iS52 In Stair









Product Description

Designed for a wide variety of sound reinforcement applications, Tannoy's new In Stair loudspeaker fits neatly into stair risers or stage fronts between 16" studs. Engineered for highly intelligible music or speech reproduction in houses of worship, theaters, auditoriums, etc., the slim two-way design uses a twin 4" low-frequencer driver and twin 1" high-frequency configuration behind a kick-proof grille. A full bandwidth loudspeaker designed for high quality sonic performance, these speakers provide a smooth and controlled response for even coverage and optimum forward gain .

Dual 100mm (4") low-frequency drivers provide high mid-bass output in a small enclosure , while the twin 25mm (1") high-frequency units have titanium domes and a neodymium magnet system for enhanced efficiency and extended response.

The black painted finish plywood enclosure has a removable black powder-coated, perforated steel kick-proof grille. Both the grille and the enclosure are paintable. A separate steel backcan is available which allows for use in concrete or where a metal enclosure is required. This backcan has multiple conduit knockouts for installation versatility.

Features

- Unique design allows mounting in stair risers or stage fronts, or other installed applications
- 120 degrees horizontal and 90 degrees vertical controlled dispersion for optimum coverage and forward gain
- Kick-proof powder coated steel grille
- High power handling and extended bandwidth
- Phase coherent design for superior vocal articulation and music reproduction
- Separate steel backcan available for use in concrete or where a metal enclosure is required
- Five year loudspeaker warranty

Applications

- Houses of worship
- Performing arts centers
- Theaters
- Auditoriums
- Classrooms

Tannoy United Kingdom | T: 00 44 (0) 1236 420199 | E: enquiries@tannoy.com
Tannoy Deutschland | T: 00 49 (180) 1111 881 | E: enquiries@tannoy.com
Tannoy France | T: 00 33 (0)1 7036 7473 | E: ventes@tannoy.com
TC|Group Americas | T: 00 1 (519) 745 1158 | E: info@tcgroup-americas.com

tannoy.com

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

iS52 In Stair

TECHNICAL SPECIFICATIONS

System	iS52 In Stair
Frequency Response (-3dB) (1)	90Hz - 25kHz
Frequency Range (-10dB) (1)	67Hz - 30kHz
System Sensitivity (1W @1m) (2)	88dB (1W = 2.45V for 6 Ohms)
Dispersion (-6dB)	120 degrees horizontal, 90 degrees vertical
Crossover	1.77, 2.27kHz
Directivity Factor (Q)	5.3 averaged 1kHz to 10kHz
Directivity Index (DI)	6.8 averaged 1kHz to 10kHz
Rated Maximum SPL(2)	
Average	109dB
Peak	115dB
Power Handling	
Average	120W
Programme	240W
Peak	480W
Recommended Amplifier Power	240W @ 6 Ohms
Nominal Impedance	6 Ohms

Distortion

10% Full Power (5.5V)	2nd Harmonic	3rd Harmonic
250Hz	2.00%	0.26%
1kHz	0.53%	0.19%
10kHz	2.5%	0.35%

1% Full Power (1.73V)	2nd Harmonic	3rd Harmonic
250Hz	0.65%	0.09%
1kHz	0.144%	0.11%
10kHz	0.52%	0.298%

Transducer

Low frequency	**2 x 100mm (4”)**
High frequency	**2 x 25mm (1”) 25 micron titanium dome neodymium magnet system**

Construction

Enclosure	7.5 liter birch plywood front:18mm sides: 15mm all others: 12mm
Grille	Powder coated steel grille (reticulated foam behind)
Finish	Textured black paint
Connectors	2 x speakon NL4MP in/out and Terminal strip connectors
Fittings	Mounting bracket supplied
Dimensions	432mm x 146mm x 258.1mm 17.01” x 5.75” x 10.2”
NET Weight	6.5kg (14.3lbs)

Notes:
(1) Average over stated bandwidth. Measured at 1 metre on axis.
(2) Unweighted pink noise input, measured at 1 metre in an anechoic chamber

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

Full independent verification of published specifications carried out by NWAA Labs, California can also be obtained from the downloads section of www.tannoy.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. Please verify the latest specifications when dealing with critical applications.

