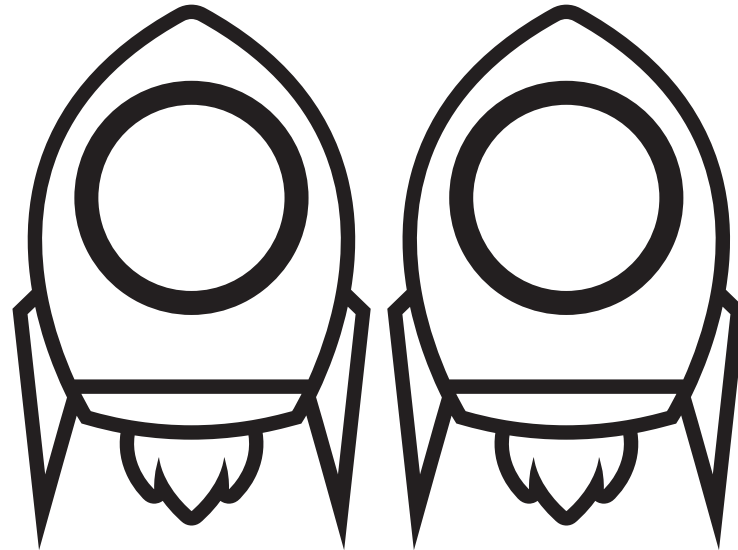


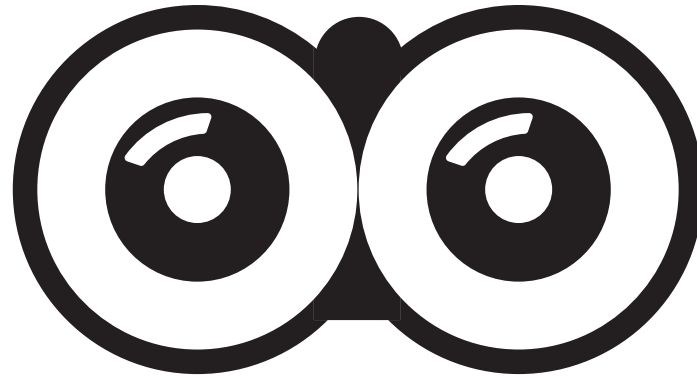


Optimal Audio

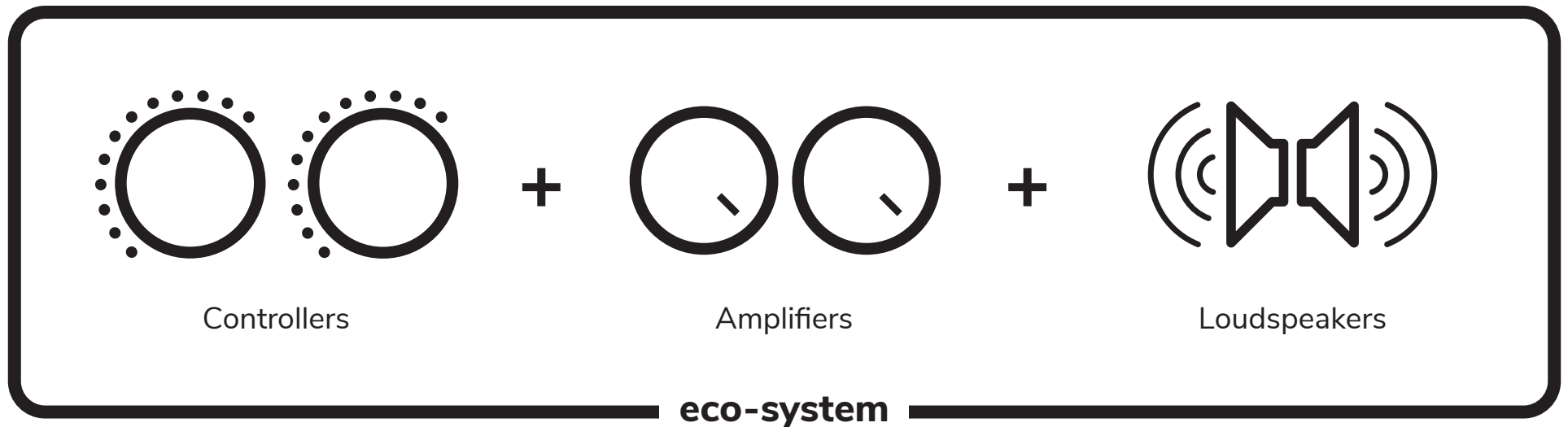


Commercial audio. Done differently.

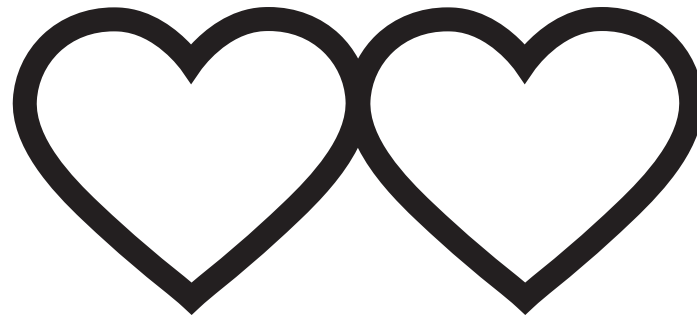




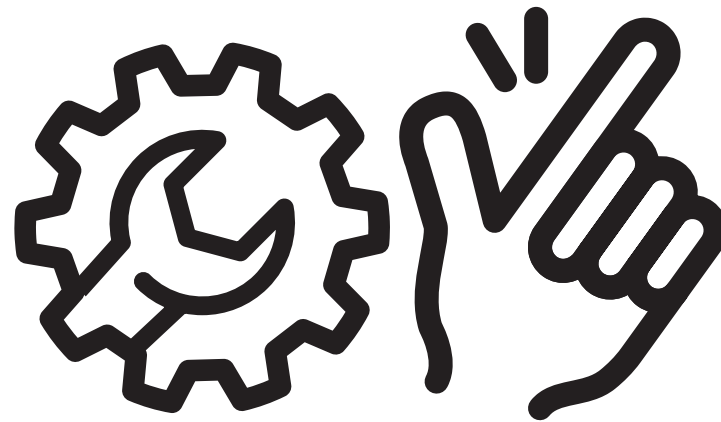
We're here with a fresh outlook.



