

## 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 for its elegant styling and practical durability, Impact is ideal for many mobile sound system applications.

The Impact 50 is an ultra-compact 2-way passive enclosure featuring a custom reflex-loaded 5" LF driver and a 0.5" liquid-cooled HF tweeter, matched with an internal fourth order passive crossover network, for use in background music applications from bars and restaurants to retail shopping malls. It provides high quality sound reproduction from a compact and attractively styled injection-moulded enclosure.

The Impact 50 can also be used with the Impact 110.2 compact sub-bass enclosure to extend low frequency response in certain applications requiring wide bandwidth response. The Impact 110.2 provides left and

right stereo inputs and outputs in a single sub-bass unit by utilising a dual-coil low frequency driver. An internal passive crossover network routes mid and high frequencies to the Impact 50 satellite loudspeakers. Connection to the Impact 50 is via spring-loaded push terminals for simple and reliable hook-up.

The Impact 50 is also optionally available with a high quality internal line input transformer (Impact 50T) with multiple power taps, allowing the unit to be used in 70 volt line and 100 volt line multiple-speaker distributed sound systems.

A universal mounting bracket is supplied to enable the Impact 50 loudspeaker to be fixed to walls and ceilings. In addition, a range of cost effective hardware is available to enable the Impact 50 to be installed in a variety of permanently installed sound reinforcement system applications.

**Recommended complementary products:**  
Impact 110.2 sub-bass enclosure



### FEATURES

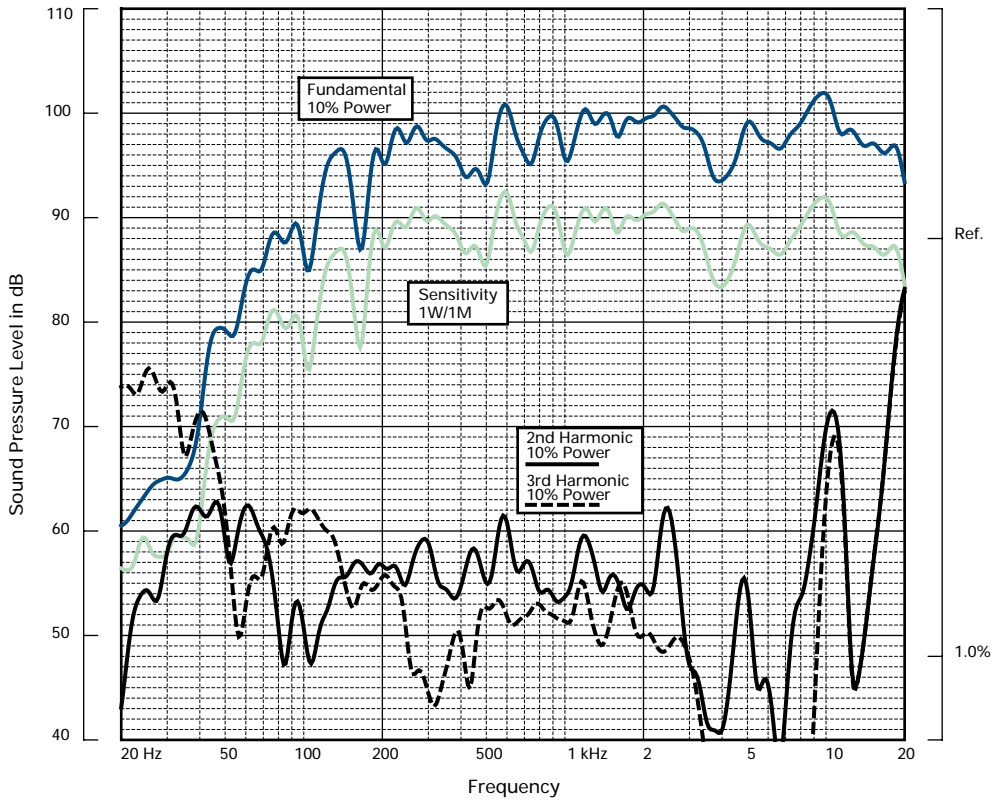
- Attractive injection moulded enclosure
- 100 watt power rating
- Full range response
- Range of colours

