





SURFACE MOUNT SPEAKERS

EASY INSTALL



# WEATHER RESISTANT THE RESISTANT RANGE

TRANSFORMER VERSIONS

**DÉCOR-MATCHING OPTIONS** 

TANOY.

## High performance and ease of install... with style

Designed for a wide variety of sound reinforcement applications, the Tannoy Di Series is a range of premium performance, ultra compact surface mount weather resistant loudspeakers.

Equipped with Tannoy's exclusive point source, constant directivity drive unit technologies, the Di products deliver an acoustic performance of outstanding clarity, definition and detail with class leading vocal intelligibility. The constant directivity and uniform dispersion nature of the drivers utilised allows either vertical or horizontal orientations on walls or ceilings with no compromise to performance.



Available in a textured black or white painted finish with matching rubber trims, the outstandingly durable and scuff resistant, high impact polystyrene (HIPS) Di enclosure is weather resistant, rated IP64 to EN60529 (IEC529); a design fully optimised for consistent performance in adverse conditions indoors or out.

All models are full bandwidth loudspeakers designed for commercial, professional and residential applications where environment durability and high quality sonic performance are required. Indoor or outdoor, these speakers are ideally suited to stereo or monaural background or foreground music systems in applications as diverse as theme parks, retail premises, restaurants and cafés, corporate audio visual and houses of worship.

### TANNOY ICT™ DRIVE UNIT

The Inductive Coupling Technology drive unit addresses the two most common component failures experienced in background music and sound reinforcement systems, the tweeter and the crossover reliability. The use of a wireless electromagnetic tweeter means that no crossover is required in the design; this therefore ensures that an ICT™ unit cannot be burned out through system misuse or by constant heavy usage. The mineral loaded polypropylene cone material and nitrile rubber surround further enhance durability, weather resistance and long-term reliability.

### TANNOY DUAL CONCENTRIC™ DRIVE UNIT

Renowned for its extraordinary power handling, high sensitivity, extended frequency response and very low distortion, Tannoy's Dual Concentric<sup>TM</sup> drive unit provides a wide and controlled dispersion ensuring optimum coverage. By placing the high frequency drive unit physically inside the low frequency driver, Tannoy engineers have created a true point source that exhibits constant directivity and unparalleled linearity. Perfect for this type of application, the driver system generates a spherical wave front unaffected by energy loss at the crossover frequency in either vertical or horizontal planes allowing highly flexible speaker placement.

While the Dual Concentric<sup>™</sup> drivers in the Di range use a complex multi fibre paper pulp mix for the mid bass cone to achieve optimum acoustic performance, a comprehensive resin treatment process ensures the materials weather resistance. The concentrically positioned HF unit has a ferrofluid cooled titanium dome, with a neodymium magnet system, equipped with dynamic high frequency protection.

### TRANSFORMER MODELS

All models are available in versions equipped with an internally mounted low insertion loss line transformer for 70V or 100V distributed sound applications. Wattage taps are easily configurable using the rotary tapping switch concealed below the rubber trim.

Model Options







6" DRIVER
Di6
Di6t
Di6 DC
Di6 DCt



8" DRIVER
Di8 DC
Di8 DCt

Installing Di

A multi position yoke bracket is supplied with all models for simple and rapid installation. To further increase install flexibility, two optional mounting accessories are available - a pole mount adaptor kit and the unique, pre-wired K-Ball<sup>TM</sup>, a fully adjustable one-size-fits-all wall bracket.

Available in black or white, the pole mount adaptor kit for the Tannoy Di yoke or K-Ball™ installation brackets is designed to facilitate simple pole mounting of Di speakers in a wide range of applications indoors or out.





Customising Di

The Di speaker cabinet may be painted to suit the décor of the installation. Further architechtural modification is possible by changing the colour of the rubber trim around the grille. The standard combination of white on white and black on black can be factory customised to order as required.

Two standard colour trim options are available from stock; enabling black or white product to be supplied pre-fitted with either red and blue trims.

Other custom colours can also be created to suit specific requirements, but only as a special order customisation subject to minimum order quantities.

This aesthetic flexibility will be of special interest to architects and consultants specifying a colour coordinated interior or for corporate branding purposes.







### The unique K-Ballom

Simple to install, the K-Ball<sup>™</sup> is a multi angle bracket which ensures that the speaker can be easily positioned for optimum coverage of the listening area. Designed to facilitate pre-wiring of the system, the K-Ball<sup>™</sup> carries a wiring loom through the arm of the bracket to a Euroblock connector plug located in the ball. When mounted in conjunction with a standard conduit junction box (J-box) the assembly is then ready to receive the speaker during the commissioning stage of the install.







