 windshield

Includes SA 8 clip



• D525E: Dynamic Supercardioid ENG Microphone

Designed for electronic news gathering and video production.

Features:

- Die-cast housing and steel grille screen
- Long shaft for easy handling
- Neodymium alloy magnet
- Optional soft protective case
- Finished in soft-touch satin black

Specifications:

Model:	D525E
Frequency Response	50Hz ~ 18kHz
Sensitivity	-54dBv (1.6mV/Pa)
Impedance	300 Ω
Termination	Male 3 pin XLR
Dimensions	Length: 294 mm Head: 47(0) mm



Includes W 5 windshield

Includes SA 8 clip



• D550E: Dynamic Omni-directional ENG Microphone

Designed for reporting, interviewing and news gathering.

Features:

- High sensitivity Neodymium alloy magnet
- Patented shock suspension
- Long shaft for easy handling
- Die-cast housing and steel grille screen
- Finished in soft-touch satin black

Specifications:

Model:	D550E
Frequency Response	50Hz ~ 18kHz
Sensitivity	-54dBv (1.6mV/Pa)
Impedance	300 Ω
Termination	Male 3 pin XLR
Dimensions	Length: 294 mm Head: 47(0) mm



Includes W 5 windshield

Includes SA 8 clip



• **SM110: Table Microphone Stand**

Heavy, stable, shock-absorbing table microphone stand with SA3 microphone holder.

Features:

- Steel construction finished in satin black with neoprene shock mount for the microphone holder
- Overall height incl. microphone holder: 85 mm
- Base diameter: 110 mm
- Weight: 0.77kg



Amplifiers

• **SA 3: Microphone Holder & Stand Adaptor**

Small swivel microphone holder and stand adaptor with 5/8" ~ 3/8" female thread.

Features:

- Finished in black plastic to avoid damage and microphone scratching
- Suitable for C 600 hand held microphone and all gooseneck microphones mounted on standard PPA (Phantom Power Adaptor)



Audio Signal Processing

• **SA 5: Microphone Holder & Stand Adaptor**

Swivel microphone holder and stand adaptor suitable for D500 Series handheld microphones.

Features:

- With 5/8" ~ 3/8" female thread and black rubber finish resistant to damage and microphone scratching



Audio Signal Generation

• **S210X: Boom Stand**

Microphone floor stand and boom arm combination. Folding base for ease of transport. Long legs for added stability.

Specifications:

Model:	S210X
Boom Arm Length	840mm
Finish	Black
Height	900 ~ 1605 mm
Weight	3.2kg



Audio System Tools

Microphones (Wired)

Microphones (Wireless)

• **F237: Aluminium Fishpole**

Lightweight, adjustable 3-piece aluminium tube used for the remote positioning of microphones for recording and broadcasting.

Rough textured hand grips and secure locking rings. Protective carrying case included.

Specifications:

Model:	F237
Finish	Black
Height	950 ~ 3220 mm
Weight	0.8kg



Portable P.A.

Soundfield

Induction Loops

• H500: Monitor Headphones

Studio quality, cost-effective monitor headphones, featuring removable jack-to-mini jack cable and soft case cover.

Features:

- Wide frequency response
- Closed diffused studio headphones
- Enhanced bass response
- High SPL capacity
- Excellent isolation from ambient noise

Specifications:

Model:	H500
Type	Dynamic closed-back circumaural
Sensitivity	96dB SPL \pm 3dB @ 1mw
Frequency	15Hz ~ 22kHz
Max Input Power	500mw
Impedance	24 Ω
TDH	<0.3%
Cable	Plug-in single cable approx 3m
Connector	Gold-plated mini stereo jack
Stereo Adaptor	Gold-plated mini stereo jack to 1/4" screw-on-adaptor
Weight	0.37kg



• AH3000: Active Protection Stereo Headphones

Designed as ear defenders for protection against hazardous noises with the ability to set essential listening levels to each ear to hear normally.

Suitable for use in a wide range of noisy environments including industrial and building locations, transport termini and sports and leisure locations.

Features:

- Defender system maintains preset listening level
- Wide bandwidth for natural sound to the ear
- Individual listening level adjustment for each ear
- Batteries operate for up to 50 hours from full charge
- Finished in cobalt blue Nextel with black trim

Specifications:

Model:	AH3000
Headphones	Micro dynamic
Design	Circumaural
Frequency Response	20Hz ~ 18kHz
Sensitivity	104dB \pm 3dB @1kHz
Ear Cup Attenuation	29dB
Microphone	Condenser (back electret)
Powering	3.6v 70mAH Ni-MH rechargeable batteries
Connector	Unterminated
Weight	0.42kg



- **H100:** Ear Defender Headphones
- **HS1000D:** Ear Defender Talk-back with Dynamic Microphone
- **HS1000E:** Ear Defender Talk-back with Condenser Microphone

The HS1000 is a ruggedly built headset with a choice of dynamic or condenser microphone, designed for a wide range of applications such as theatres, concert halls and studios. The earpieces effectively reduce high surrounding noise and equally contain the received sounds when working in quiet environments.

