

Architects & Engineers Specifications

S-SERIES BEAM-SHAPING LOUDSPEAKERS · VERSION 2 · SEPTEMBER 2026

Specification text for the EDC Acoustics S-Series. Each clause is written to be pasted into a project specification under the relevant loudspeaker section. Figures are stated as minimum performance requirements; published typical performance for each model is on the product page at www.edcacoustics.com/products/.

SQ-90 FULL-RANGE LOUDSPEAKER

Full range loudspeakers shall feature no fewer than 90 individual audio transducers, 90 individual audio amplifiers, and 90 channels of Digital Signal Processing channels. All transducers, amplifiers and processing shall be incorporated into a single audio loudspeaker. The audio loudspeaker shall be capable of dynamic configuration that can be updated at any time, and shall be capable of producing up to 4 separate audio beams simultaneously. Each audio beam shall have all of the following features: Dynamic horizontal control (variable between 1° and 120°), dynamic vertical control (variable between 1° and 120°), dynamic horizontal skew (of at least 0.05dB per degree or greater), dynamic vertical skew (of at least 0.05dB per degree or greater), dynamic tilt control (variable between +/-60°) and dynamic pan control (variable between +/- 60°). Full range loudspeakers shall allow for both horizontal and vertical stacking, allowing for configuration of a larger loudspeaker cluster to function as single audio point source. The audio dispersion shall be dynamically configurable in both the horizontal and vertical, with a frequency dispersion variance of no more than +/-3dB across the programmed coverage pattern, and shall achieve an off axis reduction of 20dB or greater. The loudspeaker shall feature analog audio input, and ethernet network control and monitoring. The loudspeaker shall have an inbuilt microphone and ability to monitor each transducer individually and report any failure of transducer, along with any thermal or amplifier fault states. The loudspeaker shall be configurable with augmented reality app, allowing for precise configuration and setup of the speaker to perfectly match the space. The augmented reality app shall feature test signal generation and measurement allowing for automatic FIR system tuning in the space. The full range loudspeaker shall be the EDC Acoustics SQ-90 loudspeaker.

SC-60 FULL-RANGE LOUDSPEAKER

Full range loudspeakers shall feature no fewer than 60 individual audio transducers, 60 individual audio amplifiers, and 60 channels of Digital Signal Processing channels. All transducers, amplifiers and processing shall be incorporated into a single audio loudspeaker. The audio loudspeaker shall be capable of dynamic configuration that can be updated at any time, and shall be capable of producing up to 4 separate audio beams simultaneously. Each audio beam shall have all of the following features: Dynamic horizontal control (variable between 1° and 120°), dynamic vertical control (variable between 1° and 120°), dynamic horizontal skew (of at least 0.05dB per degree or greater), dynamic vertical skew (of at least 0.05dB per degree or greater), dynamic tilt control (variable between +/-60°) and dynamic pan control (variable between +/- 60°). Full range loudspeakers shall allow for both horizontal and vertical stacking, allowing for configuration of a larger loudspeaker cluster to function as single audio point

source. The audio dispersion shall be dynamically configurable in both the horizontal and vertical, with a frequency dispersion variance of no more than ± 3 dB across the programmed coverage pattern, and shall achieve an off axis reduction of 20dB or greater. The loudspeaker shall feature analog audio input, and ethernet network control and monitoring. The loudspeaker shall have an inbuilt microphone and ability to monitor each transducer individually and report any failure of transducer, along with any thermal or amplifier fault states. The loudspeaker shall be configurable with augmented reality app, allowing for precise configuration and setup of the speaker to perfectly match the space. The augmented reality app shall feature test signal generation and measurement allowing for automatic FIR system tuning in the space. The full range loudspeaker shall be the EDC Acoustics SC60 loudspeaker.