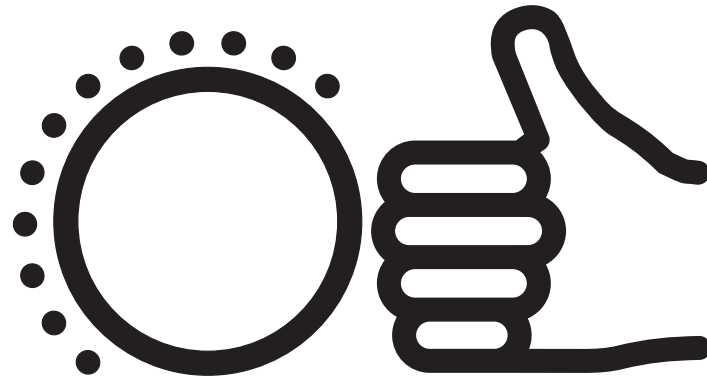
A streamlined product offering.  
Working seamlessly together.



Where sound quality is assured.

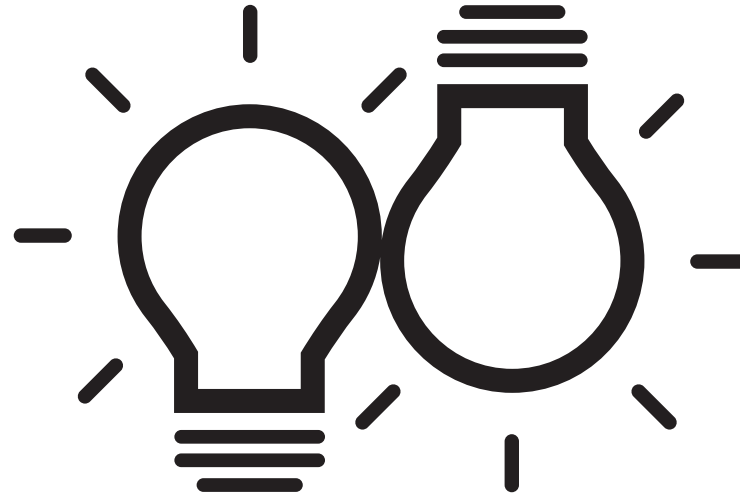


Installation is easy.



Operation is by anyone,  
not just engineers.

**Be ready to inspire.**



That's the pathway to create memorable nights of entertainment, engaging retail spaces, inspiring lessons for the next generation and uplifting houses of worship.



# Relax, it's Optimal Audio.



A British brand and as part of Focusrite plc, one of the largest pro audio manufacturers in Europe with £130m+ turnover, Optimal Audio benefits from years of engineering experience, global reach and support.





Bars/Restaurants & Cafes



Retail



Wedding Venues



Hotels



Education Facilities



Houses of Worship



Corporate Offices



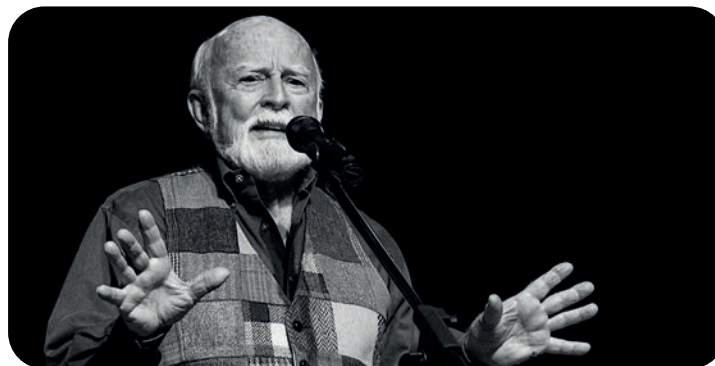
Museums



Fitness Studios



Residential

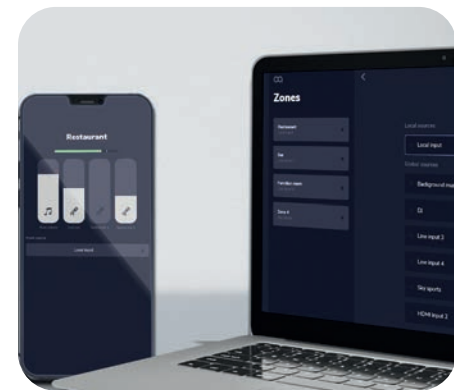


# Portfolio

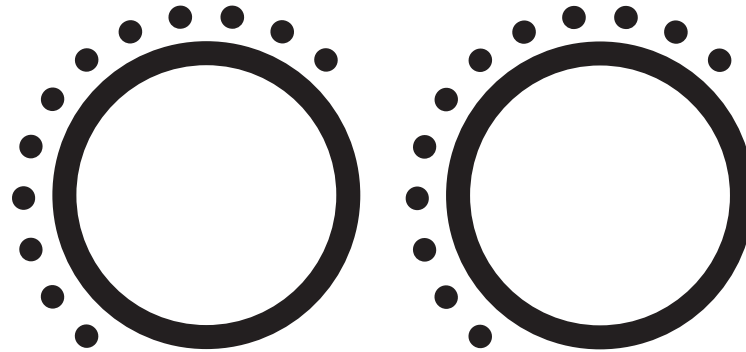
A one-stop solution of control, amplification and loudspeakers for small to medium sized commercial installations with a focus on supporting multi-zone venues.

