

MUSIC HORN LOUDSPEAKERS

MSH30



DESCRIPTION:

The HEINRICH MSH30 and MSH30T are unique re-entrant, two-way horn speakers covering a wide frequency range. They are complemented with a wide dispersion angle for excellent sound and speech reproduction even in the most difficult acoustical environments.

APPLICATION:

Typical applications are car parks, sport stadiums, train stations and similar locations where high speech quality along with excellent music reproduction are required. The wide angle dispersion means fewer speakers are required compared with other spot-type of speakers. Two drivers covering both the frequency ranges shall provide excellent sound quality where music is the criteria.

PHYSICAL CONSTRUCTION:

The speakers are finished in RAL 7035 color, and their ABS chassis make them stylish and light-weight. The MSH30 supports both 100V and 70V installations, with transformers tapped on different power setting with (3dB steps). The speaker can be mounted on aluminum brackets that make it suitable for most applications. The 'C' version can be supplied as BS5839 part 8 voice alarm compliant - meaning that a ceramic terminal and thermal fuse shall be fitted to comply with the mentioned standards.

ACOUSTIC MODELING:

The MSH30/30T speakers support EASE, CATT and ULYSSES models for acoustical studies. This means the acoustic models can be created to simulate the sound quality and distribution prior to installation. As per BS 5839 - Part 8, EN60849 and NFPA 72 a minimum of 0.5 RaSTI is required to achieve the required intelligibility.

APPROVALS & STANDARDS:

All HEINRICH loudspeakers have undergone tough testing procedures to ensure that all products can operate at their rated power in compliance with IEC60268 - Part 5.

In addition, all the fire-rated products have undergone actual fire tests to ensure compliance with BS5839 Part 8.

The MSH30 are IP65 rated in accordance with IEC60529. The high quality ABS complies with UL94V0 class.

ARCHITECT & ENGINEERING SPECIFICATION:

The unit shall be the HEINRICH Model MSH or approved equal.

Assembly shall be comprised of a high density phenolic resin diaphragm housed in a flared oblong chamber 422mm (wide) x 260mm (high) x 287.5mm (deep) and factory fitted 30 Watt / 100V line transformer.

The loudspeaker horn enclosure shall be constructed of high impact ABS with UV inhibitors complying to class UL94V0 and non-perishable sealing gaskets to avoid the ingress of water or dust (minimum standard acceptable IP65 in accordance with IEC 60529).

The unit will be mounted via a hipped aluminum stainless steel 'U' bracket and fixings.

The loudspeaker shall have a dispersion angle of 60 degree vertical, 100 degree horizontal at 1kHz. The horn loudspeaker shall have a minimum frequency response of 70Hz - 16.5kHz and high sensitivity of 99dB @ 1 meter, 1 watt using test signal bandwidth 100Hz - 10 kHz in accordance with IEC 60268.

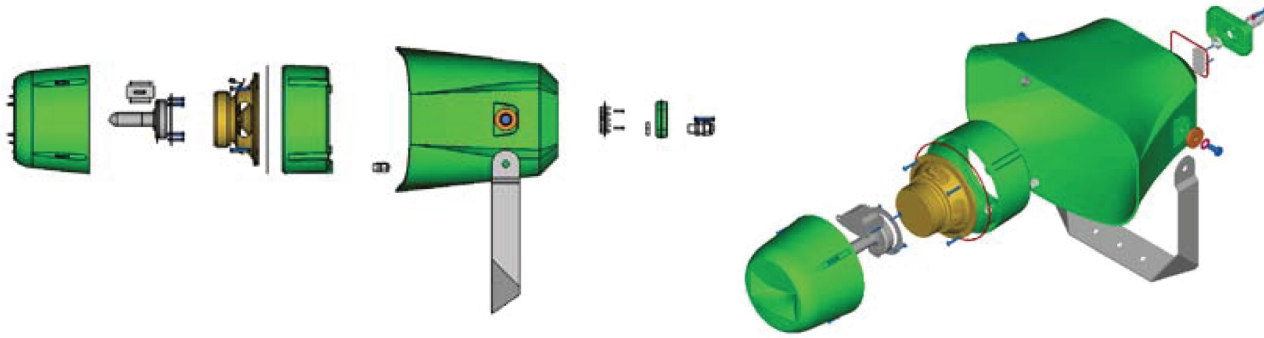
The transformer shall be 100V line with 3dB power taps of 30, 15, 7.5, and 3.75 watts to be clearly marked on the assembly.

Cable fitting shall be via 1 x 16mm cable gland entry mounted on a removable sealed rear cover plate.

