

IMPACT SERIES ENGINEERING INFORMATION

The Impact series of full-range, passive loudspeakers has been designed to be used in a variety of installed sound system applications ranging from discotheques, clubs and wine bars to theatres, themed environments and places of worship. In addition, thanks to its elegant styling and practical durability, Impact is ideal for many mobile sound system applications.

The Impact 80 enclosure is manufactured using a unique 'foam-in-place' rotational moulding technique, giving an attractive and extremely durable finish, plus the added benefit of eliminating resonances in the cabinet walls. Impact enclosures are made from recyclable materials.

The Impact 80 is a passive 2-way reflex box design using a proprietary 8" low frequency drive unit matched to an HF device with an internal passive crossover. Its physical design is symmetrical, allowing the speaker to be mounted vertically or horizontally

without altering the 60° horizontal x 60° vertical dispersion pattern. Input to the Impact 80 is via a single pair of colour coded binding posts, serving as both the input from the power amplifier and a parallel connection to additional loudspeakers.

A pole mount socket is moulded into the bottom of the enclosure, thereby allowing the Impact 80 to be used on tripod stands for audio visual applications or on top of bass enclosures from the Turbosound range. An integral moulded handle is provided at the rear for easy lifting and carrying. A versatile range of load tested mounting hardware is available that allows Impact range enclosures to be permanently fixed in installations to walls and ceilings in a wide variety of ways.

Recommended complementary products:

TSB-110 sub bass enclosure



FEATURES

Rotationally mounted enclosure

Range of fixing hardware

APPLICATIONS

Discotheques and clubs

Themed environments

DIMENSIONS (HxWxD)	480mm x 295mm x 250mm (18.9" x 11.6" x 9.8")		
NET WEIGHT	6.6kg (14.5lbs)		
COMPONENTS	1 x 8" (203mm) driver, 1 x HF tweeter		
FREQUENCY RESPONSE¹	70Hz to 18kHz @±4dB		
NOMINAL DISPERSION	60°H x 60°V @-6dB points		
POWER HANDLING	200 watts r.m.s., 400 watts program		
SENSITIVITY²	93dB SPL, 1 watt @ 1 metre		
CALCULATED MAX SPL	119 dB (continuous) 125dB (peak)		
NOMINAL IMPEDANCE	8 ohms		
CROSSOVER	Integral passive crossover at 4kHz		
CONSTRUCTION	Foam-in-place rotationally moulded enclosure, finished in TurboBlue™ Integral pole mount socket and carrying handle		
GRILLE	Black powder-coated perforated steel grille		
CONNECTORS	Binding posts		
OPTIONS	Optional colours available to order:		
	Postbox red (346)	Turquoise (55455)	Charcoal grey
	Mid grey (88273)	White	Lime green (269)
	Crimson red (079)	Avocado green (383)	Racing green (384)
	Orange (365A)	Sky blue (018D)	Yellow (320)
SPARES AND ACCESSORIES	07B500	WB-20	Adjustable telescopic wall bracket
	07B502	SM-100	Single point mount
	07B506	CB-55	Adjustable telescopic ceiling bracket
	07B504	SX-100	Single point mount extension bracket
	07B508	PA-100	Pole mount assembly
	04B100	LS-8010	LF driver for IMPACT 80.2
		RC-8010	Recone kit for LS-8010
	04B214	TW-510	HF driver for IMPACT 80.2
	10G430	PX-80.2	Passive crossover for IMPACT 80.2
	07A940	MG-IMP80	Metal grille for IMPACT 80

