

# PURPLE PRO AUDIO

## P2MTX

PMTX is a full frequency range compact cabinet capable of high fidelity sound reproduction at very high sound pressure levels. It uses two custom designed Fane loudspeaker components in a true point source configuration to produce phase coherent output from 50Hz through to 18Khz. The MTX can be used on its own or in multiples and can be supplemented with our P<sup>2</sup>SB Sub bass cabinet for large format concert reinforcement.

The unit houses:  
1 x 15" 600 Watt AES  
1 x 1" 50 Watt AES

The 15" is horn loaded at the front and reflex loaded at the rear to produce tight punchy bass output all the way down to 60Hz, the 1" compression driver is mounted on to a bespoke constant directivity horn that renders a dispersion of 90° in the Horizontal and 40° in the vertical and matches the dispersion characteristics of the 15" Horn.

The flare constant used in the bass horn is a special hybrid that through years of research has been perfected to realize a perfect balance of efficiency and very low harmonic distortion. Inside the rear of the enclosure a special internal mechanical damping system is used to drastically reduce modal anomalies and internal reflections, resulting in a cleaner and more controlled output.

### Cabinet

The cabinet is produced from 18mm Baltic multi-layer birch, and is braced throughout to give a very rigid structure. This bracing effectively moves any cabinet resonances well above those of the 15" driver, reducing the destructive amplitude anomalies normally found in other loudspeaker cabinets. The cabinet is rebated, glued and screwed every 75mm for excellent structural integrity. The cabinet also benefits from internal steel bracing for even greater strength.

The cabinet comes mounted on 4 x 100mm Guitel Blue castors fixed to the rear of the enclosure, making transportation and handling very easy.

### Electrical

The connectors are located on the rear panel and are Neutrik NL8 speakons.

Channel 3 - 15"  
Channel 4 - 1"

### Set-up

The cabinet will produce 131dB SPL at rated output and this figure increases as the units are stacked. We recommend that MTX is stacked in columns to achieve high SPL long throw output without destructive effects in the horizontal plane. In this way SPLs in excess of 137dB are possible using as few as 4 cabinets. We strongly recommend the use of XTA® digital loudspeaker management systems for use with the P<sup>2</sup> series enclosures.

### Design Philosophy

Our ideology is very simple: We pay very close attention to what our designs sound like at every stage of the development process. We believe that too many manufacturers invest little or no time actually listening to what it is they are building. Touring engineers and musicians are invited to listen to our designs before they are complete, and in this way we can solve any problems at an early stage. This level of refinement means that the enclosures sound as good as possible before any equalisation or processing to further improving their fidelity. Purple believes loudspeakers should be designed and made with the same love and attention to detail as the music they reproduce.

