#### PREMIUM GRADE MEDIUM THROW DEEP BASS SUBWOOFER OPTIMISED FOR SEALED OR PORTED ENCLOSURES



| UPC:     | 685757152372  |
|----------|---------------|
| EAN:     | 0685757152372 |
| Printed: | 685757152372  |

#### **INSTALLATION POINTS**

Failure to observe any of these installation points will invalidate your warranty:

- O not run this subwoofer infinite baffle.
- Ensure your enclosure is within the specifications listed.
- Only use correctly rated non-combustible cables.

# **DETAILED TECHNICAL DATA**

| Power Handling (Per Driver): | 1000WRMS (@0%Thd) |
|------------------------------|-------------------|
| Nominal Impedance:           | 2+2ohm            |
| DC Impedance:                | 3.77ohm           |
| Voice Coil Diameter:         | 65.5mm            |
| Voice Coil Layers:           | 4                 |
| Magnet:                      | 156mm x 50mm      |
| Magnet Type:                 | Y30 Ferrite       |

# **BOX COMPATIBILITY**

| Recommended Box Type:                           | Sealed/Ported |
|---|---------------|
| Recommended Box Size:                           | 25>50Litres   |
| Optimal Frequency<br>Response:                  | 30>100Hz      |
| Recommended Port Cross<br>Sectional Area (CSA): | 15"2>30"2     |
| Recommended Tuning<br>Frequency:                | 35>45Hz       |

#### **TEAM TIPS**

- We recommend to put all subwoofers in your system in a box with a shared air space.
- We do not recommend to run dual coil woofers from separate mono channels or amplifiers. This also applies (but less so) to single coil speakers in the same enclosure air space run from separate mono channels. We always recommend the use of a larger amplifier when possible in this case.
- For setting subwoofers it is possible to make a useful DIY clip detector. Wire an old tweeter and high voltage capacitor (we recommend a 250V 6.8uF.) Next, play a 50Hz tone. Turn the gain up slowly until the tweeter makes a distinctive metallic rasp then back the gain off a small amount until the tweeter stops making the noise. Only use an old tweeter as this can cause damage.

# **TS PARAMETERS**

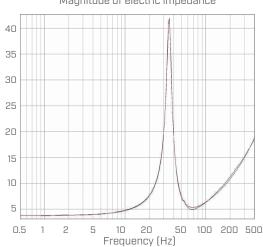
| Name | Value   | Unit | Note   | Name    | Value   | Unit |
|------|---------|------|--|---------|---------|------|
| RE   | 3.77    | OHM  | Electrical voice coil resistance at DC                                   | BL      | 16.106  | N/A  |
| KRM  | 0.0027  | OHM  | Wright inductance model  | LAMBDA  | 0.029   |      |
| ERM  | 1       |      | Wright inductance model  | QTP     | 0.72    |      |
| KXM  | 0.0282  | OHM  | Wright inductance model  | QMS     | 6.844   |      |
| EXM  | 0.81    |      | Wright inductance model  |         |         |      |
| CMES | 832.33  | UF   | Electrical capacitance representing moving mass                          | QES     | 0.692   |      |
| LCES | 24.68   | МН   | Electrical inductance representing driver                                | QTS     | 0.628   |      |
|      |         |      | compliance   | VAS     | 17.4218 |      |
| RES  | 37.27   | OHM  | Resistance due to mechanical losses                                      | МФ      | 0.105   | %    |
| FS   | 35      | HZ   | Driver resonance frequency   | LM      | 82.4    | DB   |
| MMS  | 215.907 | G    | Mechanical mass of driver diaphragm assembly including air load and coil | LMOM    | 82.66   | DB   |
| MMD  | 208     | G    | Mechanical mass of voice coil and diaphragm without air load             | RMSE Z  | 4.27    | %    |
| RMS  | 6.96    | KG/S | Mechanical resistance of total driver losses                             | RMSE HX | 2.67    | %    |
| CMS  | 0.095   | MM/N | Mechanical compliance of driver suspension                               | SD      | 359.68  | CM2  |
| KMS  | 10.51   | N/MM | Mechanical stiffness of driver suspension                                | XMAX    | 25      | MM   |

| Name    | Value   | Unit | Note   |
|---------|---------|------|--|
| BL      | 16.106  | N/A  | Force factor BL product  |
| LAMBDA  | 0.029   |      | Suspension creep factor  |
| QTP     | 0.72    |      | Total Q factor considering all losses                          |
| QMS     | 6.844   |      | Mechanical Q factor of driver in free air considering RMS only |
| QES     | 0.692   |      | Electrical Q factor of driver in free air considering RE only  |
| QTS     | 0.628   |      | Total Q factor considering RE and RMS only                     |
| VAS     | 17.4218 |      | Equivalent air volume of suspension                            |
| МФ      | 0.105   | %    | Ref. efficiency (2 PI radiation using RE)                      |
| LM      | 82.4    | DB   | Sound pressure level<br>(SPL at 1M for 1W @ RE)                |
| LMOM    | 82.66   | DB   | Nom. sensitivity (SPL at 1M for 1W @ ZN)                       |
| RMSE Z  | 4.27    | %    | Root mean square fitting error of driver impedance Z(F)        |
| RMSE HX | 2.67    | %    | Root mean square fitting error of transfer function HX(F)      |
| SD      | 359.68  | CM2  | Diaphragm area   |
| XMAX    | 25      | MM   | Total linear movement  |

# FREQUENCY VS IMPEDANCE

# **TECHNICAL DRAWING**

Magnitude of electric impedance



| Total Diameter:                | 262.60mm | Mounting Depth:    | 160mm |
|--------------------------------|----------|--------------------|-------|
| Weight Approx. (Per a Driver): | 8.5Kg    | Mounting Diameter: | 230mm |

