



# POLAR 10

# PUT YOUR SOUND IN POLE POSITION a

### Powered high-performance column PA-system

HK Audio has developed a new columnar system that takes the pole position in its class. POLAR 10 offers everything users want in this style of system:

- An integrated 24-bit DSP that delivers a consistent audio image across the whole frequency range, serving up rich sound with low distortion for fatigue-free listening experience
- Five user presets tailored to dial in the right sound for every situation and venue
- Generously sized subwoofer in a wood enclosure for powerful, snappy and lowranging bass performance
- A 2000 watt, Class D power amplifier with great headroom and perfect dynamic response
- An integrated four-channel mixing console featuring versatile connection options and Bluetooth 5.0 audio streaming
- Ships with carry bag for column and padded cover for subwoofer

POLAR 10 combines outstanding audio performance with ultra-convenient handling to provide the easiest way to the best sound for the user.



# POLAR 10

POLAR 10 is the product of sophisticated design principles and advanced, high-quality components:

- 1" driver with a CD horn: high-definition audio up to 20 kHz and a wide 120° throw pattern
- THE SOUNDMAKERS
- Six 3" high-performance neodymium speakers: optimized for powerful midrange response
- 10" high-excursion woofer with large-volume cabinet: POLAR 10 makes the most of actual physics rather than relying on power-sucking, electronic bass boosts
- Subwoofer enclosure: low-resonance wood housing with a classy look and cleverly designed carrying handles
- Muscular 2000-watt, Class D amplifiers: minimum distortion plus plenty of headroom equals wide dynamic range
- Rock-solid connector system for columnar elements: easy to handle, no wobbling, adapts to different stage situations
- Mixer: Four channels, clear layout, efficient handling, with connectors for typical applications on board
- 24-bit DSP: high-definition audio and optimized frequency response
- Bluetooth 5.0: audio streaming with more reliable connections over greater distances (up to 40m), future-proof

#### The POLAR Column

Six highly efficient, ultra lightweight 3" neodymium midrange drivers render instruments and the human voice with unadulterated accuracy. The combination of a 1" precision high-frequency driver with a constant directivity horn delivers a wide 120° throw pattern to provide optimal coverage throughout the audience area. POLAR may be set up without the spacer for even more flexible placements options, for example, on rather than in front of stages.

#### The POLAR Subwoofer

Nothing beats volume when it comes to rendering low frequencies. Applied physics keeps the bass pumping loud well beyond the point where other system with radical pre-filtering run out of steam. The wood cabinet and its painstakingly curved side walls effectively suppress resonances. Loaded with a 10" long-throw, high-excursion woofer, the generously sized, more than 50-liter enclosure delivers clean, snappy bass response.

#### The integrated Mixer

POLAR features a built-in four-channel mixer with a Master volume knob and future-proof Bluetooth 5.0 audio streaming, two channels with an XLR/ 1/4" (6.35 mm) combo jack for microphones and line signals (e.g. mixers, keyboards), a real highimpedance instrument channel (guitar) and an aux channel for DJ equipment or mp3 players that simultaneously controls Bluetooth audio streams. Three sound modes (Music, Speech, DJ) and the powerful Master EQ's settings may be stored in five user presets for easy tuning and fast results at different venues and applications.

2 Power switch 3 Balanced Line/Mic input 4 Line/Mic selector switch 5,7,9 Channel Volume controls and Bluetooth 6 Hi-Z instrument input 8 Aux input

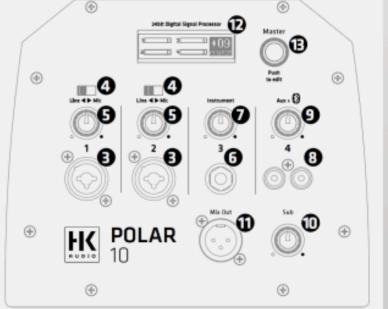
Wide-range 100-to-240 V input

10 Sub Level control

1

- 11 Mix Out 12 backlit display with level indicators
- 13 Master volume / DSP menu control





