

Preliminary Product
Information
New for Prolight+Sound

LINEAR 7

NETWORKED AUDIO PRECISION



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LINEAR cabinets have been the HK Audio range's go-to solution for upscale performance for over 25 years now. Professional handling, richly detailed definition, ample headroom and high sound pressure levels – they set the performance bar for their respective class. And the all-new LINEAR 7 series takes it up another notch. Powerful DSPs and advanced smart connectivity not only deliver even sharper audio images. They also make gigging life a lot easier with a far more efficient workflow and a host of features that include enhanced power supply.

The latest in audio technology

Although the LINEAR 7 line's visuals and hardware appointments lean heavily on the sleek look and rugged features of the LINEAR 5 series, these enclosures come with a complement of elegantly refined details. HK Audio engineers reinvented the cutting-edge technology inside LINEAR 7 and revamped the cabinets' acoustics from the bottom up. Latest-generation high-performance loudspeakers and drivers, custom-designed horns, muscular Pascal Class-D amplifiers, FIR filtering, a state-of-the-art DSP platform with awesome computing power and high-definition converters – with a feature set as rich as this, the LINEAR 7 family is the precision audio tool of choice for demanding applications.



Cardioid pattern for real-world applications

While midrange and high frequencies are naturally more directional, low frequencies tend to radiate in all directions. Excessive bass levels can be quite the problem on and behind the stage. The more serious issue, though, is that promoters are increasingly making demands to limit the sound distribution range. And there is no alternative to cardioid technology when it comes to meeting specifications for low-range frequencies. With its hardware appointments and filter sets, the 18" LINEAR 7 subwoofer provides a fast, easy way to configure effective cardioid setups.



Cardioid setup 2:1





CONNECTIONS AND CONTROL FEATURES





- 1 All models in the LINEAR 7 family feature analog balanced inputs and outputs as well as professional Ethercon ports. And all devices in the system can be daisy-chained if required that is, connected in series.
- Presets are available to tune fullrange and multifunctional models to serve as standalone speakers, monitors or to be combined with subwoofers. Configuring cardioid bass setups is simple with the subwoofers' Cardio 1:1 and Cardio 2:1 settings.
- an added active speaker lacking network connectivity into a networked setup. This speaker's volume, filtering, limiting and delay may then be controlled independently. For example, this option brings LINEAR 7 mid/high units and LINEAR SUBs together in the same network. The same goes for LINEAR 5 LTS models and the L7 118 Sub A subwoofer.
- 4 A Powercon mains socket connects the speaker to the power supply. The L7 118 Sub A subwoofer provides a second Powercon socket, an elegant power routing solution for larger systems.

LINEAR 7 speakers' state-of-the-art switching power supplies operate at all voltages ranging from 90 to 260 volts. They serve as a reliable stabilizer for fluctuating incoming voltage, for example, when operating speakers on power generators.

Milan audio streaming

Like many leading vendors, we use Milan, a state-of-the-art AVB-based network environment, to stream audio data. The certification for Milan is in the works as of March 2019.

Extended remote control

LINEAR 7 does something that only large, pricey touring rigs are expected to do: it enables the tech at the FOH desk to control every mid/high unit, subwoofer and stage monitor from that one central spot. LINEAR 7 brings the benefits of this ultra-efficient workflow to top-drawer professional point-source speakers. A Mac or PC can serve to fine-tune the volume, EQ, limiting, delay and polarity settings of every LINEAR 7 cabinet in the network.

DSP Out

The DSP Out, a very handy feature exclusive to LINEAR 7 cabinets, serves to integrate an added non-network-compatible powered speaker such as a LINEAR series active enclosure into the network and remotely control all its parameters. And that works wonders for your legacy speakers' value retention and service life.







A fully parametric ten-band EQ, high pass filter, low pass filter, delay, polarity and limiting functions are independently available for the Speaker and DSP Outs.

SETUP EXAMPLES







2.1 setup: 2 x L7 110 XA, 1 x L7 118 Sub A



Club setup: 2 x L7 112 FA, 2 x L7 118 Sub A



Power setup: 2 x L7 112 FA, 4 x L7 118 Sub A



Cardioid setup 1:1

2 x L7 112 FA 4 x L7 118 Sub A



Cardioid setup 2:1

2 x L7 115 FA 6 x L7 118 Sub A

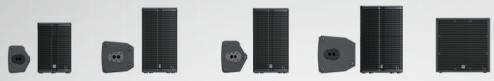
All LINEAR 7 FA and XA models are compatible with the HK Audio TB-series rigging frames.

LINEAR 7 FA enclosures' side panels are properly angled for acoustically correct clustering.





Preliminary technical data



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Parameter	L7 110 XA	L7 112 XA	L7 112 FA	L7 115 FA	L7 118 Sub A
Peak power	2,000 watts	2,000 watts	2,000 watts	2,000 watts	2,000 watts
Woofer	10" (2" voice coil)	12" (2.5" voice coil)	12" (2.5" voice coil)	15" (3" voice coil)	18" (4" voice coil)
HF driver	1" (1.75" voice coil)				-
Horn	80° x 60° CD, rotatable	70° x 50° CD, rotatable	70° x 50° CD, rotatable	60° x 40° CD, rotatable	-
X-over frequency	FIR, approx. 1.8 kHz				-
Analog inputs	1x XLR/ ¼" jack				2 x XLR / 1/4" Jack
Analog Thru	XLR				2 x XLR
DSP Out	XLR				
Network	2 x Ethercon				
DAN protocol	Milan				
DSP functions	Level, delay, limiter, fully parametric 10-band EQ with variable filter characteristics, high pass filter, low pass filter, polarity, cardioid setup (L7 118 Sub A only)				
Operating systems	Windows, Mac OS (iOS App to be added later)				
Sampling rate	96 kHz				
Latency	< 2.6 ms				
Mains	1 x Powercon 2 x Powerco				
Power supply	Automatic switching power supply (100 to 240 volts)				
Suspension points	5 x M8 for AP-8 or tilt adapter		3 x M8 for AP-8		-
Rigging frame	TB + TA-28N		TB + TA-45NQ		-
Clustering angle	- 35°			-	
Front grille	2 mm powder-coated metal grille, black acoustic foam				
Housing	15 mm birch multiplex / MDF hybrid housing				15 mm multiplex
Finish	Warnex acrylic coating				
Handles	2 x bar handle	1 x bar handle, 1 x MultiGrip	2 x MultiGrip		
Pole mount	Duo Tilt (3° / 7°)				M20
Dimensions	35 x 62 x 30 cm	37 x 67 x 30 cm	37 x 67 x 36.5 cm	45 x 71 x 45 cm	55 x 55 x 68 cm
Weight	approx. 20 kg	approx. 21 kg	approx. 24 kg	approx. 31 kg	approx. 42 kg
	All	preliminary specificati	ons are subject to cha	nge.	

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