Products are designed to meet the needs of venues and when combined with the intuitive WebApp, enable the installer to easily tailor the system from full EQ and signal processing to setting up of routines and presets.

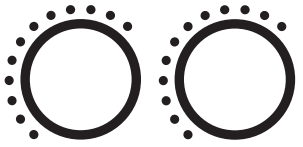




# Controllers



Optimal Audio offers a range of controllers designed to integrate with our WebApp and to partner our loudspeaker and amplifier offering.

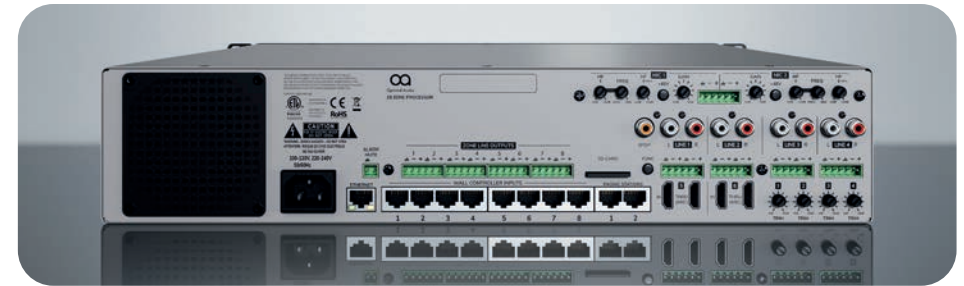


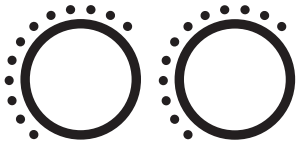
Controllers

# Zone

## Zone audio controllers with DSP and WebApp

- 4 or 8 zone powered and non-powered versions
- Desktop or rack-mounted
- Convenient front panel controls for sources and levels
- Advanced configuration via hosted WebApp
- Settings stored to SD card, for easy replication
- Emergency alarm override



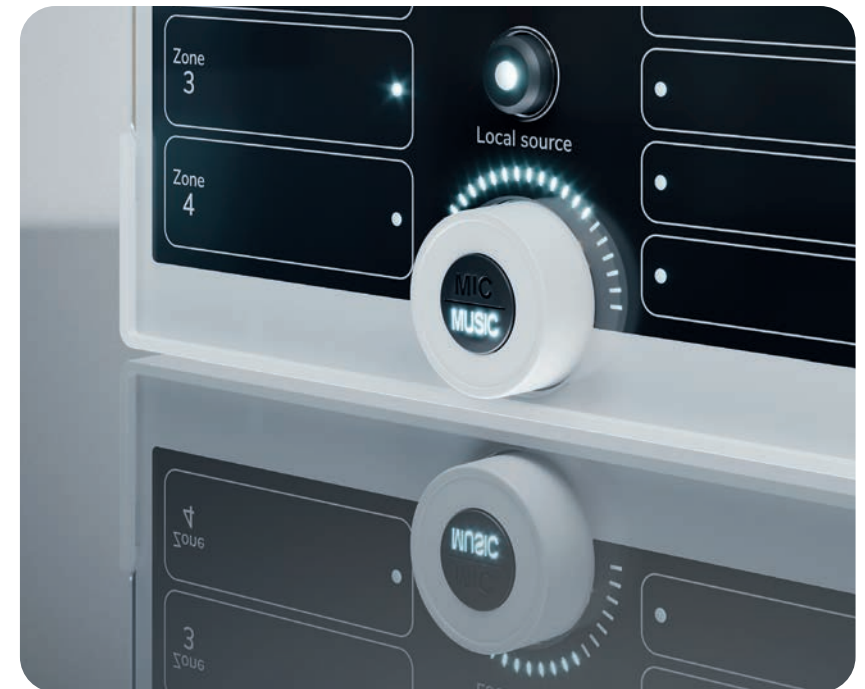


Controllers

# ZonePad

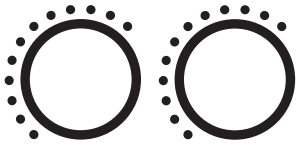
## Zone wall controllers

- Wall-mounted
- Single or 4 zone selection of music source
- Level control of selected music and mic inputs
- Single proprietary RJ45/CAT5 connection to system for power, audio and control