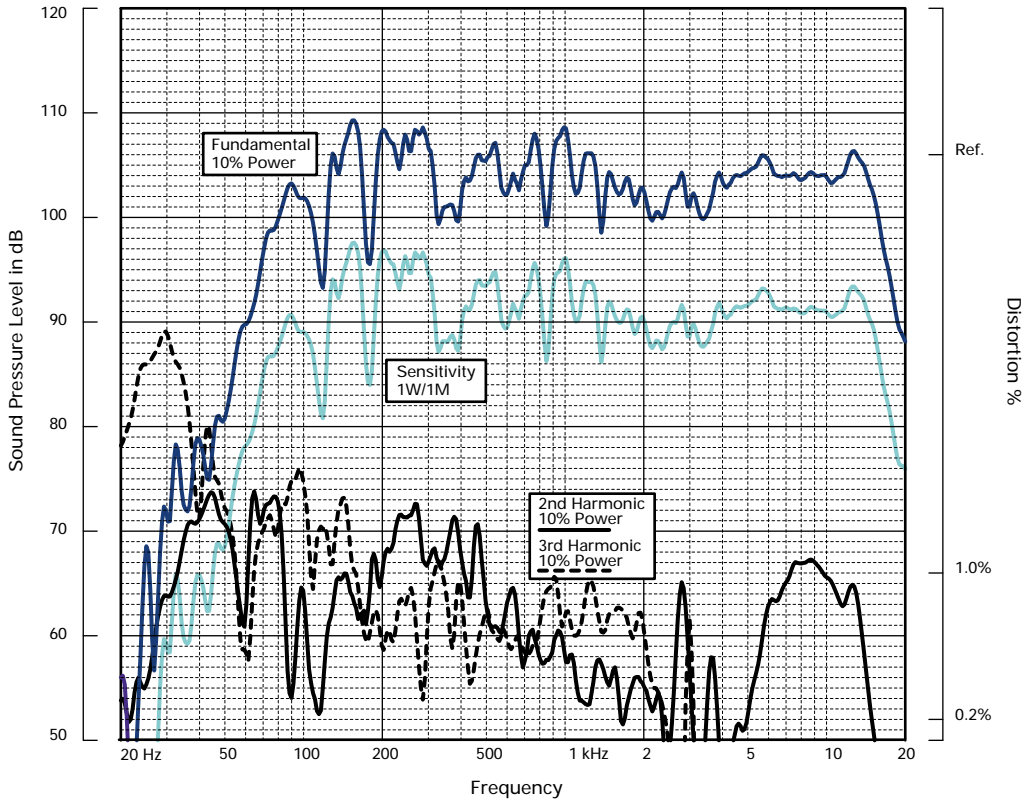
All measurements are actual figures taken from real-time testing using stated inputs, free from any filtering or weighting. Therefore actual figures may significantly exceed that of other manufacturers with higher published weighted ratings.

