

Digitally Powered Cylindric Wave Radiator **GL 24 dp**



Active high-performance line array systems for optimised speech and music reproduction in acoustically challenging rooms. The precise, broadband sound bundling to a nominal 20° vertical dispersion is achieved through the acoustic coupling of two slightly curved line arrays, arranged one behind the other within the cabinet. This innovative arrangement is complemented by the horn guide in the high frequency range to ensure an exceptionally homogeneous and symmetrical 100° horizontal dispersion. The GL 24 systems are particularly suitable for individual applications up to a distance of 25 metres, and can also be used as a downfill under the GL 16i. The integrated digital amplifier technology provides 2 x 800 Watt and DSP control.

PRODUCT SPECIFICATIONS

| | |
|--|--|
| Speaker Components | 6 x 6,5" Nd / 24 x 1" Nd Tweeter |
| Description | Digitally Powered Cylindric Wave Radiator |
| Amp Power | 2 x 800 W AES biamped / 110-230 V |
| Rated Current | 1,8 A @ 230 V |
| SPL <small>Peak @ 1 m</small> | >130 dB |
| Max. Input Signal | 25 dBu |
| DSP | HDLM FPGA Processing 32 bit floating point |
| AD / DA | 24 bit / 96 kHz |
| Latency | 0,8 ms (ana log in to analog out) |
| Usable Range | 80 Hz - 20 kHz (-6 dB) |
| Tuning Frequency <small>excursion minimum</small> | 90 Hz |
| X-Overpoint <small>acoustical</small> | Depends on preset |
| Coverage <small>horizontal / vertical</small> | 100° x 20° (degressive curved) |
| Mechanical Splay Angle | 13° |
| Connectors | Neutrik XLR in/out Neutrik PowerCon in/out Neutrik Speakon NL4MP out |
| Handles | 2 x |
| Rigging / Fittings | 9 x M10 35 mm pole mount |
| Weight | 22,0 kg |
| Size <small>height x width x depth</small> | 106,0 x 18,9 x 34,3 (24,5) cm |
| Order No. | 00520/dp |

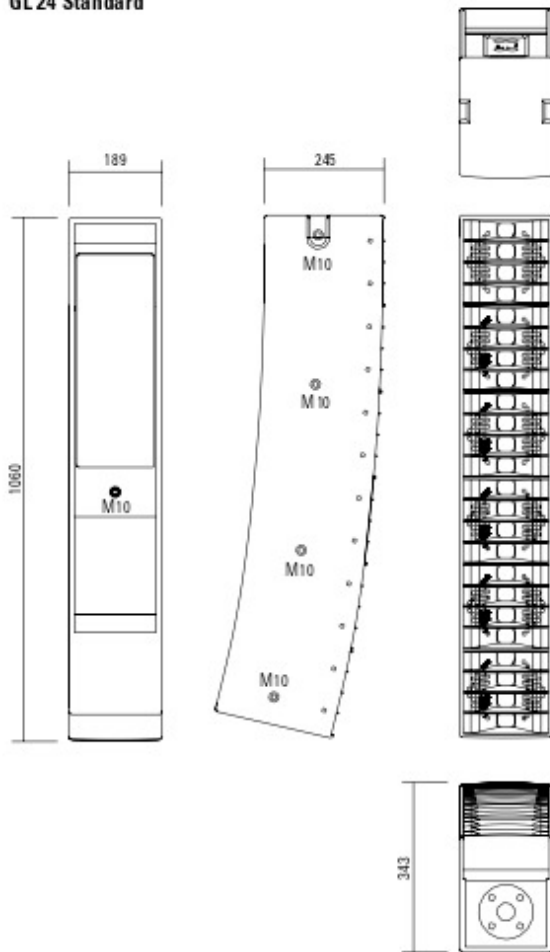


Flying Bracket.

