



**MiniRay10**  
Mini Line Array

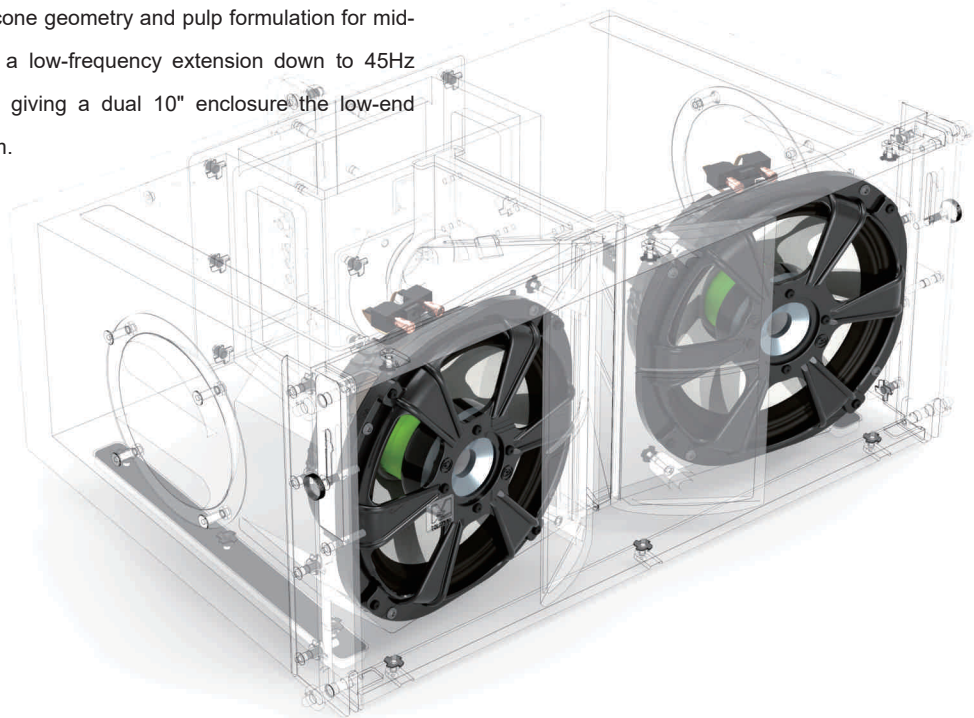
# Dual 10" 3 Way Line Array

MiniRay covers most applications with a throw range of 10-60m. For scenarios demanding higher low - frequency performance - like outdoor festivals, large clubs, and concerts - a line array with greater SPL and deeper low end is required.

MiniRay10 combines the size and weight of a standard 10" two-way line array with the SPL output of a dual 12" three-way system - achieved through a dual 10" three-way configuration.

## How is this achieved?

By adopting the ultra-slim 10" woofer structure successfully used in MiniMon and MiniQ-Sub, with optimized cone geometry and pulp formulation for mid-bass performance. This allows a low-frequency extension down to 45Hz within a compact form factor - giving a dual 10" enclosure the low-end presence of a much larger system.



# MiniRay10

## Key Features

- 3-Way, Single-Drive
- Coaxial Mid-Hi; HF Extension >18 kHz
- Max SPL 139dB
- Hi End Grade Crossover
- Preangle Adjustable Rigging Hardware



## 3-Way | Single-Drive | Hi-End Crossover

Internal passive crossover enables single-amp 3-way operation - reducing complexity, saving DSP or amp channels, and allowing standard NL4 cables, more convenient than dedicated 6- or 8-pin connectors.

To overcome typical passive loss, Our Hi-End mid-high crossover solves this with hybrid aluminum foil & polypropylene film capacitors for articulate mids and high-resolution highs, plus OFC foil-wound inductors to eliminate skin effect for smooth HF detail.



## Pre-angled 3-Point Rigging Sys

The 3-point rigging system on MiniRay10 features preset angles for both flying and ground-stacked configurations, significantly reducing installation time. Rear-mounted side handles facilitate easy handling. A universal dolly board fits both full-range and subwoofer units-eliminating sorting and further saving time.



