**FEATURES**

- Coaxial Design for Great High-Frequency Dispersion
- 3” Cone Tweeter
- 25/70.7-volt Transformer
- Smooth Frequency Response

**DESCRIPTION**

The Penton Audio SP816TCO is a 20-watt, 8” full-range speaker assembly. This premium model uses a coaxial driver with 3-inch-wide cone tweeter for smooth dispersion and long-term reliability.

High-quality components are used in the manufacture of each Penton speaker. These include steel baskets with a rust-preventative coating, twin cones (on the tweeter an aluminum voice coil) and high-temperature copper voice coil on the low-frequency driver.

This family uses speaker baskets that mount on standard bolt circles of 7.625” (195 mm). They may be mounted in various types of speaker enclosures and mate with nearly all popular mounting accessories including Penton G8M (CRS) or G8P (ABS) grilles, and BBX8B enclosure with BRG8B tile bridge. Standard mounting fasteners are also available.

The assembly uses a pre-mounted 5-watt, 70.7/25-volt transformer with an insertion loss no higher than 1.5 dB. 6” five-conductor, color-coded wire provides easy connection via bare ends to 5, 2, 1, 0.5 and 0.25 watt taps.

SP Series coaxial loudspeakers are applicable for voice announce, background/foreground music and signal reproduction.

**SPECIFICATIONS**

- **CONE SPEAKER SIZE:**
  - 8” (205 mm)

- **FREQUENCY RESPONSE (See Fig 1):**
  - 40-20,000 Hz ± 5 dB

- **POWER HANDLING (Raw Driver):**
  - 20 watts

- **DRIVER SECONDARY IMPEDANCE:**
  - 8 ohms

- **SPL @ 1w 1m:**
  - 94 dB

- **DISPERSION @ 2 kHz (6 dB Down):**
  - 120°

- **DIRECTIVITY Q FACTOR @ 2 kHz:**
  - 6.2

- **CONE DESIGN:**
  - Coaxial

- **CONE MATERIAL:**
  - Paper, Self-edged Surround

- **VOICE COIL DIAMETER, INCH (MM):**
  - Low Frequency: 1.0 (25.4)
  - High Frequency: 0.5625 (14.3)

- **VOICE COIL MATERIAL:**
  - Low Freq: High-temperature Copper
  - High Freq: Aluminum

- **MAGNET WEIGHT (CERAMIC):**
  - Low Frequency: 10 oz
  - High Frequency: 2 oz

- **FLUX DENSITY:**
  - 11,500 Gauss

- **CONNECTION:**
  - Via Wire Nuts

- **70.7-VOLT XFRMR TAPS/IMPEDANCE:**
  - Yellow: 4 watts 1.25K
  - Green: 2 watts 2.5K
  - Blue: 1 watt 5K
  - Violet: 0.5 watt 10K
  - White: 0.25 watt 20K
  - Black: Common ----

- **25-VOLT XFRMR TAPS/IMPEDANCE:**
  - Brown: 4 watts 156
  - Red: 2 watts 312
  - Orange: 1 watt 625
  - Yellow: 0.625 watt 1.25K
  - Green: 0.25 watt 2.5K
  - Black: Common ----

- **TRANSFORMER MAX INSERTION LOSS:**
  - 1.5 dB

- **TRANSFORMER TAP CHANGE:**
  - 5-1/2” Stripped & Tinned Leads

- **SUPPLIED MOUNTING ACCESSORIES:**
  - Available but Not Included

- **SUGGESTED MOUNTING ACCESSORIES:**
  - G8M - CRS Grille
  - G8P - Molded ABS Grille
  - BBX8B - Steel Backbox
  - BRG8B - Tile Bridge

- **DIMENSIONS, INCH (MM):**
  - 8.125 x 3.27 (205 x 83)

- **NET WEIGHT LBS (KGS):**
  - 2.60 (1.18)
Unit shall be Penton Audio USA Model SP816TC0 or approved equal. Speaker shall consist of a 20-watt coaxial speaker and attached 70.7/25-volt transformer. The low-frequency driver shall have a 10-ounce ceramic magnet and a high-temperature copper voice coil. The high-frequency driver shall have a 2-ounce ceramic magnet, paper cone and aluminum voice coil. The frequency response range shall be 40-20,000. Sensitivity shall be a minimum of 94 dB @ 1 watt, 1 meter.

The SP816TC0 transformer shall have wattage taps of 4, 2, 1, 0.5 and 0.25. Insertion loss shall not exceed 1.5 dB.

Leads shall be stripped and tinned and 5-1/2" in length.