

SI SERIES CM-4, CM-6 und CM-8

VERSATILE INSTALLATION TOOLS

The SI SERIES supports its users in coping with typical requirements in modern installation applications. The familiar P10x column speakers with the S210x subwoofers are available for this purpose.

The SI SERIES portfolio is now being extended with new, high-quality ceiling speakers. A particularly discreet and customizable look, simple installation and operation, powerful components and, above all, uncompromising sound quality complete the SI SERIES toolbox.

Compared to ceiling speakers previously available from HK Audio (from the INSTALLATION LINE), the new SI SERIES

models not only achieve a considerably higher maximum sound pressure level, but also offer very high sound quality thanks to the selection of high-quality speaker components, extremely low-resonance metal enclosures, newly developed passive crossovers and, last but not least, detailed DSP equalization.

Wherever music and speech need to be more than just in the background, the SI SERIES CM-X offers the ideal tool.

Typical fields of application are:

- Cafés, restaurants and bars
- · Event catering, hotels and hotel lounges
- Conference and meeting environments
- · Retail for clothing, music, electronics or mobility
- Community and club centres, exhibitions and galleries

In the above-mentioned categories, the loudspeakers can also be used as part of a sound system for emergency purposes in accordance with EN 50849 and thus fulfil a dual function - with corresponding cost benefits for the owner.

In larger or more demanding applications, the SI SERIES CM-X can also be combined with other HK Audio installation products to ensure a homogeneous sound transition to the main PA system - be it with HK Audio VORTIS (2), SI SERIES or FINEO!

Basically, the ("Ceiling Mounted") CM-4, CM-6 and CM-8 can be installed in ceilings without any additional accessories. Suitable C-rings and load distribution bridges are available as optional accessories for installation in suspended ceiling systems with limited load-bearing capacity.

As standard, the delivery includes a rimless, very flat front grille in black and white, which can be quickly replaced thanks to magnetic fastening. A template, which is also included, allows the installer to quickly and precisely make the appropriate cut-outs.

The enclosure of the speakers with high-quality steel backcan is very rigid and low-resonance thanks to its special shape and reinforcements. As a result, there are no disadvantages in terms of sound, such as those associated with inexpensive ceiling speakers in the form of rattling noises or resonances.

The front of the speakers feature a coaxial speaker arrangement with a central dome tweeter, short wave guide for the woofer, integrated bass reflex channels and a power selector switch that can be operated from the front. This allows switching between Low-Z (8 ohms) or High-Z (100/70 V) and the respective power taps of the integrated transformer. Thanks to the magnetically attached front grille, this rotary switch is easy to reach and can also be operated without any additional tools.

All plastics used for the SI SERIES CM-X are manufactured with special flame retardant additives so that the relevant international safety standards are met as standard.

Sophisticated cardboard packaging also ensures that the otherwise problematic, very voluminous plastic waste is limited for larger installation projects and favours recycling.

In addition, filter data is available for many different digital signal processors (DSPs). Simulation data is also offered in GLL format for EASE (4.4/5) and EASE EVAC (2). All these and many other features set the SI SERIES CM-X ceiling loudspeakers apart from comparable products on the market.



Three sizes: CM-4, CM-6 and CM-8.







CM-4 with black grille, without grille and rear view.







CM-6 with white grille, without grille and rear view.







CM-8 with black grille, without grille and rear view.

Grilles: Visual flexibility and practical help.







The grilles supplied as standard (black and white) adhere magnetically and allow tool-free access to the power selector switch.

Electrical connection.







Two 2-pin Euroblock connectors are included as standard. The connection cables can be routed using cover plates with a curved outlet or - depending on requirements - can also be attached using a PG cable gland. Both types of cover plates are also included as standard.

Mounting and fastening.







The clamps for fastening the ceiling speakers can be screwed on from the front and are designed in accordance with industry standards. A cut-out template is included as standard to make it easier for the installer to work quickly.

Accessories for suspended ceiling systems.







Suitable C-rings are available for every speaker. In suspended ceiling systems, these are used with universally combinable load distribution bridges, which are always supplied in pairs.

Deep integration.

Filter sheets for a total of 11 DSPs are available for operation on different systems.

Using the impulse response files also provided, the specified equalisations can be easily transferred to other systems.













Simulations. Precise and reliable.

Whether acoustic simulations for demanding projects or for quick preliminary planning are required - with the data in GLL format, the SI SERIES CM-X ceiling loudspeakers can be calculated in both EASE (4.4/5) and EASE EVAC 2.





