

USER MANUAL
DARK 12
12-INCH SINGLE VOICE COIL



CAOS[®]

UNLIMITED



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1
Year Warranty



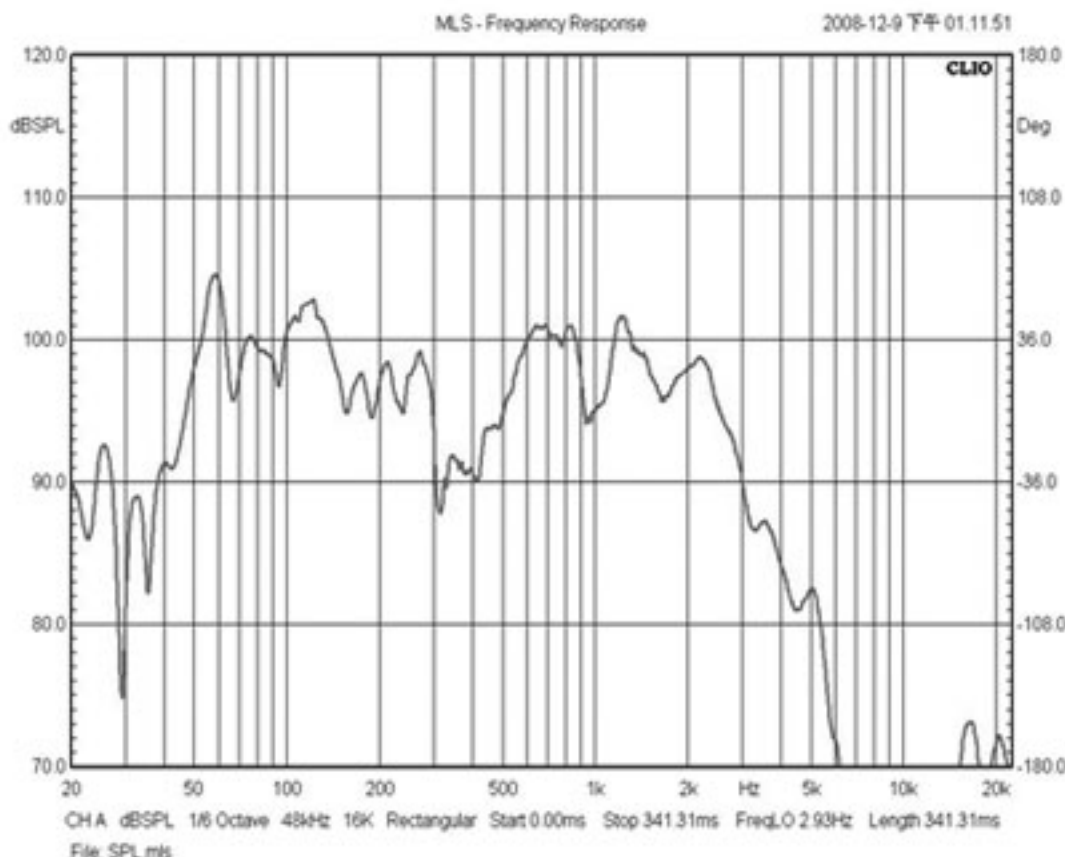
PRODUCT INFORMATIONS

GENERAL SPECIFICATIONS

Nominal Diameter: 12 inches
Rated Impedance: 1*4 ohms
Operating Bandwidth: 35HZ--4000HZ
Power Handling Capacity: 1600 W(Max)
Sensitivity :93 dB
Voice Coil Diameter: 2.0 inches

PHYSICAL INFORMATIONS

Basket: Steel
Magnet Type: 50 OZ
Cone Material: PP
Surround: Rubber
Dust Cap: PP
Damper: Cloth
Packing Quantity: 1



THIELE-SMALL PARAMETERS

Resonance Frequency F_s : 44.57 HZ
DC Resistance R_e : 3.4 ohm
Mechanical Q Factor Q_{ms} : 1,756
Electrical Q Factor Q_{es} : 1,0084
Total Q Factor Q_{ts} : 0,6405
Equivalent Cas air load V_{as} : 64.8878 L
Surface Area of Cone S_d : 0.0499 m²
Efficiency Bandwidth Product EBP: 44,19
Voice Coil Over Hang X-max: 5.0 mm

It is difficult to give exact box dimensions that are universal for all cars and trucks. It is for this reason that you must be able to calculate the space in which you have available in order to achieve the proper air volume required.

It is recommended to build your enclosure from 3/4" thick MDF (medium density fiberboard).
Make sure the enclosure is sealed air tight.

CALCULATING EXTERNAL VOLUME

1)To calculate box volume, measure the outside Width x Height x Depth of the enclosure.
Example 13" x 15" x 10" = 1950"

2)next you must convert cubic inches into cubic feet. To do this, you must divide the cubic inch total by 1728".
Example 1950 : 1728 = 1.128 Cubic feet

CALCULATING INTERNAL VOLUME

1)To calculate the internal (net) volume of the above box you must first multiply the thickness of the wood you are using by Two (2).
Example 3/4" x 2" = 1.5"

2)Next Subtract 1.5 from each of the outside measurements of the box.
Width 13 - 1.5 = 11.5
Height 15 - 1.5 = 13.5
Depth 10 - 1.5 = 8.5

3)Multiply the new totals (H x W x D)
Example 11.5 x 13.5 x 8.5 = 1319.625

4)Next you must convert cubic inches into cubic feet. To do this, you must divide the cubic inch total by 1728"
Example 1319.625 : 1728 = 0.7637 Cubic feet