Ordering Information

PART NUMBER	MODEL NAME	COLOUR	PACKED QUANTITY	PACKED WEIGHT
6481 0501	is52	Black	1	8kg (17.6lbs)

Tannoy United Kingdom | T: 00 44 (0) 1236 420199 | E: enquiries@tannoy.com
Tannoy Deutschland | T: 00 49 (180) 1111 881 | E: enquiries@tannoy.com
Tannoy France | T: 00 33 (0)1 7036 7473 | E: ventes@tannoy.com
TC|Group Americas | T: 00 1 (519) 745 1158 | E: info@tcgroup-americas.com

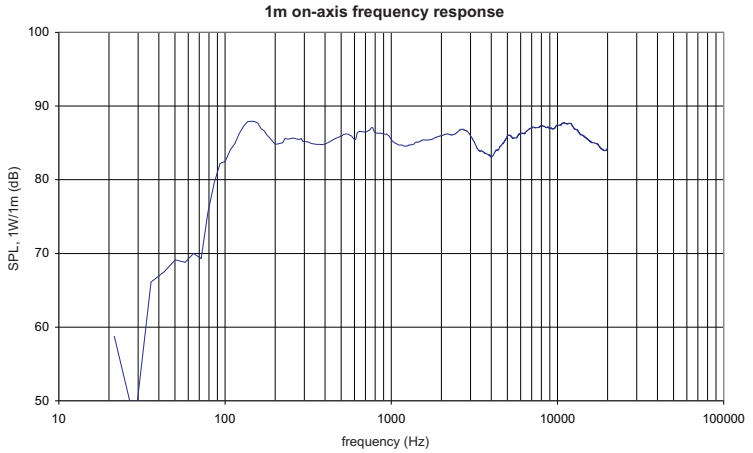
tannoy.com

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

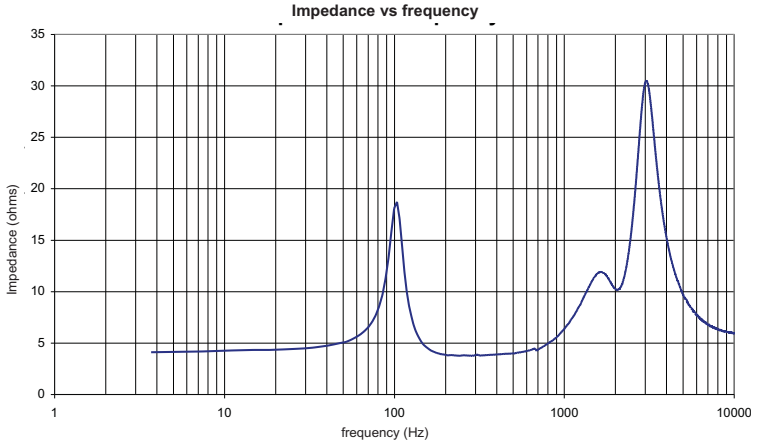
iS52 In Stair

PERFORMANCE MEASUREMENTS

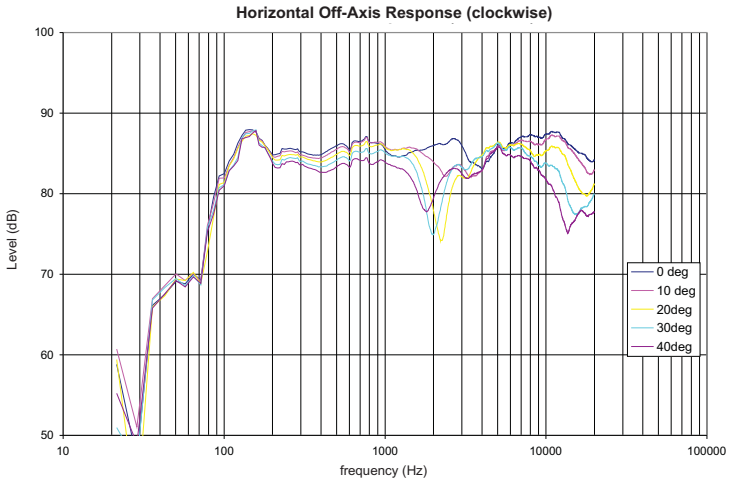
ANECHOIC FREQUENCY RESPONSE



IMPEDANCE



OFF AXIS RESPONSE 1



Tannoy United Kingdom | T: 00 44 (0) 1236 420199 | E: enquiries@tannoy.com
