



### **Subwoofer Manual**

### Models: MX 12D2, MX 12D4 MX 10D2, MX10D4

### Features

- 11mm of Linear Excursion
- Dual 2 Ohm or 4 Ohm Voice Coil models
- 12" or 10" versions
- High Excursion CAE/CAD Motor Design
- KlaraForm Vented Kapton Former technology reduces distortion by reducing heat and resistance
- Glass Fiber Reinforced Cone for Increased Low End

- Phoeniroll Surround Technology promotes linear motion
- Torriform Voice Coil Technology: Effectively dissipates heat and minimizes distortion
- Nickel Plated 12 Gauge Speaker Terminal
- Optimized for Sealed Enclosures
- Powder Coated Anti-Resonant Steel Basket

# PHOENIX GOLD

### **Enclosures**

#### ENCLOSURE INFORMATION

Phoenix Gold subwoofers are over engineered and overbuilt in virtually every way conceivable. It is important that the subwoofer's enclosure is built to these same exacting standards. The enclosure must be constructed of at least .75 inch MDF. Screws or air staples are excellent construction fasteners when used with a strong bonding "yellow" wood working glue that can fill joint gaps. Be sure that the enclosure's panels are airtight at all joining seams. Lining the walls with a polyester matting 1 to 3 inches thick is sufficient. MX subwoofers have vented pole pieces, we recommend leaving a minimum of 0.5" clearance behind the subwoofer to allow proper air movement and cooling of the voice coil.

Your PG dealer has extensive knowledge, tools and the experience needed for the design and construction necessary for your subwoofer application. We also recommend you consult with your dealer for specific technical assistance related to your installation. The chart provided should be used as a reference when building an enclosure for your subwoofer. The charts contain several enclosure types.

### **Enclosure recommendations**

| SEALED                         | MX10D2 | MX10D4 | MX12D2 | MX12D4 |
|--------------------------------|--------|--------|--------|--------|
| Rock / Punchy Bass (cu. Ft.)   | 0.5    | 0.5    | .75    | .75    |
| Neutral / Good All Around      | 0.75   | 0.75   | 1.0    | 1.0    |
| Hip Hop / Low Bass / (cu. Ft.) | 1.0    | 1.0    | 1.5    | 1.5    |

Enclosure recommendations already include driver and / or port displacement.

# **PHOENIX GOLD**

## **Speaker Wiring Diagrams**

#### SINGLE SUBWOOFER SYSTEM

WIRED IN PARALLEL



MX12D2 / MX10D2 = 1 OHM MX12D4 / MX10D4 = 2 OHM

#### SINGLE SUBWOOFER SYSTEM WIRED IN SERIES



MX12D2 / MX10D2 = 4 OHM MX12D4 / MX10D4 = 8 OHM



MX12D2 / MX10D2 = 1/2 OHM MX12D4 / MX10D4 = 1 OHM MX12D2 / MX10D2 = 2 OHM MX12D4 / MX10D4 = 4 OHM

# PHOENIX GOLD

## **Specifications**

| T/S Parameter            | MX10D2          | MX10D4           | MX12D2          | MX12D4          |
|--------------------------|-----------------|------------------|-----------------|-----------------|
| Re (Dcr)                 | 1.7 x 2         | 3.4 x 2          | 1.7 x 2         | 3.4 x 2         |
| FS (Hz)                  | 46.04           | 46.04            | 38.07           | 38.07           |
| Sd (SqM)                 | 0.033           | 0.033            | 0.051           | 0.051           |
| BL TM                    | 8.587           | 8.587            | 8.25            | 8.25            |
| Qms                      | 6.166           | 6.166            | 6.989           | 6.989           |
| Qes                      | 0.944           | 0.944            | 1.027           | 1.027           |
| Qts                      | 0.819           | 0.819            | 0.896           | 0.896           |
| Vas (cu L)               | 13.046          | 13.046           | 37.638          | 37.638          |
| Cms (uM/N)               | 84.33           | 84.33            | 101.623         | 101.623         |
| Mms (gms)                | 141.443         | 141.443          | 171.982         | 171.982         |
| SPL                      | 83.2dB          | 83.2dB           | 84.9dB          | 84.9dB          |
| Impedance (Ohm)          | Dual 2 Ohm      | Dual 4 Ohm       | Dual 2 Ohm      | Dual 4 Ohm      |
| Voice Coil Diameter      | 2in - 50mm      | 2in - 50mm       | 2in - 50mm      | 2in - 50mm      |
| RMS Power Handling       | 300 watts       | 300 watts        | 300 watts       | 300 watts       |
| PEAK Power Handling      | 600 watts       | 600 watts        | 600 watts       | 600 watts       |
| Xmax (Linear)            | 11mm            | 11mm             | 11mm            | 11mm            |
| Driver Displacement (cf) | 0.037           | 0.037            | 0.040           | 0.040           |
| Mounting Diameter        | 9.25in - 234mm  | 9.25in - 234mm   | 11.10in - 282mm | 11.10in - 282mm |
| Mounting Depth           | 3.50in - 88.9mm | 3.50 in - 88.9mm | 4.25in - 107mm  | 4.25in / 107mm  |

#### **Phoenix Gold Product Warranty**

#### LIMITED WARRANTY ON SUBWOOFERS

Phoenix Gold warrants this product to be free of defects in materials and workmanship for a period of one (1) years from the original date of purchase. This warranty is not transferable and applies only to the original purchaser from an authorized Phoenix Gold dealer in the United States of America only. Should service be necessary under this warranty for any reason due to manufacturing defect or malfunction, Phoenix Gold will (at its discretion), repair or replace the defective product with new or remanufactured product at no charge. Damage caused by the following is not covered under warranty: accident, misuse, abuse, burnt voice coils, used as door stops ,salad bowls or hats, product modification or neglect, failure to follow installation instructions, unauthorized repair attempts, misrepresentations by the seller. This warranty does not cover incidental or consequential damages and does not cover the cost of removing or reinstalling the unit(s). Cosmetic damage due to accident or normal wear and tear is not covered under warranty.

INTERNATIONAL WARRANTIES:

Products purchased outside the United States of America are covered only by that country's Authorized Phoenix Gold reseller and not by Phoenix Gold. Consumers needing service or warranty information for these products must contact that country's reseller for information.

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