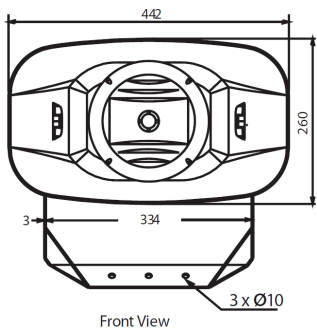
The 'C' version of the MSH30 shall be compliant with BS5839 - Part 8 (Voice Alarm Standard) to include all the above features with the addition of thermal fuse and ceramic terminals to take 2 x 2.5mm² cables. Fire-rated cable tails must be fitted for full compliance with BS5839 - Part 8.

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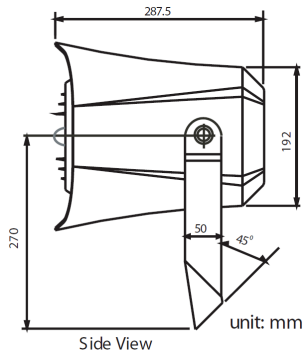
3D EXPLODED VIEW



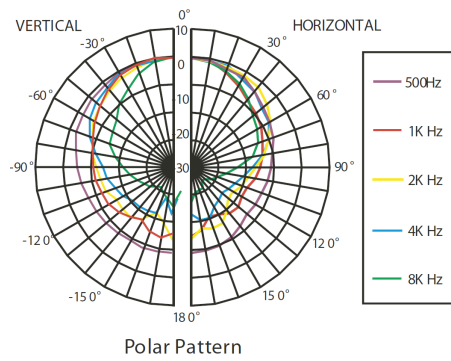
Front View



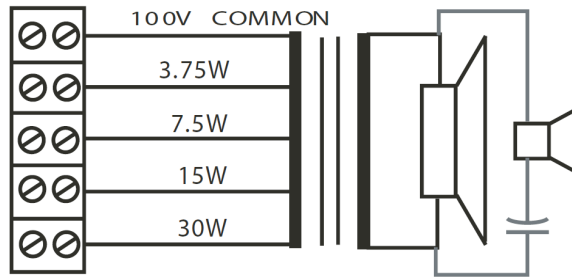
Side View



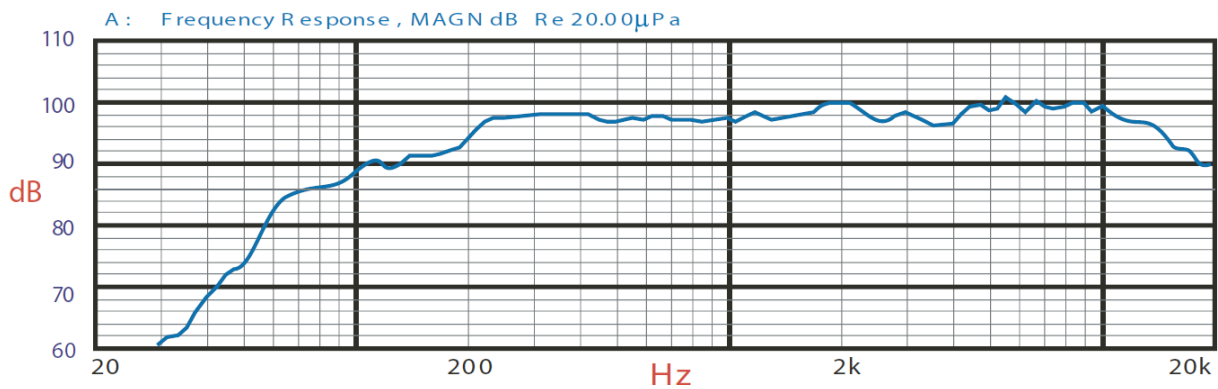
Polar Diagram



Circuit Diagram



Frequency Response



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Technical Specification

Rated power, Watts	30
Tapping 100 volt line, Watts	30/15/7.5/3.75
Transformer Impedance, Ohms, 100V	333/667/1.33K/2.66K
Tappings 70.7 volt line, Watts	15/7.5/3.75/1.875
Driver impedance, Ohms	8
Effective frequency range, Hz (BS6840)	70 - 16,500
S.P.L. @ 1m, 1 watt, dB, Test Signal Bandwidth 100Hz-10kHz	99
S.P.L. @ Full power Octave Bandwidth, dB	114
Acoustic Power (dB-PWL@1 watt)1k/2kHz, dB	91/94
Dispersion at 1k/2k Hz, Degrees	100 / 120 (horizontal), 60 / 120 (vertical)
Directivity Q factor, 1k/2kHz	8.50 / 6.50
Dimensions front and depth, mm	442 x 260 x 287.5
Net weight, Kgs	5.5
Colour/Finish	Grey RAL7035
Material	ABS Plastic with UV inhibitors
Mounting	Aluminium U bracket

As per our company policy one of the constant Product improvement the right is there for reserved to modify product specifications without prior notice