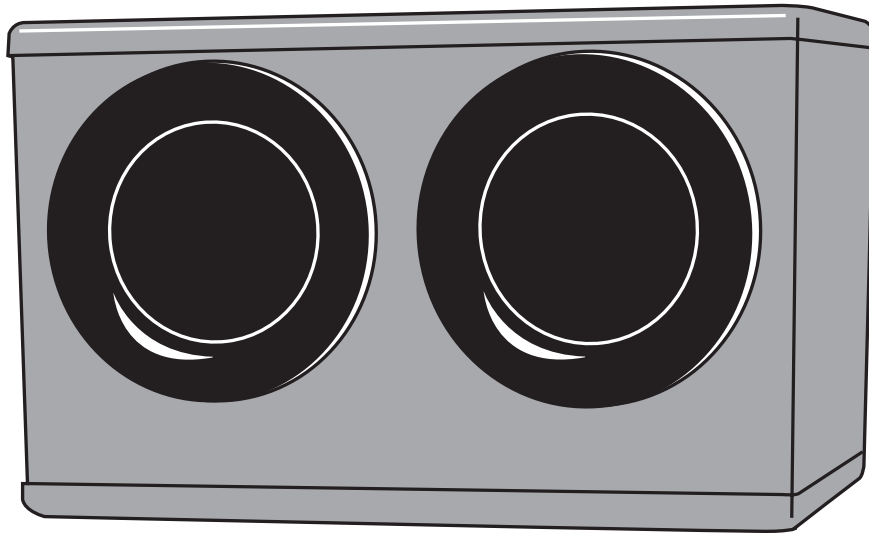


HSU

RESEARCH

***VTF* HO Turbo Manual**



Features

Doubles the low bass output.

For models that have two ports, the turbo charger allows you to operate your subwoofer in the extended bass mode with both ports open, effectively doubling the port area. This means the subwoofer can now move as much air as two of the subwoofers without turbo in the low bass with low turbulence.

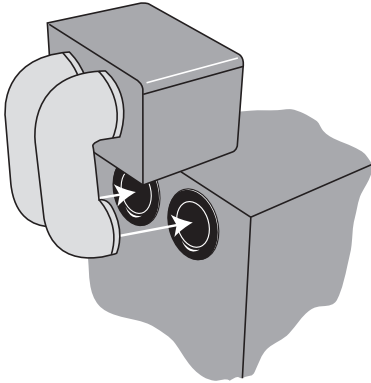
Extends the low bass without reducing port area

For models with one port, the turbo charger allows you to extend the lower limit of the subwoofer while maintaining the same port area (effectively doubling the port area compared to subwoofers that reduce the port area to tune the sub lower).

Set-Up

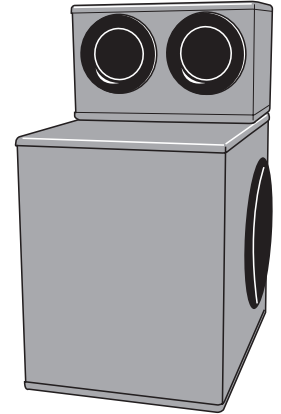
Step 1: Unpacking

Inspect the carton for damage. Look for holes or crumpled corners or edges. Open the carton. Inspect the protective bag for any rips or tears that may have occurred during shipping. Look for possible damage near where the carton has crumpled or where there are holes in the carton. If there is damage, call the shipping company to report damage. Take photos of the damage. If all is fine, go to the next step.



Step 2: Installing the Turbo

The turbo sits on top of the subwoofer, at the rear end of the subwoofer. First place the high friction pad on the top of the subwoofer at the back end. Next, place the turbo on top of the friction pad. The flares should be nearer the top of the turbo enclosure. The 'U' bend should fit snugly into the flares of the subwoofer the turbo sits on. If necessary, the port(s) can be rotated to fit properly.



Step 3: Setting the Controls on the Amplifier

Twin Port Subwoofers

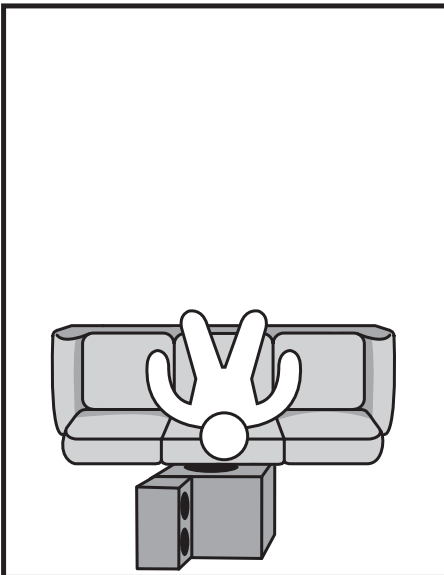
The turbo allows twin port subwoofers (e.g., VTF-3 HO) to operate in extended bass mode with both ports open, making its performance in the low bass equal two such subwoofers without turbo. Set the bass extension switch to max extension mode. For example, for the VTF-3 HO, set switch to '16 Hz/1 Port Open Or With Turbo'.