A recess on the rear of the enclosure contains the Euroblock connector socket which completes the signal path when the speaker is offered up to the bracket and pushed into place. The speaker may then be swivelled into the desired angle for optimum coverage before tightening the locking collar. A secondary support line can be secured to the tie back point and the rubber weather-sealing boot located.

This innovative bracket is available in black or white as an optional accessory for all the Di passive models.

### SPECIFICATIONS | ICT™ MODELS

		Di5			Di6		
SYSTEM							
Frequency Response (-3dB) (1)	90Hz - 25kHz			75Hz - 22kHz			
Frequency Range (-10dB) (1)	80Hz - 30kHz			55Hz - 24kHz			
System Sensitivity (1W @1m) (2) 1W = 2.45V for 6 Ohms		88dB			90dB		
<b>Dispersion</b> Degrees conical -6dB		90			90		
Low Frequency Driver Mineral loaded polypropylene		1x 110mm (4.50")			1x 165mm (6.50")		
High Frequency Driver		ICT <sup>™</sup>			ICT <sup>™</sup>		
Crossover Inductively Coupled ICT™		7kHz			7kHz		
Directivity Factor (Q)	1kHz to 10kHz	5.3 averaged			10.5 averaged		
Directivity Index (DI)	1kHz to 10kHz	6.6 averaged		8.4 averaged			
	Average Peak	105dB 111dB		107dB 113dB			
	Average Programme Peak	50W 100W 200W		60W 120W 240W			
Recommended Amplifier Power	100W @ 6 Ohms			120W @ 6 Ohms			
Nominal Impedance		6 Ohms			6 Ohms		
<b>Distortion 10% Full Power</b> 250Hz 1kHz 10kHz		2nd Harmonic 3rd 2.00% 0.53% 2.50%	0.26% 0.19% 0.35%	,	2nd Harmonic 3r 1.86% 1.17% 1.10%	0.12% 0.54% 0.04%	
Distortion 1% Full Power	(1.73V)	,		1.9V)	/) 2nd Harmonic 3rd Harmonic		
250Hz 1kHz 10kHz		0.65% 0.144% 0.52%	0.09% 0.11% 0.298%		0.70% 0.45% 0.25%	0.14% 0.39% 0.065%	

### CONSTRUCTION

Connectors

Enclosure Weather resistant high impact polystyrene (HIPS), IP64 to EN60529 (IEC529)

Grille Steel, with weather resistant coating

Finish Textured black or white paint with matching rubber trims

Factory fitted custom trim colours available to special order

Removable locking Euroblock type connector

with screw terminals and "loop through" facility

1 x socket for K-Ball™ bracket and 2 x M8 yoke bracket inserts

Fittings

**Supplied Accessory** Yoke bracket

357.5 x 230.0 x 223.2mm Dimensions (H x W x D) 240.7 x 155.0 x 162.0mm

9.47 x 6.10 x 6.38" 14.08 x 9.05 x 8.79"

Weight 2.2kg (4.85lbs) 3.7kg (8.15lbs)

TRANSFORMER VERSIONS Specifications as above except:		Di5t	Di6t	
<b>Transformer Taps</b> 70V Rotary switch mounted under trim		30W / 15W / 7.5W / 3.75W / OFF & Low Impedance operation	60W / 30W / 15W / 7.5W / OFF & Low Impedance operation	
	100V	30W / 15W / 7.5W / OFF & Low Impedance operation	60W / 30W /15W / OFF & Low Impedance operation	
* Rated Maximum SPL (2)	Average	103dB (using 30W transformer tap)	107dB (using 60W transformer tap)	
Weight		2.7kg (5.94lbs)	5.0kg (11.02lbs)	

See Passive models above for max SPL figures on low impedance settings.

