

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, both indoors and outdoors, ranging from cafes and restaurants, clubs and wine bars to theatres, mass transport facilities, retail environments and places of worship.

Impact series enclosures are injection-moulded using unique gas-injected glass filled fire-retardant ABS plastic, giving an elegantly stylish and extremely durable finish, plus the added benefit of IP54 weather resistance making them suitable for installation outdoors or in humid conditions.

The Impact 35 is an ultra-compact passive two-way reflex design loudspeaker using a proprietary 3.5" low frequency drive unit matched to a 1" neodymium ferrofluid-cooled HF tweeter with an internal passive crossover network. It will provide high quality sound reproduction from an unobtrusive cabinet designed to blend effectively into any decor.

The low frequency range of the Impact 35 can easily be extended with subwoofers from the TSB range of bandpass enclosures. Passive subwoofers such as the TSB-110

provide sub-bass support without the need for additional crossovers and amplifiers by connecting to the Impact satellite speakers through the passive crossover built into the subwoofer.

The Impact 35 is supplied with a universal adjustable wall mounting bracket which provides the loudspeaker connections as an integral part of the bracket assembly. This facility allows the brackets to be sited, installed and wired independently of the loudspeakers being available on-site, making the final installation and commissioning of the loudspeaker system a greatly simplified process. The cabinet also provides M6 fixings for use with CB-10 wall brackets, WB-10 ceiling brackets and OmniMount™ brackets.

A 3/8" threaded insert is provided behind an EPDM rubber cover on the bottom of the cabinet for use with microphone stands as a spot monitor.

The drive units are protected by a perforated stainless steel grille which, together with the moulded cabinet, provides IP54 weather resistance suitable for outdoor applications.



FEATURES

- Compact injection-moulded enclosure**
- Wall bracket with integral connection**
- Paintable enclosure**
- OmniMount™ compatible**
- Passive crossover**
- IP54 weather resistance**

APPLICATIONS

- Cafés and bars**
- Restaurants**
- Retail shops**
- Sports and leisure**
- Spot monitor**
- Discotheques and clubs**
- Themed environments**
- Houses of Worship**

DIMENSIONS (HxWxD)	242mm x 145mm x 148mm (9.5" x 5.7" x 5.8")	
NET WEIGHT	2.2kg (4.8lbs)	
COMPONENTS	1 x 3.5" (89mm) LF driver, 1 x 1" (25mm) neodymium ferrofluid-cooled HF tweeter	
FREQUENCY RESPONSE¹	90Hz – 20kHz ±3dB, 70Hz – 20kHz ±10dB	
NOMINAL DISPERSION²	100°H x 100°V @ -6dB points	
POWER HANDLING	40 watts continuous, 80 watts program	
SENSITIVITY	88dB SPL, 1 watt @ 1metre	
CALC. MAXIMUM SPL	104dB continuous, 110dB peak	
NOMINAL IMPEDANCE	16 ohms	
CROSSOVER	Internal passive crossover at 2.5kHz, 12dB/octave	
CONSTRUCTION	Injection moulded gas-filled ABS enclosure	
GRILLE	Powder-coated perforated stainless steel	
MOUNTING	Two M6 fixing points for WB-5 wall bracket (supplied). Compatible with WB-10 wall bracket and CB-10 ceiling bracket, and OmniMount™ brackets	
CONNECTORS	Colour coded binding posts	
STANDARDS	Fire retardant V0 ABS	
OPTIONS	Available colours: White, Black	
SPARES AND ACCESSORIES	LS-35	LF driver
	TW-52	HF tweeter
	PX-35	Passive crossover network
	MG-IMP35	Metal grille
	WB-5	Adjustable wall bracket
	WB-10	Wall bracket
	CB-10	Ceiling bracket

