

FlatPanel Audio

DML500W

Weatherized Distributed Mode Loudspeaker

The breakthrough DML500 loudspeaker and its non-destructive boundary interaction have revolutionized hundreds of indoor spaces and now those same benefits can be had in our new all-weather version.

The DML500W has the same features as the DML500, including the thin form factor, easy mounting, and jaw-dropping sonic performance and it can be safely integrated into outdoor and into moisture-rich environments.

Making the DML500 weather-resistant for exterior installations was simple and straightforward because the DML500 is highly weather resistant by design. Its main components—such as the carbon fiber diaphragm, and metal casing—are suitable for wet conditions.

The DML500W is a passive, non-powered loudspeaker. While it's not intended to be submerged, water is less of an issue than with competitive loudspeakers, as there are no active electronics to be damaged. And with our water resistant grille cloth, we have even an added layer of protection. As a result, we are offering a generous 4 year warranty.

What makes the DML500W weather-resistant

- Weather and UV resistant powder coating on the exterior surfaces
- Water-resistant (yet sonically transparent) grille cloth in the front and rear grilles
- Assembled with stainless steel exterior hardware
- Neutrik protective cover for unused SpeakON jack
- Other enhancements to help the DML500W withstand tough operating conditions

Applications

Patios and decks	Theme parks	Industrial facilities
Cruise ships	Sports arenas	Zoos and gardens
Natatoriums	Train/bus/ferry stations	Outdoor venues



DML500W specifications

Frequency range (-10dB) 75Hz-20kHz

Frequency response (± 6 dB) 85Hz-20kHz

Horizontal/vertical coverage 165°

System sensitivity 92 dB

Rated maximum SPL SPL 123 dB

System nominal impedance 8 ohms

Power handling

Continuous / program / peak 200W/300W/600W

Suggested high pass filter 90Hz Butterworth 2nd order

Drivers

FlatPanel transducer 4 x DML exciter

Voice coil diameter 32 mm

Voice coil winding wire Copper-clad aluminum

Suspension design Standard spider

Diaphragm design

Design principle Bending wave modal

Radiator surface area 400 x 575 mm

Material Carbon fiber honeycomb

Input connection Neutrik Speakon® NL4 +1 /-1 Input, +2 /-2 Loop out

Physical

Outer dimensions (H x W x D) 21.6 in x 31.5 in x 3.5 in
550 mm x 800 mm x 90 mm

Outer frame (4 x MB) 15.5 in x 19.13 in
395 mm x 486.5 mm

Rear grill (4 x MB) 9.13 in x 7.95 in
292 mm x 202 mm

Weight 44 lbs / 20.3 kg

Shipping dimensions 27 in x 37 in x 8 in
650 mm x 800 mm x 250 mm

Shipping weight 51 lbs / 23.2 kg

Ingress Protection (IP) Code Pending

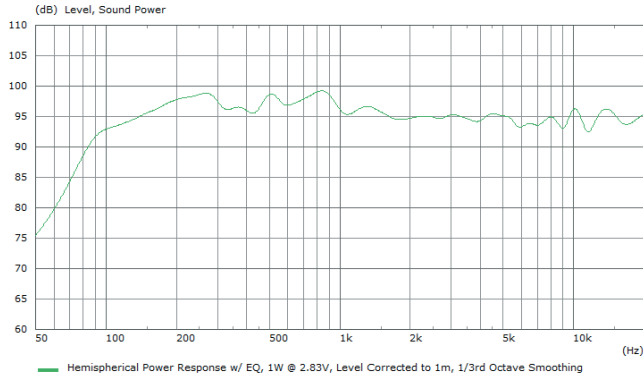
Warranty 4 years

FlatPanel Audio continually engages in research related to product improvement. Specifications are subject to change without notification.