### SPECIFICATIONS | DUAL CONCENTRIC™ MODELS

		Di5 DC		Di6 DC			Di8 DC		
SYSTEM									
Frequency Response (-3dB) (	1)	90Hz - 50kHz	90Hz - 50kHz		75Hz - 30kHz	75Hz - 30kHz		65Hz - 30kHz	
Frequency Range (-10dB) (1)		80Hz - 54kHz	80Hz - 54kHz		55Hz - 35kHz			53Hz - 35kHz	
System Sensitivity (1W @1m) (2) 1W = 2.83V for 8 Ohms		88dB	88dB		89dB		91dB		
<b>Dispersion</b> Degrees conical -6dB		90		90			90		
Low Frequency Driver  Dual Concentric™ constant directivity driver  with a resin treated multi fibre paper pulp cone		1x 110mm (4.50	1x 110mm (4.50")		1x 165mm (6.50")			1x 200mm (8.00")	
High Frequency Driver titanium dome with neodymium magnet system		19mm (0.75")	19mm (0.75")		25mm (1.00")		25mm (1.00")		
Crossover		2kHz - 2nd order LF, 2nd order HF with Dynamic HF protection			1.6kHz - 2nd order LF, 2nd order HF with Dynamic HF protection		1.5kHz - 2nd order LF, 2nd order HF with Dynamic HF protection		
Directivity Factor (Q)	1kHz to 10kHz	5.3 averaged	5.3 averaged		5.6 averaged		5.5 averaged		
Directivity Index (DI)	1kHz to 10kHz	6.6 averaged	6.6 averaged		7.0 averaged			7.0 averaged	
Rated Maximum SPL (2)	Average Peak	106dB 112dB			109dB 115dB			111dB 117dB	
Power Handling	Average Programme Peak	60W 120W 240W			90W 180W 360W			90W 180W 360W	
Recommended Amplifier Power 120W @ 8 O		120W @ 8 Ohm	ns	180W @ 8 Ohms			180W @ 8 Ohms		
Nominal Impedance		8 Ohms	8 Ohms		8 Ohms		8 Ohms		
<b>Distortion 10% Full Power</b> 250Hz 1kHz 10kHz	(6.9)	7) 2nd Harmonic 31 4.00% 0.76% 0.65%	rd Harmonic 0.20% 0.60% 0.15%	(8.0V) 2	2nd Harmonic 1.00% 0.18% 1.00%	3rd Harmonic 0.32% 0.32% 0.18%	(8.5V)	2nd Harmonic 1.55% 0.41% 1.20%	3rd Harmonic 0.42% 0.63% 0.65%
<b>Distortion 1% Full Power</b> 250Hz 1kHz 10kHz	(2.2)	/) 2nd Harmonic 3r 2.00% 0.009% 0.32%	rd Harmonic 0.15% 0.124% 0.17%	(2.5V)	2nd Harmonic 0.25% 0.06% 0.45%	3rd Harmonic 0.25% 0.18% 0.14%	(2.7V)	2nd Harmonic 0.43% 0.07% 0.55%	3rd Harmonic 0.48% 0.47% 0.13%

### CONSTRUCTION

Grille

Enclosure Weather resistant high impact polystyrene (HIPS), IP64 to EN60529 (IEC529)

Steel, with weather resistant coating

Finish Textured black or white paint with matching rubber trims Factory fitted custom trim colours available to special order

Connectors Removable locking Euroblock type connector

with screw terminals and "loop through" facility

1 x socket for K-Ball™ bracket and 2 x M8 yoke bracket inserts Fittings

**Supplied Accessory** Yoke bracket

240.7 x 155.0 x 162.0mm 357.5 x 230.0 x 223.2mm 404.3 x 260.0 x 260.3mm Dimensions (H x W x D) 9.47 x 6.10 x 6.38" 14.08 x 9.05 x 8.79" 15.92 x 10.24 x 10.25" Weight 2.2kg (4.85lbs) 5.0kg (11.02lbs) 6.0kg (13.23lbs)

	TRANSFORMER VERSIONS Specifications as above except:		Di5 DCt	Di6 DCt	Di8 DCt	
<b>Transformer Taps</b> 70V Rotary switch mounted under trim		70V	30W / 15W / 7.5W / 3.75W / OFF & Low Impedance operation	60W / 30W / 15W / 7.5W / OFF & Low Impedance operation	60W / 30W / 15W / 7.5W / OFF & Low Impedance operation	
		100V	30W / 15W / 7.5W / OFF & Low Impedance operation	60W / 30W / 15W / 7.5W / OFF Low Impedance operation	60W / 30W / 15W / OFF & Low Impedance operation	
*	Rated Maximum SPL (2)	Average	106dB (103dB - 30W transformer tap)	109dB (107dB - 60W transformer tap)	111dB (109dB - 60W transformer tap)	
	Weight		2.7kg (5.95lbs)	5.5kg (12.12lbs)	7.0kg (15.87lbs)	

See Passive models above for max SPL figures on low impedance settings.

Notes:
(1) Average over stated bandwidth. Measured at 1 metre on axis in an anechoic chamber
(2) Unweighted pink noise input, measured at 1 metre in an anechoic chamber
A full range of measurements, performance data, and Ease® Data can be downloaded from 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.

