

is52 In-Stair Speaker
OWNER'S MANUAL



Notes



# OWNFR'S MANUAL

## CONTENTS

1.0 INTRODUCTION	3	6.0 CONNECTIONS	6
2.0 WARNINGS	4	6.1 Wire Runs 6.2 Polarity	
2.1 Important Safety Instructions		7.0 TROUBLE SHOOTING	7
3.0 PRODUCT INDENTIFICATION	4	8.0 WARRANTY	7
4.0 UNPACKING	5	9.0 TECHNICAL DRAWINGS	8
<ul><li>5.0 INSTALLATION</li><li>5.1 Installation with back can</li></ul>	5	10.0 TECHNICAL SPECIFICATIONS	9
5.2 Installation without back can	6	11.0 DECLERATION OF CONFORMITY	10

## 1.0 INTRODUCTION

Thank you for selecting Tannoy loudspeakers. Developed by our dedicated team of design engineers, they are the choice of discriminating music and movie lovers the world over. Excellence is designed into our loudspeakers and electronics from the start. Careful selection of the very best components combined with strict quality control procedures during the production process ensures this level of excellence is maintained. We feel confident that you will enjoy your new Tannoy loudspeakers/electronics for many years to come.

Please take time to read the rest of this owner's guide before using your loudspeakers/electronics to gain maximum effect from their use. Once you have installed your new loudspeakers/electronics please complete and return the registration document – this does not limit your legal rights.

### 2.0 WARNINGS

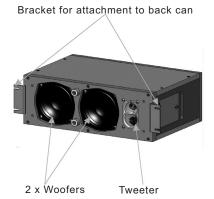
# 2.1 Important Safety Instructions

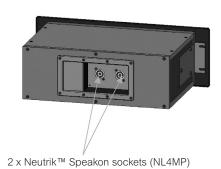
Before using your is52 instair loudspeaker, be sure to carefully read the applicable items of these operating instructions and the safety suggestions.

- · Read these instructions.
- Keep these instructions.
- · Heed all warnings.
- Follow all instructions.
- The installer is responsible for the correct installation of the loudspeaker and back can. Please consult the relevant construction codes in your region for further information on suitable installation methods.
- Tannoy will not be held accountable for any damage caused by incorrect installation.
- Refer all servicing to qualified service personnel.

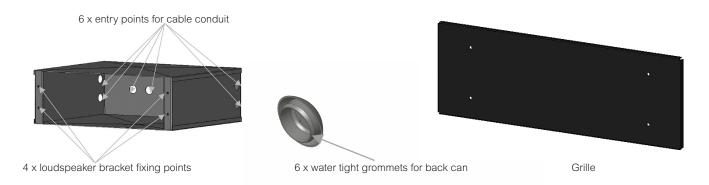
## 3.0 PRODUCT / ACCESSORY IDENTIFICATION

FRONT REAR





## Accessories



### 4.0 UNPACKING

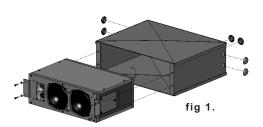
Carefully open the shipping carton and check for any noticeable damage. Every Tannoy is52 is tested and inspected before leaving the factory and should arrive in perfect condition. If found to be damaged, notify the shipping company immediately. Only the consignee may institute a claim with the carrier for damage incurred during shipping. Be sure to save the carton and packing materials for the carriers inspection. It is also advisable to save the carton and packing material, even if the speaker is undamaged. Should you ever need to ship the loudspeaker, always use original packaging.

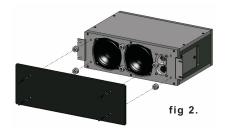
### 5.0 INSTALLATION

### 5.1 Installation with back can

- Lay the loudspeaker cable from the amplifier to the cavity where the loudspeaker will be installed.
- Thread the cable or conduit through the appropriate entry point on the back can. There are six entry points to choose from.
- 3. Plug the remaining entry points with the supplied grommets to ensure that the back can is water tight. The grommets need to be hammered into the back can.
- 4. SAFETY NOTE: If the back can is being installed into a concrete cavity, it is the responsibility of the installer to follow the relevant safety precautions.
- 5. Terminate and connect the loudspeaker. Go to section 6.0 Connections for wiring and connection instructions, then return to point 6 below.
- 6. Place the back can into the cavity.
- 7. Affix the loudspeaker to the back can using the supplied fittings. See fig 1.
- 8. Attach the grille using supplied fittings. See fig 2.

IMPORTANT care must be taken not to over tighten the screws, as the grille is mounted on rubber spacers.



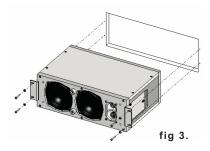


## 5.0 INSTALLATION

### 5.2 Installation without back can

- 1. Lay the loudspeaker cable from the amplifier to the cavity where the loudspeaker will be installed.
- 2. Terminate and connect the loudspeaker. Go to section 6.0 Connections for wiring and connection instructions, then return to point 3 below.
- 3. Place the loudspeaker into the stair cavity and attach the loudspeaker brackets to the surface using the appropriate fittings. See fig 3.

