

T4 / 10/12/15

SUBWOOFERS

**OWNER'S MANUAL AND
INSTALLATION GUIDE**

SOUNDSTREAM[®]
T E C H N O L O G I E S

T4 Woofers

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

T4 woofers require Full Throttle engineering for maximum SPL and power handling. These SPL machines are made to take the abuse of “Class D” amplification. You see “Class D” amplifiers will over heat a voice coil 2 to 3 times faster than a standard amplifier. We use custom mixed glues along with 18 gauge voice coil windings to handle that extra heat and abuse.

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

T4-10

10” High Performance SPL Subwoofer
Proprietary Cast Aluminum Basket
UDV Cooling Technology
Cloth laminated Paper Cone w/MD6 Coating
Black Progressive Roll Conex Spider
C-Lock Rubber Gasket
Hi-Arc High Excursion Surround
Dual 1-ohm Voice Coil
3” BAEISV Hybrid Voice Coil Former
Woven Tinsel Leads
Vented & Extended Pole Piece
Low Carbon Top & Bottom Plate
Rubber Magnet Cover
Triple Stack 160 oz. Magnets
800 watts RMS

T4-12

12” High Performance SPL Subwoofer
Proprietary Cast Aluminum Basket
UDV Cooling Technology
Cloth laminated Paper Cone w/MD6 Coating
Black Progressive Roll Conex Spider
C-Lock Rubber Gasket
Hi-Arc High Excursion Surround
Dual 1-ohm Voice Coil
3” BAEISV Hybrid Voice Coil Former
Woven Tinsel Leads
Vented & Extended Pole Piece
Low Carbon Top & Bottom Plate
Rubber Magnet Cover
Triple Stack 200 oz. Magnets
900 watts RMS

T4-15

15” High Performance SPL Subwoofer
Proprietary Cast Aluminum Basket
UDV Cooling Technology
Cloth laminated Paper Cone w/MD6 Coating
Black Progressive Roll Conex Spider
C-Lock Rubber Gasket
Hi-Arc High Excursion Surround
Dual 1-ohm Voice Coil
3” BAEISV Hybrid Voice Coil Former
Woven Tinsel Leads
Vented & Extended Pole Piece
Low Carbon Top & Bottom Plate
Rubber Magnet Cover
Triple Stack 250 oz. Magnets

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 $\frac{3}{4}$ 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	T4-10	T4-12	T4-15
Max (watts)	2000 Burst	2300 Burst	2500 Burst
RMS (watts)	800	900	1000
Mag. Wgt. (oz)	160	200	250
V.C. Size (in.)	3.0	3.0	3.0
V.C. Imp	1 Ω x2	1 Ω x2	1 Ω x2
Fs (Hz)	40.44	36.52	34.03
Vas (Cu. Ft.)	.35	1.034	2.075
Qms	1.975	3.584	3.722
Qes	0.397	0.414	0.449
Qts	0.330	0.371	0.401
Xmax (in.)	0.63	0.63	0.551
SPL (dB)	87	89	91
Primary Enclosure Style	Ported	Ported	Ported

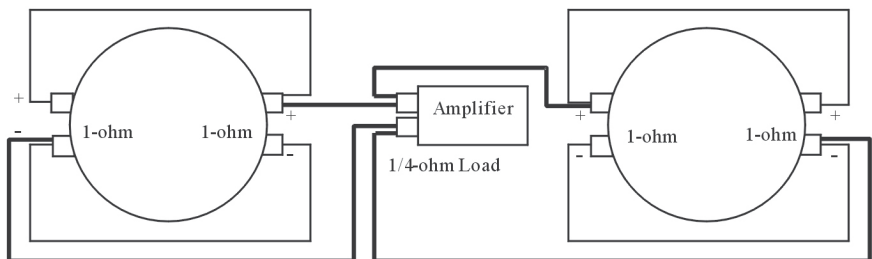
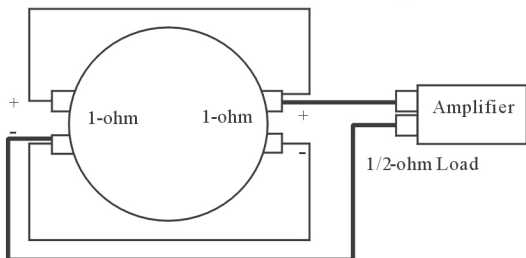
Recommended box sizes

