**Penton Audio USA - Tele: 888/883-8383 Website: www.penton-usa.com Fax 888/821-2121**

**MSH60T**

**MSH30T**

**Features**
- Wide Frequency Response for Voice or Contemporary Music
- 116 dB or 112 dB Output
- Short-Throw Dispersion
- ABS Housing Weather-Sealed for Outdoor Use
- Stainless Steel Hardware

**Description**

Penton Audio’s MSH60T and MSH30T are full-range, short throw, all-weather music projectors designed to be used in 70.7-volt systems. The sturdy ABS housing is protected from the elements with molded-in UV inhibitors, a bird/insect screen and stainless steel hardware.

Low frequencies are reproduced by a 6-1/2” backward firing cone speaker complete with a rubber surround (treated to withstand moisture), while a horn tweeter reproduces the high frequencies. These models offer long-term reliability and even coverage for distributed audio.

Access to the internal connector block is via a cap secured with a Phillips-head screw. A gland nut allows a 9 mm diameter cable entry and a silicone “O” ring seals the unit from the rear.

Visually identical, each is finished in non-reflecting cool gray with a matching aluminum “U” bracket.

**Application**

The MSH series has been developed for situations requiring cost-effective quality sound at high sound pressure levels (SPL) in occasional unfriendly weather conditions.

They are ideal for sporting and recreational areas including public pools, fairs, celebrations, park districts as well as athletic venues such as tennis courts, baseball/football/soccer fields and competitive stadiums of all types. Commercial industrial uses include transportation hubs, corporate picnic areas, factories and outdoor showrooms including auto dealership lots.

**Specifications**

- **Speakers**
  - HF: Moving Coil Tweeter
  - LF: 6-1/2” (165 mm)

- **Frequency Response (See Fig 1)**
  - MSH60T: 190-20,000 Hz ± 5 dB
  - MSH30T: 190-18,000 Hz ± 5 dB

- **Power Handling (Raw Driver)**
  - MSH60T: 75 Watts
  - MSH30T: 40 Watts

- **SPL @ 1w 1m**
  - MSH60T: 99 dB
  - MSH30T: 97 dB

- **SPL @ Full Power, 1m**
  - MSH60T: 116 dB
  - MSH30T: 111 dB

- **Dispersion @ 2 kHz (6 dB Down):**
  - 112° (V) x 90° (H)

- **Directivity Q Factor @ 2 kHz:**
  - 6.5

- **Low-Frequency Speaker Design:**
  - Single Cone

- **Cone Material:**
  - Coated Paper with Rubber Surround

- **Magnet Weight**
  - LF: 17 oz
  - HF: 11 oz

- **Transformer Max Insertion Loss:**
  - 0.5 dB

- **70.7-Volt Transformer Taps (Watts)**
  - MSH60T: 60, 30, 15, 7.5
  - MSH30T: 30, 15, 7.5, 3.75

- **70.7-Volt Transformer Impedance**
  - MSH60T: 83, 167, 333, 667
  - MSH30T: 167, 333, 667, 1.33K

- **Connection:**
  - Internal Terminal Block with Gland Entry for 20 mm Cable

- **Supplied Mounting Accessories:**
  - Stainless Steel Bracket Bolts

- **Housing Material:**
  - Molded ABS with UV Inhibitor

- **Accessory Included:**
  - Stainless Steel Bird/Insect Screen

- **Finish:**
  - Cool Gray

- **Approvals:**
  - CE; IP65

- **Dimensions, Inch (mm):**
  - 17.40 x 10.24 x 12 (w/gland nut) (442 x 260 x 305)

- **Net Weight Lbs (Kgs)**
  - MSH60T: 13.21 (6.0)
  - MSH30T: 12.2 (5.5)
**ARCHITECTS' AND ENGINEERS' SPECIFICATIONS:**

Unit shall be Penton Audio USA Model (MSH60T/MSH30T) or approved equal. Assembly shall be weather-resistant and comprised of a horn-loaded 6-1/2" coated paper-cone loudspeaker and separate moving coil dynamic tweeter. It shall have a 112° by 90° dispersion. Unit shall include an internal 70.7-volt transformer housed inside a molded ABS weather-sealed housing, protected by UV inhibitors and stainless steel hardware. Transformer insertion loss is not to exceed 0.5 dB.

**MSH60T horn loudspeaker** shall be rated at 75 watts and 99 dB at 1 watt, 1 meter. It shall have a 70.7-volt transformer with 60, 30, 15 and 7.5-watt power taps.

**MSH30T horn loudspeaker** shall be rated at 40 watts and 97 dB at 1 watt, 1 meter. It shall have a 70.7-volt transformer with 30, 15, 7.5 and 3.75-watt power taps.

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**Fig 1: Frequency Response**

- 1000 Hz
- 2000 Hz
- 4000 Hz
- 8000 Hz

**Fig 2: Polar Patterns**

**Fig 3: Front View**

**Fig 4: Side View**

**Fig 5: Circuit Diagram**