## AUDICA

# Flexible Professional Audio Solutions



## AUDICA

Audica Professional combines leading-edge design and acoustic engineering in flexible audio solutions for commercial background music, corporate AV and audio communications

**Applications include** retail outlets, restaurants hotel public areas and guest rooms, meeting rooms, museums and visitor centres.



### microseries

Traditional design of loudspeakers for commercial applications has either been large boxes that give full-range audio, but which are inherently less attractive or more visible, or sub-sat systems that use tiny satellite loudspeakers for mid/high frequencies and a subwoofer for mid/bass. The main problem with sub-sat systems in public spaces is that people are often listening close to thin sounding satellites with the mid/bass rumbling away in the distance, sonically disconnected and failing to recombine the critical mid-band for audio quality.

With MICROseries we've designed the smallest possible loudspeakers to give high quality over a wide audio band so that, no matter where you are in the room, the sound from the main loudspeakers remains coherent and pleasing. For many applications no additional bass loudspeakers are required, whether you choose the MICROdot flush-mount, MICROpoint or MICROline surface-mount models.

For applications requiring extended, higher level bass performance, such as an Audio-Visual system playing back film material, the MICROsub 3 can be added and perfectly tuned to extend bass performance without confusing the all Important mid-band.

With all of the MICROseries loudspeakers, aesthetics have been a prime consideration. This starts with the family look, which is softly shaped to merge into the environment. Secondly with the selection of materials, which have to be acoustically excellent but also provide for flexibility of design and quality of appearance. The MICROdot is a single-piece aluminium casting whilst the MICROpoint and MICROline use aluminium extrusions with moulded aluminium end-caps. Grilles are micro-perforated steel for both acoustic transparency and durability. The MICROsub 3 is a more traditional construction but adds a full amp-panel cover to ensure it looks good from all angles and prevent access to controls and electrical connections. It also has a steel mesh grille under the aesthetic cloth cover.

Equally important for the aesthetics, as well as the speed and quality of installation, are the fixings and brackets. The MICROdot fits a standard 85mm diameter ceiling spotlight cut-out and is fitted with integral spring-clips. The MICROpoint and MICROline have a unique and secure integral bracket, merging the design of loudspeaker and bracket. Only the bracket needs to be fixed and connected during first-fix. Fitting the loudspeaker, with pre-wired cable management through the bracket, is then done as required and the position locking screw is hidden behind the loudspeaker grille. A high degree of tilt and pan are catered for, allowing for wall or ceiling mounting with the required angle of coverage. The MICROsub 3 is also supplied with its own mounting bracket which allows flush mounting to walls or ceilings.



#### microdot

ceiling loudspeaker



Frequency response 70Hz to 20kHz

**Power Handling** 25W **Impedance** 8 Ohm

**Dispersion** 120 degrees × 120 degrees -3dB at 4kHz

Finish White

Fixing Integral spring clips,

standard 85mm mini spotlight cut-out

**Dimensions (mm)** H  $130 \times W 100 \times D 100 (85 \text{mm cut-out})$ 

Weight 0.5Kg



### micropoint

compact loudspeaker

**Drive units** I × 50mm full range drive unit

I  $\times$  50mm low frequency drive unit

Frequency response 70Hz to 20kHz

**Power Handling** 35W **Impedance** 4 Ohm

**Dispersion** 120 degrees Horizontal × 60 degrees

Vertical -6dB at 4kHz

Finish Black or White

**Fixing** Integral bracket allowing 360° rotation,

120° pan and 70° tilt

**Dimensions (mm)** H 240 × W 80 × D 151 (including bracket)

Weight 1.2Kg



#### microline

column loudspeaker

**Drive units**  $2 \times 50$ mm full range drive unit

 $2 \times 50$ mm low frequency drive unit

**Frequency response** 70Hz to 20kHz

**Power Handling** 50W **Impedance** 8 Ohm

**Dispersion** 120 degrees Horizontal x 30 degrees

Vertical -6dB at 4kHz

Finish Black or White

**Fixing** Integral bracket allowing 360° rotation,

120° pan and 60° tilt

**Dimensions (mm)** H  $378 \times W 80 \times D 151$  (including bracket)

**Weight** 1.8Kg







#### microzone

At the heart of the MICROseries range is the innovative MICROzone, a 5-configuration amplifier/controller that provides unequalled flexibility for a wide range of applications with single or multi-location input and control. Comprehensive switching functions enable the unit to be used singly and in multiples; as a complete system amplifier/controller; as an additional zone amplifier/controller; as a system master; as a slave amplifier (i) or as a system equaliser.