Tannoy Deutschland | T: 00 49 (180) 1111 881 | E: enquiries@tannoy.com
Tannoy France | T: 00 33 (0)1 7036 7473 | E: ventes@tannoy.com
TC|Group Americas | T: 00 1 (519) 745 1158 | E: info@tcgroup-americas.com

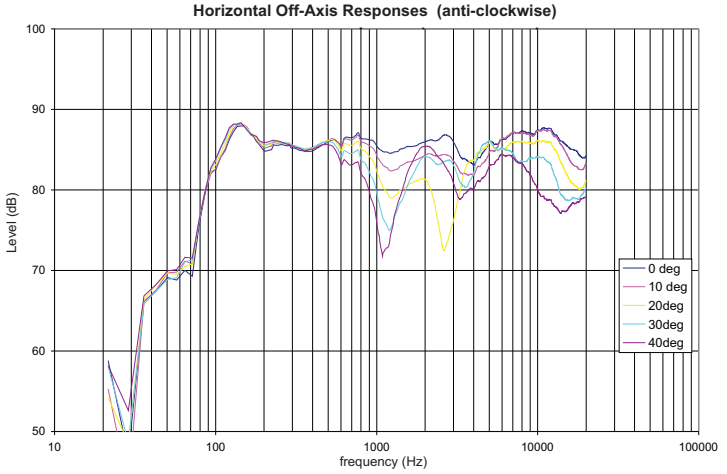
tannoy.com

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

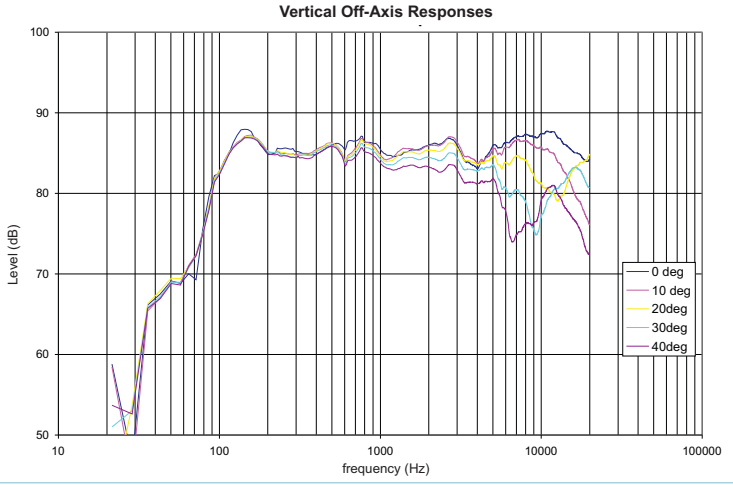
iS52 In Stair

PERFORMANCE MEASUREMENTS

OFF AXIS RESPONSE 2



OFF AXIS RESPONSE 3



Tannoy United Kingdom
Tannoy Deutschland
Tannoy France
TC|Group Americas

T: 00 44 (0) 1236 420199
T: 00 49 (180) 1111 881
T: 00 33 (0)1 7036 7473
T: 00 1 (519) 745 1158

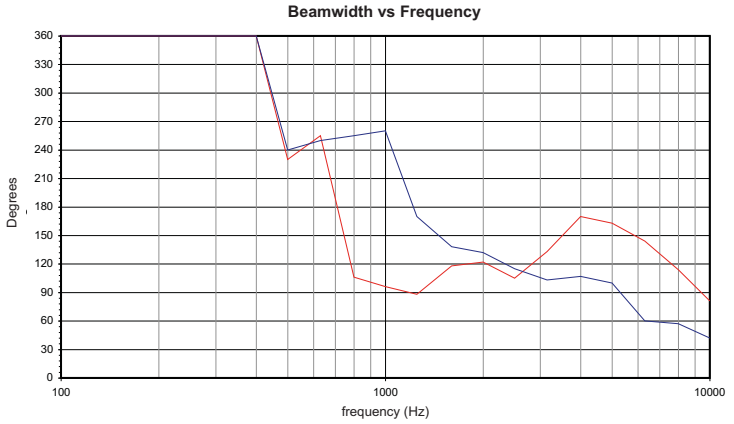
E: enquiries@tannoy.com
E: enquiries@tannoy.com
E: ventes@tannoy.com
E: info@tcgroup-americas.com