# **B2B-INFO HK AUDIO POLAR 10**

Facts & Features	Description	Benefit		
2.000-watt, Class D power amplifiers	Low weight, lots of headroom and minimized distortion	Stable, consistently rich sound at all volumes		
1" compression driver with a 120° CD horn	High-definition HF response up to 20 kHz and wide-ranging, consistent coverage throughout the room	Natural-sounding and room-filling listening experience throughout the venue. High speech intelligibility and precise rendering of details		
6 x 3" high-performance midrange speakers	Entire vocal range rendered with power and authority. With a line array effect not as pronounced as that of longer arrays, POLAR's midrange response is a perfect match for the HF horn's throw pattern (-6 dB at double the distance).	Stable audio image even at greater distances and the perfect distribution of sound pressure for typical events – loud on the dance floor, assertive but not overpowering in the front seating area, and conversation-friendly at the back		
10" high-excursion woofer with extra large magnet	Real bass woofer with a long voice coil and great cooling capacity at strong bass pulses	Consistent high-performance bass response all the way down to the lowest frequencies even in continuous operation		
Acoustically correct dimensioned subwoofer (more than 50 liters), housing made of wood,	Wood housing and curved sidewalls minimize resonances while bass speaker has plenty of room to do what it does best without requiring electronic filtering	Maximum useable sound pressure level in the low bass range, the audience gets the full bass experience		
Variable column design	POLAR 10 may be set up with or without the spacer	Unlike columns with a continuous line of speakers, POLAR 10 delivers excellent audio performance even when set up on stages or used as a near-field monitor		
Integrated four-channel mixer with Master volume	Two channels with XLR/ 1/4" (6.35 mm) combo jack for microphones and line signals (e.g. keyboards), a Hi-Z instrument channel, and an RCA/cinch input for DJ equipment or mp3 players that simultaneously controls Bluetooth audio streams	No external mixing console required for most applications with a microphone, keyboard, acoustic guitar or DJ equipment. Master volume knob adjusts the system's overall volume without having to fuss with the individual channels' controls		
Bluetooth 5.0	Bluetooth 5.0 has up to four times the reach of older Bluetooth versions, but – heads up – only in combination with Bluetooth 5- enabled devices!	POLAR's Bluetooth range means it receive audio streams from as far away as 40 meters, yet it is compatible with older Bluetooth standards with a range up to 10 meters		
24-bit DSP	High-definition audio, optimized frequency response, low distortion level.	Delivers a pleasurable, fatigue-free listening experience to the audience		
Modes	Three fundamental EQ setups – Music, Voice, DJ	Fast and easy to fine-tune to the given application		
Master-EQ	Three-band EQ with semi-parametric midrange	Serves to effectively tune the overall sound to the room's acoustics		
System-Delay	Easy to use system delay, adjustable up to 100 meters in 25-cm steps. The DSP converts distance to time in milliseconds.	Convenient, no-fuss tool turns POLAR 10 into an elegant delay line		

## **B2B-INFO HK AUDIO POLAR 10**

Facts & Features	Description	Benefit	
Backlit, configurable display	Level indicators of all input channels and master volume, system status overview. Variable brightness, contrast and automatic dimming.	Adjustable display adapts to every situation, providing an easy-to-see readout that dims so as to be unobtrusive in dark rooms	
Five user presets	All settings – Mode, EQ, Delay, Display, Bluetooth – may be stored in five user presets.	Never forget a perfect setting again. Five performance scenarios accessible at the touch of a button.	
Mix out	Balanced out of the sum of all channels.	Lets you connect further speakers	

## INCLUDED ACCESSORIES



POLAR Column Carry Bag

This padded bag accommodates the Mid/High-Unit and the Spacer.



POLAR Sub Cover

This cover provides the padding to protect the sub effectively in transit.

### TECHNICAL DATA

POLAR 10 System	
Max. SPL peak calculated	126 dB half space
Frequency response +/- 10 dB	38 Hz – 20 kHz
Power amp output	2000 W
Bluetooth	5.0
Housing	Birch plywood/ABS
Mixer	2x Mic/Line, 1x Instrument, 1x Aux/Bluetooth
Overall height	213 cm
Weight	26.9 kg / 59.3 lbs
POLAR 10 Subwoofer	
Bass woofer	1x 10", 2" voice coil
Dimensions (WxHxD)	36,6 x 62,5 x 54,1 cm
Weight	21 kg / 46,1 lbs
POLAR 10 Mid/High-Unit	
Mid speaker	6x 3", 3/4" voice coil, neodymium
HF driver	1x 1", 1" voice coil
Horn directivity	120° x 30°
Dimensions (WxHxD)	10,8 x 82,5 x 9,8 cm
Weight	3,9 kg / 8,8 lbs.
POLAR 10 Spacer	
Dimensions (WxHxD)	10.8 x 82.5 x 9.8 cm
Weight	2 kg / 4.4 lbs

# MARKET OVERVIEW

Valid for September 2019	HK Audio POLAR 10	LD Systems MAUI 11 G2	LD Systems MAUI 28 G2	Bose L1 Compact	JBL Eon One
SRP/streetprice	699 €	675 €	925 €	825 €	649 €
System power	2.000 watts	1.000 watts	2.000 watts	130 watts	380 watts
Max SPL (halfspace)	126 dB	124 dB	126 dB	112 dB	123 dB
Frequency response	38 Hz -20 kHz	50 Hz -20 kHz	45 Hz -20 kHz	65 Hz -14 kHz	? Hz -18.5 kHz
Real Bass response	yes	no	yes	no	no
Subwoofer	1x 10"	3x 6,5"	2x 8*	1x 8*	1x 10"
Mid/High-Unit	6x 3" + 1x 1"	8x 3" + 2x 1"	16x 3" + 2x 1"	6x 2"	6x 2"
Directivity	120 x 30°	120 x 20°	120 x 20°	180 x 40°	100° x 50°
Channels	4	4	4	3	6
Mic inputs	2	1	1	1	2
Hi-Z inputs	1	1	1	1	no
Master Volume	yes	yes	yes	no	yes
Master EQ	3 Band EQ, 3	no	no	no	no
User Presets	yes	no	no	no	по
System Delay	yes, up tp 100 m	no	no	no	по
Integrated display	yes	no	no	no	по
Bluetooth / Reach	5.0, up to 40 m	yes, 10 m	yes, 10 m	no	yes, 10 m
Variable height	yes, 1x Spacer	yes, 1x Spacer	no	yes, 2x Spacer	yes, 2x Spacer
Weight (kg)	26,9 kg	24,9 kg	30,9 kg	13,3 kg	18,5 kg
Carry bag / cover	included	optionally	optionally	included	optionally