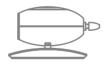
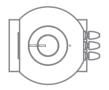


# OWNER'S MANUAL







CONTENTS	PAGE
Warranty and Service	2
Introduction	3
Wiring	4
Initial Positioning	5
Adjustments	6
Fine Tuning	7

### WARRANTY AND SERVICE

Your Tannoy SuperTweeter will operate for many years without trouble provided it is not misused. The high peak power handling of Tannoy loudspeakers will allow responsible use with larger amplifiers on wide dynamic range material.

Take care with any amplifier, irrespective of power output, to avoid abnormal conditions such as switch-on surges or output overload (clipping) that may result in peaks of power greatly over the rated output.

The SuperTweeter is warranted against manufacturing defects in material or craftsmanship over a period of 5 years from the date of purchase. This warranty is in addition to your statutory rights as a customer. Tannoy cannot however be held responsible for failures caused by abuse, unauthorised modifications, improper operation or damage caused by faults elsewhere in your system.

The determination of the cause of failure will be made by Tannoy Limited or its authorised Distributor or Service Agent, based on physical inspection of the failed parts.

If you suspect a problem with your SuperTweeter, in the first instance discuss it with your Tannoy Dealer. The dealer has the expertise and experience to help you troubleshoot the system and assess the situation.

If you continue to have problems, contact your Tannoy Distributor or Tannoy Customer Services at our Coatbridge address.

### INTRODUCTION

Congratulations on choosing this precision handcrafted component, to complement your loudspeaker system. Before removing the product from the packing and commencing the installation process, please take the time to read these instructions, in order to prevent possible damage.

This SuperTweeter is designed to provide the extended high frequency response demanded by modern programme material and sources. Your main loudspeakers still provide the heart of the musical information, but at extreme high frequencies are supplemented by the **WIDE**BAND™ SuperTweeter. Musical information contains transient information, beyond the range of human hearing for pure tones. For music to be accurately reproduced, we have found it essential to accurately preserve this information.

The unit will find application with a broad range of quality loudspeaker systems. Adjustments are provided for crossover frequency and level to enable accurate matching.

#### **FEATURES**

- High stiffness titanium dome to minimise effects of dome break-up and extend frequency response.
- Copper clad aluminium voice coil on aluminium former for high power handling.
- Neodymium magnet system also extends frequency response by minimising eddy current losses in voice coil.
- Provision for driver magnet system earthing, to avoid interference and information masking caused by radio interference.
- Gold plated terminals for high signal transparency.
- Radio Frequency quality inductors in crossover for good high frequency characteristics.
- Non-Inductive resistors to avoid losses associated with normal wire wound types. High
  quality polypropylene film capacitors, selected for high frequency use.

#### **UNPACKING INSTRUCTIONS**

#### Caution:

The titanium dome on this SuperTweeter is very delicate. Although protected by a metal mesh, take care to avoid pressing on this during unpacking and installation, in case damage results.

Each carton contains the following:

- SuperTweeter units x 2
- Support platforms x 2

To unpack, the SuperTweeters should be removed from their box complete with the inner packaging. Always keep the packaging for future use.

#### **ENVIRONMENTAL CONSIDERATIONS**

Do not install the SuperTweeter in the following conditions:

- Very warm or humid areas (such as near swimming pools, kitchens or bathrooms).
- Near to a fire or heating appliance.
- · In direct sunlight.

#### WIRING

The SuperTweeter should be connected across your main speakers, positive (red) to positive and negative (black) to negative. If appropriate, remove the plastic blanking plugs in the terminals. Ensure your amplifier is switched off, and the volume control turned fully down before beginning. Typical wiring configurations are shown in Fig. 1:

- A. Typical single-wired installation. The SuperTweeter is simply connected across your speaker terminals.
- B. Bi-wiring installation. The SuperTweeter is connected across the HF terminals on your loudspeaker.

For optimum performance, the central earth connection on the SuperTweeter should be taken back to the amplifier chassis or ground point. This screening effect can give an improvement in detail and clarity, depending on the amplifier used, by reducing radio frequency interference.

#### INITIAL POSITIONING

With a moving coil drive unit, the sound will appear to emanate from a point a little behind the front of the speaker cabinet. This position, or driving point, coincides approximately to the bass unit (or Dual Concentric $^{\text{TM}}$ ) dust cap position. For optimum results the SuperTweeter should be positioned centrally, on top of the loudspeaker cabinet, so that the SuperTweeter drive unit is in line with with this bass unit driving point, or cone neck in the case of the Dual Concentric $^{\text{TM}}$ . See fig. 2.