tannoy.com

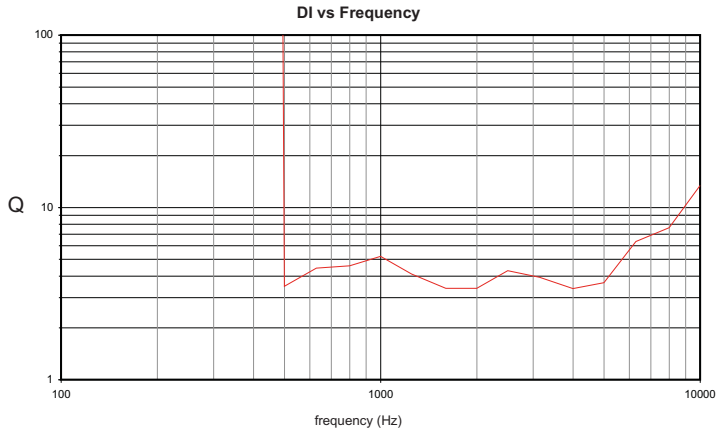
Tannoy adopts a policy of continuous improvement and product specification is subject to change

iS52 In Stair

PERFORMANCE MEASUREMENTS



BEAMWIDTH



DIRECTIVITY INDEX

Tannoy United Kingdom
Tannoy Deutschland
Tannoy France
TC|Group Americas

T: 00 44 (0) 1236 420199
T: 00 49 (180) 1111 881
T: 00 33 (0)1 7036 7473
T: 00 1 (519) 745 1158

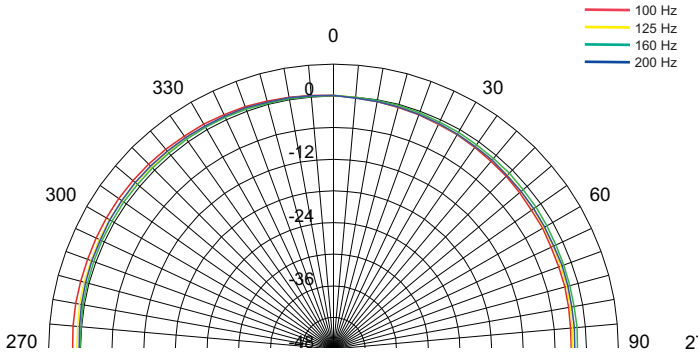
E: enquiries@tannoy.com
E: enquiries@tannoy.com
E: ventes@tannoy.com
E: info@tcgroup-americas.com

