



SC-424-8F Cinema Loudspeaker System

Features

- Flyable 4-way selectable tri- or quad-amplified screen channel system
- Constructed of heavily braced, 15 mm tour-grade plywood
- Sixteen M10 attachment points per enclosure for safe and easy suspension with installer provided hardware
- Common dimensions of Mid/High and LF enclosures facilitate easy installation in vertical or horizontal arrays
- Unique HF/VHF diaphragm has less mass than traditional diaphragms resulting in exceptional dynamic range, extended high frequency response and lower distortion
- Low-distortion waveguides provide highly articulate dialogue



The SC-424-8F (shown with installer provided mounting hardware) may be configured to fly in either a vertical or horizontal orientation.

Developed specifically for the unique requirements of Large Format motion picture playback, the SC-424-8F extends QSC's commitment to the cinema market. As a member of the DCS Digital Cinema Speaker Series, the SC-424-8F is a 4-way, selectable tri or quad-amplified screen channel loudspeaker system comprised of two main units – the MHV-1090F mid-high-very high-frequency system and the LF-4215-8F low-frequency system. The two sections can be joined together to create a single, flyable unit.

The MHV-1090F 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-1090F 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-4215-8F dual 15" (381 mm) low-frequency enclosure is designed specifically to address the extended low-frequency response required for cinema applications. The LF-4215-8F 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-424-8F is designed for ease of installation. The MHV-1090F and LF-4215-8F components come pre-assembled to reduce field assembly time. Both enclosures have the same dimensions to allow stacked or side-by-side arrays. Each enclosure is fitted with sixteen M10 attachments points for safe and secure suspension. All mounting hardware must be provided by the installer.

SC-424-8F Details

Specifications	SC-424-8F	
Nominal Coverage	90° horizontal x +20 to -30° vertical	
Frequency Range (-6 dB)	33 Hz – 22 kHz	
Active Crossover Frequencies	250, 1700, 6 kHz, 24 dB per octave	
	LF-4215-8F	MHV-1090F
Impedance	8Ω	MF: 8Ω HF: 8Ω VHF: 8Ω
Sensitivity 1 watt/1 meter, half space	99.5 dB	MF: 105 dB HF/VHF: 107.5 dB
Maximum Input Power ¹		
8 hours of 6 dB crest factor IEC 268 noise spectrum	800 W RMS	MF: 185 W RMS HF/VHF: 155 W RMS
2 hours of 6 dB crest factor pink noise, 200 Hz – 2 kHz, AES method	1000 W RMS	MF: 275 W RMS HF/VHF: 230 W RMS maximum
Recommended Amplifier Power	1600 W RMS maximum	MF: 800 W RMS maximum HF/VHF: 500 W RMS maximum
Recommended Processing	Subsonic filter below 30 Hz, >18 dB per octave	4th order LR crossover at 300 and 1700 Hz via QSC processor
Connectors	Neutrik Speakon™ NL4	Neutrik Speakon™ NL4
Pin Outs	1+/1- LF; 2+/2- no connection	1+/1- MF; 2+/2- HF/VHF
Transducers	Two 15" (381 mm) high-efficiency, extended bass woofers featuring 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 voice coil and 1.75" (44 mm) VHF voice coil
Enclosure	Heavily braced 15 mm tour-grade plywood with sixteen M10 load-rated attachments points	
Dimensions (HWD)	40" x 31.5" x 19" (1016 mm x 800.1 mm x 482.6 mm)	40" x 31.5" x 19" (1016 mm x 800.1 mm x 482.6 mm)
Weight – Net / Shipping	134 lb (61 kg) / 144 lb (65 kg)	121 lb (54.8 kg) / 132 lb (59.7 kg)
System Weight – Net / Shipping	255 lb (116 kg) / 276 lb (125 kg)	

Specifications subject to change without notice.



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