SC-30 FULL-RANGE LOUDSPEAKER

Full range loudspeakers shall feature no fewer than 30 individual audio transducers, 30 individual audio amplifiers, and 30 channels of Digital Signal Processing channels. All transducers, amplifiers and processing shall be incorporated into a single audio loudspeaker. The audio loudspeaker shall be capable of dynamic configuration that can be updated at any time, and shall be capable of producing up to 4 separate audio beams simultaneously. Each audio beam shall have all of the following features: Dynamic horizontal control (variable between 1° and 120°), dynamic vertical control (variable between 1° and 120°), dynamic horizontal skew (of at least 0.05dB per degree or greater), dynamic vertical skew (of at least 0.05dB per degree or greater), dynamic tilt control (variable between $\pm 60^\circ$) and dynamic pan control (variable between $\pm 60^\circ$). Full range loudspeakers shall allow for both horizontal and vertical stacking, allowing for configuration of a larger loudspeaker cluster to function as single audio point source. The audio dispersion shall be dynamically configurable in both the horizontal and vertical, with a frequency dispersion variance of no more than ± 3 dB across the programmed coverage pattern, and shall achieve an off axis reduction of 20dB or greater. The loudspeaker shall feature analog audio input, and ethernet network control and monitoring. The loudspeaker shall have an inbuilt microphone and ability to monitor each transducer individually and report any failure of transducer, along with any thermal or amplifier fault states. The loudspeaker shall be configurable with augmented reality app, allowing for precise configuration and setup of the speaker to perfectly match the space. The augmented reality app shall feature test signal generation and measurement allowing for automatic FIR system tuning in the space. The full range loudspeaker shall be the EDC Acoustics SC-30 loudspeaker.

SC-90 FULL-RANGE LOUDSPEAKER

Full range loudspeakers shall feature no fewer than 90 individual audio transducers, 90 individual audio amplifiers, and 90 channels of Digital Signal Processing channels. All transducers, amplifiers and processing shall be incorporated into a single audio loudspeaker. The audio loudspeaker shall be capable of dynamic configuration that can be updated at any time, and shall be capable of producing up to 4 separate audio beams simultaneously. Each audio beam shall have all of the following features: Dynamic horizontal control (variable between 1° and 120°), dynamic vertical control (variable between 1° and 120°), dynamic horizontal skew (of at least 0.05dB per degree or greater), dynamic vertical skew (of at least 0.05dB per degree or greater), dynamic tilt control (variable between $\pm 60^\circ$) and dynamic pan control (variable between $\pm 60^\circ$). Full range loudspeakers shall allow for both horizontal and vertical stacking, allowing for configuration of a larger loudspeaker cluster to function as single audio point source. The audio dispersion shall be dynamically configurable in both the horizontal and vertical, with a frequency dispersion variance of no more than ± 3 dB across the programmed coverage pattern, and

shall achieve an off axis reduction of 20dB or greater. The loudspeaker shall feature analog audio input, and ethernet network control and monitoring. The loudspeaker shall have an inbuilt microphone and ability to monitor each transducer individually and report any failure of transducer, along with any thermal or amplifier fault states. The loudspeaker shall be configurable with augmented reality app, allowing for precise configuration and setup of the speaker to perfectly match the space. The augmented reality app shall feature test signal generation and measurement allowing for automatic FIR system tuning in the space. The full range loudspeaker shall be the EDC Acoustics SC-90 loudspeaker.

