

PH10T PH20T PH30T

Constant-Voltage Paging Projectors



■ FEATURES

- High-efficiency Output
- Choose 10, 20 or 30-watt Output Models
- Weather Resistant
- Economical Design

■ DESCRIPTION

The economical, high-value Penton Audio PH Series paging projectors are well-designed, efficient, but economical. These 10, 20 and 30-watt double reentrant horns provide sound penetration and dependability seldom found in popularly priced models.

Each unit has a 70.7-volt transformer sealed inside its high-strength, light-weight, ABS housing that is protected against the elements by molded-in UV inhibitors. Its 17" five-conductor wire enters the housing through a gland nut designed to keep the moisture out.

All PH Series horns use lightweight high-density, phenolic-resin diaphragms and ceramic magnets.

This family is resistant to salt-laden air and is noncorrosive. Mounting is via an epoxy-coated, stainless steel "U" bracket held in place by stainless steel hardware, allowing its position to be maintained despite unusually high wind velocity.

■ APPLICATION

The PH Series paging projectors are at home for indoor or outdoor situations. Unique applications for the PH horns is the ability to be installed near seashores made possible by the corrosive-resistant materials used in its design.

Their internal 70.7-volt transformers allow long wire runs without severe line loss and/or daisy-chained connection of multiple units to the same amplifier with 70.7-volt output.

Typical applications are schools, gas stations, industrial property, ballparks, factories, recreational districts, fair-grounds, air shows or wherever high efficiency and clear communication is of prime importance.



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■ SPECIFICATIONS

• POWER HANDLING

PH10T: 10 watts
PH20T: 20 watts
PH30T: 30 watts

• FREQUENCY RESPONSE (SEE FIG 1):

PH10T: 500 - 6,000 Hz \pm 10 dB
PH20T: 330 - 7,000 Hz \pm 10 dB
PH30T: 650 - 5,000 Hz \pm 10 dB

• SPL @ 1w 1m

PH10T: 102 dB
PH20T: 105 dB
PH30T: 107 dB

• SPL @ FULL POWER, 1m

PH10T: 112 dB
PH20T: 118 dB
PH30T: 121 dB

• DIAPHRAGM MATERIAL:

High-density Phenolic Resin

• MAGNET WEIGHT (CERAMIC):

PH10T: 7.9 oz
PH20T: 10.0 oz
PH30T: 13.6 oz

• APPROVALS:

CE; IP66

• 70.7-VOLT TRANSFORMER TAPS

PH10T: 10, 5, 2.5, 1.25 watts
PH20T: 20, 10, 5, 2.5 watts
PH30T: 30, 15, 7.5, 3.75 watts

• 70.7-VOLT TRANSFORMER IMPEDANCE

PH10T: 500, 1K, 2K, 4K
PH20T: 250, 500, 1K, 2K
PH30T: 167, 333, 660, 1.32K

• TRANSFORMER MAX INSERTION LOSS:

PH10T: 0.3 dB
PH20T: 0.4 dB
PH30T: 1.0 dB

• TRANSFORMER TAP CHANGE:

17" 5-conductor cable

• SUPPLIED MOUNTING ACCESSORIES:

Stainless Steel "U" Bracket Epoxy Coated in Matching White

• FINISH:

White

• DIMENSIONS, INCH (MM):

PH10T: 5.47 x 7.87 (139 x 200)
PH20T: 7.99 x 10.0 (203 x 254)
PH30T: 9.37 x 11.3 (238 x 287)

• NET WEIGHT LBS (KGS):

PH10T: 2.87 (1.30)
PH20T: 4.19 (1.90)
PH30T: 5.07 (2.30)

PH10T

PH20T

PH30T

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS:

Unit shall be Penton Audio USA Model (PH10T, PH20T, PH30T) or approved equal. Horn speaker shall consist of a weather-resistant ABS housing, high-density phenolic resin diaphragm, internal 70.7-volt transformer, epoxy-coated stainless steel mounting bracket, stainless steel hardware and 17" five-conductor wire.

(PH10T shall have a frequency response of 500-6,000 Hz and be rated at 10 watts with transformer taps at 10, 5, 2.5 and 1.25 watts. Sensitivity shall be 102 dB @ 1 watt, 1 meter.)

(PH20T shall have a frequency response of 330-7,000 Hz and be rated at 20 watts with transformer taps at 20, 10, 5 and 2.5 watts. Sensitivity shall be 105 dB @ 1 watt, 1 meter.)

