

# MSE-118 **Q**UAKE

large format horn-loaded subwoofer



## FEATURES AND BENEFITS:

- unrivalled frequency and phase response in a large format subwoofer
- incredible efficiency when used in multiples of 4 enclosures or more
- robust build quality to survive a life on the road
- tour-friendly enclosure hardware

The MSE-118 Quake is a powerful, horn-loaded subwoofer - the ultimate no-compromise solution for any application requiring crisp, deep bass information. The Quake, released in 2003, matches the utmost in modern drive unit performance with tireless research into horn technology. The result is one of the finest and most powerful professional subwoofers on the market today. The magnitude & phase response provided by the combination of the mighty 5" (127mm) voice coil 18" drive unit, coupled to a precisely engineered 9' (2743mm) horn mean that Quakes will interface perfectly with any mid-high system, from point source to line arrays.

Due to the way horns work, the Quake is best suited to use in groups - four or more Quakes in a stack will produce staggering results - producing higher SPL output than twice the number of many dual 18" designs. But it isn't just about SPL - the impulse and phase response of the true horn system means it is unrivalled in terms of definition, speed and clarity. Quakes have been and continue to be used by the biggest artists and in the biggest venues all across the globe. Aside from working perfectly with EM Acoustics systems such as the X3 or HALO Compact line array, Quakes are equally at home underneath any other high power mid-high system.

The MSE-118 contains a single 5" (127mm) voice coil, 18" (457mm) LF drive unit, loaded onto a 9' (2743mm) exponential/hyperbolic folded horn. Designed to be used in multiples, the MSE-118 is unmatched when used in blocks of four or more enclosures. With blocks of four or more, the system efficiency rises to approaching 50%, and as with all horn designs the more enclosures you have, the higher the efficiency becomes.

The substantial enclosure is constructed from premium 18mm (3/4") multi-laminate Birch plywood - rebated, screwed and glued together for maximum strength. The enclosure is sized at 574mm (22.6") wide for optimum truck-pack - four enclosures will neatly fit across the width of standard vehicles in both Europe and the United States. The enclosure is supplied as standard in black textured paint, however RAL colour matching and weather protection options are available. The enclosure is fitted with eight steel bar handles and with interlocking feet on both sides to facilitate easy stacking. Heavy duty castors are also supplied for the rear of the enclosure, though these can be removed for fixed installations if required. A foam-backed hex-punched steel grille protects the front of the enclosure from damage and moisture ingress.

The MSE-118 requires active high/low pass filters, and a single amplifier channel capable of delivering 1600-2000W RMS into an 8 ohm load. For optimum results, the EM Acoustics AD-9 power amplifier should be used.

|  |   |
|--|---|
| <b>ENCLOSURE TYPE:</b>                 | exponential/hyperbolic folded horn  |
| <b>DIMENSIONS (HxWxD):</b>             | 1200 (47.2) x 574 (22.6) x 950 (37.4) mm/(ins)  |
| <b>NET/SHIPPING WEIGHT:</b>            | 109/116kg (239.8/255.2lbs)  |
| <b>FREQUENCY RESPONSE<sup>1</sup>:</b> | 35Hz - 200Hz +/- 3dB (single enclosure)<br>27Hz - 200Hz +/- 3dB (four enclosure stack)                              |
| <b>SENSITIVITY<sup>2</sup>:</b>        | 106dB (single enclosure)<br>110dB (four enclosure stack)  |
| <b>DISPERSION<sup>3</sup>:</b>         | omnidirectional   |
| <b>DRIVE UNITS:</b>                    | 18" (457mm) LF cone drive unit  |
| <b>POWER HANDLING:</b>                 | 800W RMS, 1600W program   |
| <b>MAXIMUM SPL<sup>4</sup>:</b>        | 134dB continuous, 140dB peak  |
| <b>NOMINAL IMPEDANCE:</b>              | 8 ohms  |
| <b>CROSSOVER:</b>                      | external active, recommended below 120Hz  |
| <b>CONNECTORS:</b>                     | 2 x Neutrik SpeakON™ NL4MPR   |
| <b>ENCLOSURE:</b>                      | 18mm (3/4") multi-laminate Birch plywood - rebated, screwed & glued.<br>Finished in impact resistant textured paint |
| <b>ENCLOSURE HARDWARE:</b>             | 8 x steel bar handles<br>8 x stacking feet and mating recesses<br>4 x tour-grade castors                            |
| <b>GRILLE:</b>                         | hex punched steel backed with acoustically transparent foam   |
| <b>OPTIONS:</b>                        | Colours/Weather Protection  |
| <b>ACCESSORIES:</b>                    | TC-118 padded touring cover   |
| <b>SPARE PARTS:</b>                    | DU-1801 18" drive unit<br>RK-1801 recone kit<br>RFG-118 replacement grille/foam                                     |

### Notes on measurement conditions:

<sup>1</sup>Measured on-axis at 2m in an anechoic environment and referenced to 1m.