#### **ADJUSTMENTS**

Refer to the instruction manual for your loudspeakers and select the SENSITIVITY setting that is the nearest to that of the speaker. Using your fingers, turn the switch on top of the SuperTweeter to the correct position (Fig. 3). If you do not have a manual for your loudspeakers, choose the middle setting initially. For the CROSSOVER FREQUENCY, it is again best to choose the middle position initially, unless you have details on your loudspeaker system. Be prepared to experiment though to achieve the best results.

The SuperTweeter may be adjusted for angle by means of the slots provided in the support platform, and should be pointing at ear level when seated.

After double-checking the wiring, you are now ready to switch your amplifier on. Select some music you are familiar with, and gently advance the volume control to normal listening level.

#### **RUNNING IN**

Like all loudspeakers, the drive unit in your SuperTweeter requires a while to reach optimum performance, as the stresses in the materials relax. For this reason, it is beneficial to run the system at fairly high levels at normal room temperature for approximately 20 hours to reach best results.

#### FINE TUNING

Once the SuperTweeter is fully run in, you are in a position to fine-tune the system. Listening room acoustics and personal taste may dictate some adjustment. Remember that like a subwoofer, the SuperTweeter should not draw attention to itself, but should offer a natural enhancement to the upper frequencies.

The effect of the SENSITIVITY adjustment screw is to increase or decrease the output over the full frequency operating range of the SuperTweeter, in 4dB steps. The CROSSOVER FREQUENCY control offers 3 positions for the SuperTweeter energy to be rolled in (Fig. 4).

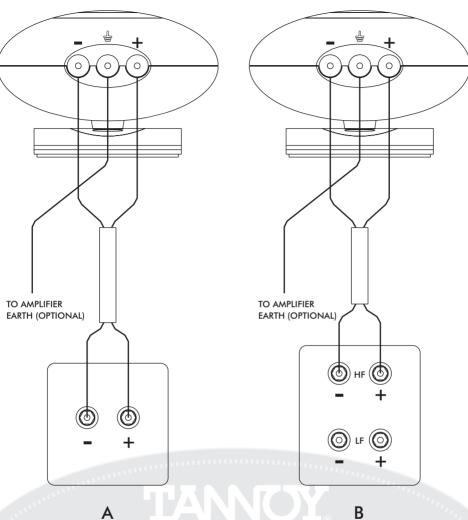
You may also experiment with the SuperTweeter position, to achieve best results.

The SuperTweeter has a protective mesh grille, which can be removed for optimum performance. It is simply held in place by the magnetic field from its own magnet. Carefully remove by gently holding the mesh on the edges and pulling forward. Take care not to touch the fragile dome.

#### CARE OF THE SUPERTWEETER

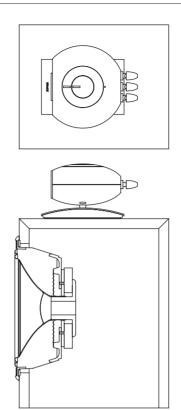
Both SuperTweeter and support platform can be dusted with a soft lint free cloth. Use a slightly damp cloth to remove any marks.

Under no circumstances should chemical cleaning agents be used.

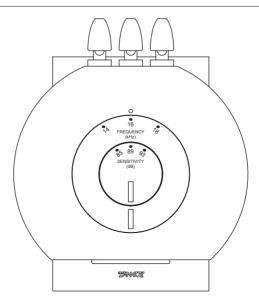


Α

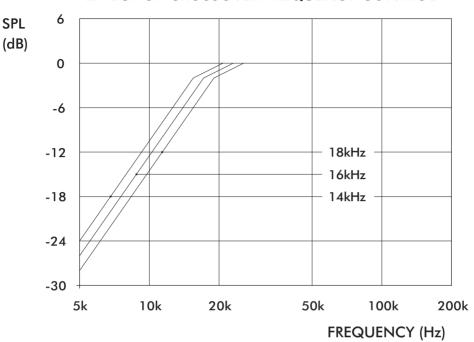




# FIG. 3



## **EFFECT OF CROSSOVER FREQUENCY CONTROL**



# **TECHNICAL SPECIFICATIONS**

	ST50
Recommended amplifier power:	Up to 200W
Power rating to DIN IEC 268:	110W RMS
ū	450W peak
Maximum sensitivity (2.83V @ 1m):	93dB
Nominal impedance:	8 ohm
Frequency response (-6dB):	To 54kHz, usable output (-18dB) to 100kHz
DRIVE UNIT: Driver type:	25mm diameter 25-micron titanium dome,
•	24 Karat vapour deposited gold finish,
	with neodymium magnet system
CROSSOVER:	
Crossover type:	3rd order high pass
Crossover frequency:	14, 16 or 18kHz adjustable
Level adjustment:	85dB, 89dB, 93dB

Due to our policy of continuous improvement, all specifications are subject to change without notice.



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