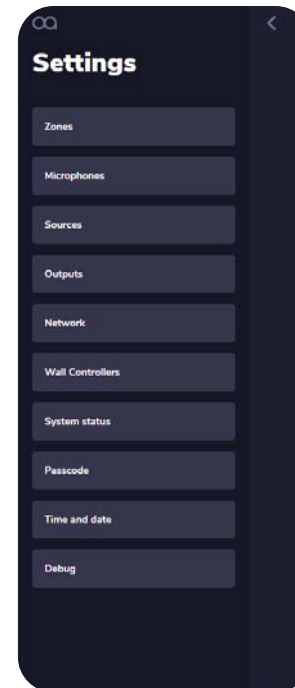
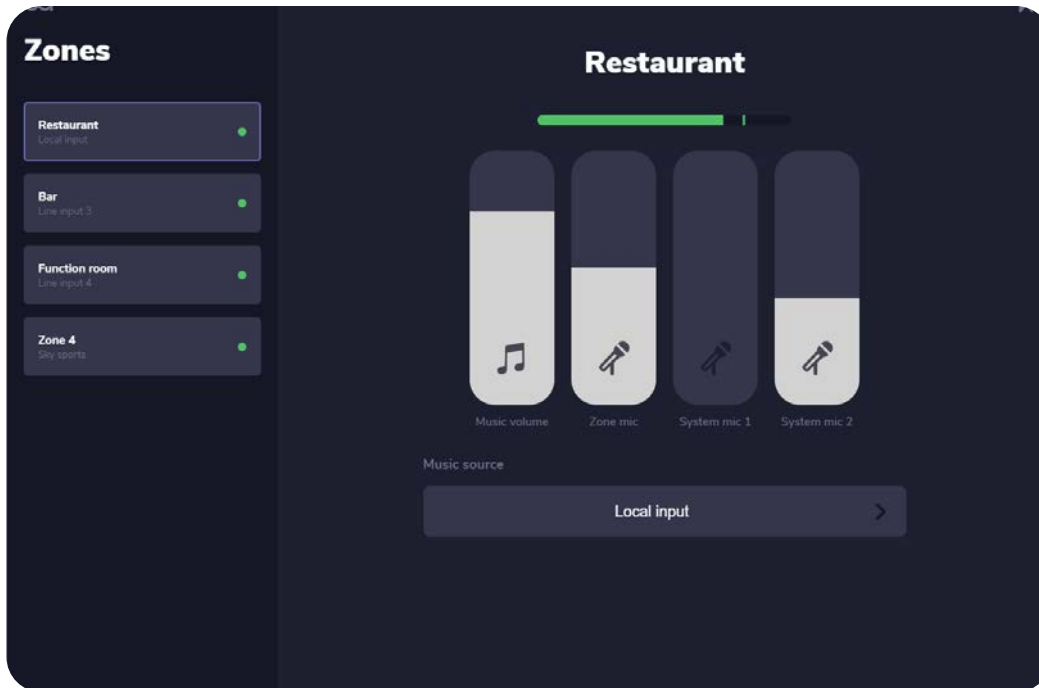


Controllers

# WebApp

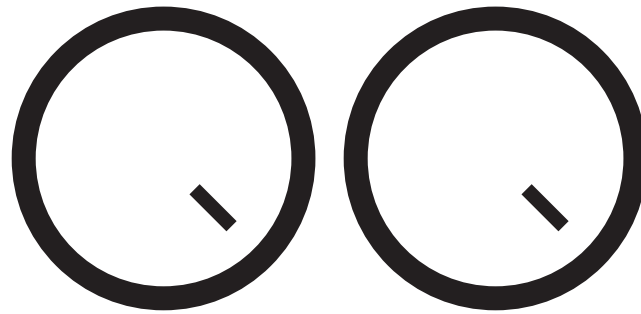
## Intuitive system set-up and control

- Simple and intuitive user interface
- Accessed via the browser on any device on any platform
- Control for all connected sources in all zones
- Presets and time of day routines
- Access all functions for complete system set-up including EQ, routing, ducking, limiting and more
- Customisable zone and input naming

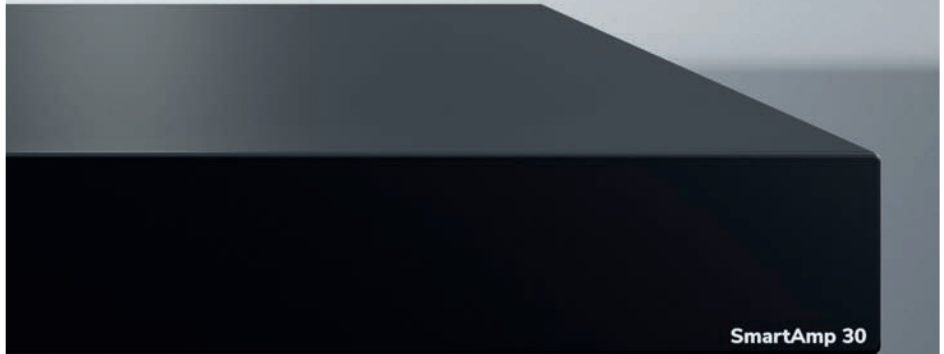




# Amplifiers



Optimal Audio offers a range of amplifiers, to partner our loudspeaker and control offering.



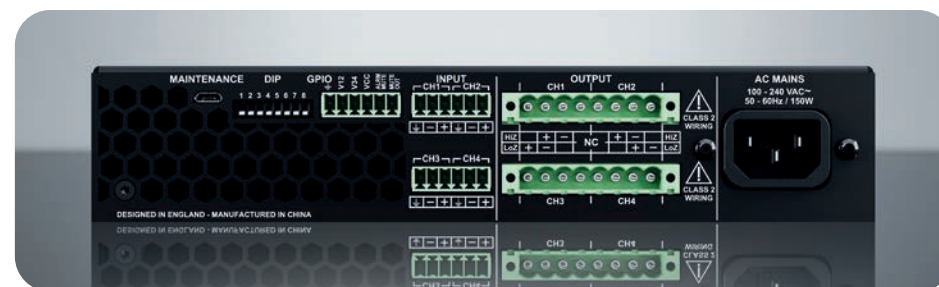


Amplifiers

# SmartAmp

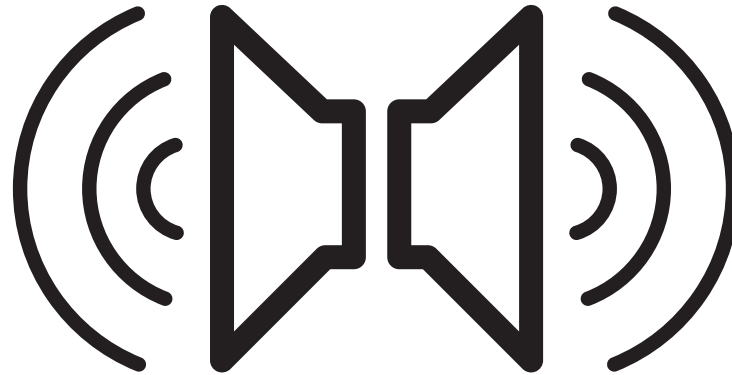
## Amplifiers with DSP

- Three multi-channel direct drive constant voltage amplifiers with DSP
- Up to 30 internal DSP presets for Optimal Audio loudspeakers
- Flexible configuration for a wide range of applications
- Capable of either 4Ω-16Ω or 70V-100V operation





# Loudspeakers



Optimal Audio offers a range of ceiling, on-wall and subwoofer loudspeakers for a full complement of commercial applications. Designed by world-class engineers, they offer a premium sound quality at a cost-conscious price point.