Comprehensive facilities on the MICROzone allow for: stereo or 2-channel mono operation (g);one 0.5V front panel stereo mini-jack input (f) for MP3 and PC connection plus 2 rear panel 1.0V RCA stereo inputs (l); a switch for common line feed through multiple units with the ability for alternative input selection on zones (h); fixed and variable line outputs (j)+(m) for master or independent level control of additional zone units; equalised line output (n) for using additional standard power amplifiers; front volume control (a) with master output level on rear (k) for applications where maximum levels need to be preset; IR control via the front panel or an optional RJ45 CAT5 remote IR sensor (p); filtered sub output for feed to active sub-bass loudspeakers (o).

For applications, such as AV and hotel bedroom, where an MP3 player or similar may be used for long periods, the MICROzone also offers a front panel USB charge facility (e). The elegant aluminium stick IR remote controller supplied with the MICROzone duplicates the front panel controls of volume (a), mute (-16dB) (b) and source selection (c). In addition to manual standby (d) the MICROzone also features auto standby and start-up for non-managed applications and for reliability is fitted with clip limiting and total overdrive protection with auto-reset. The head-unit design of the MICROzone allows one or two units to be mounted in an optional 2U rack mount panel or it can be fitted into any flat surface, such as a lectern or other piece of furniture. Clip-on caps cover the fixings to maintain the clean, style of the unit's front panel.



#### microzone

control amplifier

**Amplifier** Class D Digital with EQ for

Audica MICRO loudspeakers

**Channels** 2 × 25W into 4 Ohm per channel

Switchable for stereo or 2 x mono

**Modes** Switchable normal or slave operation

**Controls** Standby

Front volume with rear master level control

Channel select Mute (-16dB)

Line output channel selection (selected or input 2)

Infrared remote control (volume, source select, mute)

Outputs Screw clamp loudspeaker terminals

Parallel stereo line out (fixed or variable)

Stereo line out with EQ

Mono sub out

Inputs Input I - 3.5mm jack (front panel)

Inputs 2 and 3 - stereo phono (rear panel)

**Charging** USB on front

**Dimensions (mm)** H  $54 \times W 225 \text{ (max)} 198 \text{ (case)} \times D 122 \text{ (max)}$ 

**Weight** IKg



#### microsub 3

bass loudspeaker

**Drive Units** I × 200mm drive unit

Amplifier 100W

**Frequency** 40Hz to 200Hz

**Controls** Volume

Phase, zero and 180°

Crossover frequency, variable 50Hz to 200Hz

Outputs Phono, line level Inputs Phono, line level

Binding posts, loudspeaker level

Voltage 100 to 240V

**Fixing** Free standing or wall mountable

**Dimensions (mm)** H 323 × W 228 × D 470 (including rear cover)

**Weight** 12Kg







## microplus

The Audica Professional MICROplus is an ultra-compact 4-channel power amplifier with the same size and style of head-unit mounting as the MICROzone pre/amp/controller, which it is designed to partner. It delivers 4 x 80W into 4 Ohm per channel, 2 x 80W into 4 Ohm plus 1 x 160W bridged into 8 Ohm or 2 x 160W into 8 Ohm with twin channels bridged.

Features include 4-channel limiting and protection and individual channel bar indicators showing output level, clip and fault.

The unit has rear-mount level control, phono in/out and screw terminal loudspeaker outputs for each channel. Being a straight gain amplifier, the MICROplus is designed to be used in conjunction with the MICROzone and MULTIzone.







#### microplus

4-channel power amplifier

Normal Mode (per channel)

**Programme power output** 80W into 4 Ohms, 40W into 8 Ohms

Sine wave r.m.s. power output 55W into 4 Ohms, 28W into 8 Ohms (restricted by limiter

operation)

**Peak power output** 160W into 4 Ohms, 80W into 8 Ohms

**Gain** -infinity to 28.2dB (adjustable on rear panel)

Frequency Response <10Hz to 35kHz (-3dB), less than 1dB down @ 20kHz

**Signal to Noise ratio** 86dB (22Hz to 22kHz), 90dB (A-weighted)

**THD** <0.03% (at 1kHz and 25W), <1% (20Hz-20kHz) all output levels

**Input level for 55W output** 610mV r.m.s. at maximum gain setting

(limiter operation begins)

Input impedance10k ohmsMaximum input level30V r.m.s.