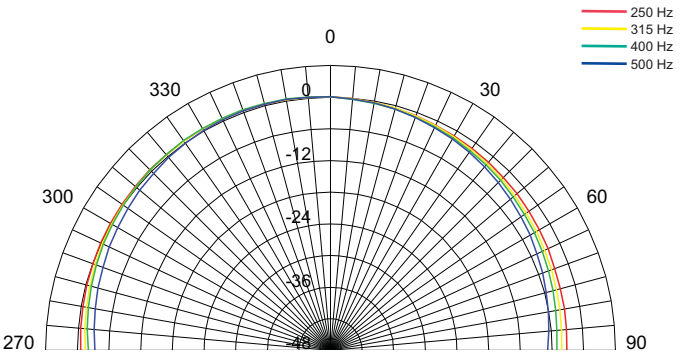
tannoy.com

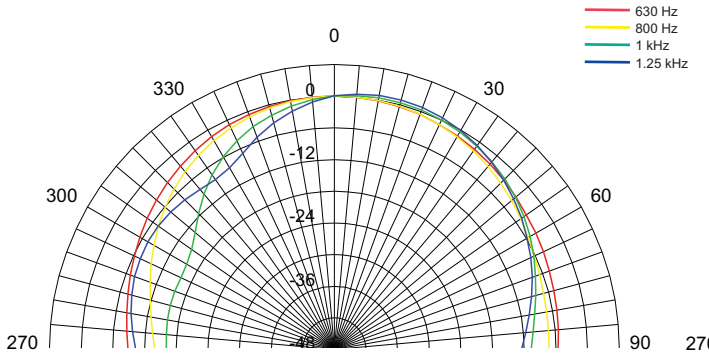
Tannoy adopts a policy of continuous improvement and product specification is subject to change

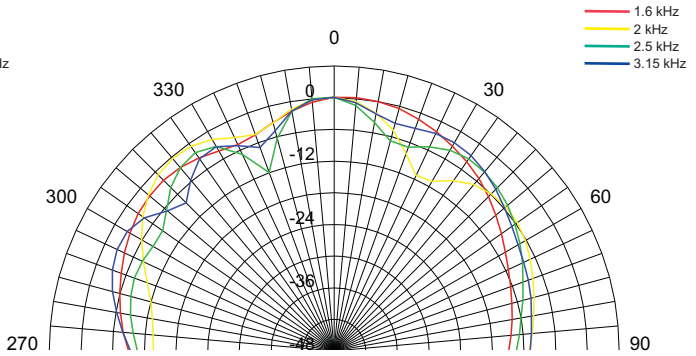
iS52 In Stair

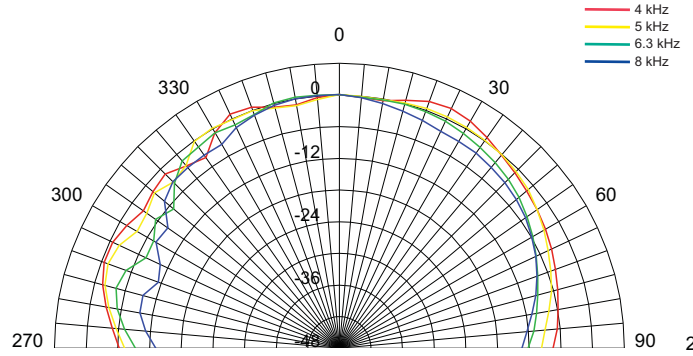
PERFORMANCE MEASUREMENTS POLAR PLOTS (1/3 OCTAVE)

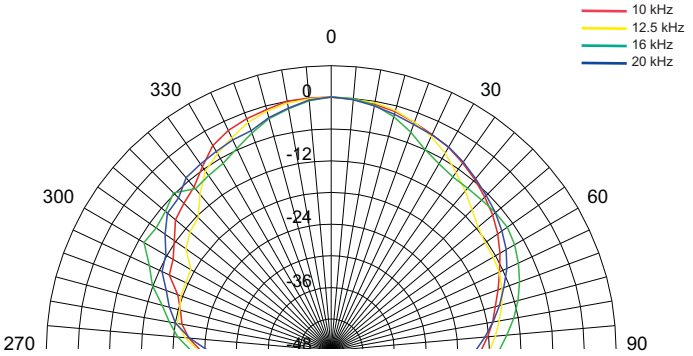












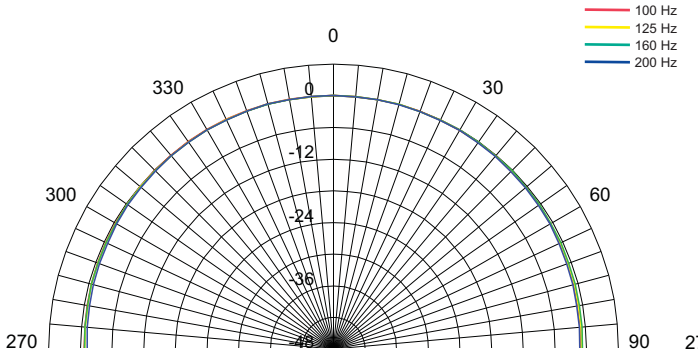
Tannoy United Kingdom | T: 00 44 (0) 1236 420199 | E: enquiries@tannoy.com
Tannoy Deutschland | T: 00 49 (180) 1111 881 | E: enquiries@tannoy.com
Tannoy France | T: 00 33 (0)1 7036 7473 | E: ventes@tannoy.com
TC|Group Americas | T: 00 1 (519) 745 1158 | E: info@tcgroup-americas.com

