



### Features

- 4-way selectable, tri or quad- amplified screen channel system
- Unique HF/VHF diaphragm has less mass than traditional diaphragms resulting in exceptional dynamic range, extended high-frequency response and lower distortion
- LF-4315 is constructed of MDF and features single woofer chambers
- Low-distortion waveguides provide highly articulate dialogue
- Shallow depth (20") facilitates installation
- THX™ approved for professional cinema applications

Developed specifically for the unique requirements of professional motion picture playback, the SC-434 extends QSC's commitment to the cinema market. As a member of the DCS Digital Cinema Speaker Series, the SC-434 is a 4-way, selectable tri or quad-amplified screen channel loudspeaker system comprised of two main units—the MHV-1090 high-frequency system and the LF-4315 low-frequency system.

The MHV-1090 mid-high-very high system features a high output, horn loaded 10" midrange cone driver and a coaxial neodymium high-frequency/very high-frequency compression driver. The MHV-1090 includes a driver protection network and a passive crossover for tri-amp operation. The protection circuitry prevents low-frequency signals from damaging the high-frequency and very high-frequency driver. A high power 10" cone driver allows operation as low as 250 Hz and the advanced phase plug coupling permits a crossover point of up to 1800 Hz to the high-frequency horn. This ensures that most of the dialog range is reproduced by a single element, for unmatched intelligibility.

The coaxial neodymium high-frequency/very high-frequency compression driver provides a dramatic improvement in dynamic response, clarity and transparency. The annular high-frequency diaphragm covers the frequency range between 1800 and 7000 Hz with a smooth, linear response. The large diaphragm excursion of +/-0.8 mm results in high output and increased power handling. The very high-frequency driver covers the frequency range from 7000 to 22,000 Hz and eliminates the dome break up of conventional drivers that can cause resonance and harsh, metallic sound.

The LF-4315 triple 15" (381 mm) low-frequency enclosure is designed specifically to address the extended low-frequency response required for cinema applications. The LF-4315 covers the frequency range from 35 Hz to 250 Hz. Close Coupled Woofers (CCW), with their tight spacing between woofers, improves coupling and keeps coverage angles wide over a greater frequency range than more widely spaced designs.

The SC-434 is designed for ease of installation. The MHV-1090 components come pre-assembled to reduce field assembly time. Three bolts are all that are required to secure the MHV-1090 to the top of the LF-4315 enclosure.

### Specifications

#### SC-434

Nominal Coverage	90° horizontal x +20 to -30° vertical		
Frequency Range (-6 dB)	33 – 20 kHz		
Active Crossover Frequencies	250, 1700 and 6000 Hz, 24 dB per octave		

#### LF-4315

#### MHV-1090

Impedance	5.5Ω	MF: 8Ω HF: 8Ω VHF: 8Ω	
Sensitivity 1 watt/1 meter, half space	99.5 dB	Tri-amp MF: 105 dB HF/VHF: 110 dB	Quad-amp MF: 105 dB HF: 110 dB VHF: 110 dB