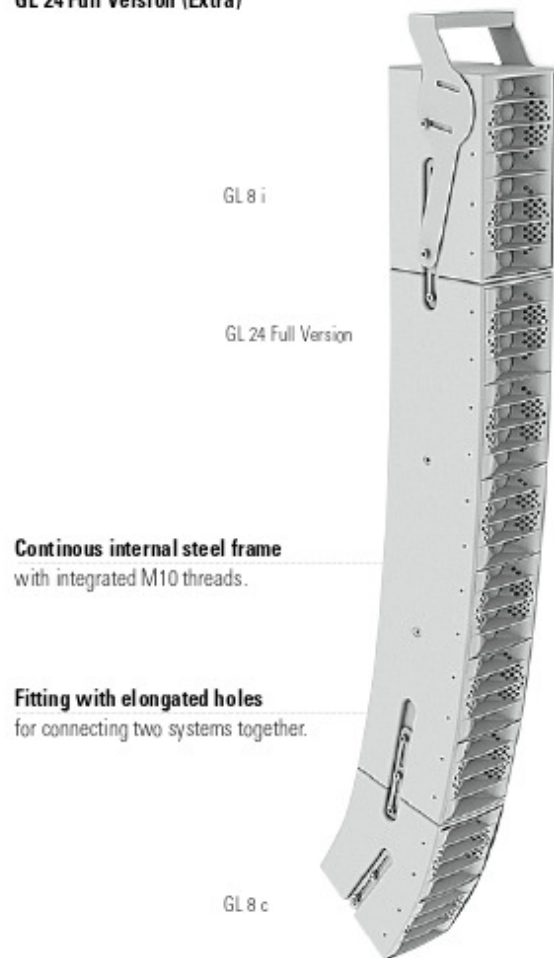


DIMENSIONS

GL 24 Standard



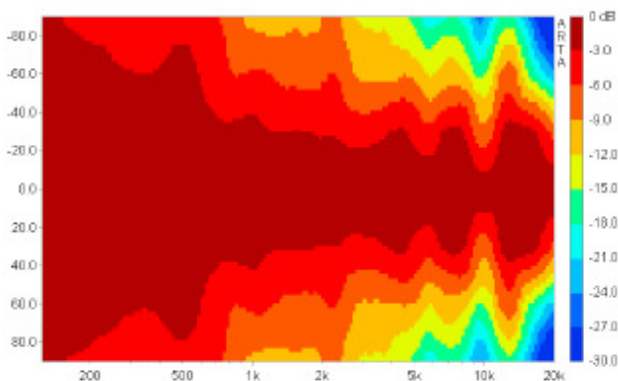
GL 24 Full Version (Extra)



COVERAGE PATTERNS

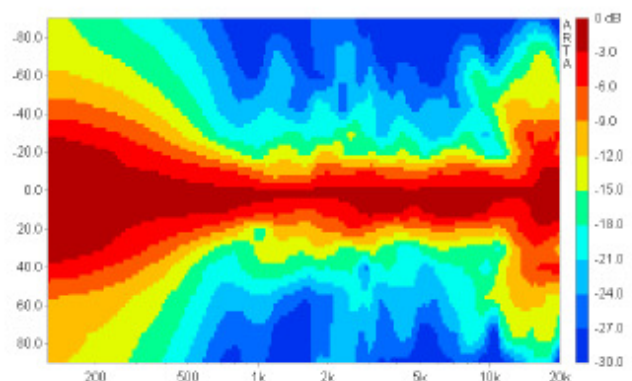
GL 24 horizontal - 2D Directivity Plot

100° horizontal dispersion for good performance in wide venues.



GL 24 vertical - 2D Directivity Plot

The j-curving leads to an unsymmetrical vertical dispersion, narrower in the upper section for long throw and wider in the lower section for near field.



AMR® PRINCIPLE

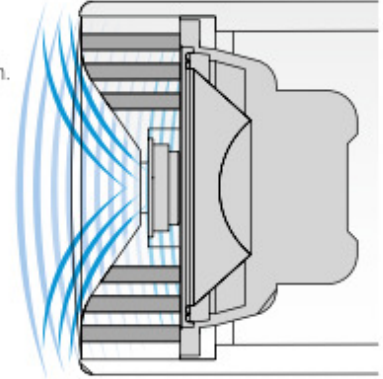


AMR® Principle.*

The AMR horn contains integrated channels which allow the sound waves generated by the low-mid speakers mounted behind the horn to pass through.

