### LINEAR 9 210 LTA

# LINEAR 9 210 LTA

### THE SCALABLE LONG THROW LINE

Active multifunctional speaker
Part number: 1007942

The LINEAR 9 210 LTA convinces with its enormous throw and power. It comes into its own particularly in confined venues that require a long throw. In addition, the LINEAR 210 LTA allows flexible sound coverage thanks to the option of using it in a cluster.

As a pure mid/high unit, equipped with a rotating  $60^\circ x 25^\circ$  horn with a powerful 1.4" driver and two vertically arranged 10" speakers, it achieves outstanding efficiency.

The MCT developed by HK Audio converts the point source of the compression driver into a line source which, in addition to razor-sharp dispersion, enables optimum coupling of further LINEAR 9 210 LTA speakers. The multicell MCT achieves significantly better distortion performance compared to conventional horns of the same size.

The robust birch multiplex enclosure with resistant PU coating protects the LINEAR 9 210 LTA not only from wind and the elements but also during transport from the storage to the venue and back again. All LINEAR 9 models are manufactured in Germany.

- Features
- Scalable mid/high unit with long throw and network control
- +  $2 \times 10$ -inch bass-midrange driver with 2.5-inch voice coil
- +  $1 \times 1.4$  -inch compression driver with 2.5-inch voice coil
- Rotatable MCT horn,  $60^\circ \times 25^\circ$  (horizontal  $\times$  vertical)
- DSP platform with fully parametric 10-band EQ, delay and limiting for uncompromised individual adjustment
- · Modern network technology for precise control of all DSP features
- Additional DSP-Out with the full range of features for integration of nonnetwork-compatible loudspeakers
- Direct access to easily selectable presets on the speaker for use in a single application, or as a cluster of two or three
- High-resolution AD/DA converters with 96 kHz, FIR filtering and low latency
  of less than 2.6ms
- The cabinet design allows horizontal clusters to be formed quickly and easily
- DuoTilt for 3° or 7° tilt for tripod mounting
- User friendly rigging and mounting options
- Professional, lockable PowerCon and EtherCon connections
- Sturdy enclosure made of birch multiplex with PU coating
- Made in Germany

## LINEAR 9 210 LTA

#### Technical data

L	INEAR 9 210 LTA
Max. SPL @ 10 % THD	133 dB half space* (88 Hz - 12 kHz averaged)
Max. SPL Peak @ 10 % THD	142 dB half space*
Frequency response +/-3 dB	105 Hz - 19 kHz (high pass filter with 24 dB/oct. at 100 Hz)
Frequency response -10 dB	84 Hz - 20 kHz (high pass filter with 24 dB/oct. at 100 Hz)
Power amp output (RMS)	1.000 W
Amp type	Class D - Biamped
Low-/mid speaker	2x 10", 2.5" voice coil
HF driver	1.4", 2.5 voice coil
Horn directivity	60° x 25° MCT horn, rotatable
Active crossover frequency	1.35 kHz FIR X-over with 72 db/oct.
Maximum input level	+20 dBu
Analog inputs	1x XLR combo balanced
Analog thru	1x XLR balanced
DSP Out	1x XLR balanced
Network port	Ethercon RJ45, 1x In, 1x Thru
Filter presets	Stand Alone, Cluster (2), Cluster (3), Remote
Remote software	DSP CONTROL (Windows, macOS)
DSP functions	Fully parametric 10-band EQ with variable filter characteristics, High-Pass Filter, Low-Pass Filter, Polarity, Level, Delay, Limiter, Mute
Sample rate	96 kHz
System latency	Less than 2.9 ms
Mains connector	1x Powercon NAC3 In, 1x Powercon NAC3 Thru, 100-240 V
Power consuption	2.5 A / 100-240 V nominal according to EN 62368-1
Clustering angle	25°
Pole mount	DuoTilt 3°/7°
Carrying handles	2x MultiGrip
Housing	Birch multiplex
Finish	PU coating black
Front grille	2 mm metal grille backed with black acoustic foam
Dimensions (WxHxD)	34 x 96 x 39 cm 13-25/64 x 37-3/4 x 15-23/64"
Weight	33 kg / 72,8 lbs





## LINEAR 9 210 LTA

### Technical data



Max. SPL (blue= 3% THD, red= 10% THD)



Frequency response (blue= Monitor, red= Flat, green= Lowcut)

### LINEAR 9 210 LTA

Accessories



#### TB-210NQ Part n

The TB-210NQ is a tilt bracket with quick-release pins for mounting LINEAR 9 210 LTA speakers on truss rods, ceilings, wall brackets, beams and on tripods. Quick mounting on the box is guaranteed thanks to the ball lock pins. Flexible vertical and horizontal alignment is possible. This tilt bracket set can be used for rigging the LINEAR 9 210 LTA either in a single application or as a cluster of two.

#### Tilt-Unit Part numb

For mounting directly on the subwoofer. This means that the DuoTilt can also be used at tilt angles of both -3° and -7° in a stack setup, and the Tilt-Unit prevents the mid/high units from slipping.



#### Rear Protection Plate LINEAR 9 210 LTA

1007538

Part nu 1007972

The Rear Protection Plate, which is made of sturdy sheet metal, protects the electronics of the LINEAR 9 210 LTA from splash water. The slanted surface serves as a runoff surface in case of rain.



#### Protection Cover LINEAR 9 210 LTA

Part numbe 1007990 The Protection Cover LINEAR 9 210 LTA is a padded transport protection cover. Thanks to the convenient handle recesses, the protective cover can remain on the box permanently during installation and dismantling.



Case LINEAR 9 2x 210LTA Part number: 1007993 Optional flight case for two LINEAR 9 210 LTA speakers and the tilt bracket set.



Horizontal directivity



Vertical directivity



### LINEAR 9 210 LTA



Simulation and CAD files, tender specifications, certificates and much more can be found at www.pro.hkaudio.com

### Clustering the LINEAR 9 210 LTA

The LINEAR 9 210 LTA has built-in, fast-mount hardware that makes it easy to cluster two or more units.

When stacking speakers, place LINEAR 9 210 LTA units on the subwoofers with their side panels touching. The rubber bumpers on one cabinet fit it into indentations in the neighboring wood cabinet to properly align the two speakers on the horizontal plane. Fix the preconfigured cluster in place by screwing down the top cluster couplers to connect the neighboring speakers:





You can also fly one LINEAR 9 210 LTA or a cluster of two with the optional TB-210NQ tilt bracket. If you want to fly two speakers with this tilt bracket, you have to additionally secure the cluster with the bottom cluster couplers. This is mandatory.



To get the best audio results when clustering LINEAR 9 210 LTAs, you will have to rotate the two adjacent horns to set them to a horizontal directivity of 25°. The angles are clearly marked on the horns.