Single Port Subwoofers

The turbo allows single port subwoofers (e.g., VTF-2 HO) to operate lower without having to reduce the cross-sectional area of the port. In the case of the VTF-2 HO, the turbo allows the VTF-2 HO to have the same air moving capability in the sub 20 Hz range as a TN1220HO. Set the bass extension switch to 'With Turbo' option.

Step 4: Subwoofer Placement

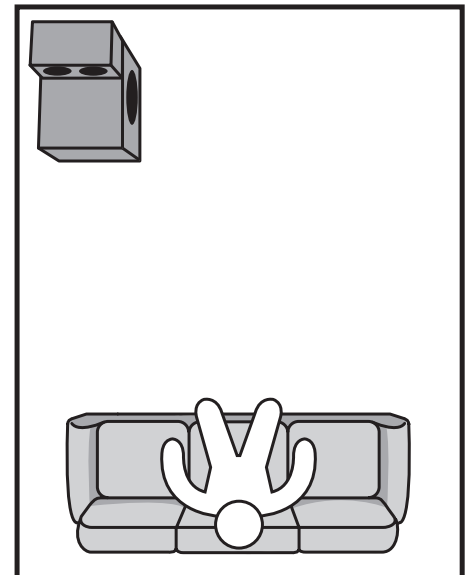
If you want the turbo to be a permanent part of your subwoofer, it may not be as convenient to use as an end table, with the turbo higher than the arm of the sofa. It will work better behind the sofa where the height of the subwoofer plus turbo is comparable to the height



of sofa backs. Place it sideways so the woofer fires into the back of the sofa. Give it one to two inch spacing between the sub and the back of the sofa. If this is practical, it should give the best upper bass impact and hardest to localize. If this is not practical, place it in the front corner furthest from openings.

If using the subwoofer as an end table is preferred, you can consider putting the turbo in storage until you really want to show off your system. i.e., 99% of the time, your subwoofer serves as a nice end table (happy wife). For the last 1% of the time, it transforms into a wall shaking monster (happy hubby).

That is it! Now sit back and enjoy ultra clean low bass.



Specifications

	Twin Turbo	Single Turbo
<i>Cabinet Dimensions</i>	10.5"(h)/17"(w)/11.5"(d)	10.5"(h)/13"(w)/8.5"(d)
<i>Shipping Weight</i>	23 lbs.	13 lbs.

HSU Speaker System Limited Warranty

If the speaker system proves to be defective in materials or workmanship within seven years from the date of the original customer's purchase, we will, at our option, repair or replace the defective product.

***DISCLAIMER**

THE WARRANTY STATED HEREIN IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE AND ALL OTHER LIABILITIES AND OBLIGATIONS OF HSU, ALL OF WHICH ARE EXPRESSLY DISCLAIMED. HSU HAS NOT MADE AND DOES NOT HEREBY MAKE ANY OTHER REPRESENTATION, WARRANTY OR COVENANT WITH RESPECT TO THE CONDITION, QUALITY, DURABILITY, DESIGN, OPERATION, CAPACITY, FITNESS FOR USE OR SUITABILITY OF THE SPEAKER SYSTEMS.

Exclusion of Certain Damages

HSU's liability for any defective product is limited to repair or replacement of the product at our option. HSU shall not be liable for incidental or consequential damages of any kind or character because of product defects. Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusions may not apply.

This Warranty Does Not Cover:

Damage caused by abuse, accident, misuse, negligence, or improper operation.

Products that have been altered or modified.

Any product whose serial number has been altered, defaced, or removed.

Normal wear and maintenance.

Damages caused by shipping. (All claims for shipping damage must be made with the carrier.)

Warranty Service

Warranty service must be performed by an authorized service center, usually a HSU Speaker Systems dealer or its authorized agent. You may obtain a list of authorized service centers by writing to this address:

HSU Research, Inc.
3160 E. La Palma Ave., # D
Anaheim, CA 92806

All warranty repairs must be accompanied by the original bill of sales. No other document is acceptable or is required. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Due to our continual efforts to improve product quality as new technology and techniques become available, HSU reserves the right to revise its Speaker Systems specifications without notice.