#### Bridge Mode (per pair of channels)

**Programme power output** 160W into 8 Ohms

Sine wave r.m.s. power output I 10W into 8 Ohms (restricted by limiter operation)

Peak power output 320W into 8 Ohms

**Gain** -infinity to 34.6dB (adjustable on rear panel)

**Signal to Noise ratio** 86dB (22Hz to 22kHz), 90dB (A-weighted)

THD <0.03% (at 1kHz and 50W), <1% (20Hz-20kHz) all output levels

**Input level for 110W output** 610mV r.m.s. at maximum gain setting

(limiter operation begins)

Input impedance10k ohmsMaximum input level30V r.m.s.





audio transformer

Loudspeaker connections
Transformer tapping
Dimensions
Packed and sold in multiple

Packed and sold in multiples of Colour

4 Ohm and 8 Ohm 2W, 4W, 8W and 16W

 $96 \text{ mm} \times 71 \text{ mm} \times 46 \text{ mm}$ 

4 units

Black or white





## I OOvoltline adapter

The 100V Adapter is an extremely high quality audio transformer that facilitates the use of Audica Professional MICROseries loudspeakers with 100V line systems. Designed to complement the design of the MICROpoint and MICROline for on-wall use, the Adaptor can also be used above the ceiling void with the MICROpoint.

When used with Audica MICROseries loudspeakers, the audio signal must still be used with a MICROzone, MULTIzone or DSP programmed with the MICROseries Eq.The equalized signal can then be fed to a 100V power amplifier to provide the power to the 100V Adapters connected to the Audica MICROseries loudspeakers.

Connections allow the unit to be matched to 4 Ohm and 8 Ohm loudspeakers and tapping links provide for 2W, 4W, 8W and 16W output. The unit has been designed for quick and simple installation and is available in black or white finishes that match the black and white of the MICROseries loudspeakers. The Adapter is available in packs of 4 units.



The Median IC 125 and IC 165 from Audica Professional are premium ceiling loudspeakers designed for applications where high fidelity audio quality is a primary requirement. The open back design saves depth and weight for installations where a sealed enclosure (back-can) is not required.

Both models feature a swivel HF unit, to direct the sound to the required listening area, and incorporate an HF cut/boost control to shape the frequency response for the application or room acoustics.

The loudspeakers are quick to install with swing out legs for secure fitting and the ultra-low profile grille is magnetically mounted for a fast fit and a clean, discreet appearance.

Requiring no signal processing, the Median IC 125 and IC 165 loudspeakers are ideally suited for use in systems with the Audica Professional MULTIzone controller (EQ setting flat) and the MICROplus power amplifier:



#### median|C|25

ceiling loudspeaker

**Drive Units** I x 19mm dome high frequency drive unit

I x I34mm low frequency drive unit

**Frequency response** 75Hz to 20kHz +/- 3dB

**HF control** +3dB / 0dB / -3dB

Power Handling 40W
Sensitivity 87dB/W/m
Impedance 12 Ohm

**Dispersion** 120 degrees -6dB at 6kHz

**Finish** White grille

**Fixing** 4 swing-out clamps

**Dimensions** 204mm diameter x 83mm deep

Weight (with grille) 1.28 Kg



#### median|C|65

ceiling loudspeaker

**Drive Units** I x 25mm dome high frequency drive unit

I  $\times$  I65mm low frequency drive unit

**Frequency response** 70Hz to 20kHz +/- 3dB **HF control** +3dB / 0dB / -3dB

Power Handling 40W
Sensitivity 87dB/W/m
Impedance 12 Ohm

**Dispersion** 120 degrees -6dB at 6kHz

**Finish** White grille

**Fixing** 4 swing-out clamps

**Dimensions** 231.9mm diameter x 83.8mm deep

Weight (with grille) 1.63 Kg









## multizone

A zone control mixer consisting of 4 zones with 6 music inputs plus a microphone input for paging applications. Each of the 4 outputs can be independently configured to provide music from any one of the inputs plus the paging microphone and the relative levels are set by front panel controls. The music is automatically reduced in level (ducking) to allow for announcements to be heard clearly. Each zone output is mono and all inputs are stereo capable (mixed to mono internally).

Zone outputs can have flat response or Audica loudspeaker EQ, as required. A mute control input is provided to be linked to fire control systems. This mutes all music inputs whilst keeping the paging microphone active for safety announcements.

Remote zone control is possible via wired control panels or an RS232 interface. Up to 7 MULTIzone units can be linked (daisy-chained) for systems of up to 28 zones.



