#### COMPACT SERIES ENGINEERING INFORMATION

# datasheet TCX-15

The TCX-15 is a passive loudspeaker system designed for use in a wide range of installed music sound reinforcement applications.

It consists of a 15" reflex-loaded low frequency driver and a 1" high frequency compression driver on a wide dispersion Converging Elliptical Waveguide<sup>™</sup> in a trapezoidal reflex loaded enclosure. These high grade components are matched with an internal passive crossover network.

When permanently installed the cabinet presents a discreet appearance with no visible side handles, while for portable applications the pole mount blanking plug can be removed for use with speaker stands and poles, and a single carrying handle is provided for transportation.

When used with Turbosound Loudspeaker Management Systems, TCX loudspeakers can be controlled and monitored over a BVNet network using TurboDrive™ control software.

TheTCX-15 features a wide dispersion Converging Elliptical Waveguide™, which generates a smooth wavefront while giving excellent pattern control. The Waveguide<sup>™</sup> can be rotated through 90° within the cabinet, so allowing a swap of the horizontal and vertical dispersion patterns. This feature is especially useful to retain the wide horizontal dispersion when mounting the cabinet horizontally in venues where ceiling height is limited.

The trapezoidal cabinet includes internal rigging points for use with wall and ceiling brackets, and provides compatibility with OmniMount<sup>™</sup> loudspeaker mounting brackets. Constructed from 5/8" (15mm) birch plywood, the cabinet is available in black or white textured paint as standard. A perforated steel mesh grille protects the drive units from damage.

The rear connector panel provides two Speakon NL4 connectors for input and loop-out functions, wired in parallel with a 4-way barrier strip connector.



Converging Elliptical Waveguide™ Rotatable HF horn

Pole mount socket

**Internal rigging points** 

OmniMount<sup>™</sup> compatible

Speakon NL4 and barrier strip connectors

**EASE GLL file supported** 

#### APPLICATIONS

Mobile DJ

**Corporate / industrial** 

**House of Worship** 

Live music venues



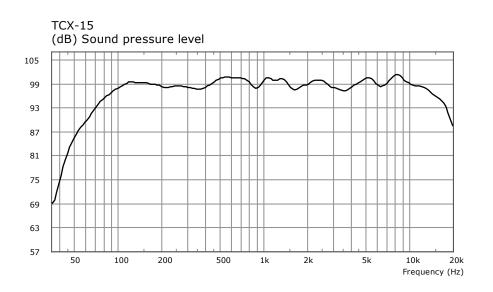


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DIMENSIONS (HxWxD)	652mm x 470mm x 422mm (25.7″ x 18.5″ x 16.6″)	
NET WEIGHT	24.5kg (54lbs)	
COMPONENTS	1 x 15″ (381mm) LF driver, 1 x 1″ (25mm) HF driver on a Converging Elliptical Waveguide™	
FREQUENCY RESPONSE	55Hz - 20kHz ±10dB, 85Hz - 18kHz ±3dB	
NOMINAL DISPERSION	90°h x 60°v @ -6db points	
POWER HANDLING	400 watts r.m.s., 800 watts program	
SENSITIVITY	99dB, 1w @ 1m	
MAXIMUM SPL	125dB continuous, 131dB peak	
NOMINAL IMPEDANCE	8 ohms	
CROSSOVER	2kHz	
CONSTRUCTION	15mm (5/8") birch plywood	
FINISH	Black or white semi-textured paint	
GRILLE	Powder coated perforated mild steel	
CONNECTORS	(2) Neutrik Speakon NL4MP, wired pin 1+: positive, pin 1- : negative, pins 2+ and 2- N/C (1) 4-way barrier strip connector	
FLYING HARDWARE	(13) M10 internal rigging points for eyebolts andTurbosound brackets (4) M8 internal rigging points for OmniMount™ brackets	
SPARES AND	LS-1531	15" LF loudspeaker Recone kit
ACCESSORIES	RC-1531 CD-119	1" compression driver
	RD-119	Replacement diaphragm
	TCX-004	Passive crossover
	WB-55	Wall bracket
	CB-55	Ceiling bracket
	PB-55	Pole bracket
	SB-15	Swivel bracket
	PA-90	Speaker pole 90cm
	PA-100	Speaker pole 100cm
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### COMPACT SERIES ENGINEERING INFORMATION