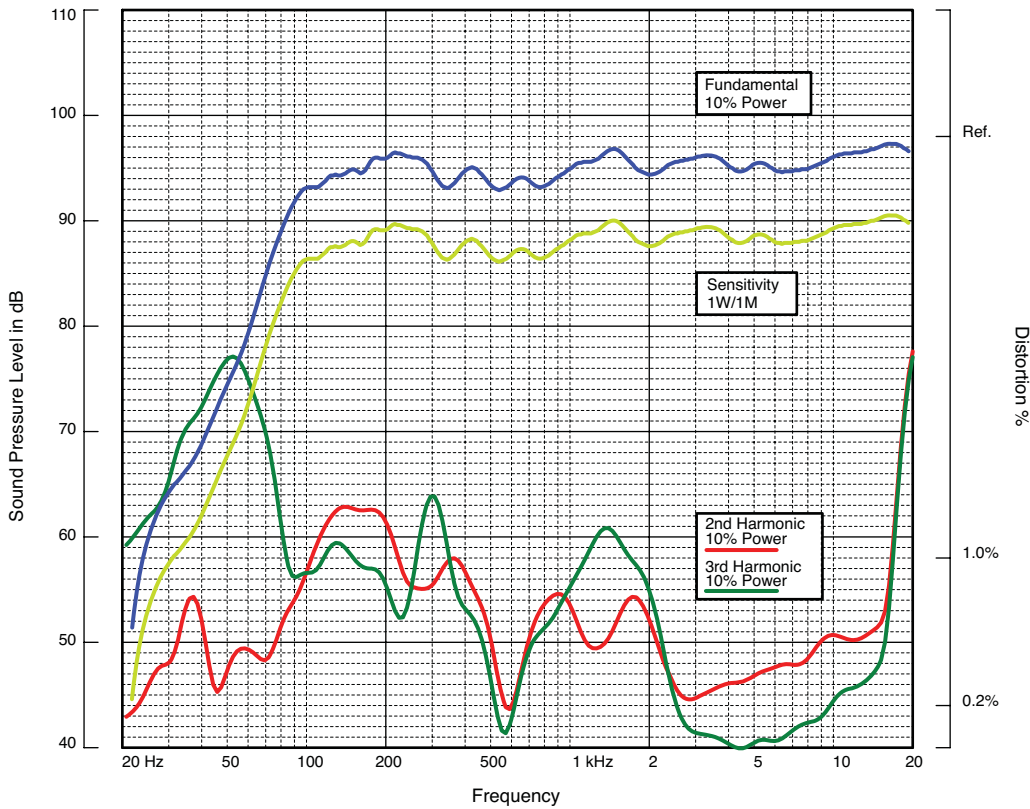
All measurements are actual figures taken from real-time testing using stated inputs, free from any filtering or weighting. Therefore actual figures may significantly exceed that of other manufacturers with higher published weighted ratings.

Notes

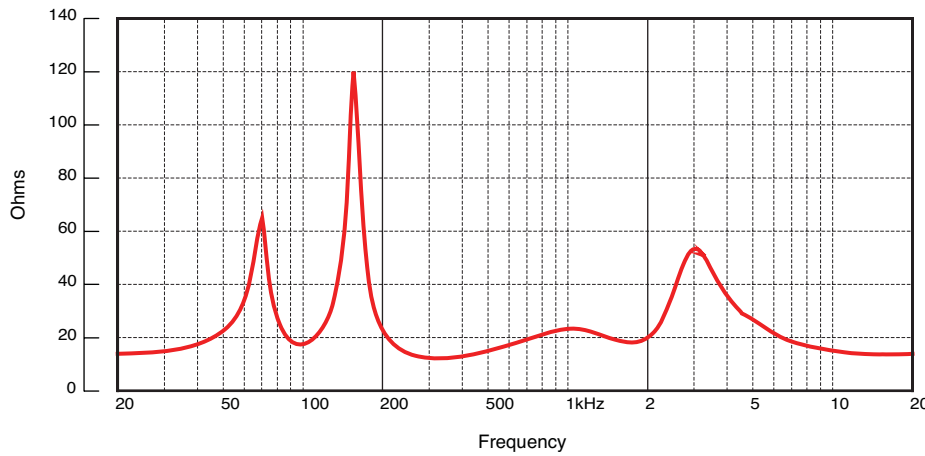
¹Measured on axis

²Average over stated bandwidth.