#### multizone

multizone amplifier

#### Inputs

Stereo Phono jack pair for input 1, 2, 3, 4, 5, 6

XLR balanced input for paging microphone. (48V Phantom power option provided)

 $\hbox{15-pin D-Type connector for looping the audio (and optionally Mic and RS232) inputs to another unit.}\\$ 

There are also five control inputs: Remote zone control on RJ45 connector for zone 1, 2, 3, 4 and RS232

#### Other

AC supply on IEC 3-pin socket. 2 meter mains cable according to sku.

MUTE input for fire control panel on Phoenix connectors. This can be wired for isolated contacts (Normally Open) or a voltage input (3-24V DC). The sense of this input can be reversed by an internal jumper such that a Normally Closed contact or absence of the 3-24V causes muting instead.

#### Outputs

Eight outputs are available and a loop-through is provided for daisy chaining inputs to multiple units. Mono phono jack output for zone 1, 2, 3, 4. Selectable flat or AEQ curve.

Balanced audio output on Phoenix connector for zone 1, 2, 3, 4. Replicates phono jack output for zone. 15-pin D-Type connector for looping the audio inputs (and optionally Mic and RS232) to another unit.

#### **Controls**

#### Front Panel

Mains power switch (full AC line switch - not a standby control)

zone 1, 2, 3, 4 source selector zone 1, 2, 3, 4 music level control.

zone 1, 2, 3, 4 page mic mixing level. (When set to zero music ducking is disabled for that channel)

#### Rear Panel

Rotary potentiometer to set gain for input 1, 2, 3, 4, 5, 6. Rotary potentiometer to set gain of Microphone input.

DIP switch to enable 48V phantom power for Microphone input.

Rotary potentiometer to set compressor contribution to mic channel.

Rotary potentiometer for low-mid tone control on Microphone input (Centred at 150Hz).

Rotary potentiometer for mid-high tone control on Microphone input (Centred at 5kHz).

Rotary potentiometer for music ducking "floor level" (music attenuation level).

Rotary potentiometer for music ducking release time (music fade-up time).

DIP switch to set the MIC source (input or loop-through).

Three DIP switches for RS232 address setting (1 to 8).

DIP switch for RS232 source switch (input or loop-through).

Four DIP switches to enable Audica speaker EQ (AEQ) on each output channel.

#### Front Indication Panel

Power LED. Off when Mains power switch is off. Blue when mains power is on. Short-term rapid flashing indicates RS-232 enabled standby mode in operation.

Channel indicators. Each channel has a white indicator LED to show signal present. The brightness of the LED gives some indication of signal level.

#### **Rear Indication Panel**

MIC LED. This is a 2-colour LED to assist in MIC input level setting. Green indicates signal is in the optimum range (>-20dB) and Red indicates clipping imminent (>-2dB)

Input channels. A single 2-colour LED is provided to set the line input levels. By applying a signal on each input in turn the level can be set as per the MIC LED above.

#### **RS232 Interface**

The RS-232 interface allows control of all basic functions of the unit. Commands are provided for "absolute" control (e.g. Volume = 68) only. It also controls which channels are assigned to RS232. This allows some channels to remain under manual control whilst others are RS-232 controlled. The user can also set an address for the MULTIzone on its rear panel allowing multiple chained units to be controlled from one RS-232 port. If this feature is required then the user simply sets the RS-232 source to "Chain" on the rear panel and assigns different addresses to each unit. The RS-232 data is relayed to all chained units using the same cable as the signal loop-through. The RS-232 port is uni-directional, the MULTIzone does not send any data.





## mediatrac

MEDIAtrac is a high quality loudspeaker for music, audio visual and speech applications, including retail outlets, bars and restaurants, hotels, education establishments, meeting rooms, museums and visitor centres.

The extruded aluminium body houses a 20mm dome high frequency unit, 4-inch bass unit and 4-inch passive bass radiator. The unit is designed for 8 Ohm low impedance and I 00V line use, and is adjustable via a tap switch located discretely behind the removable front grille.

Finished in white, MEDIAtrac is supplied complete with an adjustable yoke bracket for fast and reliable installation.

#### mediatrac

loudspeaker

**Drive units** 20mm dome HF with 4-inch bass unit

and a 4-inch passive radiator

Frequency response 80Hz - 30kHz (no EQ required)

Power handling 100 Volt and 8 Ohm switching

> 2, 4, 8 and 16W 100V 30W 8 Ohm

Colour White

Mounting Ceiling or wall mount 146 x 376 x 127mm Size (LxWxH)

3.00kg Weight

**media**trac www.audicapro.co.uk



Flexible Professional Audio Solutions

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