

# Meyer Sound



# CQ™ Series

## Self-Powered Loudspeaker

Patents Pending

### Features

Wide and narrow coverage patterns for CQ-1 (low Q) and CQ-2 (high Q)

Self-contained control electronics, amplifiers, and drivers

Dual-channel 1240 Watt amplifier (620 Watts per channel)

Active balanced input circuit

Active crossover with optimized pole-zero filter combinations

**Intelligent AC™** System

TruPower™ Limiting (TPL)

Compatible with the **Remote Monitoring System™** (RMS)

The **CQ™ Series** self-powered loudspeakers contain independent amplifier and control electronics for one 15" bass-reflex cone driver and one 4" diaphragm horn driver in a compact enclosure. This integrated design eliminates amplifier racks, simplifies setup and installation, and improves durability and reliability.

The CQ Series, consisting of the CQ-1 (low Q) and CQ-2 (high Q), are efficient full-range speakers and ideal companions for the PSW-2, PSW-4, and 650-P self-powered subwoofers. The CQ Series have the following acoustical specifications:

Frequency Response	±4 dB 40 Hz-18 kHz
Phase Response	±90° 50 Hz-16 kHz
Max Peak SPL at 1 m	CQ-1: 136dB; CQ-2: 139dB
Dynamic Range	> 110dB

The CQ is phase-corrected through the crossover, which yields exceptional system impulse response and accurate signal reproduction.

The **beam width** of a horn is the angle at which the sound pressure at a given frequency decreases to half (-6 dB) its on-axis value. Most horns have a beam width that varies with respect to frequency, nonuniform frequency response within their coverage area, and significant side lobes outside their beam width. These undesirable characteristics are easily identified by viewing polar patterns plotted at various frequencies.

Meyer Sound developed the CQ Series horns in an anechoic chamber by measuring coverage patterns using angular and frequency resolutions of 1° and 1/24 octave, respectively. The CQ Series horns exhibit **Constant Q**: the beam width remains consistent across the horn's operating frequency range in both the vertical and horizontal planes. The CQ-1 has a wider horizontal beam width than the CQ-2. The CQ Series have the same vertical beam width and share the following remarkable attributes:

uniform frequency response within the beam width

rapid and uniform amplitude attenuation for all frequencies outside the beam width

minimal side lobes

The CQ horns are an unprecedented development in acoustical measurement, design, and manufacturing. The CQ Series loudspeakers are ideally suited for venues requiring precise coverage with minimal interaction between subsystems but are appropriate for any acoustical environment.

The CQ can be equipped to operate with the **Remote Monitoring System™** (RMS) interface network and software application. RMS displays signal and power levels, driver and cooling fan status, limiter activity, and amplifier temperature for all speakers in the network on a Windows-based PC.