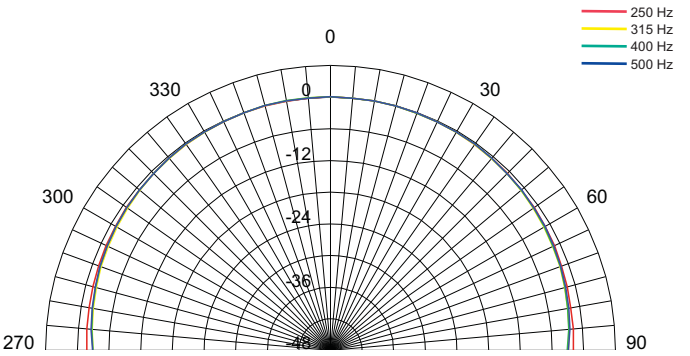
tannoy.com

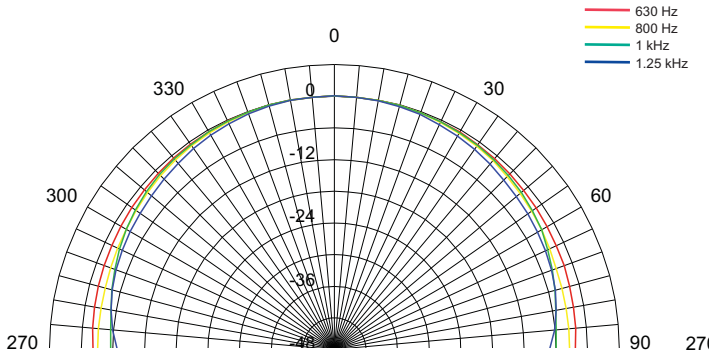
Tannoy adopts a policy of continuous improvement and product specification is subject to change

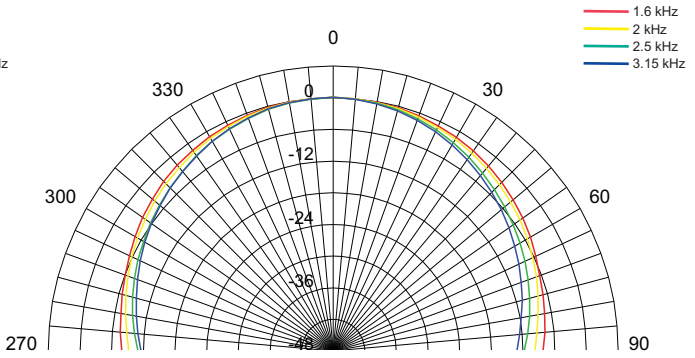
iS52 In Stair

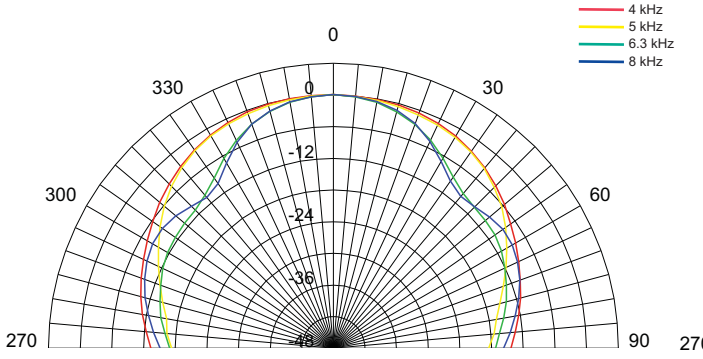
PERFORMANCE MEASUREMENTS POLAR PLOTS (1/3 OCTAVE)