For sound waves in the frequency range generated by the 1" HF driver, these channels behave as if they were sealed due to the air mass inside the channels acting as a reflector (AMR = Air Mass Reflection).

The low-mid speakers are coupled to an acoustical band pass filter with a center frequency close to the crossover frequency between the Mid and HF drivers. This construction provides smooth horizontal dispersion over a wide frequency range. Another asset is the extreme compactness of this design.



*patentrechtlich geschützt

APPLICATIONS



Flying Cradle.



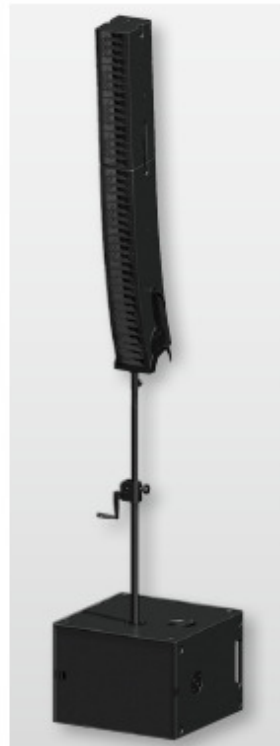
Integrated 35 mm Pole Mount.



Flying Bracket.



GL 24 dp / G Sub 1501
For applications up to 25 m distance.



GL 16 i dp 1000 / GL 24 dp / G Sub
For applications up to 40 m distance.



2 x GL 16 i dp 1000 / GL 24 dp
For applications up to 80 m distance.

The GL 24 dp features integrated digital amplifier electronics with a DSP controller. Various factory-configured presets and volume settings can be selected.

High-grade electronic components from the industrial sector and a first-class circuit design ensure excellent audio quality with low distortion and a minimal noise floor.

Highly efficient and "intelligent" limiter systems ensure optimum protection against overload, without restricting the possibilities offered by this high-performance sound system.

Presets

Flat
Standard setting with linear frequency response for stand-alone use.

Low (slight)
Slight reduction of low / mid range frequencies for combination with one GL 16 system.

Low (strong)
Strong reduction of low / mid range frequencies for combination with several GL 16 systems.

HP
120 Hz high pass filter for combination with subwoofers.

Level
Adjustment in 3 dB steps (-6 dB to +3 dB).

Status
Mute LED
Red light when the system is muted or under technically critical conditions.

Limit LED
Yellow light when the limiter is restricting the level.

Signal LED
Green light when the input signal exceeds -20 dBu

Power LED
Green light when the system is switched on.

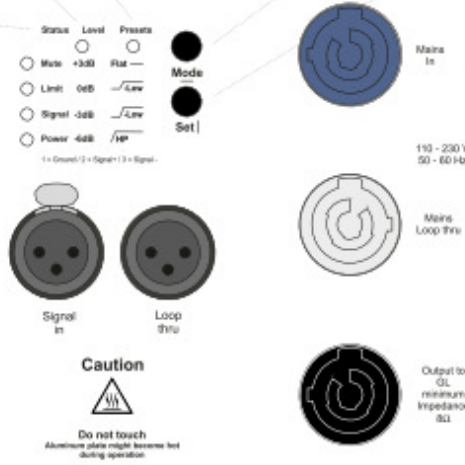
XLR
Symmetrical analog input max. Input +25 dBu. Effective filter protection against HF interference and DC Voltages. Electronically balanced to prevent noise.

GL 24 dp

Cylindric Wave Radiator

Serial No.:

| | |
|-----------------|---------------------|
| Power | 2x 800 W AES bamped |
| Input Impedance | 10 kΩ |
| Coverage | 105° x 20° |
| Frequency Range | 80 Hz - 20 kHz |
| Mains Supply | 100 - 230 VAC |
| Weight | 22kg |



Mode - key
Switches between control modes Status, Level and Presets.

Set - key
Setting of various values and Mute on / off.

PowerCon (blue)
Power supply ~ 110-230 V / 16 A max.