Notes

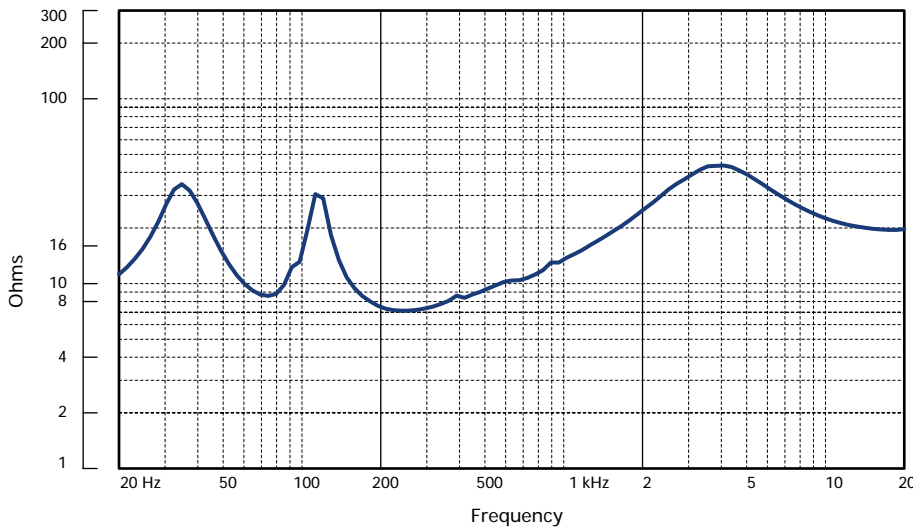
¹Measured on axis

²Average over stated bandwidth

FREQUENCY RESPONSE



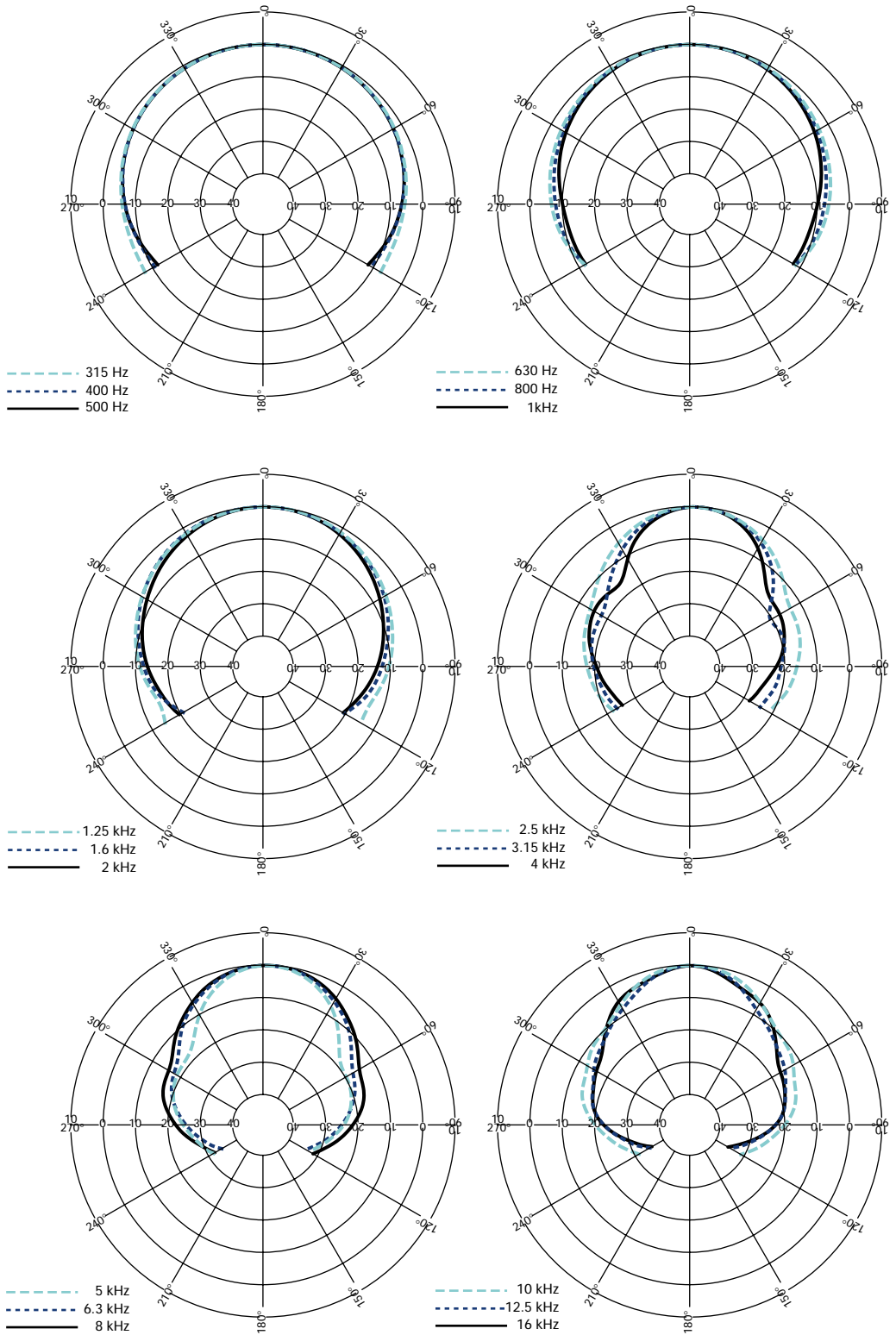
IMPEDANCE



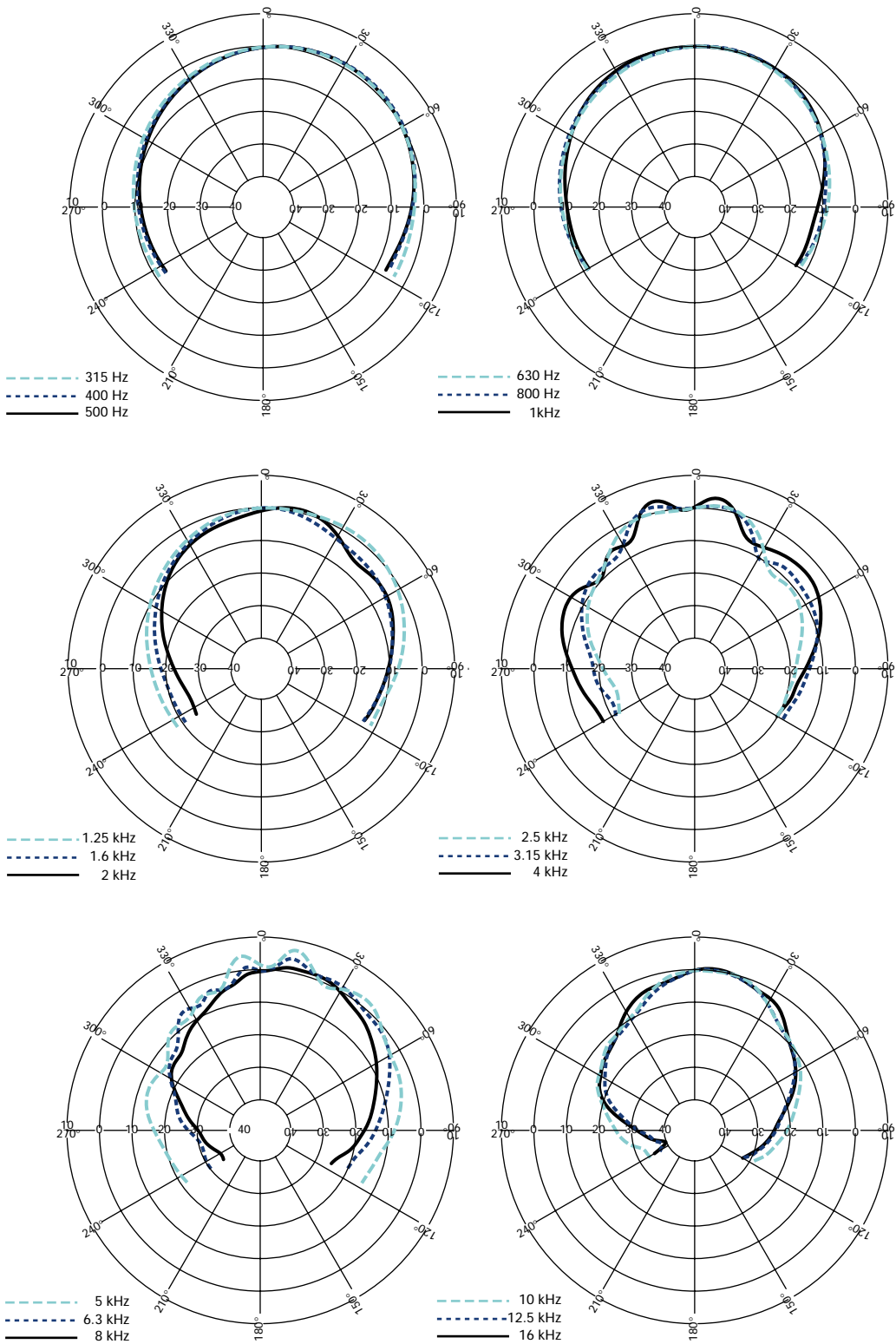
Impedance A constant current circuit was used to measure the impedance. **Frequency response** The frequency response shown was obtained by feeding a swept sine wave through the system in a half space environment. The position of the microphone was vertically on-axis at a distance of 2 metres, then scaled to represent 1 metre. **2nd & 3rd Harmonic Distortion** Distortion measurements were obtained using an Audio Precision harmonic distortion analysis system and comply with AES recommendations for enclosure measurement (AES paper ANSI S4-26-1984). **Data Conversion** All graphs were digitally generated using the APEX custom software system, designed to translate data derived from Audio Precision 'System One' test equipment into AutoCAD™. This program enables graphical information to be plotted to a high degree of accuracy.