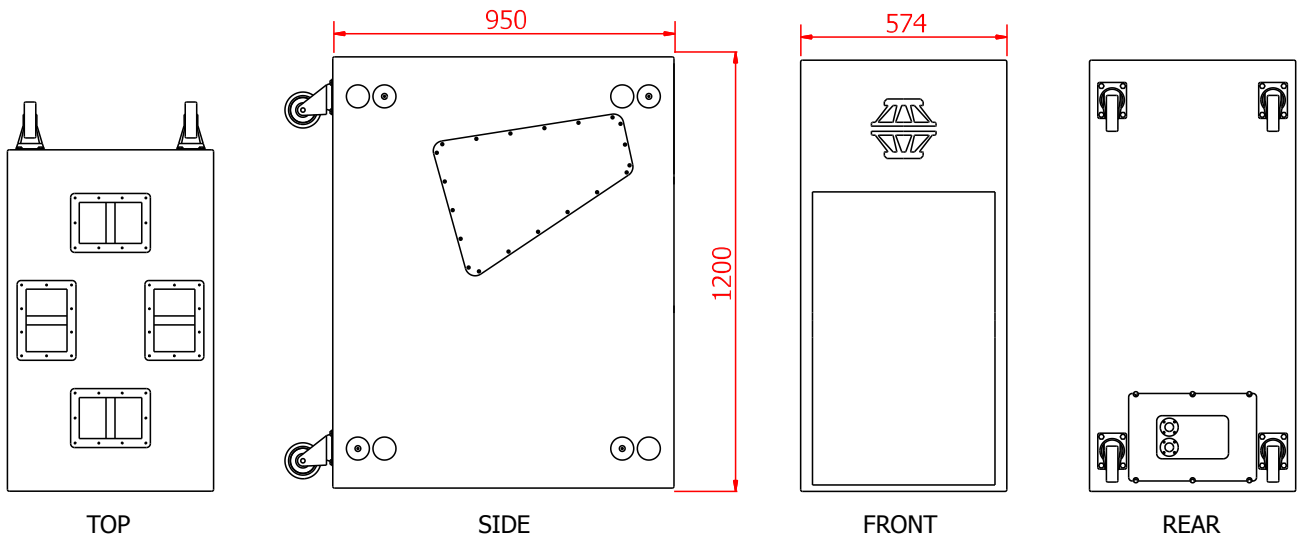
<sup>2</sup>Measured in half space at 2m with 4W sine wave input and referenced to 1m.

<sup>3</sup>Nominal dispersion, measured in an anechoic environment and averaged over stated bandwidth

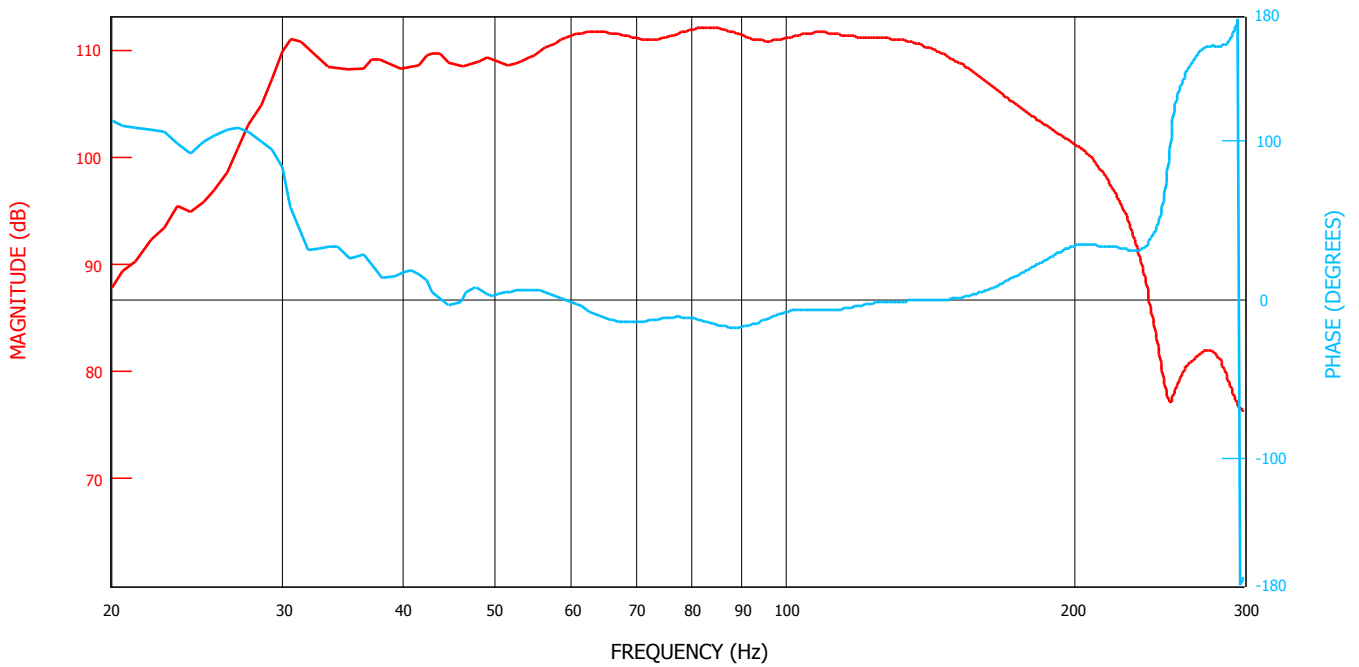
<sup>4</sup>Calculated and verified by subjective listening test of familiar program material.

**ENGINEERING DRAWING**

**MSE-118 QUAKE**  
large format horn-loaded subwoofer



**RESPONSE CURVES**



MAGNITUDE MEASURED WITH 1 WATT INPUT AT ONE METRE DISTANCE WITH FOUR ENCLOSURES  
DATA MEASURED IN HALF SPACE USING THE PRAXIS MEASUREMENT SYSTEM  
24dB/OCTAVE LINKWITZ-RILEY LOW-PASS FILTER AT 160Hz INCLUDED IN THE SIGNAL CHAIN

**ENCLOSURE OPTIONS**

MSE-118 enclosures are supplied as standard in black. Any RAL colour can be supplied on request (extended lead time and setup charges apply). Weather protection options are also available to give enhanced protection to the loudspeaker when used outdoors for extended periods of time.