Includes W 2 windshield



Features:

- Wide band headphones
- Robust boom assembly
- Comfortable padded ear cups giving high ambient noise attenuation
- Finished in cobalt blue Nextel with black trim

Specifications:

Model:	HS1000D	HS1000E
Microphone	Dynamic	Condenser (back electret)
Polar Pattern	Noise cancelling	Noise cancelling
Frequency Range	150Hz ~ 10kHz	100Hz ~ 10kHz
Impedance	300 Ω	1.6K Ω
Powering	1.5 ~ 9v DC through series resistor	
Cable Length	2m	2m
Connector	Unterminated	Unterminated
Weight	0.5kg	0.5kg



• WP600: Wall-Mounted Microphone

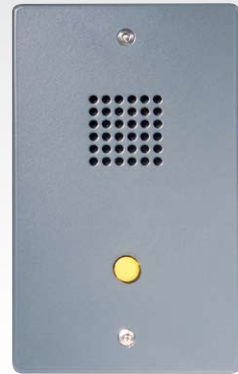
The WP600 is a flush-mounting microphone designed for applications in the retail and industrial sectors, providing a wall-mounting paging point for till positions, security locations and building access points, etc.

Generally for indoor use, the unit has a shock-mounted microphone capsule positioned behind a 3mm thick, 2 gang aluminium panel. The capsule is protected by a pin-proof screen to stop abuse and to ensure the unit is in working order when needed.

Connections to the unit are made via push-fit screw terminals and give the option of NO and NC operations for both the microphone output and switched voltage free contacts.

Features:

- Rugged aluminium faceplate
- Security mounting screws
- Shock-mounted capsule
- Selectable mic output (NO/NC)
- Selectable switched output (NO/NC)



Amplifiers

Audio Signal Processing

Audio Signal Generation

Audio System Tools

Specifications:

Model:	WP600
Product IP Rating	IP62
Microphone Capsule	Dynamic
Frequency Response	±6dB, 300 ~ 3500kHz
Impedance	600Ω (2400Ω special order)
Output Level	-57dB @ 1kHz
Finish	Basalt grey, powder coat
Dimensions	90(W) x 150(H) mm
Minimum Backbox Depth	40 mm

- **VP892/600:** 600Ω Impedance Vandal-proof Microphone
- **VP892/2400:** 2400Ω Impedance Vandal-proof Microphone

The VP892 is a vandal-proof microphone with push switch and 'active' LED mounted on a UK double-gang switchplate designed to fit on backboxes of at least 40mm depth.

The switchplate is stainless steel with integral microphone grille designed for close-talk use; the entire assembly is showerproof to IP67 and designed for use in public places or in a manufacturing process where vandal resistance is judged to be appropriate or heavy-handed use an expectation.

Features:

- 'Push-to-Talk' switch and 'active' LED
- Rugged stainless steel faceplate
- IP67-rated
- 'Pin-proof' microphone capsule



Microphones (Wired)

Microphones (Wireless)

Portable P.A.

Soundfield

Induction Loops

Specifications:

Model:	VP892
Product IP Rating	IP67
Frequency Response	±6dB, 300Hz ~ 3.5kHz
Impedance	600Ω (2400Ω special order)
Output Level	-57dB @ 1kHz
Finish	Stainless steel
Dimensions	86(W) x 146(H) mm
Minimum Backbox Depth	30mm

• SEC09: Omni-directional 'Fire Detector'-Housed Microphone

The SEC09 has been designed for security and surveillance applications. Offering easy mounting to walls or ceilings, the SEC09 has the appearance of an ordinary fire detector.

Electronics housed within the SEC09 offer screw terminals, eliminating the need for connectors.

Features:

- Omni-directional
- Built-in line level pre-amp
- Selectable sensitivity switching
- 9 ~ 48v Phantom power switchable for 12 ~ 24V dc operation
- Pick up range of 15 metres
- Red LED status indicators
- Sturdy ABS housing
- Easy to install
- Universal mounting to electrical conduit boxes



Specifications:

Model:	SEC09
Frequency Response	50Hz ~ 12kHz
Impedance	75Ω
Sensitivity	1.4v/PA
Dimensions	55(H) x 105(Ø) mm
Minimum Backbox Depth	30 mm

Wiring Information:

Model:	SEC09
Input: Pin 1	+24v AC / 12v DC
Pin 2	Phase +
Pin 3	Phase -
Pin 4	GND / -ac/dc
Line level set up	Switch pins 7, 5, 3 to ON
Phantom Power set up	Switch pins 8, 6, 4 to ON

• FM280: Dynamic Fist Microphone

A rugged fist microphone designed for use in high quality close-talk mobile or fixed applications; ideal for noisy environments such as factories, airside at airports and for two-way communications in taxicabs, buses, helicopters, construction sites and fire & rescue vehicles.

Features:

- The dynamic microphone capsule is shock-mounted within the housing, constructed from virtually unbreakable ABS plastics, contoured for safe, convenient handling
- The 'Press-to-Talk' grip switch, engineered for heavy use, operates 2 single-pole contact pairs; one pair mutes the microphone capsule when not in use, the other can be used as 'dry' contacts for system access or signalling
- 4 core heavy-duty coiled lead to free end
- Spring-mounted clip for easy storage



Specifications:

Model:	FM280
Microphone Housing	ABS plastic moulding
Capsule	Dynamic omni-directional
Sensitivity	-75dB ±3dB @ 1kHz
Impedance	200Ω
Frequency Response	±6dB, 300Hz ~ 6kHz
PTT Switch	2 Switch pairs: microphone - red/white access - blue/black
Operating Temperature	0°C ~ +55°C
Dimensions	45(W) x 100(H) x 45(D) mm
Weight	0.2kg