SC-60SL FULL-RANGE LOUDSPEAKER

Full range loudspeakers shall feature no fewer than 60 individual audio transducers, 60 individual audio amplifiers, and 60 channels of Digital Signal Processing channels. All transducers, amplifiers and processing shall be incorporated into a single audio loudspeaker. The audio loudspeaker shall be capable of dynamic configuration that can be updated at any time, and shall be capable of producing up to 4 separate audio beams simultaneously. Each audio beam shall have all of the following features: Dynamic horizontal control (variable between 1° and 120°), dynamic vertical control (variable between 1° and 120°), dynamic horizontal skew (of at least 0.05dB per degree or greater), dynamic vertical skew (of at least 0.05dB per degree or greater), dynamic tilt control (variable between +/-60°) and dynamic pan control (variable between +/- 60°). Full range loudspeakers shall allow for both horizontal and vertical stacking, allowing for configuration of a larger loudspeaker cluster to function as single audio point source. The audio dispersion shall be dynamically configurable in both the horizontal and vertical, with a frequency dispersion variance of no more than +/-3dB across the programmed coverage pattern, and shall achieve an off axis reduction of 20dB or greater. The loudspeaker shall feature analog audio input, and ethernet network control and monitoring. The loudspeaker shall have an inbuilt microphone and ability to monitor each transducer individually and report any failure of transducer, along with any thermal or amplifier fault states. The loudspeaker shall be configurable with augmented reality app, allowing for precise configuration and setup of the speaker to perfectly match the space. The augmented reality app shall feature test signal generation and measurement allowing for automatic FIR system tuning in the space. The full range loudspeaker shall be the EDC Acoustics SC-60SL loudspeaker.

SC-30SL FULL-RANGE LOUDSPEAKER

Full range loudspeakers shall feature no fewer than 30 individual audio transducers, 30 individual audio amplifiers, and 30 channels of Digital Signal Processing channels. All transducers, amplifiers and processing shall be incorporated into a single audio loudspeaker. The audio loudspeaker shall be capable of dynamic configuration that can be updated at any time, and shall be capable of producing up to 4 separate audio beams simultaneously. Each audio beam shall have all of the following features: Dynamic horizontal control (variable between 1° and 120°), dynamic vertical control (variable between 1° and 120°), dynamic horizontal skew (of at least 0.05dB per degree or greater), dynamic vertical skew (of at least 0.05dB per degree or greater), dynamic tilt control (variable between +/-60°) and dynamic pan control (variable between +/- 60°). Full range loudspeakers shall allow for both horizontal and vertical stacking, allowing for configuration of a larger loudspeaker cluster to function as single audio point source. The audio dispersion shall be dynamically configurable in both the horizontal and vertical, with a frequency dispersion variance of no more than +/-3dB across the programmed coverage pattern, and shall achieve an off axis reduction of 20dB or greater. The loudspeaker shall feature analog audio input, and ethernet network control and monitoring. The loudspeaker shall have an inbuilt microphone and

ability to monitor each transducer individually and report any failure of transducer, along with any thermal or amplifier fault states. The loudspeaker shall be configurable with augmented reality app, allowing for precise configuration and setup of the speaker to perfectly match the space. The augmented reality app shall feature test signal generation and measurement allowing for automatic FIR system tuning in the space. The full range loudspeaker shall be the EDC Acoustics SC-30SL loudspeaker.

SC-90SL FULL-RANGE LOUDSPEAKER

Full range loudspeakers shall feature no fewer than 90 individual audio transducers, 90 individual audio amplifiers, and 90 channels of Digital Signal Processing channels. All transducers, amplifiers and processing shall be incorporated into a single audio loudspeaker. The audio loudspeaker shall be capable of dynamic configuration that can be updated at any time, and shall be capable of producing up to 4 separate audio beams simultaneously. Each audio beam shall have all of the following features: Dynamic horizontal control (variable between 1° and 120°), dynamic vertical control (variable between 1° and 120°), dynamic horizontal skew (of at least 0.05dB per degree or greater), dynamic vertical skew (of at least 0.05dB per degree or greater), dynamic tilt control (variable between +/-60°) and dynamic pan control (variable between +/- 60°). Full range loudspeakers shall allow for both horizontal and vertical stacking, allowing for configuration of a larger loudspeaker cluster to function as single audio point source. The audio dispersion shall be dynamically configurable in both the horizontal and vertical, with a frequency dispersion variance of no more than +/-3dB across the programmed coverage pattern, and shall achieve an off axis reduction of 20dB or greater. The loudspeaker shall feature analog audio input, and ethernet network control and monitoring. The loudspeaker shall have an inbuilt microphone and ability to monitor each transducer individually and report any failure of transducer, along with any thermal or amplifier fault states. The loudspeaker shall be configurable with augmented reality app, allowing for precise configuration and setup of the speaker to perfectly match the space. The augmented reality app shall feature test signal generation and measurement allowing for automatic FIR system tuning in the space. The full range loudspeaker shall be the EDC Acoustics SC-90SL loudspeaker.