NOTES ON MEASUREMENT CONDITIONS

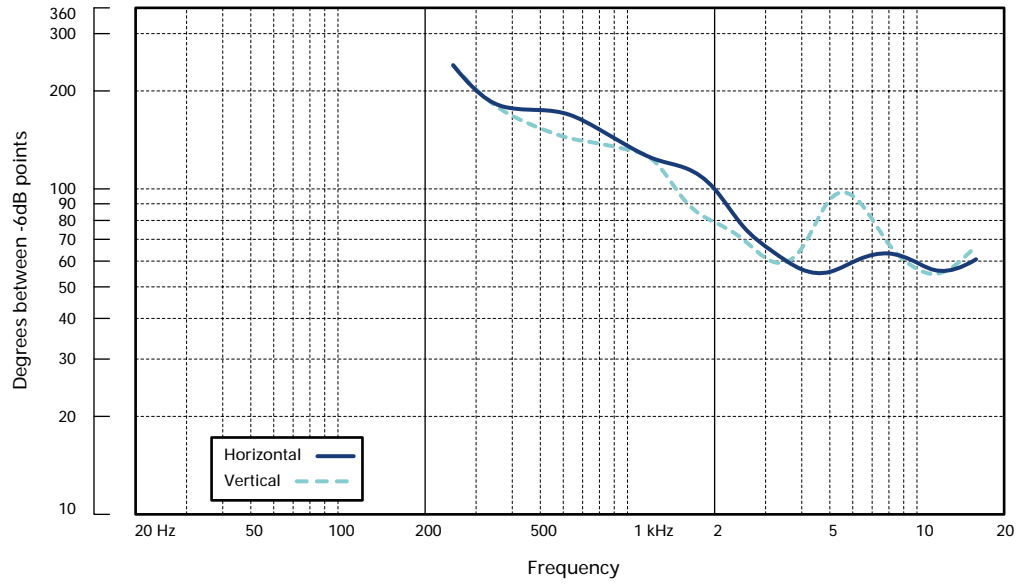
**HORIZONTAL THIRD
OCTAVE POLARS**



**VERTICAL THIRD
OCTAVE POLARS**



BEAMWIDTH

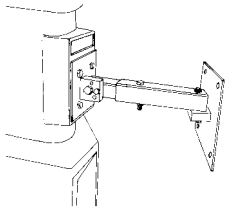
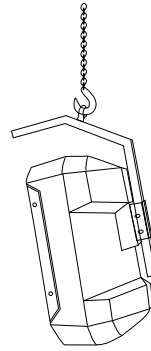


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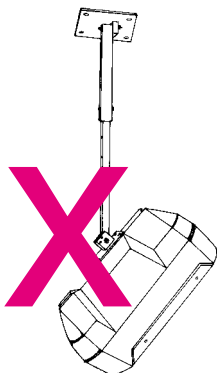
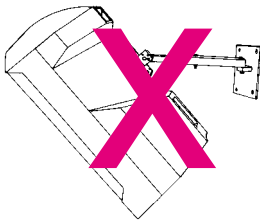
A range of fixing and mounting hardware is optionally available to implement safe and effective installations in a variety of differing situations. An integral moulded 'top hat' fitting is incorporated into the base of the enclosure, allowing it to be used with standard 35mm diameter loudspeaker stands and with the PA-100 straight pole assembly.

FLYING AND MOUNTING
HARDWARE

A single point mount, **SM-100**, is used for attaching to single point suspension systems such as TV spigots. A range of adjustments allows either loudspeaker to be flown upside down if required



An adjustable telescopic wall bracket, **WB-20**, allows wall mounting in a variety of possible horizontal and vertical orientations. The vertical orientation of the loudspeaker can be adjusted in 15° increments as shown from 0° (vertical) to 45° of downward inclination



A telescopic ceiling bracket, **CB-55**, is used for ceiling mounting. Several horizontal and vertical orientations are possible

**ARCHITECTURAL
& ENGINEER'S
SPECIFICATIONS**

The loudspeaker shall be of the 2-way passive type consisting of one 203mm (8") low frequency loudspeaker and one high frequency tweeter. Performance specifications of a typical production unit shall meet or exceed the following: frequency response, measured with a swept sine-wave input, shall be flat within $\pm 4\text{dB}$ from 70Hz - 18kHz. Nominal dispersion, at -6dB points, shall average $60^\circ\text{H} \times 60^\circ\text{V}$. Nominal impedance shall be 8 ohms. Power handling shall be 200 watts r.m.s., 400 watts program. Sensitivity measured with 1 watt input at 1 metre distance on axis, mean averaged over stated bandwidth, shall be 93dB. Maximum SPL (peak), measured with music program at stated amplifier power, shall be 125dB. Dimensions: 480mmH x 295mmW x 250mmD (18.9" x 11.6" x 9.8"). Net weight: 6.6kg (14.5lbs). Total enclosure volume shall not exceed 0.24 cu metres. The loudspeaker system shall be the Turbosound Impact 80.2. 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.

DIMENSIONS