FREQUENCY RESPONSE



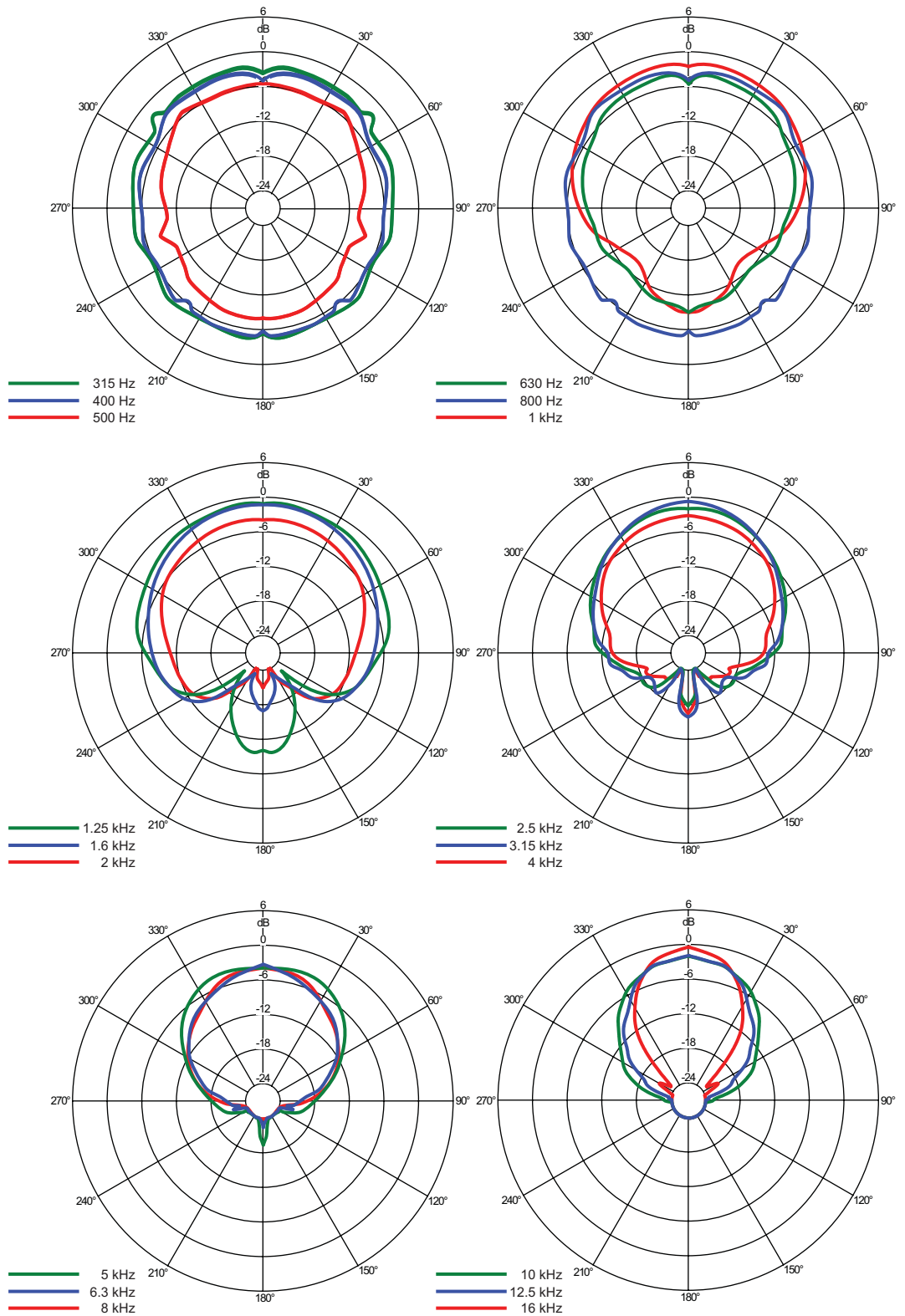
IMPEDANCE



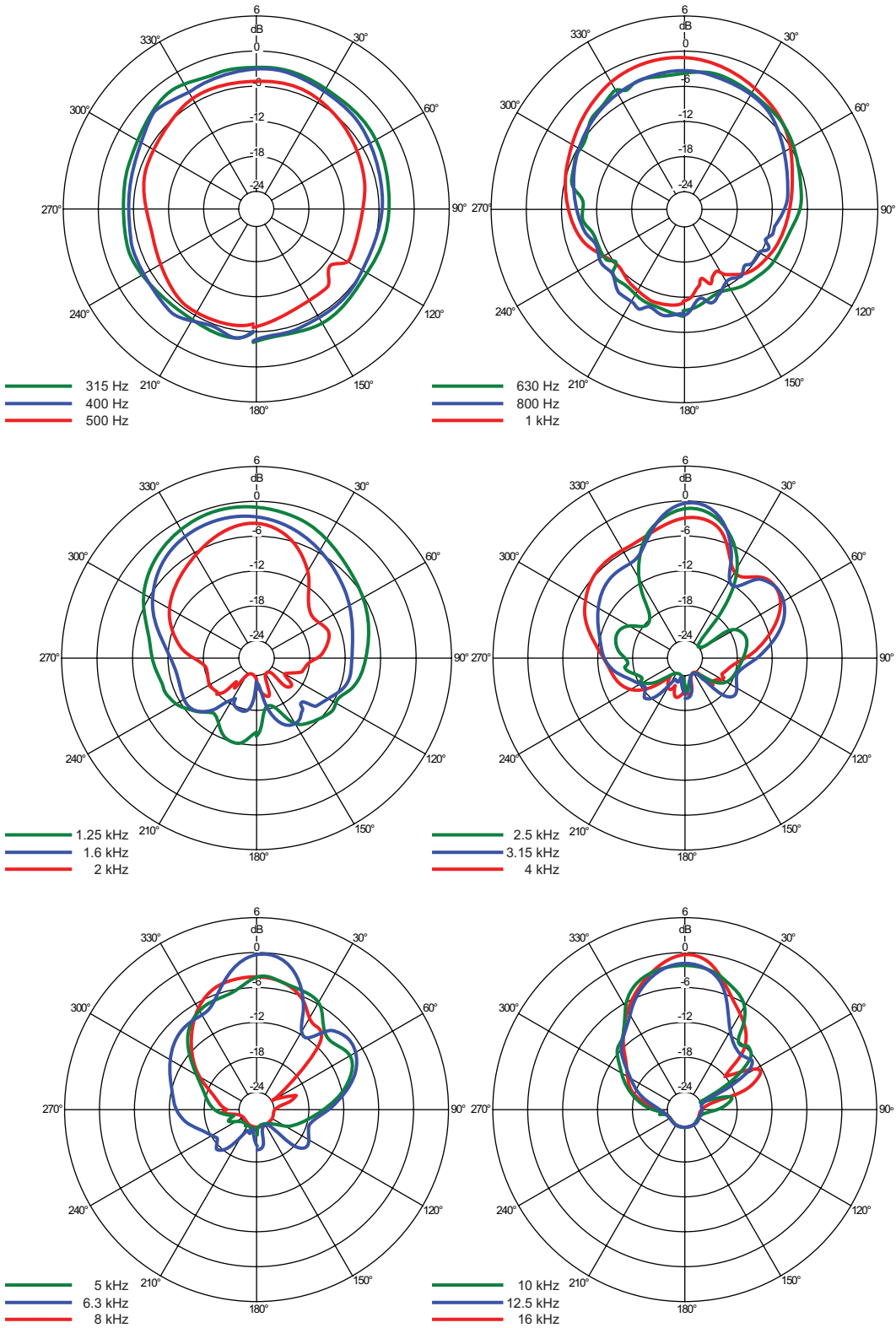
Impedance A constant current circuit was used to measure the impedance. **Frequency response** The frequency response shown was obtained by feeding a swept sine wave through the system in a half space environment. The position of the microphone was vertically on-axis at a distance of 2 metres, then scaled 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