Purple Pro Audio P<sup>2</sup>mtx

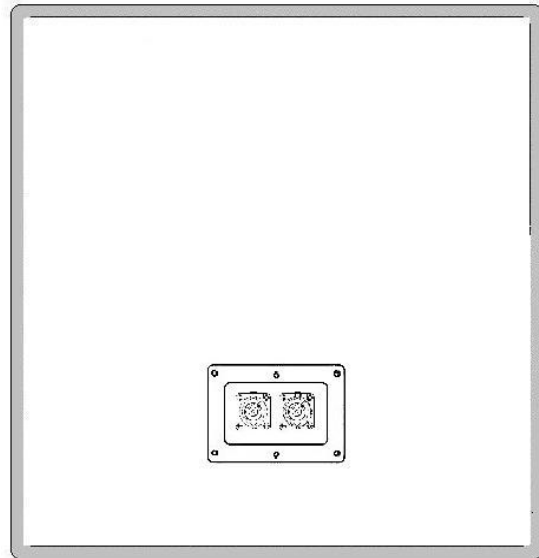
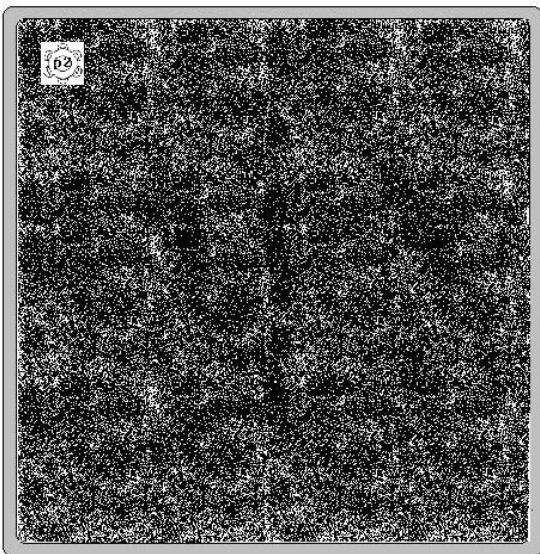
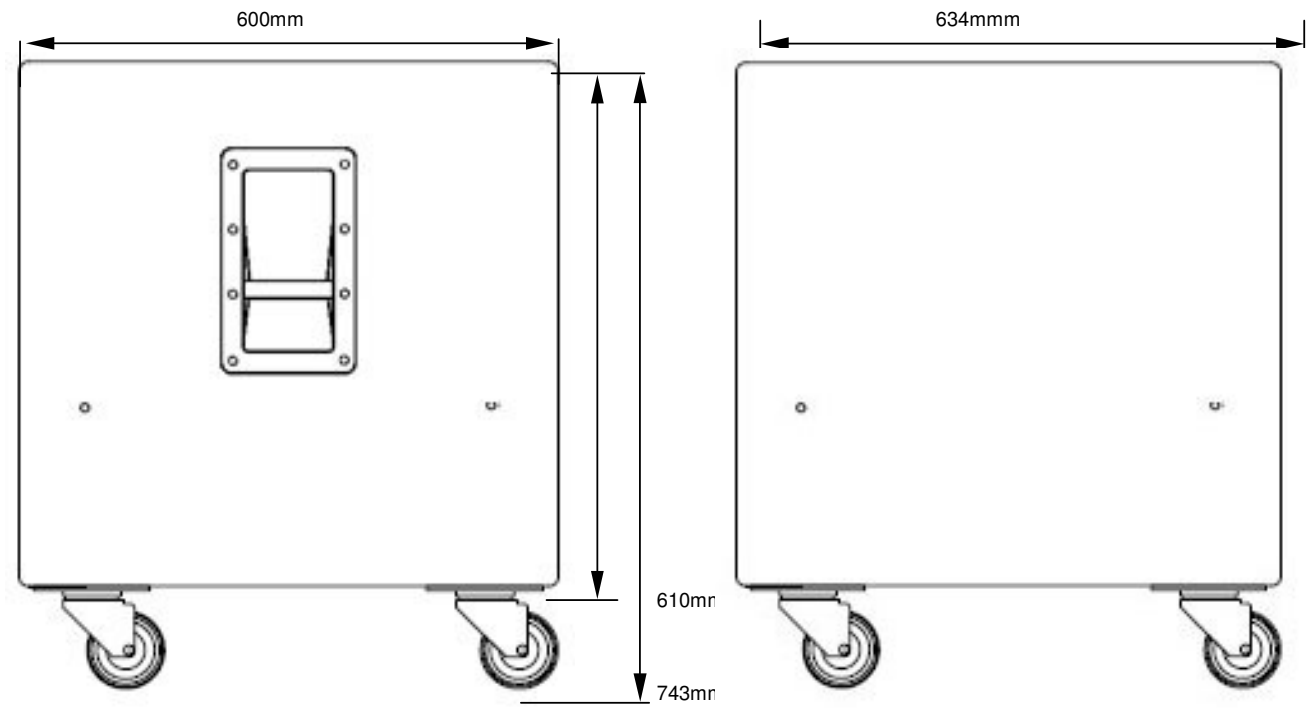


Diagram of **P2MTX** showing, front, rear and side elevations with plan view top left.

## Specifications

Model number	P2mtx
Type of cabinet	Full range / mid top, two way
Construction	18mm Multiply Baltic Birch
Total cabinet power handling	650Watts AES,
Driver compliment	1x 15" + 1 x 1"
Frequency response +/-3dB	50Hz-18KHz
Recommended crossover points	50Hz HPF & 3.6KHz @ 18dB/Oct min roll off
Type of loading	Dual concentric Point source Hybrid CD Horn
Weight	55Kg / 121.25lbs
Connectors	2 x Neutrik NL8 (ch3 15" / ch4 1")
Paint	Weather resistant textured finish
Fly ware	Optional P2fs