Loudspeakers

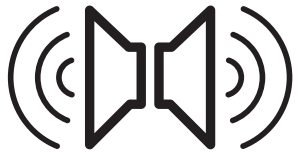
# Up

## Ceiling speakers

- Range of 3", 4" and 6" ceiling speakers
- High quality construction with neutral white finish
- Crisp, clear and evenly distributed sound
- 70V – 100V line amplification with easy access power taps







Loudspeakers

# Cuboid

## On-wall loudspeakers

- 8", 10", 12" and 15" full range, two-way, passive loudspeakers
- Wooden cabinet and quality driver components
- Presets in the SmartAmps and Zone products ensure sonic quality
- User-rotatable high-frequency horn
- Symmetrical multi-angle enclosure for mounting speaker in landscape or portrait
- Wall-mount bracket and other mounting accessories available





Loudspeakers

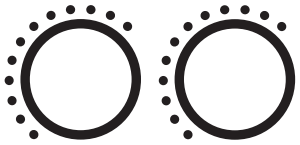
# Sub

## Subwoofers

- 10" and 15" reflex loaded subwoofers for punchy bass
- Plywood cabinets and impact resistant steel grille
- Compact dimensions for greater placement options
- Supports mounting/flying







## Controllers

# Technical Specifications

	Zone 4	Zone 4P	Zone 8	Zone 8P
<b>TYPE</b>	4 zone audio processor with DSP and loudspeaker presets	4 zone audio processor with DSP, amplification and loudspeaker presets	8 zone audio processor with DSP and loudspeaker presets	8 zone audio processor with DSP, amplification and loudspeaker presets
<b>MIC INPUTS</b>	2 with 48V phantom power, +12dB to +55dB gain	2 with 48V phantom power, +12dB to +55dB gain	2 with 48V phantom power, +12dB to +55dB gain	2 with 48V phantom power, +12dB to +55dB gain
<b>MIC INPUT PROCESSING</b>	Fixed hi-pass filter @160Hz; sweepable mid-band 200Hz-5kHz, +/-12dB; HF shelf @12kHz	Fixed hi-pass filter @160Hz; sweepable mid-band 200Hz-5kHz, +/-12dB; HF shelf @12kHz	Fixed hi-pass filter @160Hz; sweepable mid-band 200Hz-5kHz, +/-12dB; HF shelf @12kHz	Fixed hi-pass filter @160Hz; sweepable mid-band 200Hz-5kHz, +/-12dB; HF shelf @12kHz
<b>LINE INPUTS</b>	4 stereo with +26dB gain trim. SPDIF option on input 1	4 stereo with +26dB gain trim. SPDIF option on input 1	4 stereo with +26dB gain trim. SPDIF option on input 1	4 stereo with +26dB gain trim. SPDIF option on input 1
<b>HDMI INPUTS</b>	2 with ARC	2 with ARC	2 with ARC	2 with ARC
<b>LINE OUTPUTS</b>	4	4	8	8
<b>ZONEPAD SOCKETS</b>	4	4	8	8
<b>AMPLIFIER CHANNELS</b>	n/a	4	n/a	8
<b>AMPLIFIER POWER</b>	n/a	100W at 4Ω or 8Ω	n/a	100W at 4Ω or 8Ω
<b>PAGING INPUTS (CAT 5)</b>	2	2	2	2
<b>LAN ETHERNET 100MBPS</b>	Yes	Yes	Yes	Yes
<b>ALARM OVERRIDE</b>	Yes	Yes	Yes	Yes
<b>DIMENSIONS</b>	(W) 480mm x (H) 88mm x (D) 400mm (W) 18.90" x (H) 3.46" x (D) 15.75"	(W) 480mm x (H) 88mm x (D) 400mm (W) 18.90" x (H) 3.46" x (D) 15.7"	(W) 480mm x (H) 88mm x (D) 400mm (W) 18.90" x (H) 3.461" x (D) 15.7"	(W) 480mm x (H) 88mm x (D) 400mm (W) 18.90" x (H) 3.46" x (D) 15.75"
<b>WEIGHT</b>	9.2kg (20.2lb)	9.75kg (21.5lb)	9.2kg (20.2lb)	10.3kg (22.7lb)

	ZonePad 1	ZonePad 4
<b>TYPE</b>	Single zone wall controller with local mic and line inputs	4 zone wall controller
<b>LOCAL MIC INPUT</b>	1 with 48V phantom power, +12dB to +55dB gain, fixed hi-pass filter @160Hz	n/a
<b>LOCAL MUSIC INPUT</b>	1 x mono	n/a
<b>MAXIMUM DISTANCE (CAT5)</b>	500m	500m
<b>CONNECTION</b>	RJ45	RJ45
<b>DATA PROTOCOL</b>	Optimal Audio proprietary over CAT 5	Optimal Audio proprietary over CAT 5
<b>CASE MATERIAL</b>	Zinc plated steel, ABS	Zinc plated steel, ABS
<b>LENS MATERIAL</b>	Clear acrylic	Clear acrylic
<b>BACK BOX</b>	2-gang 25mm deep back box	2-gang 25mm deep back box
<b>DIMENSIONS</b>	(W) 146mm x (H) 86.2mm x (D) 39.3mm (W) 5.75" x (H) 3.39" x (D) 1.55"	(W) 146mm x (H) 86.2mm x (D) 39.3mm (W) 5.75" x (H) 3.39" x (D) 1.55"
<b>WEIGHT</b>	0.35kg (0.8lb)	0.35kg (0.8lb)