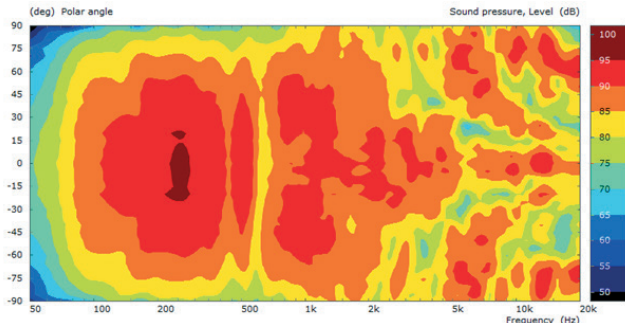
DML500

Hemispherical power response

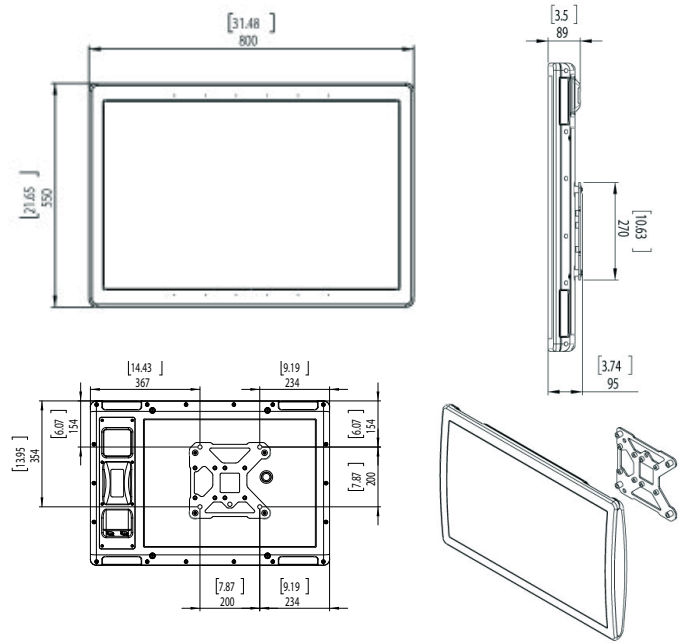
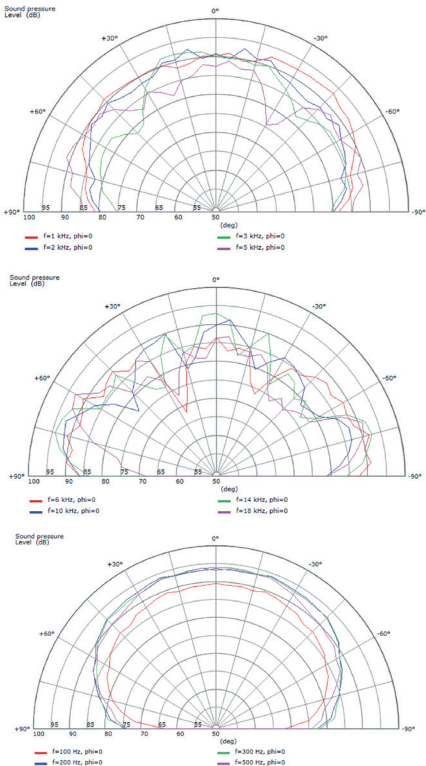
Due to the modal nature of DML loudspeakers, the best way to represent their acoustic characteristics is to measure their power response. Measurements are made at 5° intervals in both the vertical and horizontal axes, and averaging a total of 1349 measurements.



Hemispherical contour plot



Polar plots



Accessories

If attachment to a VESA mount accessory with specific 200mm x 200mm pattern is required, we offer a VESA adapter (sold separately). Other mounting options are described in our Rigging Guide.

Recommended filtering/crossover

The DML500W loudspeaker requires the use of a High Pass filter at or above 85Hz. Driving a DML500W in full range at higher power levels can cause over excursion of the exciters resulting in noise/distortion, and in extreme cases, damage to the DML500W.

Refer to our online KnowledgeBase for recommended filtering/crossover details.

Frequency response