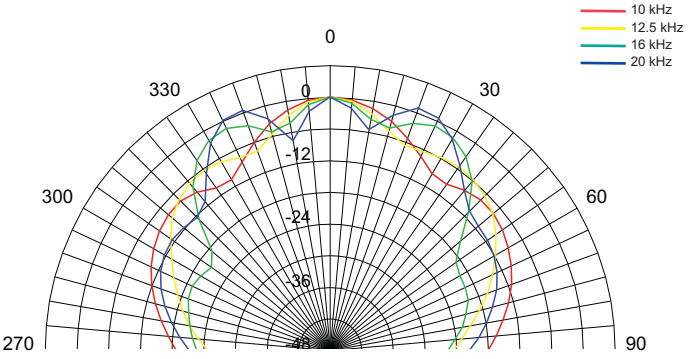












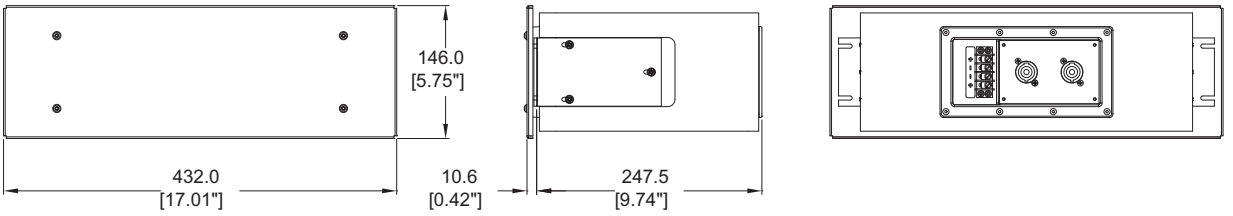
Tannoy United Kingdom | T: 00 44 (0) 1236 420199 | E: enquiries@tannoy.com
Tannoy Deutschland | T: 00 49 (180) 1111 881 | E: enquiries@tannoy.com
Tannoy France | T: 00 33 (0)1 7036 7473 | E: ventes@tannoy.com
TC|Group Americas | T: 00 1 (519) 745 1158 | E: info@tcgroup-americas.com

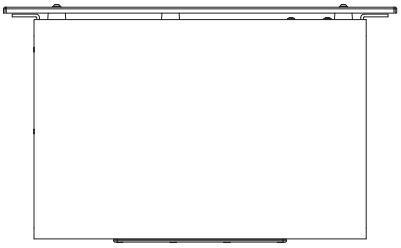
tannoy©com

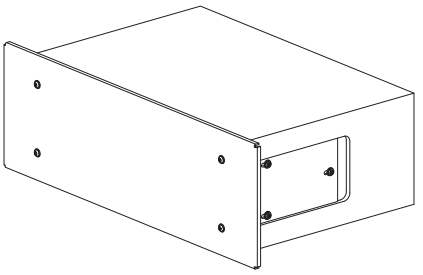
Tannoy adopts a policy of continuous improvement and product specification is subject to change