## Coaxial Mid-High Design

The coaxial mid-high compression driver keeps the cabinet compact and lightweight. A 100mm polymer mid-diaphragm enables a low 600Hz crossover, while a 65mm annular polymer HF diaphragm extends response to 18kHz - surpassing the 16kHz limit of typical 75mm domes for exceptional high-frequency detail. Dual-diaphragm design delivers 139dB SPL. At just 152mm (only 17mm larger than a 3" driver), it offers 2-way compactness with 3-way performance.



# MiniSub18

## Key Features

- Direct stacking on sub - no adapter frame required
- Large-profile port reduces air noise
- Frequency extension down to 30Hz



## Single 18" Flying Sub

Designed for MiniRay10, the MiniSub18 is a single 18" subwoofer with integrated rigging hardware. It supports stacking with a foldable aluminum support bar-no adapter frame needed for stacking full-range on top. Can be flown alone or with a full-range array below using a conversion rod.

## Frequency extension down to 30Hz

Featuring a 100mm 18" ferrite woofer delivering fast, punchy low end. Large-profile ports minimize air noise. Frequency extends down to 30Hz with a direct-radiating design allowing a crossover point up to 130Hz.



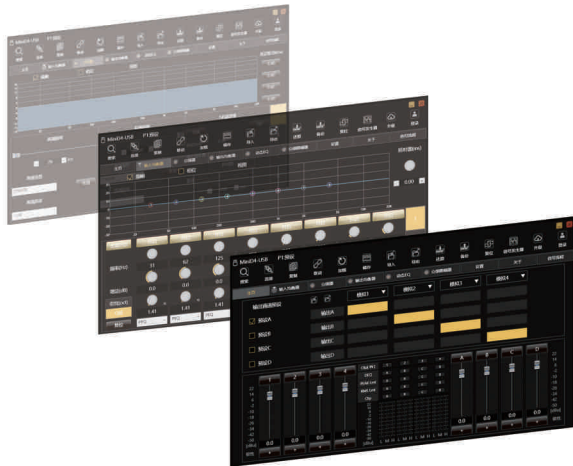
# D1600-4V

## Key Features

- 4 x 2500W powerful power supply
- 4 x 1600W 8Ω output
- Built-in DSP highly integrated
- Up to +23 dBu Max input

## Ultra-High Power Output

Four independent amplifier modules, each with a dedicated 2500W switching power supply-total 10000W. Delivers 2500W per channel simultaneously at 4Ω. Unlike conventional 4×1300W amps sharing a single 4000-5000W supply. Flexible channel assignment with no power budget constraints.

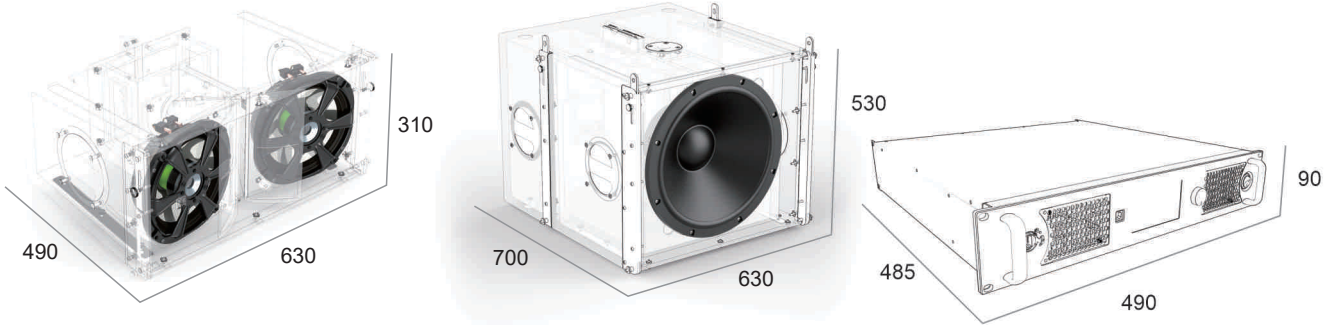


## Built-in 4 CH DSP Module

Self-developed by MZ Audio, the integrated DSP module eliminates the need for an external processor-simplifying setup and system integration.