T4-10	High Output	Sound Quality
Optimum Enclosure Type	Ported	Ported
Enclosure Size Net (w/o driver displacement)	1.5 cubic feet	2.0 cubic feet
Enclosure Size Gross (w/o driver displacement)	1.7 cubic feet	2.125 cubic feet
Tuning Frequency	40 Hz	34 Hz
Round Port Dimensions (diameter x length)	4" round x 11.25"	3" round x 5.25"
Number of Ports	1	1
Square Port Area (1 Port)	12.25 sq. inches (3.5" x 3.5" square)	12.25 sq. inches (3.5" x 3.5" square)
Square Port Dimensions	H 3.5" x W 3.5" x L 11"	H 3.5" x W 3.5" x L 10.25"
F3 (3dB down point)	35 Hz	34 Hz
Recommended Damping	None	Loose Fill
Driver Displacement	0.10	0.10
Recommended Box Dimensions (using .75" material)	L 25.25" x H 13.0" x W 12.0"	L 22.0" x H 13.0" x W 13.0"
T4-12	High Output	Sound Quality
Optimum Enclosure Type	Ported	Ported
Enclosure Size Net (w/o driver displacement)	2.0 cubic feet	3.0 cubic feet
Enclosure Size Gross (w/o driver displacement)	2.16 cubic feet	3.16 cubic feet
Tuning Frequency	41 Hz	32 Hz
Round Port Dimensions (diameter x length)	4" round x 7.5"	4" round x 7.0"
Number of Ports	1	1
Square Port Area (1 Port)	16.0 sq. inches (4.0" x 4.0" square)	12.25 sq. inches (3.5" x 3.5" square)
Square Port Dimensions	H 4.0" x W 4.0" x L 10.0"	H 3.5" x W 3.5" x L 6.75"
F3 (3dB down point)	34 Hz	32 Hz
Recommended Damping	None	Loose Fill
Driver Displacement	0.11	0.11
Recommended Box Dimensions (using .75" material)	L 20.5" x H 14.0" x W 13.0"	L 30.0" x H 14.0" x W 13.0"
T4-15	High Output	Sound Quality
Optimum Enclosure Type	Ported	Ported
Enclosure Size Net (w/o driver displacement)	4.0 cubic feet	3.5 cubic feet
Enclosure Size Gross (w/o driver displacement)	4.25 cubic feet	3.87 cubic feet
Tuning Frequency	39 Hz	32 Hz
Round Port Dimensions (diameter x length)	3" round x 3.0"	3" round x 7.5"
Number of Ports	2	2
Square Port Area (1 Port)	25.0 sq. inches (5.0" x 5.0" square)	16.0 sq. inches (4.0" x 4.0" square)
Square Port Dimensions	H 5.0" x W 5.0" x L 10.0"	H 4.0" x W 4.0" x L 7.5"
F3 (3dB down point)	33 Hz	32 Hz
Recommended Damping	None	Loose Fill
Driver Displacement	0.23	0.23
Recommended Box Dimensions (using .75" material)	L 30.75" x H 20.0" x W 15.0"	L 30.0" x H 18.5" x W 12.0"

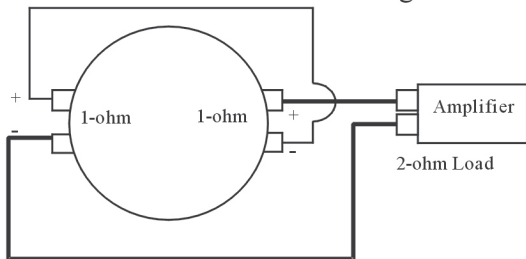
Recommended wiring

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.

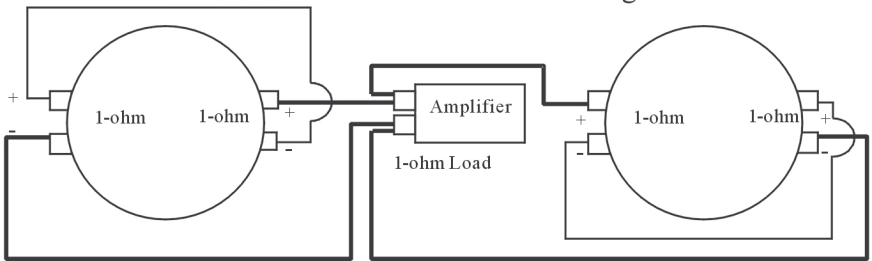
Parallel voice coil configuration



Series voice coil configuration



Series/Parallel voice coil configuration



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T E C H N O L O G I E S

1550 Maple Ave. Montebello, California

90640 USA

Phone: (323) 724-4600 Fax: (323) 722-8125

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