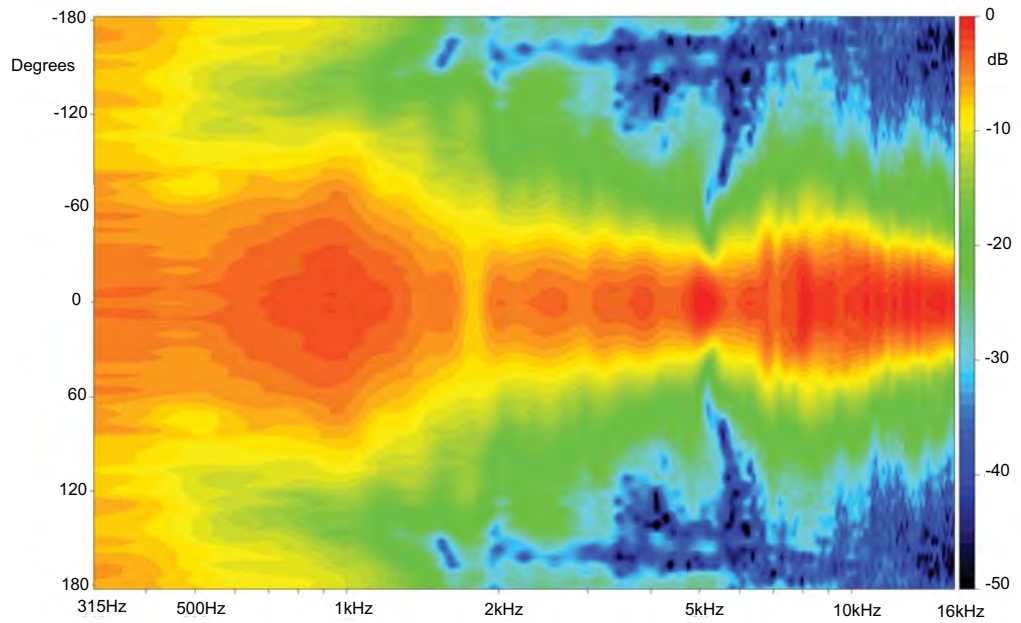
**HORIZONTAL THIRD
OCTAVE POLARS**



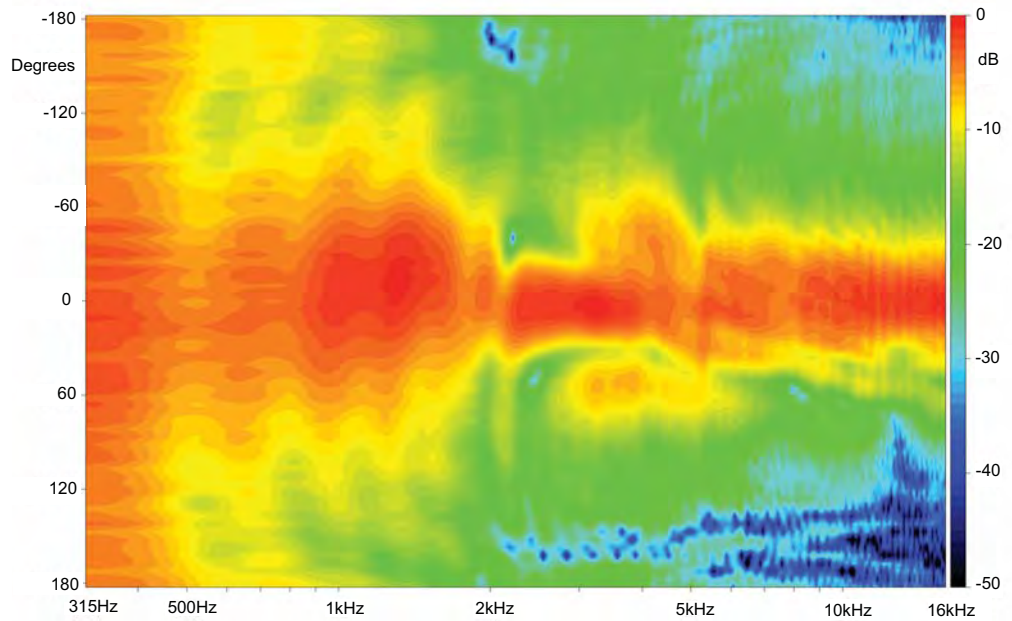
**VERTICAL THIRD
OCTAVE POLARS**



**HORIZONTAL
DIRECTIVITY**



**VERTICAL
DIRECTIVITY**



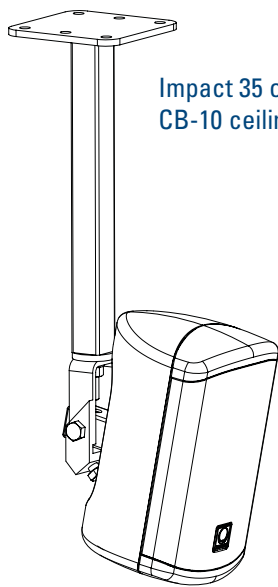
IMPACT SERIES ENGINEERING INFORMATION

The supplied wall bracket provides integral electrical connections to the loudspeaker, allowing the brackets to be installed independently of the loudspeakers being available on site. It allows for a wide range of adjustment angles in both horizontal and vertical planes.

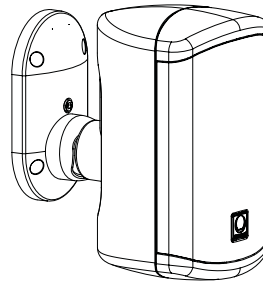
The cabinet can also be installed using CB-10 ceiling brackets and WB-10 wall brackets, as well as with OmniMount™ wall and ceiling brackets.

A threaded insert is also provided on the bottom of the cabinet, and this can be used to attach the loudspeaker to standard 3/8" microphone stand fittings.

INSTALLATION HARDWARE

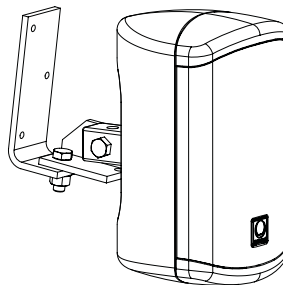


Impact 35 on
CB-10 ceiling bracket



Impact 35 on
WB-5 wall bracket

Impact 35 on
WB-10 wall bracket



**ARCHITECTURAL
& ENGINEER'S
SPECIFICATIONS**

The system shall be of the passive two-way type consisting of one 3.5" (89mm) low frequency loudspeaker and one 1" (25mm) ferrofluid-cooled neodymium high frequency tweeter and shall be supplied with an adjustable wall bracket providing integral electrical connections. 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 $\pm 3\text{dB}$ from 90Hz to 20kHz, and within $\pm 10\text{dB}$ from 70Hz to 20kHz. Nominal dispersion, at -6dB points, shall average $100^\circ\text{H} \times 100^\circ\text{V}$. Nominal impedance shall be 16 ohms. Power handling shall be 40 watts continuous, 80 watts program. Sensitivity, measured with 1 watt input at 1 metre distance on axis, mean averaged over stated bandwidth shall be 88dB. Maximum SPL (peak) measured with music program input at stated amplifier power shall be 110dB. Dimensions: 242mm x 145mm x 148mm (9.5" x 5.7" x 5.8"). Net weight: 2.2kg (4.8lbs). The loudspeaker system shall be the Turbosound Impact 35. 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