### APPLICATIONS

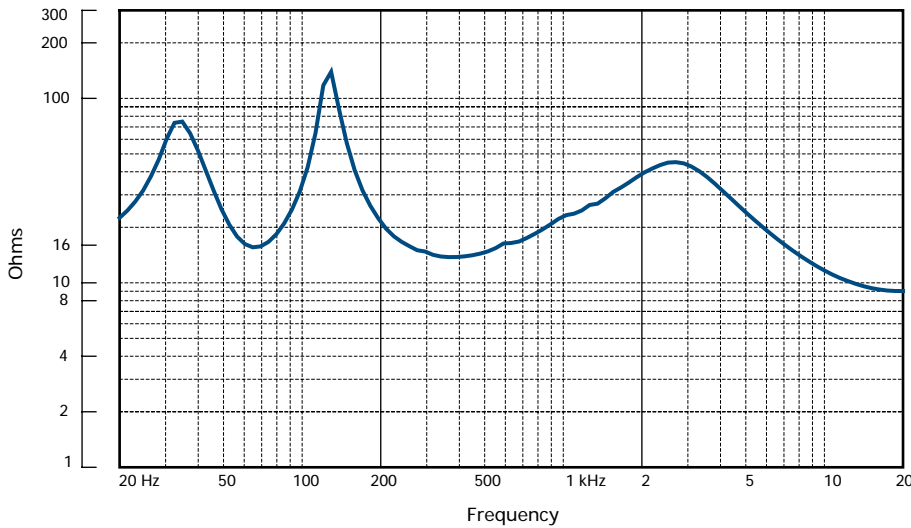
- Theatre and nightclubs
- Themed environments
- Retail shops
- Restaurants and cafés

<b>DIMENSIONS (HxWxD)</b>	288mm x 167mm x 148mm (11.3" x 6.6" x 5.8")
<b>NET WEIGHT</b>	2.2kg (4.8lbs)
<b>COMPONENTS</b>	1 x 5" (127mm) LF driver, 1 x 0.5" (14mm) liquid-cooled HF tweeter
<b>FREQUENCY RESPONSE</b>	80Hz to 20kHz @±4dB
<b>POWER HANDLING</b>	100 watts r.m.s., 200 watts program, 250 watts peak
<b>SENSITIVITY</b>	88dB SPL, 1 watt @ 1metre
<b>MAXIMUM SPL</b>	111dB continuous, 117dB peak
<b>NOMINAL IMPEDANCE</b>	16 ohms
<b>CROSSOVER</b>	Built in passive crossover network at 4kHz
<b>CONSTRUCTION</b>	Injection moulded enclosure finished in TurboBlue™
<b>GRILLE</b>	Black powder-coated perforated steel grille
<b>CONNECTORS</b>	Spring-loaded push terminals
<b>OPTIONS</b>	Optional colours available: White, Mid Grey, Black Internal 70/100 volt line transformer (Impact 50T), magnetically shielded (Impact 50S)
<b>SPARES AND ACCESSORIES</b>	WB-50 Universal wall and ceiling bracket (supplied) LS-50 LF driver for Impact 50 RC-50 Recone kit for LS-50 TW-50 HF tweeter for Impact 50 RD-50 Replacement diaphragm for TW-50 PX-50 Passive crossover for Impact 50 MG-50 Metal grille for Impact 50 TX-50 70 volt line transformer SM-50 Single point mount SB-50 Horizontal swivel bracket