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FREQUENCY

RESPONSE

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### COMPACT SERIES ENGINEERING INFORMATION

#### INSTALLATION HARDWARE

datasheet

**TCX-15** 

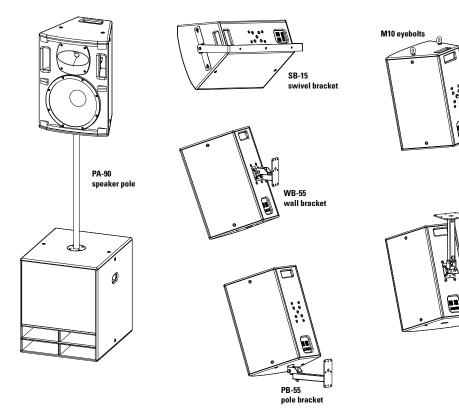
TCX loudspeakers are equipped with multiple internal rigging points which can be used to permanently install the cabinets in a variety of ways.

Turbosound wall and ceiling brackets couple with the rigging points on the rear panel of the cabinet and are fully adjustable both horizontally and vertically. The rear panel also provides rigging points for use with OmniMount<sup>™</sup> wall and ceiling brackets.

A swivel bracket provides a simple method of wall mounting the cabinet with fully adjustable downward angle.

The universal PB-55 pole bracket provides an additional method of wall mounting TCX series cabinets that are equipped with a pole mount socket.

TCX cabinets can also be simply suspended using shoulder eyebolts attached to the rigging points on the top of the cabinet, with the centre rigging point on the rear panel being used as a pull-back.



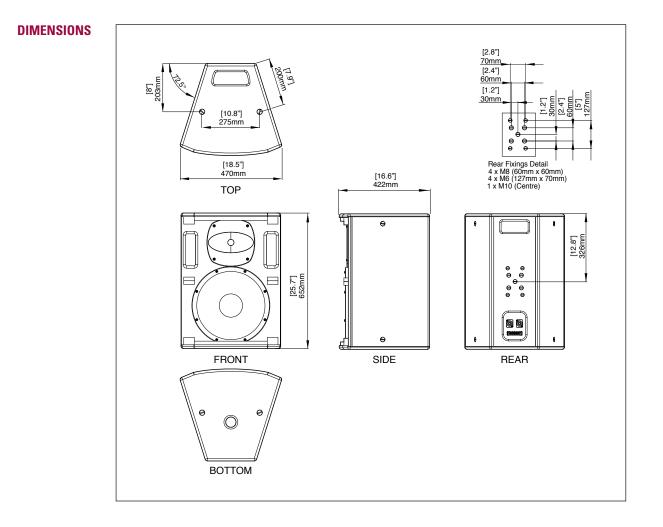
CB-55 ceiling bracket

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### COMPACT SERIES ENGINEERING INFORMATION

#### ARCHITECTURAL & ENGINEER'S SPECIFICATIONS

The system shall be of the passive two-way loudspeaker type consisting of one 15" (381mm) LF driver and one 1" (25mm) HF driver on a rotatable Converging Elliptical Waveguide<sup>™</sup>. Performance specifications of a typical production unit shall meet or exceed the following: Frequency response, measured with swept sine wave input, shall be flat within ±10dB from 55Hz to 20kHz, and within ±3dB from 85Hz to 18kHz. Nominal dispersion, at -6dB points, shall average 90°H x 60°V. Power handling shall be 400 watts continuous, 800 watts program. Maximum SPL (peak) measured with music program at stated amplifier input shall be 131dB. Dimensions: 652mmH x 470mmW x 422mmD (25.7"H x 18.5"W x 16.6"D). Weight: 24.5kg (54lbs). The loudspeaker system shall be the Turbosound TCX-15. No other loudspeaker shall be acceptable unless submitted data from an independent test laboratory verify that the above combined performance / size specifications are equalled or exceeded.



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