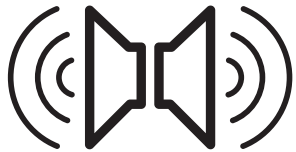


## Amplifiers

# Technical Specifications

	SmartAmp 10	SmartAmp 20	SmartAmp 30
<b>TYPE</b>	CLASS D power amplifier with DSP	CLASS D power amplifier with DSP	CLASS D power amplifier with DSP
<b>POWER OUTPUT (4Ω-16Ω)</b>	2 x 125W	4 x 125W	4 x 250W
<b>70V - 100V OUTPUT</b>	2 x 125W	4 x 125W	4 x 250W
<b>DIGITAL SIGNAL PROCESSING</b>	EQ & limiter presets for Optimal Audio loudspeakers	EQ & limiter presets for Optimal Audio loudspeakers	EQ & limiter presets for Optimal Audio loudspeakers
<b>COOLING</b>	Forced air cooling with fan	Forced air cooling with fan	Forced air cooling with fan
<b>ANALOGUE IN/LINK</b>	2 balanced line inputs on Euroblock connectors	4 balanced line inputs on Euroblock connectors	4 balanced line inputs on Euroblock connectors
<b>ANALOGUE INPUT IMPEDANCE</b>	10kΩ unbalanced, 20kΩ balanced	10kΩ unbalanced, 20kΩ balanced	10kΩ unbalanced, 20kΩ balanced
<b>MAXIMUM ANALOGUE INPUT LEVEL</b>	+24dBu	+24dBu	+24dBu
<b>AMPLIFIER OUTPUTS</b>	Euroblock	Euroblock	Euroblock
<b>SIGNAL TO NOISE RATIO</b>	> 100dB (A-weighted, 20Hz - 20kHz, 8Ω load)	> 100dB (A-weighted, 20Hz - 20kHz, 8Ω load)	> 100dB (A-weighted, 20Hz - 20kHz, 8Ω load)
<b>FREQUENCY RESPONSE</b>	20Hz - 20kHz, +0/-0.25dB (8Ω load, 3 dB below rated power)	20Hz - 20kHz (+0/-0.25dB (8Ω load, 3dB below rated power)	20Hz - 20kHz, +0/-0.25dB (8Ω load, 3dB below rated power)
<b>TOTAL HARMONIC DISTORTION</b>	< 0.05 % (20Hz - 20kHz, 8Ω load, 3dB below rated power)	< 0.05 % (20Hz - 20kHz, 8Ω load, 3dB below rated power)	< 0.05 % (20Hz - 20kHz, 8Ω load, 3dB below rated power)
<b>SLEW RATE</b>	8.796V/μS at 70V peak, low impedance, 17.77V/μS at 100V peak, high impedance	8.796V/μS at 70V peak, low impedance, 17.77V/μS at 100V peak, high impedance	8.796V/μS at 70V peak, low impedance, 17.77V/μS at 100V peak, high impedance
<b>DAMPING FACTOR</b>	370 with 8Ω load	370 with 8Ω load	370 with 8Ω load
<b>CONTROL AND MONITORING</b>	GPIO	GPIO	GPIO
<b>DSP SAMPLE RATE</b>	48kHz	48kHz	48kHz
<b>MAINS POWER INPUT</b>	Universal mains, 100-240V, 50-60Hz	Universal mains, 100-240V, 50-60Hz	Universal mains, 100-240V, 50-60Hz
<b>MAINS CONNECTOR</b>	IEC	IEC	IEC
<b>POWER CONSUMPTION</b>	75W	150W	300W
<b>HEAT GENERATED</b>	270kJ per hour	540kJ per hour	1080kJ per hour
<b>DIMENSIONS</b>	(W) 220mm x (H) 43.9mm x (D) 277mm (W) 8.67" x (H) 1.73" x (D) 10.91"	(W) 220mm x (H) 44mm x (D) 353mm (W) 8.67" x (H) 1.73" x (D) 13.90"	(W) 440mm x (H) 44mm x (D) 308mm (W) 17.32" x (H) 1.73" x (D) 12.13"
<b>WEIGHT</b>	1.9kg (4.2lb)	2.4kg (5.3lb)	3.6kg (7.9lb)
<b>ACCESSORIES (available separately)</b>	Rack ears and connection plate, rear rack support kit, wall/desktop mount kit	Rack ears and connection plate, rear rack support kit, wall/desktop mount kit	Rear rack support kit
<b>ACCESSORIES (included)</b>	n/a	n/a	2 x rack ears