**FREQUENCY RESPONSE**



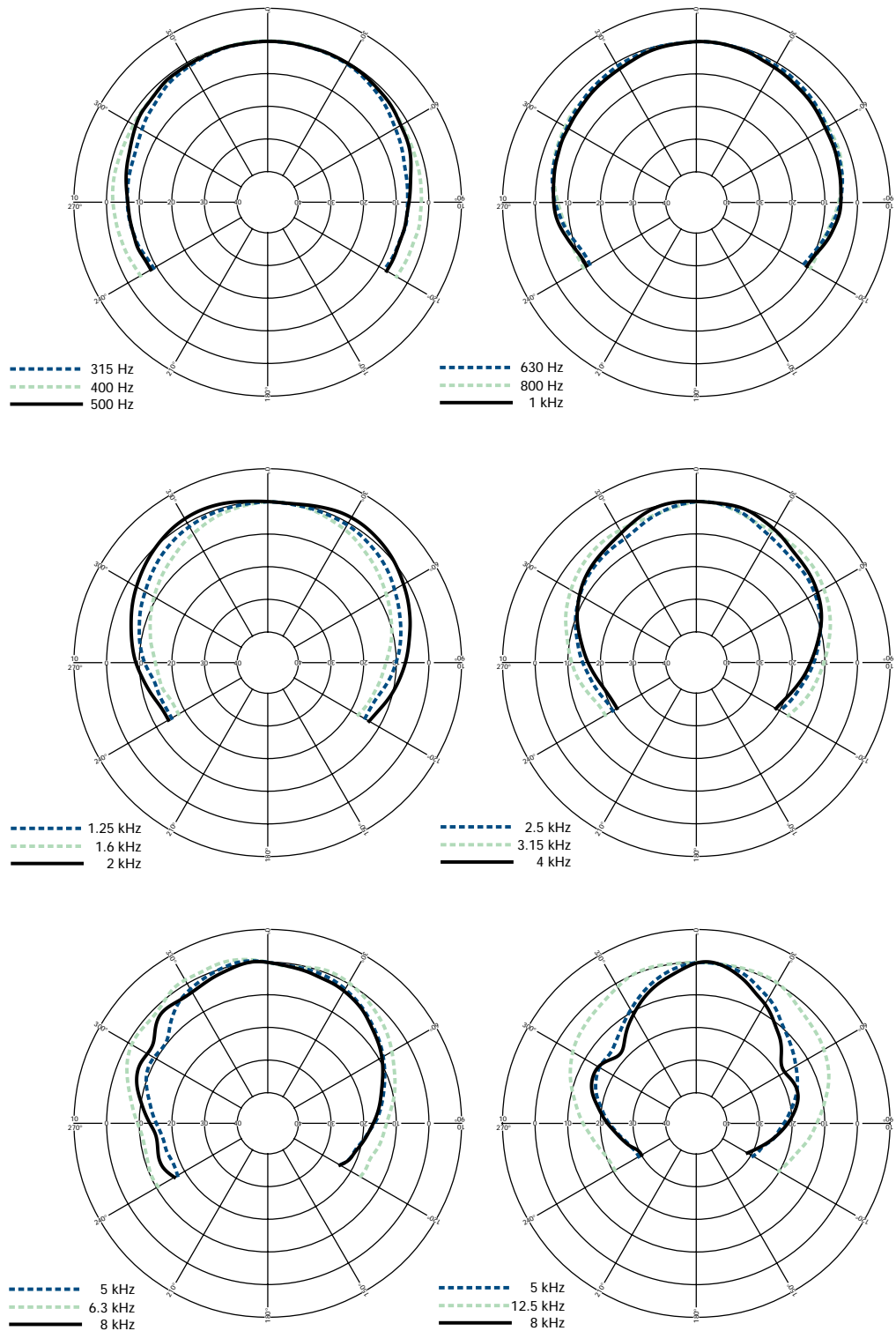
**IMPEDANCE**



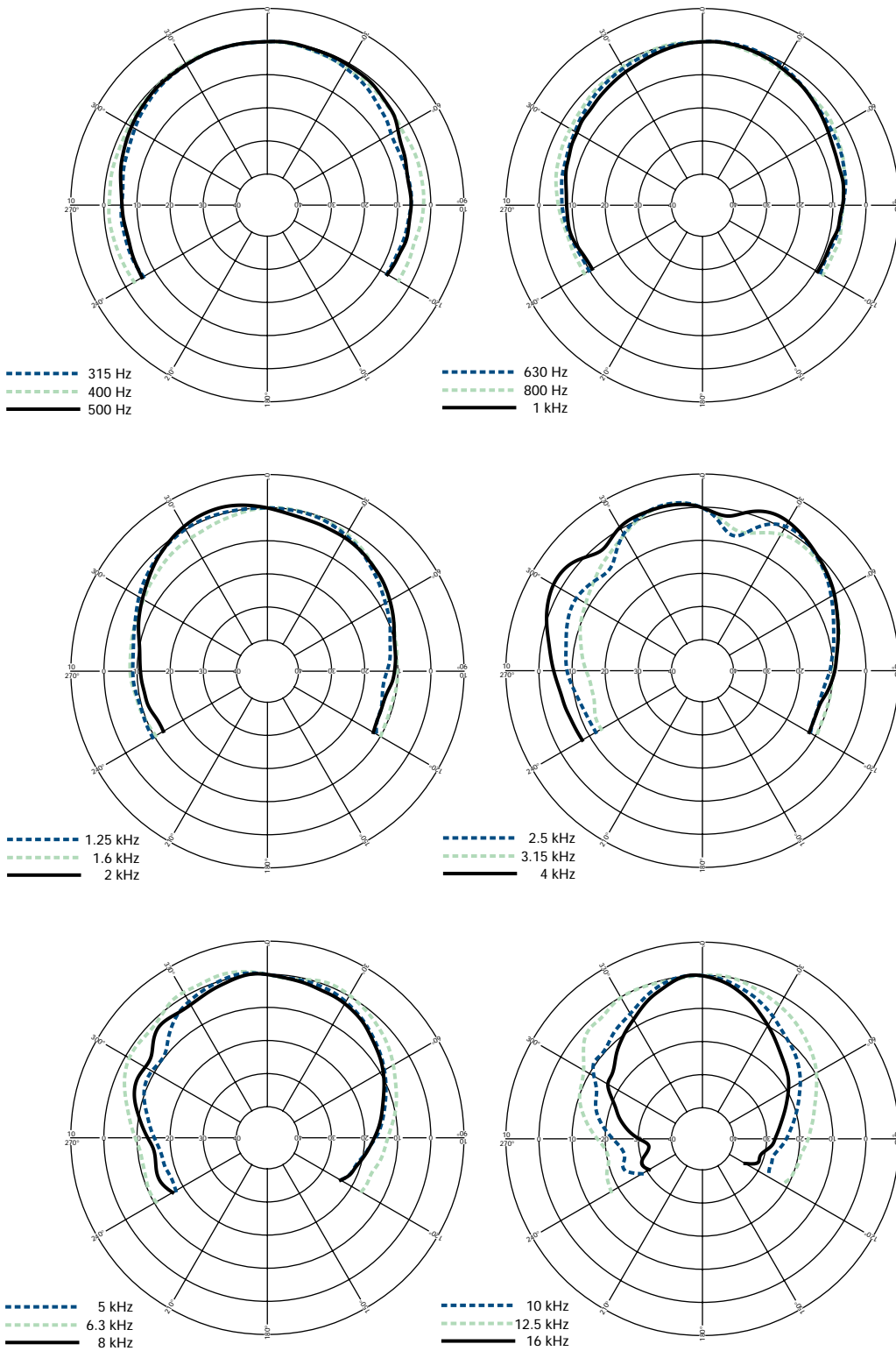
**Impedance** A constant current circuit was used to measure the impedance. **Frequency response** The frequency response shown was obtained by feeding a swept sine wave through the system in a half space environment. The position of the microphone was vertically on-axis at a distance of 2 metres, then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