The MiniD4 processor features a +23 dBu maximum input level, exceeding the output of most digital mixers on the market to prevent input clipping distortion. Dynamic EQ, crossover limiting, and other advanced functions provide enhanced loudspeaker protection and system stability.

# Parameter



## SPECIFICATIONS

### MiniRay10

### MiniSub18

Frequency Range(-10dB)	45 Hz - 18 kHz	30 Hz - 200 Hz
MAX SPL	139 dB SPL peak	136dB SPL peak
Coverage	Horizontal 100°/ Vertical 0-10° Adjustable	Horizontal 360° / Vertical 180°
Transducers	2×10"Neodymium Woofers;1×100mm+65mm Coaxial ND Mid-Hi Driver	1×18"Ferrite Woofer
Nominal Impedance	8 Ω	8 Ω
Driving Mode	3-Way Single Drive	One way Single Drive
Power (AES)	600 W	800W AES
Cabinet	Baltic birch plywood, black polyurea finish	Baltic birch plywood, black polyurea finish
Dimensions (W×H×D)	630 × 310 × 490 mm 24.6×11.9×19.2 in	630 × 530 × 700 mm 24.6 × 20.8 × 27.5 in
Weight	28.5kg /62.8 lbs	55.8 kg /123 lbs

## DI600-4V

### Amp Module

### DSP Module

Amplifier Output	4 × 1600 W 8Ω	Input Impedance	20 KΩ	SNR	≥113 dB
Frequency Response	20 Hz-35 kHz ±1 dB	Output Impedance	100 Ω	Noise Floor	≤-96 dB
Rated Voltage	100~240 V AC 50~60Hz	A/D Dynamic Range	118 dB	CMRR	74dB
SNR	Typical > 120dB	D/A Dynamic Range	118 dB	Dante Input Channels (Optional)	4
Dimensions	490 × 90 × 485 mm 19.29×3.54×19.09 in	Max Input Level	23 dBu	AES Digital Input Channels	2
Weight	16.8 kg / 37 lbs	Max Output Level	17 dBu	Analog Input Channels	4
		THD	≤0.004%	USB Control Port	1
		Frequency Response	20 Hz~40 kHz	Network Control Port	1
		Crosstalk	≤-102 dB		

## SYSTEM LIST

MiniRay 10	×8
MiniSub 18	×4
D1600-4V	×2
2U Amp Cabinet	×2
0.6m Speaker Jumper	×4
0.6m NL4 Crosswire	×2
2m NI4 Crosswire	×2
10m NI4 Speaker Cable	×2
20m NI4 Speaker Cable	×2
Transport Dolly	×4
Transport Cover	×4

## OPTIONAL

MiniRay 10 Flying Frame	×2
MiniSub 18 Flying Frame	×2
Full Range Conversion Bar	×2
Amp Flying Frame	×2
Extension Bar	×2
Flying Tent	×2



# Accessories

Transport Dolly  
MiniRay10-DL



Full Range Flying Frame  
MiniRay10-TG



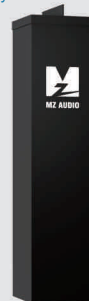
Sub Flying Frame  
MiniRay10-TGS



Transport Cover  
MiniRay10-Cov



Flying Tent  
MiniRay10-FT



Full Range Conversion Bar  
MiniRay10-BS



Extension Bar  
MiniRay10-RBS



Amp Conversion Bar  
MiniRay10-TR



**MiniRayIO**  
Mini Line Array

small footprint  
**SONIC IMPACT**



**MZ AUDIO**

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MZ audio technology development Co.,Ltd.

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