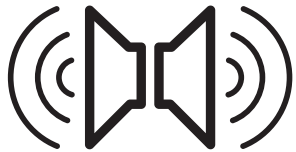




## Loudspeakers

# Technical Specifications

	Up 3	Up 40	Up 45	Up 4	Up 60	Up 6
<b>TYPE</b>	Full range, passive, ceiling speaker	Full range, passive, ceiling speaker	Two-way, full range, passive, ceiling speaker	Two-way, full range, passive, ceiling speaker	Two-way, full range, passive, ceiling speaker	Two-way, full range, passive, ceiling speaker
<b>FREQUENCY RESPONSE (with preset)</b>	95Hz - 15kHz ± 3dB -10dB @68Hz	87Hz - 15kHz ± 3dB -10dB @60Hz	110Hz - 18kHz ± 3dB -10dB @85Hz	100Hz - 18kHz ± 3dB -10dB @74Hz	65Hz to 18kHz ±3dB -10dB @ 50Hz	115Hz - 18kHz ± 3dB -10dB @80Hz
<b>DRIVERS</b>	3" (78mm), coated paper	4" (105mm), coated paper	LF: 4" (105mm), polypropylene injection moulded HF: 1" (25mm) exit/0.7" (20mm) voice coil, silk dome	LF: 4" (105mm), coated paper HF: 1" (25mm) exit/0.7" (20mm) voice coil, silk dome	LF: 6.5" (162mm), Coated paper HF: 1" (25mm) exit/ 0.7" (20mm) metal dome	LF: 6.5" (162mm), coated paper HF: 1" (25mm) exit/ 0.7" (20mm) metal dome
<b>RATED POWER</b>	20W (AES) 40W (peak)	10W (AES)	15W (AES) 30W (peak)	30W (AES) 60W (peak)	60W (AES) 120W (peak)	60W (AES) 120W (peak)
<b>NOMINAL IMPEDANCE</b>	8Ω	Tap dependent	8Ω	8Ω	16Ω	16Ω
<b>SENSITIVITY (1W/1m)</b>	84dB	93dB	86dB	87dB	90dB	90dB
<b>MAXIMUM SPL</b>	97dB (cont), 100dB (peak)	100dB (cont)	98dB (cont), 101dB (peak)	102dB (cont), 105dB (peak)	108dB (cont), 111dB (peak)	108dB (cont), 111dB (peak)
<b>CROSSOVER</b>	n/a	n/a	3.5kHz passive	3.5kHz passive	2.7kHz passive	2.7kHz passive
<b>RECOMMENDED HIGH-PASS FILTER</b>	24dB/octave @90Hz	24dB/Octave @80Hz	24dB/octave @85Hz	24dB/octave @90Hz	24dB/octave, 60Hz	24dB/octave @80Hz
<b>TRANSFORMER TAPS @ 70V</b>	15, 7.5, 3.8, 1.9W	6, 3, 1.5, 0.75W	8, 4, 2, 1, 0.5W	25, 12.5, 6.3, 3.2W	60, 30, 15, 7.5W	60, 30, 15, 7.5W
<b>TRANSFORMER TAPS @ 100V</b>	15, 7.5, 3.8W	6, 3, 1.5W	8, 4, 2, 1W	25, 12.5, 6.3W	60, 30, 15W	60, 30, 15W
<b>DISPERSION (-6dB)</b>	130° conical	130° conical	150° conical	120° conical	110° conical	110° conical
<b>BACK CAN</b>	Zinc-plated steel	n/a	Zinc-plated steel	Zinc-plated steel	n/a	Zinc-plated steel
<b>BAFFLE</b>	ABS	ABS	ABS	ABS	ABS	ABS
<b>PROTECTIVE GRILLE</b>	Perforated steel with cloth backing	Perforated steel with cloth backing	Perforated steel with cloth backing	Perforated steel with cloth backing	Perforated steel	Perforated steel with cloth backing
<b>FIRE RATING</b>	UL94-V0	UL94-V0	UL94-V0	UL94-V0	UL94-V0	UL94-V0
<b>CONNECTORS</b>	4 pin Euroblock with link out	Bare wires	4 pin Euroblock with link out	4 pin Euroblock with link out	4 Pin Euroblock with link out	4 pin Euroblock with link out
<b>FITTINGS</b>	C-ring support backing plate	C-ring support backing plate	C-ring support backing plate	C-ring support backing plate	C-ring support backing plate	C-ring support backing plate
<b>DIMENSIONS (inc. Grille)</b>	(Ø) 202mm x (D) 165mm (Ø) 7.95" x (D) 5.7"	(Ø) 202mm x (D) 117mm (Ø) 7.95" x (D) 4.62"	(Ø) 202mm x (D) 144mm (Ø) 7.95" x (D) 5.67"	(Ø) 202mm x (D) 227.5mm (Ø) 7.95" x (D) 8.96"	(Ø) 251mm x (D) 103.5mm (Ø) 9.88" x (D) 4.1"	(Ø) 251mm x (D) 205.1mm (Ø) 9.88" x (D) 8.08"
<b>CUT-OUT DIAMETER</b>	178mm (7.01")	178mm (7.01")	178mm (7.01")	178mm (7.01")	222mm (8.74")	222mm (8.74")
<b>WEIGHT</b>	1.6kg (3.5lb)	1.3kg (2.9lb)	2.2kg (4.9lb)	2.2kg (4.9lb)	2.24kg (4.94lb)	3.0kg (6.6lb)
<b>INCLUDED ACCESSORIES</b>	2 tile support rails (for 2ft or 600mm tile spans), cutout template, paint shield, removable locking, multi-pin connector	2 tile support rails (for 2ft or 600mm tile spans), cutout template, paint shield, removable locking multi-pin connector	2 tile support rails (for 2ft or 600mm tile spans), cutout template, paint shield, removable locking multi-pin connector	2 tile support rails (for 2ft or 600mm tile spans), cutout template, paint shield, removable locking multi-pin connector	2 tile support rails (for 2 ft or 600mm tile spans), cutout template, paint shield, removable locking multi-pin connector	2 tile support rails (for 2ft or 600mm tile spans), cutout template, paint shield, removable locking multi-pin connector