SS-3 SUB BASS LOUDSPEAKER

The sub bass loudspeaker shall feature no fewer than 3 individual audio transducers, 3 individual audio amplifiers, and 3 channels of Digital Signal Processing channels. All transducers, amplifiers and processing shall be incorporated into a single audio loudspeaker. The audio loudspeaker shall be capable of dynamic configuration that can be updated at any time, and shall be capable of producing up to 2 separate audio beams simultaneously. When arrayed into a larger array consisting of 3 sub bass loudspeaker or more, each audio beam shall have all of the following features: Dynamic horizontal control (variable between 1° and 120°), dynamic vertical control (variable between 1° and 120°), dynamic horizontal skew (of at least 0.05dB per degree or greater), dynamic vertical skew (of at least 0.05dB per degree or greater), dynamic tilt control (variable between +/-60°) and dynamic pan control (variable between +/- 60°). Sub bass loudspeakers shall allow for both horizontal and vertical stacking, allowing for configuration of a larger loudspeaker cluster to function as single audio point source. When arrayed into a larger array consisting of 3 sub bass loudspeaker or more, the audio dispersion shall be dynamically configurable in both the horizontal and vertical, with a frequency dispersion variance of no more than +/-3dB across the programmed coverage pattern, and shall achieve an off axis reduction of 20dB or greater. The loudspeaker shall feature analog audio input, and ethernet network control and monitoring. The loudspeaker shall have an inbuilt microphone and ability to monitor each transducer

individually and report any failure of transducer, along with any thermal or amplifier fault states. The loudspeaker shall be configurable with augmented reality app, allowing for precise configuration and setup of the speaker to perfectly match the space. The sub bass loudspeaker shall be the EDC Acoustics SS-3 sub bass loudspeaker.

SS-1 SUB BASS LOUDSPEAKER

The sub bass loudspeaker shall feature no fewer than 1 individual audio transducers, 1 individual audio amplifier, and 1 channel of Digital Signal Processing channels. All transducers, amplifiers and processing shall be incorporated into a single audio loudspeaker. The audio loudspeaker shall be capable of dynamic configuration that can be updated at any time, and shall be capable of producing up to 2 separate audio beams simultaneously. When arrayed into a larger array consisting of 3 sub bass loudspeaker or more, each audio beam shall have all of the following features: Dynamic horizontal control (variable between 1° and 120°), dynamic vertical control (variable between 1° and 120°), dynamic horizontal skew (of at least 0.05dB per degree or greater), dynamic vertical skew (of at least 0.05dB per degree or greater), dynamic tilt control (variable between +/-60°) and dynamic pan control (variable between +/- 60°). Sub bass loudspeakers shall allow for both horizontal and vertical stacking, allowing for configuration of a larger loudspeaker cluster to function as single audio point source. When arrayed into a larger array consisting of 3 sub bass loudspeaker or more, the audio dispersion shall be dynamically configurable in both the horizontal and vertical, with a frequency dispersion variance of no more than +/-3dB across the programmed coverage pattern, and shall achieve an off axis reduction of 20dB or greater. The loudspeaker shall feature analog audio input, and ethernet network control and monitoring. The loudspeaker shall have an inbuilt microphone and ability to monitor each transducer individually and report any failure of transducer, along with any thermal or amplifier fault states. The loudspeaker shall be configurable with augmented reality app, allowing for precise configuration and setup of the speaker to perfectly match the space. The sub bass loudspeaker shall be the EDC Acoustics SS-1 sub bass loudspeaker.