



AVA-MR100
10inch MARINE
SUBWOOFER

INSTALLATION MANUAL

Product Specifications

Free Air Resonance	(Fs)	30
Total Q Driver @ FS including all resistance's	(Qts)	0.3091
Q of the Driver @ FS including non electrical resistance only	(Qms)	4.7452
Q of the Driver @ FS including electrical resistance only	(Qes)	0.3307
The Driver's compliance expressed as an equivalent	(Vas)	1.83
Volumn of all (cubic Ft.)		
The Driver's linear displacement (inches)	(Xmas)	0.3071
The DC resistance of the driver's twin voice coils(ohms)	(Re)	4
Thermal Power rating of Driver (R.M.S./Peak)	(Pe)	300W/600W
The Driver's voice coil inductance(millihenries)	(le)	2.0717
The Driver's sensitivity (dB)	(Sens)	94

Calculating Enclosures

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 $12" \times 14" \times 9" = 1512"$

2)Next you must convert cubic inches into cubic feet. To do this, You must divide the cubic inch total by 1728". Example $1512 \div 1728 = .875$ Cubic feet

Calculating Internal Volume

1)To calculate the internal (net) volumn of the above box you must first multiply the thickness of the wood you are using by Two (2) Example; $3/4" \times 2"=1.5"$

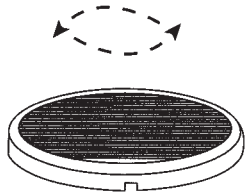
2)Next Subtract 1.5 from each of the outside measurements of the box.
Width $12-1.5=10.5$ Height $14-1.5=12.5$ Depth $9-1.5=7.5$

3)Multiply the new totals (H x W x D) Example : $10.5 \times 12.5 \times 7.5=984.375$

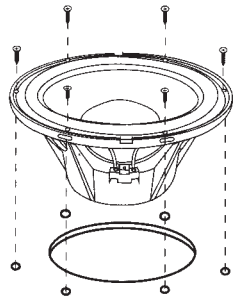
4)Next you must convert cubic inches into cubic feet.To do this,you must divide the cubic inch total by 1728" Example $984.375 \div 1728 = .5696$ Cubic feet

Woofer Installation Instruction

1. Using mounting template for woofer, mark the correct mounting location by a pencil or pen.



2. Cut out the panel by this marking and drill 6 holes for the mounting bolts to pass through.

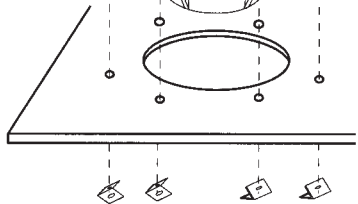


3. Rotate the plastic grill counterclockwise to separate it from the woofer.

4. Connect the terminal of the speaker to car audio correctly by using cord provided. Caution: Be carefully not to misconnect polarity.

5. Insert woofer in the speaker mounting hole and fix woofer with bolt & screws & nuts provided.

6. Put the plastic grill back with the woofer, rotate it clockwise.



Thank you for purchasing **BOSS** speaker systems. Engineered in the USA, **BOSS** offers innovative products that are on the cutting edge of design and performance.

If you have any question about the installation or operation of your **BOSS** speaker system which are not answered by this manual, contact your dealer in first instance.

Precautions

- Before making holes, check the mounting space with supplied template
- To prevent noise pick-up, keep the wiring of this unit away from motors, high-voltage leads and other possible noise, source.
- To prevent short-circuit, keep all wiring away from moving parts sharp edges.
- Make sure you have carefully read and understood the installation instruction.