SI SERIES CM-X APPLICATIONS

Cafés, restaurants and bars





Event catering, hotels and hotel loungess





Conference and meeting environments





Retail: clothing, music, electronics or mobility





Community and club centres, exhibitions and galleries





SI SERIES CM-X TECHNICAL DATA

CHARACTERISTICS				
	SI SERIES CM-4	SI SERIES CM-6	SI SERIES CM-8	
Concept		Ceiling Mounted Speaker		
Cabinet principle		Bassreflex		
Power handling RMS	30 W (low-Z), 15 W max. (high-Z 100 V)	50 W (low-Z), 15 W max. (high-Z 100 V)	70 W (low-Z), 30 W max. (high-Z 100 V)	
Power handling program	60 W (low-Z)	100 W (low-Z)	140 W (low-Z)	
Power handling peak	120 W (low-Z)	200 W (low-Z)	280 W (low-Z)	
Power handling 100 V (5 taps)	15 W, 12.5 W, 10 W, 7,5 W	15 W, 10 W, 7,5 W, 5 W	30 W, 20 W, 10 W, 5 W	
Power handling 70 V (5 taps)	7,5 W, 6,3 W, 5 W, 3,8 W	7,5 W, 5 W, 3,8 W, 2,5 W	15 W, 10 W, 5 W, 2,5 W	
Nominal impedance (low-Z) ¹⁾	8 ohms	8 ohms	8 ohms	
Nominal impedance (high-Z power taps) ¹⁾	670 ohms, 800 ohms, 1000 ohms, 1300 ohms	650 ohms, 900 ohms, 1300 ohms, 2000 ohms	300 ohms, 500 ohms, 1000 ohms, 2000 ohms	
Max. SPL average (Iow-Z) ²⁾	102 dB	108 dB	109 dB	
Max. SPL average (high-Z, highest power tap) ²⁾	99 dB	104 dB	107 dB	
Max. SPL peak (low-Z) ³⁾	107 dB	114 dB	115 dB	
Max. SPL peak (high-Z, highest power tap) ³⁾	103 dB	110 dB	112 dB	
Sensitivity 1 W/1 m (low-Z) ⁴⁾	85 dB	89 dB	90 dB	
Crossover frequency	3,6 kHz	3 kHz	2,2 kHz	
Frequency range -6 dB	81 Hz - 20 kHz	75 Hz - 20 kHz	73 Hz - 20 kHz	
Frequency range -10 dB	64 Hz - 20 kHz	62 Hz - 20 kHz	60 Hz - 20 kHz	
Dispersion angle -6 dB (circular) ⁵⁾	145°	140°	135°	

CERTIFICATIONS			
Flame retarding ABS (IEC 60695-11-10/-20) class V-0/5VB	certified		
Ball impact resistance (DIN 18032-3)	not specified		
IP protection class (EN 60529)	not specified (indoor use only)		

COMPONENTS					
Low-/mid frequency	4" polypropylene speaker with ferrite magnet and 1" voice coil	6.5" polypropylene speaker with ferrite magnet and 1" voice coil	8" polypropylene speaker with ferrite magnet and 1.25" voice coil		
High frequency	0.75" aluminium dome tweeter with neodymium magnet and 0.75" voice coil with ferrofluid	1" aluminium dome tweeter with neodymium magnet and 1" voice coil with ferrofluid	1" aluminium dome tweeter with neodymium magnet and 1" voice coil with ferrofluid		
Crossover	High pass: 18 dB/octave, low pass: 12 dB/octave	High pass: 18 dB/octave, low pass: 12 dB/octave	High pass: 18 dB/octave, low pass: 12 dB/octave		
Horn	Integrated wave guides	Integrated wave guides	Integrated wave guides		

AMPING/FILTER SHEETS		
Filter specifications in tabular form for frequency response equalization Without limiter specifications	Biamp Tesira. BSS, Lab.gruppen Lake, Lab.gruppen IPD/IPX, LEA Professional, Linea Research, Marani, Powersoft, QSC Q-SYS, Ram Audio, Symetrix	

CONNECTIONS		
Input 2-pole Euroblock connector		
Output/parallel output	2-pole Euroblock connector, wired in parallel	

MECHANICAL DATA			
Mounting clamps	3 x front-accessible mounting clamps with max. 40 mm (0.4 inch) grip range		4 x front-accessible mounting clamps with max. 40 mm (0.4 inch) grip range
Saftey features	2 x bracket for safety wires/chains or cable fastening		
Cover plates	2 x cover plate included, with curved cable entries or with hole for PG gland		
Rotary switch for power taps	1 x front-accessible rotary switch for bypassing the transformer for low-impedance (8 ohms) operation or for power taps at 100/70		
Cabinet material	Metal back-can with low-resonance, partially curved shape		
Color	Black and white front grille included		
Front grille	Rimless design with magnetic attachment		
Optional accessories	C-ring and tile bridges		
Dimensions (diameter x total depth (installation depth))	224 x 177 (171) mm, 8.82 x 6.97 (6.73) inch	224 x 177 (171) mm, 8.82 x 6.97 (6.73) inch	313 x 180 (173) mm, 12.32 x 7.09 (6.81) inch
Cut-out diameter	192 mm (template included)	240 mm (template included)	280 mm (template included)
Weight	2.70 kg, 5.95 lbs	3,75 kg, 8.23 lbs	5,35 kg, 11.79 lbs







SI SERIES CM-4 Installation Kit
SI SERIES CM-6 Installation Kit
SI SERIES CM-8 Installation Kit