VGW 10/12

SUBWOOFERS

OWNER'S MANUAL AND INSTALLATION GUIDE

SOUNDSTREAM®

TECHNOLOGIES

Van Gough Woofers

Congratulations on your purchase of one of the finest woofers available for your vehicle today.

Technological innovation is the best way to describe Van Gough woofers. The VGW woofers use low distortion, Nomex/honey comb cones integrated with TIL glass fiber voice coil formers for unparalleled control and dead center accuracy. Van Gough woofers are nothing short of sound Q genius.
Own a glimpse of the future. Own Van Gough.

Please take a few moments to fill out the warranty card and review this manual before installing this woofer for proper connections and box sizes.

Design Features

VGW-10
10" High Performance SQ Subwoofer
Proprietary Cast Aluminum Basket
UDV Cooling Technology
Low Distortion Nomex/Honey Comb Cone
Black Progressive Roll Conex Spider
C-Lock Rubber Gasket
XLS Santoprene Surround
Dual 4-ohm Voice Coil
2.5" TIL Glass Fiber Voice Coil Former
Woven Tinsel Leads
Vented & Extended Pole Piece
Low Carbon Top & Bottom Plate
Rubber Magnet Cover
100 oz. Dual Stack Magnets
500 watts RMS Power Handling

VGW-12
12" High Performance SQ Subwoofer
Proprietary Cast Aluminum Basket
UDV Cooling Technology
Low Distortion Nomex/Honey Comb Cone
Black Progressive Roll Conex Spider
C-Lock Rubber Gasket
XLS Santoprene Surround
Dual 4-ohm Voice Coil
2.5" TIL Glass Fiber Voice Coil Former
Woven Tinsel Leads
Vented & Extended Pole Piece
Low Carbon Top & Bottom Plate
Rubber Magnet Cover
120 oz. Dual Stack Magnets
600 watts RMS Power Handling

Building the Enclosure

- Determine the dimensions of your enclosure.
- Be certain the box dimensions that you have designed will fit in the location you have chosen in your vehicle. Sometimes making a cardboard box with the same outside dimensions is helpful.
- It is recommended to use ¾ or 1 inch thick MDF (medium density fiberboard) for your box.
- Use a "T" square to verify precise right angle cuts before you assemble the box.
- Use high quality wood glue and screws to assemble the box to guarantee an airtight box that will not come apart due to excess vibration and pressure.
- It is recommended for high fidelity, sealed enclosures to stuff the interior of the box about 50 - 75% fiberglass insulation or Dacron fiberfill for increased sound damping and woofer performance.
- For ported enclosures, it is recommended to staple 1" thick fiberglass insulation to the interior walls of your box.
- Use slide on connectors for spade style connectors or bare wire for push and screw terminals. Do not solder the wires to the factory connectors as this may cause damage to the voice coil or tinsel lead and may void your warranty./

Parameters

Spec/Model	VGW-10	VGW-12
Max (watts)	1000	1200
RMS (watts)	500	600
Mag. Wgt. (oz)	100	120
V.C. Size (in.)	2.5	2.5
V.C. Imp	1 Ω x2	4 Ω x2
Fs (Hz)	28.5	29.03
Vas (Cu. Ft.)	0.857	1.807
Qms	7.969	8.032
Qes	0.492	0.474
Qts	0.464	0.448
Xmax (in.)	0.649	0.649
SPL (dB)	85	87
Primary Enclosure Style	Sealed	Sealed

Recommended box sizes

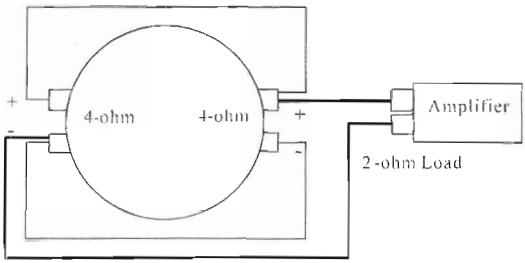
VEG-10X	High Output	Sound Quality
Optimum Enclosure Type	Sealed	Sealed
Enclosure Size Net (w/o driver displacement)	.44 cubic feet	.44 cubic feet
Enclosure Size Gross (w/o driver displacement)	.5 cubic feet	.5 cubic feet
Enclosure QTC	0.707	0.707
F3 (3dB down point)	46 Hz	46 Hz
Recommended Damping	None	Loose Fill
Driver Displacement	0.065	0.065
Recommended Box Dimensions (using .75" material)	L 10.5" x H 10.5" x W 12.25"	L 10.5" x H 10.5" x W 12.25"

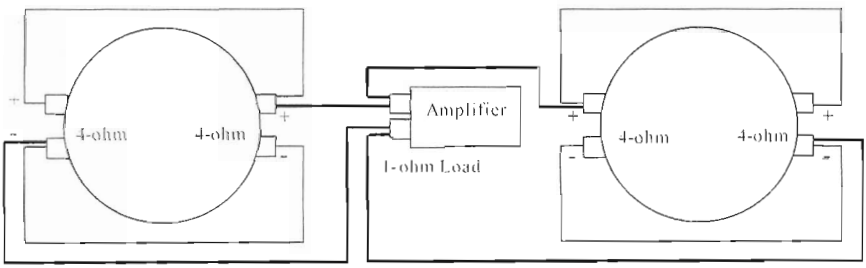
VGW-12	High Output	Sound Quality
Optimum Enclosure Type	Sealed	Sealed
Enclosure Size Net (w/o driver displacement)	0.59 cubic feet	0.79 cubic feet
Enclosure Size Gross (w/o driver displacement)	0.68 cubic feet	0.89 cubic feet
Enclosure QTC	0.859	0.707
F3 (3dB down point)	52 Hz	51 Hz
Recommended Damping	None	Loose Fill
Driver Displacement	0.096	0.096
Recommended Box Dimensions (using .75" material)	L 12.25" x H 12.25" x W 11.75"	L 12.25" x H 12.25" x W 14.75"

Recommended wiring

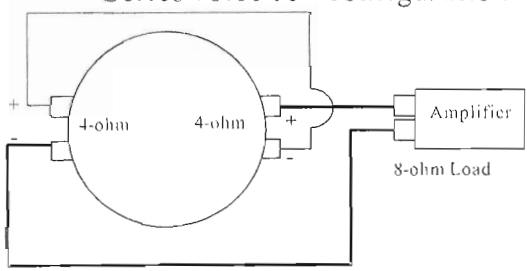
The following page will give you a few different options to match the impedance of the woofers to the impedance capability of the amplifier. Please look and follow the diagrams closely to insure maximum woofer performance.

Parallel voice coil configuration





Series voice coil configuration



Series/Parallel voice coil configuration