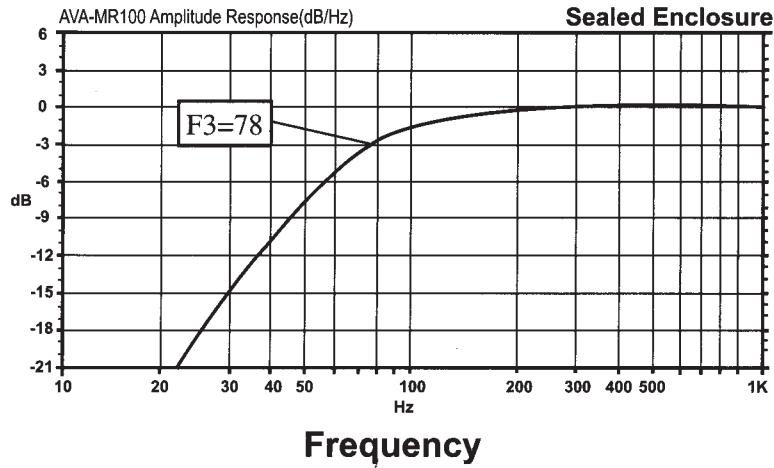
10" Marine Subwoofer

(300watts RMS Sealed Enclosure)

- **HIGH QUALITY POLY MICA CONE**
 - **BUTYL RUBBER SURROUND**
 - **WATER-RESISTANT CONSTRUCTION**
 - **50 OZ MAGNET STRUCTURE**
 - **2" HIGH TEMPERATURE VOICE COIL**
 - **600 WATTS PEAK / 300 WATTS RMS**
 - **FREQUENCY RESPONSE: 30 HZ – 2.5 KHZ**
 - **SPL: 94 dB (1 W / 1 M)**
 - **IMPEDANCE: 4 OHMS**
- MOUNTING DEPTH: 4-5/8"**

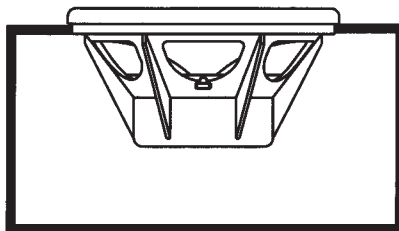
Recommended Enclosures

Please Note : Our Suggested box Volumes are given as internal Air requirements.

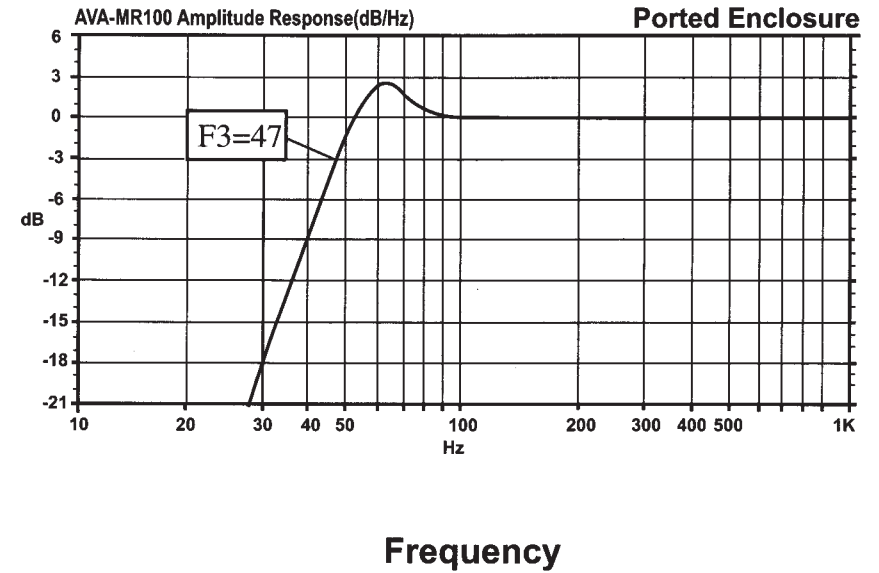


Sealed Enclosure

Box Volume : 0.4Cu Ft

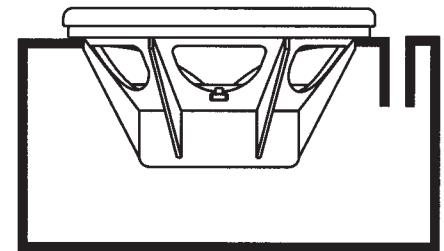


Box is given as internal air volume including driver displacement



Ported Enclosure

Box Volume : 1.0Cu Ft



Box is given as internal air volume including driver displacement

Port Frequency : 51 Hz
Port Diameter : 3 Inches
Port Length : 5 Inches