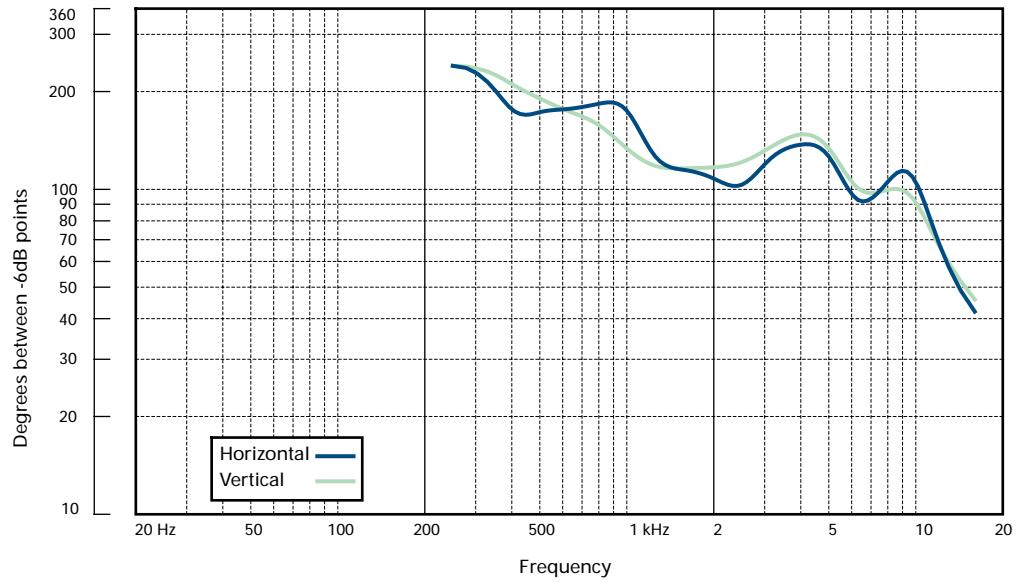
HORIZONTAL THIRD  
 OCTAVE POLARS



VERTICAL THIRD  
OCTAVE POLARS



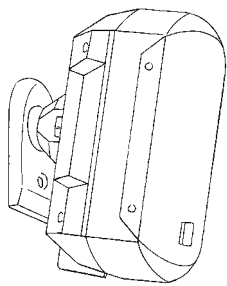
BEAMWIDTH



**IMPACT SERIES ENGINEERING INFORMATION**

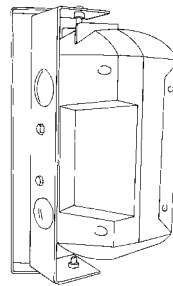
The Impact 50 is fitted with two integral M6 fittings on the rear of the cabinet which enable it to be permanently installed using the supplied WB-50 wall bracket, giving variable horizontal and vertical adjustment. The optional SB-50 swivel bracket can be attached via the same M6 fittings, and allows nearly 180° of horizontal rotation. The optional SM-50 single point mount enables the Impact 50 to be attached securely to a scaffold bar or truss, and also adapts for use with a microphone stand.

**INSTALLATION  
 HARDWARE**

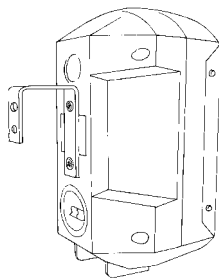


WB-50

SB-50



SM-50



**ARCHITECTURAL  
& ENGINEER'S  
SPECIFICATIONS**

The system shall be of the two-way passive type consisting of one 5" (127mm) low frequency loudspeaker and one 0.5" (14mm) high frequency tweeter. 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  $\pm 4\text{dB}$  from 80Hz - 20kHz. Nominal impedance shall be 16 ohms. Power handling shall be 100 watts r.m.s., 200 watts program, 250 watts peak. 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 117dB. Dimensions: 288mm x 167mm x 148mm (11.3" x 6.6" x 5.8"). Net weight: 2.2kg (4.8lbs). The loudspeaker system shall be the Turbosound Impact 50. 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**