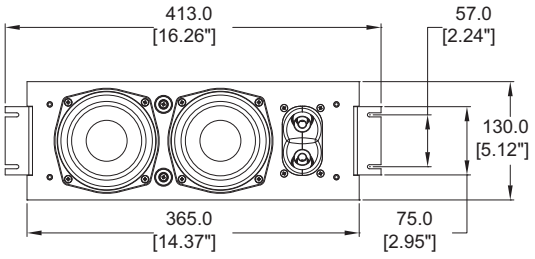
iS52 In Stair

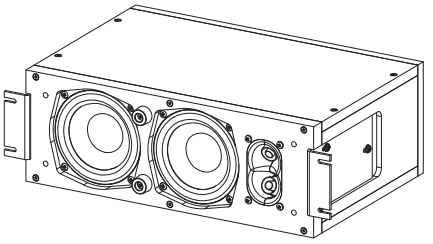
DIMENSIONAL SKETCHES

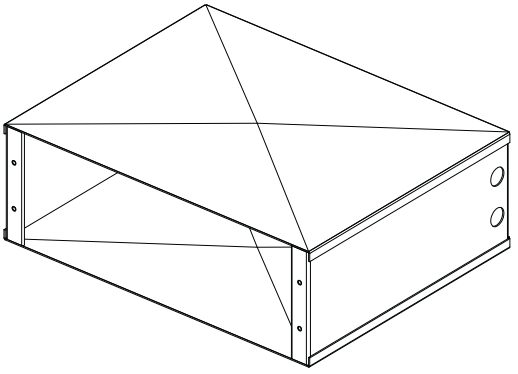


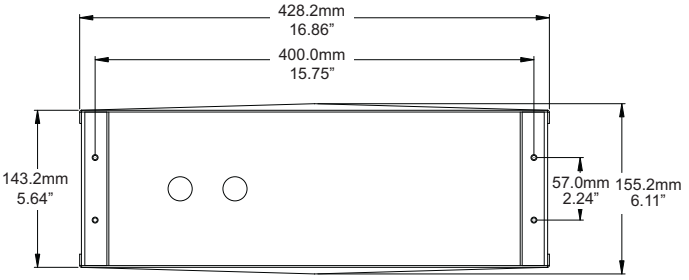


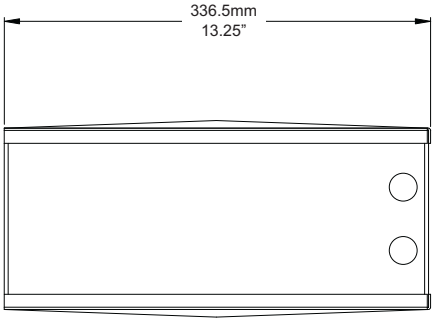












Tannoy United Kingdom | T: 00 44 (0) 1236 420199 | E: enquiries@tannoy.com
Tannoy Deutschland | T: 00 49 (180) 1111 881 | E: enquiries@tannoy.com
Tannoy France | T: 00 33 (0)1 7036 7473 | E: ventes@tannoy.com
TC|Group Americas | T: 00 1 (519) 745 1158 | E: info@tcgroup-americas.com

tannoy.com

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

iS52 In Stair

Architectural specifications

The full bandwidth In Stair two-way speaker system shall consist of two 100mm (4") low-frequency transducers and two 25mm (1") high-frequency devices with a passive crossover mounted in a sealed plywood enclosure. The protective kick-proof grille shall be constructed from powder-coated steel with reticulated foam behind it. A separate steel backcan shall be provided for use in concrete or where a metal enclosure is required.

Performance of the iS52 In Stair speaker shall meet or exceed the following criteria: The system shall have a coverage pattern of 120° horizontal and 90° vertical (-6dB). Frequency response measured on axis shall be 67Hz - 30kHz (-10dB from rated sensitivity, average over stated bandwidth. Measured at 1 metre in an anechoic chamber) with no equalisation. Sensitivity shall be 88dB (1W = 2.83V for 8 Ohms). Long term power handling capacity as defined in EIA-426B test shall be 120W, recommended amplifier power 240W. The nominal system impedance shall be 6 Ohms.

A termination recess shall be integrated with the rear panel, a Speakon type locking connector with "loop through" facility shall be provided.

The dimensions shall not exceed 432mm x 146mm x 258.1mm
(17.01” x 5.75” x 10.20”).

The surface mount speaker system shall be the.....iS52.

Tannoy United Kingdom
Tannoy Deutschland
Tannoy France
TC|Group Americas

T: 00 44 (0) 1236 420199
T: 00 49 (180) 1111 881
T: 00 33 (0)1 7036 7473
T: 00 1 (519) 745 1158

E: enquiries@tannoy.com
E: enquiries@tannoy.com
E: ventes@tannoy.com
E: info@tcgroup-americas.com

tannoy.com

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

NOTES

Tannoy United Kingdom
Tannoy Deutschland
Tannoy France
TC|Group Americas

T: 00 44 (0) 1236 420199
T: 00 49 (180) 1111 881
T: 00 33 (0)1 7036 7473
T: 00 1 (519) 745 1158

E: enquiries@tannoy.com
E: enquiries@tannoy.com
E: ventes@tannoy.com
E: info@tcgroup-americas.com

tannoy.com

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