IMPORTANT care must be taken not to over tighten the screws, as the grille is mounted on rubber spacers.



### 6.0 CONNECTIONS

### 6.1 Wire Runs

The is52 is fitted with two 4-pole Neutrik™ Speakon sockets (NL4MP) for connection to the amplifier. These NL4 sockets are paralleled within the enclosure. See **fig 4.** 

Caution: Do not attempt to connect the speakers to any source or amplifier that is turned on. Be sure the source or amplifier is off prior to connecting the speakers.

Parallel or series wiring is commonly acceptable for the is52 speaker to gain correct amplifier loading. Avoid series wiring your is52 speakers with any other speaker type or brand.

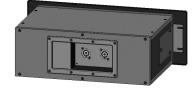


fig 4.

# 6.2 Polarity

For a typical audio installation, all speakers in a system will be connected with the same respective polarity.

Tannoy has adopted the conventional wiring standard for the is52 loudspeaker:

PIN 1+ is positive

PIN 1- is negative

Polarity - Speaker wires are marked for polarity consistency so that you can determine the positive and negative identity of the individual wires within the molded pair insulation. Polarity shown by either a color stripe on the insulation, by ridges molded into one side of the insulation, the color of the insulation case around the wire or by the color type or colors of the wires/wire itself (copper or silver).

**Important:** In order to maintain correct polarity, always connect speaker wire using the positive (+) terminal on the amplifier to the positive (+) wire and the negative (-) terminal on the amplifier to the negative (-) wire.

# 7.0 TROUBLESHOOTING

Distorted or unnatural sound can indicate poor connections, defective electronics, damaged source material or speaker failure. If only one of your speakers has poor sound quality, check the speaker wire and audio connections.

If you hear obvious distortion from the speakers Immediately lower the volume level of your amplifier. Those sounds often indicate that either the amplifier or the speaker is being over driven and damage can result in playing your source material at high volume levels for prolonged periods of time. You should also avoid using extreme amounts of equalization.

### 8.0 WARRANTY

All of our products have been produced and tested with care and precision to give first-class service.

All passive components are guaranteed for a period of five years from the date of purchase from an authorized Tannoy dealer subject to the absence of evidence of misuse, overload or accidental damage.

All active and electronic components are guaranteed for a period of one year from the date of purchase from an authorized Tannoy dealer subject to the absence of, or evidence of, misuse, overload or accidental damage.

If at any time during this warranty period the equipment proves to be defective for any reason other than accident, misuse, neglect, unauthorized modification or fair wear and tear, we will repair any such manufacturing defect or, at our option, replace it without charge for labour, parts or return carriage.

If you suspect a problem with a Tannoy product then, in the first instance, discuss it with your Tannoy dealer. If you require further assistance then we ask that you deal directly with your local Tannoy distributor.

For spares and service in NORTH AMERICA only:

Contact: Customer Service Manager

inquiries@tannoyna.com Telephone: 519.745.1158

### DO NOT SHIP ANY PRODUCT TO TANNOY WITHOUT PREVIOUS AUTHORIZATION

For spares and service OUTSIDE of NORTH AMERICA only:

