# RCS6XT

### 6" Coaxial Torsion-Mount Speaker Package



#### **■** FEATURES

- Hardware-free Metal Grille for Prestige Appearance
- Terminal Block Connection
- Torsion-mount Assembly for Fast/Easy Installation
- Coaxial for Smooth High-Frequency Dispersion
- Dual 70.7/25-volt Xfrmr with Spade-lug Taps

#### ■ DESCRIPTION

Aesthetic excellence, a robust 10-ounce magnet and a superb 1" Mylar dome tweeter complete with a 1/2" moving coil and neodymium magnet make Penton Audio's RCS6XT a premium speaker package. Unit combines the wide dispersion associated with 6" loudspeakers with torsion-spring installation advantages and a versatile 8-watt, 70.7/25-volt transformer.

This speaker package has a two-part, torsion-mount, CRS grille baffle with a steel mesh grille to present a stylish hardware-free look. Its terminal block connection and spade-lug trans-former taps combined with torsion properties allow quick and easy installation and/or wattage changes.

The popular round speaker package is finished in non-reflecting ceiling white.

#### ■ APPLICATION

6" speakers are a fine tool for the sound contractor and audio designer. When ceiling heights don't warrant the use of an 8" speaker, a 6" loudspeaker will typically provide better coverage at less cost but with significantly more bass than a 5".

The 6" RCS speaker package is an fine choice for value-designed in-ceiling audio projects. The speakers are designed for commercial, industrial and institutional applications including offices, banks, schools, restaurants, hotel/motels, malls-wherever precise transmission of audio is required.

#### **■** SPECIFICATIONS

- CONE SPEAKER SIZE: 6-1/2" (165 mm)
- FREQUENCY RESPONSE (SEE Fig 1):  $60-18,000~\text{Hz} \pm 6~\text{dB}$
- POWER HANDLING (RAW DRIVER): 20 watts
- **SPL** @ **1**w **1**m: 92 dB
- DISPERSION @ 2 kHz (-6 dB):  $120^{\circ}$
- DIRECTIVITY Q FACTOR @ 2 KHz: 5.1
- CONE DESIGN: Coaxial
- TWEETER TYPE:
  - 1" Mylar Dome with 1/2" Moving Coil and Neodymium Magnet
- CONE MATERIAL:

Paper with Rubber Surround

- MAGNET WEIGHT: 10 oz
- TRANSFORMER MAX INSERTION LOSS:
   0.8 dB
- TRANSFORMER TAP CHANGE: Movable Spade Lug
- CONNECTION: Via Terminal Block

- **70.7-VOLT TRANSFORMER TAPS:** 8, 4, 2, 1, 0.5
- **70.7-VOLT TRANSFORMER IMPEDANCE:** 625, 1.25K, 2.5K, 5K, 10K
- **25-VOLT TRANSFORMER TAPS:** 8, 4, 2, 1, 0.5
- **25-VOLT TRANSFORMER IMPEDANCE:** 78, 158, 312, 625, 1.25 K
- APPROVALS:
- MOUNTING:
   Quick-Release Torsion Springs
   Locked onto Baffle
- BAFFLE MATERIAL:

Two-part CRS Steel with Steel Mesh

EINICH.

White, Non-reflective, Baked Epoxy

- SUGGESTED MOUNTING ACCESSORIES:
   BBX6 Steel Backbox
   BRG6 Tile Bridge
   MBK6 Mounting Bracket
- **DIMENSIONS**, **INCH (MM)**: 9.41 x 1.97 (239 x 50)
- NET WEIGHT LBS (KGS): 2.29 (1.04)

### **RCS6XT**

## ■ ARCHITECTS' AND ENGINEERS' SPECIFICATIONS:

Unit shall be Penton Audio USA Model RCS6XT or approved equal. Assembly shall be comprised of a coaxial 6" loudspeaker with 10-ounce magnet and 1" Mylar dome tweeter complete with a 1/2" moving coil and neodymium magnet. It shall also have a pre-mounted transformer and two -part, non-reflective white baffle with no visible hardware.

Two-part baffle shall be CRS with inner steel mesh grille. Baffle shall be round with torsion-spring mounting.

Loudspeaker shall have wide-angle 120° dispersion at 2000 Hz. Cone shall be a damped, high-compliance type with a smooth extended response over a range of 60-18,000 Hz. Sensitivity shall be a minimum of 92 dB @ 1 watt, 1 meter.

Included shall be a 70.7/25-volt transformer with power taps of 8, 4, 2, 1 and 0.5 watts clearly marked on the assembly. Insertion loss shall not exceed 0.8 dB.

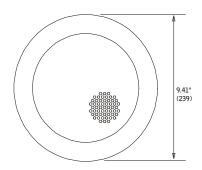


Fig 3: Front View

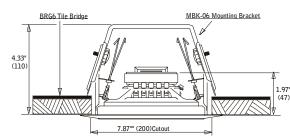


Fig 4: Side View

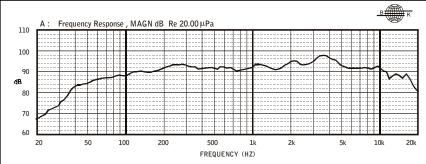
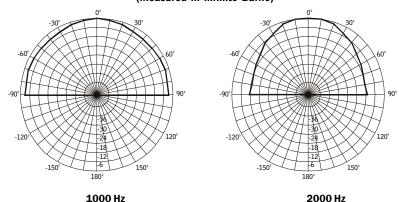
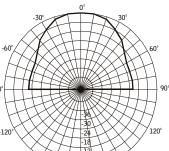


Fig 1: Frequency Response (Measured in Infinite Baffle)





4000 Hz

90°

-60°
-60°
-120°
-150°
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8000 Hz

Fig 2: Polar Patterns

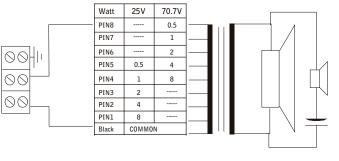


Fig 5: Circuit Diagram

Website: www.penton-usa.com

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Specifications subject to change without notice