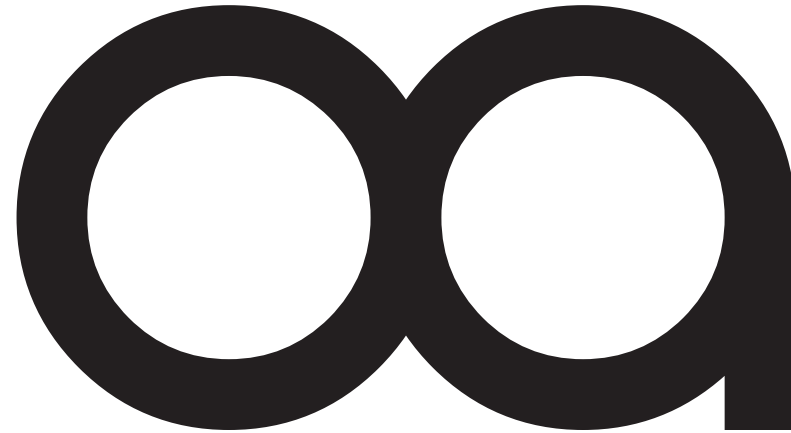


## Loudspeakers

# Technical Specifications

	<b>Cuboid 8</b>	<b>Cuboid 10</b>	<b>Cuboid 12</b>	<b>Cuboid 15</b>	<b>Sub 10</b>	<b>Sub 15</b>
<b>TYPE</b>	Two-way, full range, passive loudspeaker	Two-way, full range, passive loudspeaker	Two-way, full range, passive loudspeaker	Two-way, full range, passive loudspeaker	Sub-bass loudspeaker	Sub-bass loudspeaker
<b>FREQUENCY RESPONSE (with preset)</b>	90Hz - 18kHz ± 3dB -10dB @62Hz	65Hz - 20kHz ± 3dB -10dB @49Hz	62Hz - 20kHz ± 3dB -10dB @47Hz	58Hz - 18kHz ± 3dB -10dB @40Hz	50Hz - 150Hz ± 3dB -10dB @42Hz	45Hz - 150Hz ± 3dB -10dB @40Hz
<b>DRIVERS</b>	LF: 8" (200mm), ferrite motor system HF: 1" (25mm) exit/1" (25mm) voice coil, HT polymer dome compression driver	LF: 10" (254mm), ferrite motor system HF: 1" (25mm) exit/1.4" (36mm) voice coil, polyimide dome compression driver	LF: 12" (300mm), ferrite motor system HF: 1" (25mm) exit/1.4" (36mm) voice coil, polyimide dome compression driver	LF: 15" (380mm), ferrite motor system HF: 1" (25mm) exit/1.7" (44mm) voice coil, polyimide dome compression driver	LF: 10" (250mm)	LF: 15" (380mm)
<b>RATED POWER</b>	200W (AES) 800W (peak)	250W (AES) 1000W (peak)	300W (AES) 1200W (peak)	500W (AES) 2000W (peak)	250W (AES) 1000W (peak)	500W (AES) 2000W (peak)
<b>NOMINAL IMPEDANCE</b>	8Ω	8Ω	8Ω	8Ω	8Ω	8Ω
<b>SENSITIVITY (1W/1m)</b>	92dB	96dB	98dB	99dB	97dB (half space)	102dB (half space)
<b>MAXIMUM SPL</b>	115dB (cont), 121dB (peak)	120dB (cont), 126dB (peak)	123dB (cont), 129dB (peak)	126dB (cont), 132dB (peak)	121dB (cont), 127dB (peak) (half space)	129dB (cont), 135dB (peak) (half space)
<b>CROSSOVER</b>	2.9kHz passive	2.8kHz passive	2.5kHz passive	2.3kHz passive	n/a	n/a
<b>DISPERSION (-6dB)</b>	90° H x 50° V (user-rotatable)	90° H x 50° V (user-rotatable)	80° H x 50° V (user-rotatable)	80° H x 50° V (user-rotatable)	n/a	n/a
<b>ENCLOSURE</b>	Trapezoid wooden cabinet	Trapezoid wooden cabinet	Trapezoid wooden cabinet	Trapezoid wooden cabinet	Plywood	Plywood
<b>FINISH</b>	Black textured paint	Black textured paint	Black textured paint	Black textured paint	Black textured paint	Black textured paint
<b>PROTECTIVE GRILLE</b>	Black perforated steel with scrim cloth backing	Black perforated steel with scrim cloth backing	Black perforated steel with scrim cloth backing	Black perforated steel with scrim cloth backing	Perforated steel	Perforated steel
<b>CONNECTORS</b>	2x NL4 type	2x NL4 type	2x NL4 type	2x NL4 type	Euroblock type	Euroblock type
<b>PIN CONNECTIONS (INPUT)</b>	1+/1-	1+/1-	1+/1-	1+/1-	1+ 1-	1+ 1-
<b>FITTINGS</b>	16 x M8, inset bolts	21 x M8, inset bolts	21 x M8, inset bolts	19 x M8, inset bolts	12 x M8, inset bolts	12 x M8, inset bolts
<b>DIMENSIONS</b>	(W) 256mm x (H) 422.5mm x (D) 261mm (W) 10.08" x (H) 16.63" x (D) 10.28"	(W) 322mm x (H) 524mm x (D) 326mm (W) 12.68" x (H) 20.63" x (D) 12.83"	(W) 360mm x (H) 575mm x (D) 392mm (W) 14.17" x (H) 22.64" x (D) 15.43"	(W) 426.5mm x (H) 691.5mm x (D) 416mm (W) 16.79" x (H) 27.22" x (D) 16.38"	(W) 470mm x (H) 297mm x (D) 353mm (W) 18.50" x (H) 11.7" x (D) 13.9"	(W) 716mm x (H) 443mm x (D) 480mm (W) 28.19" x (H) 17.4" x (D) 18.9"
<b>WEIGHT</b>	10kg (22.05lb)	16kg (35.27lb)	20kg (44.09lb)	28kg (61.73lb)	12.9kg (28.4lb)	34.3kg (75.6lb)
<b>ACCESSORIES (available separately)</b>	Wall bracket A, U bracket A, M8 eye bolt	Wall bracket B, U bracket B, M8 eye bolt	Wall bracket B, U bracket C, M8 eye bolt	Wall bracket C, U bracket D, M8 eye bolt	Sub bracket (pair), M8 eye bolt	M8 eye bolt





**Relax, it's Optimal Audio.**

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