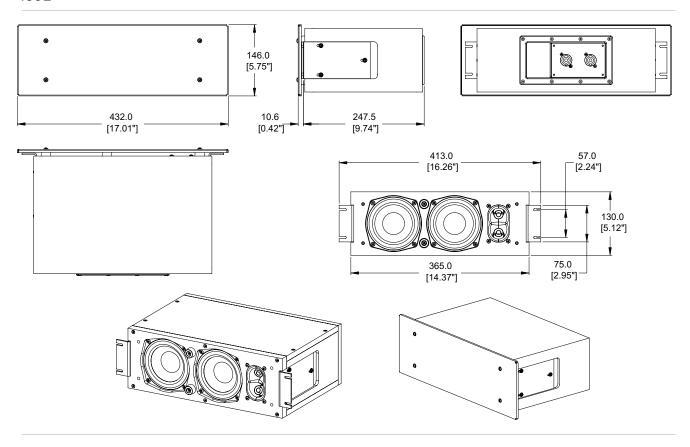
Contact: Customer Service Manager

enquiries@tannoy.com

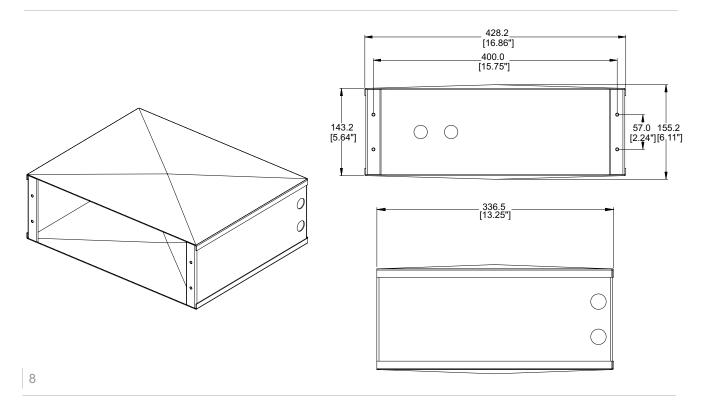
Telephone: +44 (0) 1236 420199

# 9.0 TECHNICAL DRAWINGS

# is52



is52 Back Can



# 10.0 TECHNICAL SPECIFICATIONS

System	is52			
Frequency response (-3dB) (1)	90Hz - 25kHz			
Frequency range (-10dB) (1)	67Hz - 30kHz			
System sensitivity (1W@1m) (2)	88dB (1W = 2.45V for 6Ω)			
Dispersion (-6dB)	120° horizontal, 90° vertical			
Crossover	1.77, 2.27kHz	1.77, 2.27kHz		
Directivity factor (Q)	5.3 averaged 1kHz to 10kHz			
Directivity index (DI)	6.8 averaged 1kHz to 10kHz			
Rated maxim SPL <sup>(2)</sup> Average Peak	109dB 115dB			
Power Handling Average Program Peak	120W 240W 480W			
Recommended amplifier power	240W @ 6Ω	240W @ 6Ω		
Nominal impedance	6Ω			
Distortion 10% full power (5.5V) 250Hz 1kHz 10kHz	2nd harmonic 2.00% 0.53% 2.5%	3rd harmonic 0.26% 0.19% 0.35%		
1% power (2.83V) 250Hz 1kHz 10kHz	2nd harmonic 0.65% 0.144% 0.52%	3rd harmonic 0.09% 0.11% 0.298%		

## Transducer

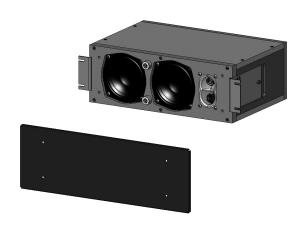
Low frequency 2 x 100mm (4")

High frequency 2 x 25mm (1") 25 micron titanium dome neodymium magnet system

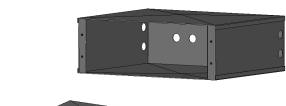
## **Physical**

Enclosure 7.5 liter birch plywood front:18mm sides: 15mm all others: 12mm Grille Material Powder coated steel grille (reticulated foam behind) Finish Textured black paint Connection 2 x speakon NL4MP in/out Fittings Mounting bracket supplied Dimensions (H x W x D) 432mm x 146mm x 258.1mm 17.01" x 5.75" x 10.2" Net Weight (ea) 6.5kg 14.3lbs Shipping Weight (ea) 8kg 17.6lbs

## is52



## is52 Back Can & Grille





#### Notes:

- $^{\left(1\right)}$  Unweighted pink noise input measured at 1m in an anechoic chamber
- (2) Averaged over stated bandwidth, measured at 1m on axis

A full range of measurements, performance data and Ease™ data can be downloaded from www.tannov.com.

Tannoy operates a policy of continuous research and development. The introduction of new materials or manufacturing methods will always equal or exceed the published specifications, which Tannoy reserves the right to alter without prior notice..

# **Ordering Information**

Item number	Item name	Packaging Quantity	Gross Weight	Gross Depth	Gross Width	Gross Height
6481 0501	1852	1	8kgs (17.6lbs)	335mm (10.2")	500mm (5.75")	230mm (17.01")

### 11.0 DECLARATION OF CONFORMITY

The following apparatus is manufactured in the UK at Tannoy Ltd of Rosehall Industrial Estate, Coatbridge, Scotland, ML5 4TF and conform(s) to the protection requirements of the European Electromagnetic Compatibility Standards and Directives relevant to Domestic Electrical Equipment. The apparatus is designed and constructed such that electromagnetic disturbances generated do not exceed levels allowing radio and telecommunications equipment and other apparatus to operate as intended, and, the apparatus has an adequate level of intrinsic immunity to electromagnetic disturbance to enable operation as specified and intended.

**Details of the Apparatus:** Tannoy Contractor Loudspeaker

Model Number: is52

Associated Technical File: EMCi6

Applicable Standards: EN 50081-1 Emission EN 50082-1 Immunity

Signed:

Position: Director of Engineering (Professional)

Date: 07th Feb. 07



Notes

Tannoy United Kingdom Tannoy North America Tannoy Deutschland Tannoy France

T: 00 44 (0) 1236 420199
T: 00 1 (519) 745 1158
T: 00 49 (0180) 1111 881
T: 00 33 (0)1 7036 7473
E: enquiries@tannoy.com
E: info@tannoy.com
E: ventes@tannoy.com

E: inquiries@tannoyna.com

Tannoy adopts a policy of continuous improvement and product specification is subject to change.