PowerCon (grey)
~ 110-230 V / 16 A max. loop through connector

Speakon NL4MP
Parallel output connection for a passive GL 24 system with an impedance of 8 Ω.



Flying Cradle

for GL System,
max. load 120 kg
Order No. **01354**



Flying Bracket

for GL 24,
incl. (black version: 4 x M10 x 20
handle screws, white version:
4 x M10 x 20 socket head screws)
Order No. **01352/GL24/set/w** (RAL 9010)
Order No. **01352/GL24/set**



Handle Screw

for flying brackets, adjustable
Order No. **08375/20** (M10 x 20)
Order No. **08375/30** (M10 x 30)



Clamping Bar

for flying bracket GL 24 / GL 24 j,
for stronger angling
Order No. **01352/clamp**



Knurled Head Screw

Reduction screw for fastening
M10 Flange (08126).
Order No. **73755**



Connection Bar

GL 24 standard version -> GL 8 c
for Downfill,
a pair, incl. accessories
Order No. **08159**



Flange

for Galeo S / G 3 / GL 16 / GL 24 /
K 24 flying bracket,
M20 x 35 mm with nut, incl. 1 x M20
x 30 socket head screw, 1 x flat
Order No. **08127/nut**



Quick Trigger TV Clamp

Max. load 200 kg
Order No. **01223/TV**



Doughty Quick Trigger Clamp

max. load 250 kg
Order No. **01223/250 kg**



TV Adapter

M20 external thread,
28 mm Ø
Order No. **08128/M20**



Shackle

for GL flying cradle,
max. load 1000 kg
Order No. **01372/GL**



Ring Screw

M10- DIN 580
Order No. **73700** (zincod)
Order No. **73700/sw** (black zincod)



Steel Safety

6 mm x 600 mm, black,
max. load 22 kg (BG1 810-3),
quick connector undetachably
Order No. **01376/6**



Chain Fastener

VBS 7 mm
Order No. **01378**



TV Adapter -> Flying Bracket



Clamping Bar



Spacer

ACCESSORIES GL 24 dp

Wall Mount



2 x M6 fixing holes (d=73 mm),
1 x M10 fixing hole (center),
max. load 25 kg
Order No. **03034**

Spacer



for wall mount (03034),
M10 x 55 (screw),
polyurea coated
Order No. **03034/spc**

Wall Mount



for U-brackets, max. load 40 kg,
incl. screws (M10 x 70 mm socket
head screw, M10 hex lock nut and
flat washer)
Order No. **08130/F/400** (400 mm)
Order No. **08130/F/269** (269 mm)

Speaker Stand



K&M, incl. wind up,
height 138,5 to 218 cm,
max. load 50 kg
Order No. **03011**

K&M, height 137,5 to 218,5 cm,
max. load 50 kg
Order No. **03010**

Hybrid Cable System



PowerCon-PowerCon / XLR-XLR
2,5 m Order No. **08462**
5 m Order No. **08464**
10 m Order No. **08466**
15 m Order No. **08468**

Stretch Cover



for GL 24 / GL 24 j
Order No. **01233/stretch/black**
Order No. **01233/stretch/grey**
Order No. **01233/stretch/white**

Rain Cover



for GL 24, incl. low lid,
connectable to other covers of the
GL-system
Order No. **01233/outdoor/2**

Bag



for one unit GL 24
Order No. **01233**

Flight Case



for 2 pcs. GL 24 units,
and accessories, heavy duty, 9 mm
birch multiplex, PVC coated, hinged lid,
8 x recessed sprung handles,
2 x butterfly catches, 4 x 100 mm blue
wheels, 2 pcs. with brake, stackable,
inserts for accessories, interior lined
with felt, loading measurements,
Size (H x W x D): 48,0 x 115,5 x 61,0 cm
Order No. **16013/pro/T**

EXTRAS



Grille on Front
Order No. **01179/GL 24**



Acoustic Foam on Front
Order No. **01178/GL 24**



Full Version
Integrated Flying Frame with
connecting bars
Order No. **01177/GL 24**

Colour Selection
RAL 9010, Pure White
Order No. **01199/GL 24**