(PH30T shall have a frequency response of 650-5,000 Hz and be rated at 30 watts with transformer taps at 30, 15, 7.5 and 3.75 watts. Sensitivity shall be 107 dB @ 1 watt, 1 meter.)

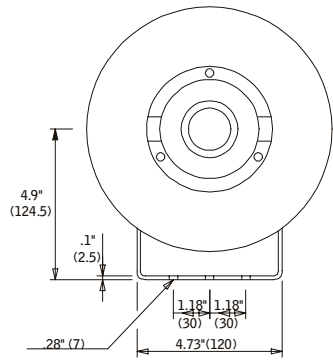


Fig 3: Front View

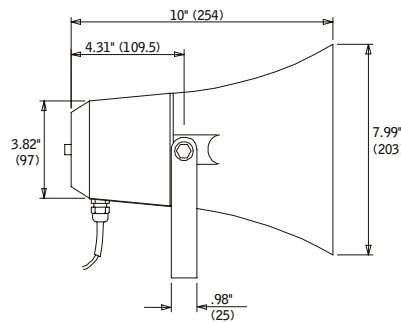


Fig 4: Side View



COLOR	PH30T	PH20T	PH10T
Red	30W	20W	10W
Blue	20W	10W	5W
Orange	10W	5W	2.5W
Yellow	5W	2.5W	1.25W
Black	COM	COM	COM

Fig 5: Circuit Diagram

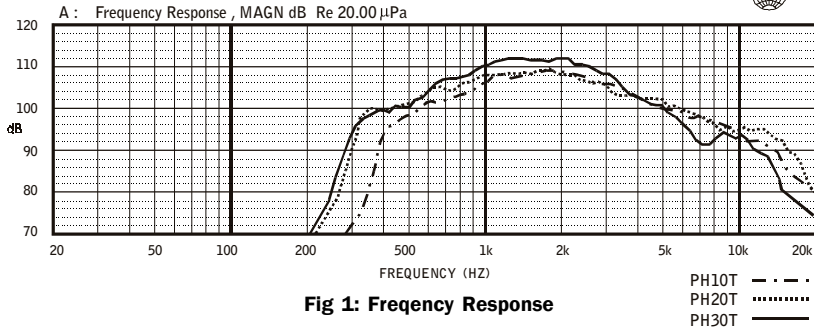


Fig 1: Frequency Response

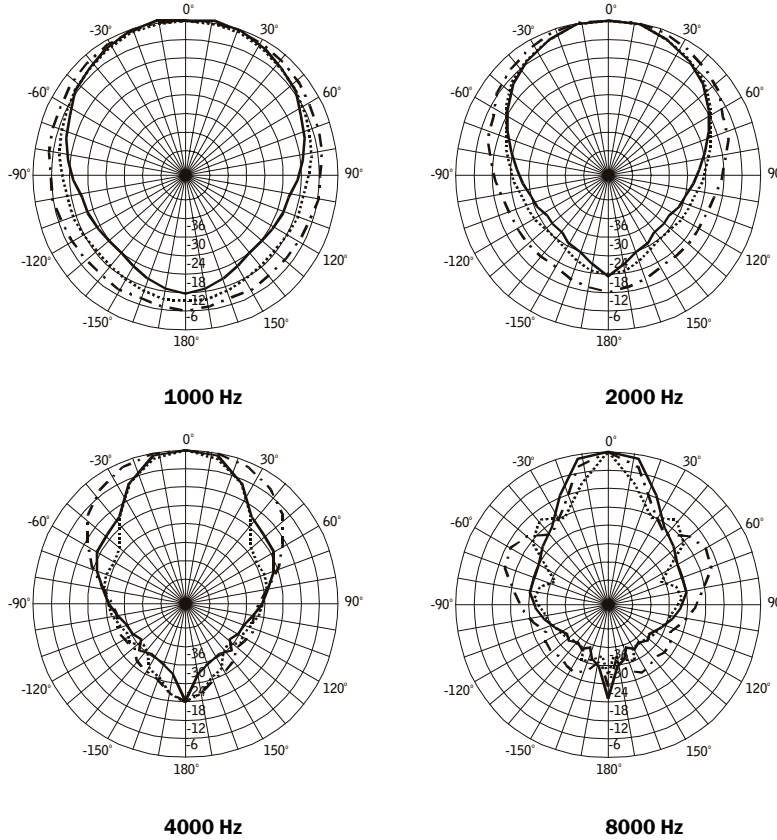


Fig 2: Polar Patterns