#### Maximum Input Power<sup>1</sup>

8 hours of 6 db crest factor IEC 268 noise spectrum	1200 W RMS	MF: 275 W RMS HF/VHF: 230 W RMS	MF: 275 W RMS HF: 150 W RMS VHF: 80 W RMS
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2 hours of 6 db crest factor pink noise, 50 Hz – 20 kHz, AES method	1500 W RMS	MF: 800 W RMS HF/VHF: 500 W RMS maximum	
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Recommended Amplifier Power	2400 W RMS maximum	MF: 800 W RMS HF: 500 W RMS VHF: 300 W RMS maximum	
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Recommended Processing	Subsonic filter below 30 Hz, >18 dB per octave	4th order LR crossover at 250, 1700 and 6000 Hz via QSC DCM or QSCControl.net™	
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Connectors	Barrier strip screw terminals accept up to #10 AWG stranded wire		
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Transducers	Three 15" (381 mm) high efficiency, extended bass woofer featuring a 4" copper voice coils	MF: 10" high-efficiency, horn-loaded cone with phase plug HF/VHF: coaxial neodymium compression driver with 3.5" (90 mm) HF diaphragm and 1.75" (44 mm) VHF diaphragm	
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Enclosure	Quasi B4 alignment, ported enclosure with fully flared ports, symmetrical port design, tuned to 36 Hz, constructed of MDF and heavily braced. Features vandal resistant woofer mounting bolts	Tilt/Pan Bracket ±10° vertical tilt ±10° horizontal pan	
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Dimensions (HWD)	53" x 30" x 20.3" (1344 mm x 762 mm x 516 mm)	39" x 30" x 20" (990 mm x 762 mm x 508 mm)	
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Weight – Net	260 lb (118 kg)	84 lb (38.5 kg)	
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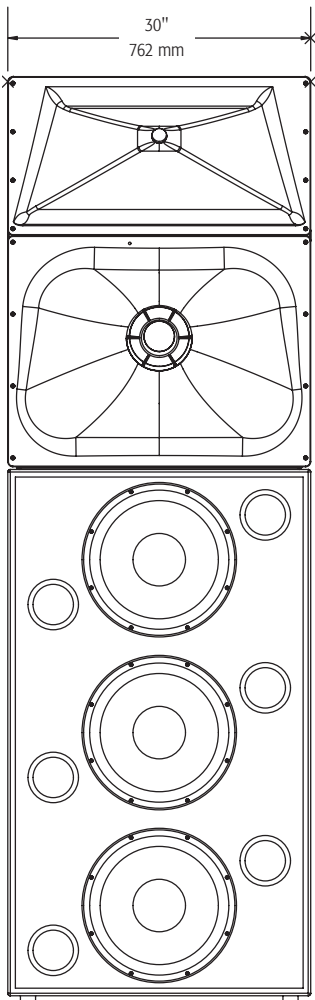
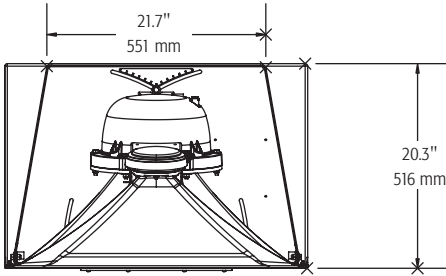
System Weight	344 lb (155.5 kg)		
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<sup>1</sup>) Maximum input power tested in accordance with IEC 268-5 recommendations, 50 Hz – 20 kHz band limiting, 6 dB signal crest factor.

# SC-434

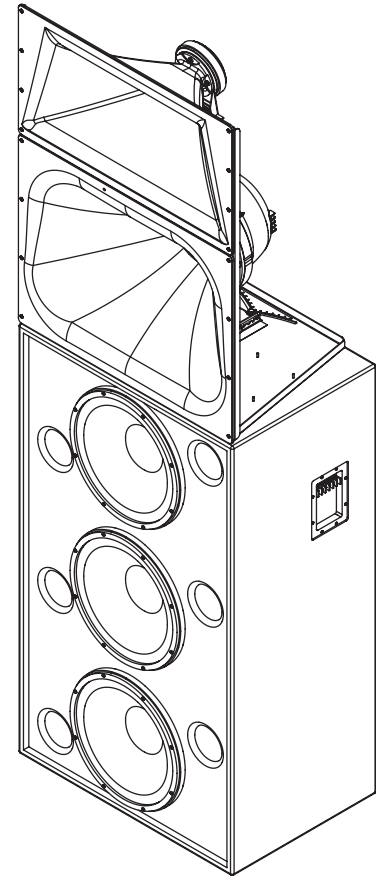
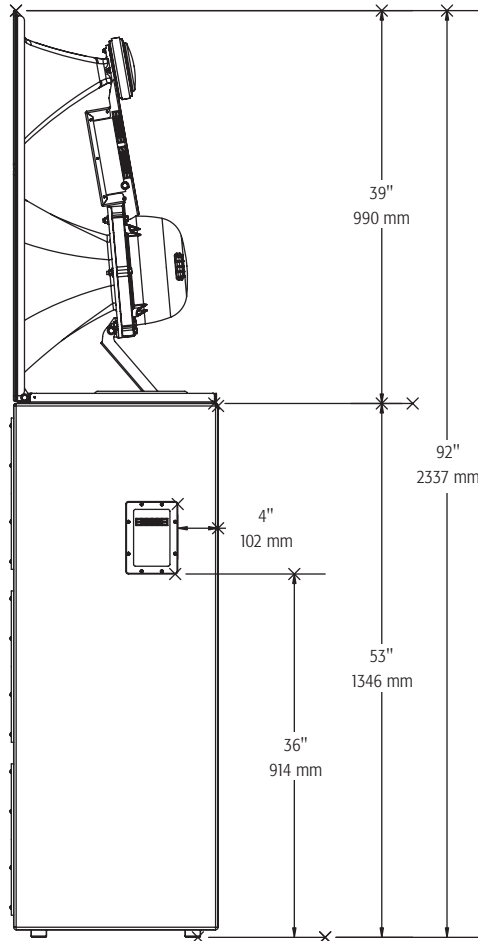
## Dimensions

Top



Front

Side



Specifications subject to change without notice.

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SC-434 Spec Sheet - 06/20/08

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