

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° (50°-GL 24 j-version) 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 amplifier electronics are based on Class D power amplifiers, which are controlled via particularly low-noise FPGA DSP processing. Various factory-configured presets and volume settings can be called up. Remote monitoring and control is carried out via the Ethernet interface using SEEBURG Network Manager. Signal transmission (AoE) in accordance with the AES 67 standard is also possible.

PRODUCT SPECIFICATIONS

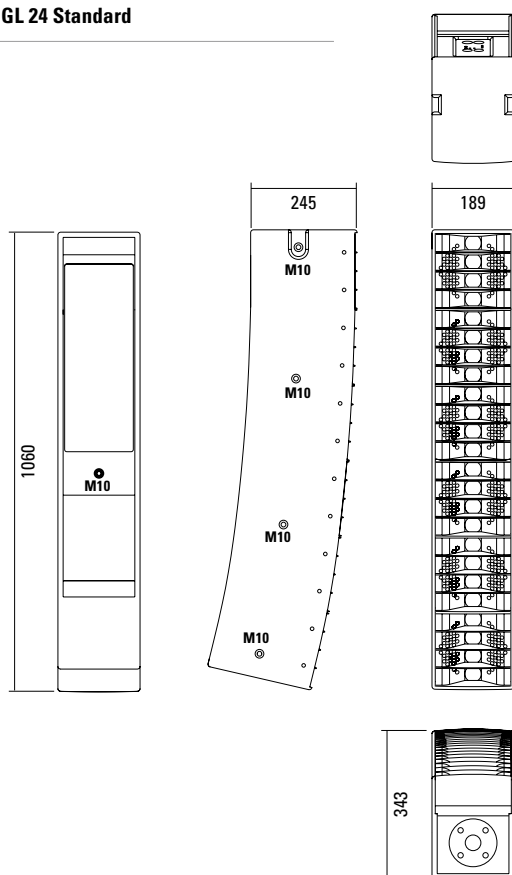
Speaker Components	6 x 6,5" Nd / 24 x 1" Nd Tweeter
Description	Digitally Powered Cylindric Wave Radiator
Amp Power	2 x 800 W AES biamped / 110-230 V
Rated Current	1,8 A @ 230 V
SPL <small>Peak @ 1 m</small>	>130 dB
Max. Input Signal	25 dBu
DSP	DPLMx FPGA Processing 32 bit floating point
AD / DA	24 bit / 96 kHz
Latency	0,8 ms (analog 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 100° x 50° - j-curved (GL 24 j)
Mechanical Splay Angle	13° 43° (GL 24 j)
Connectors	XLR in/thru, Ethercon, Powercon in/thru, Speakon NL4MP out
Rigging / Fittings	9 x M10 (GL 24 / GL 24 j) 35 mm pole mount (GL 24)
Weight	22 kg
Size <small>height x width x depth</small>	106,0 x 18,9 x 34,3 (24,5) 100,6 x 18,9 x 52,0 (24,5) (GL 24 j)
Order No.	00520/dp 00520/j/dp (GL 24 j)



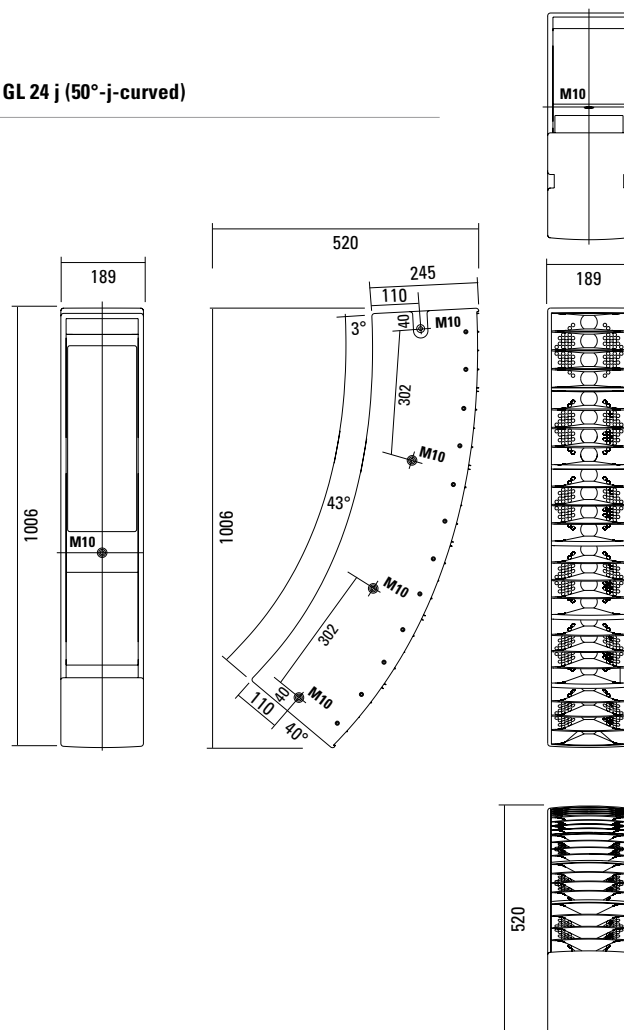
GL 24 j (50°-j-curved-version)

DIMENSIONS

GL 24 Standard



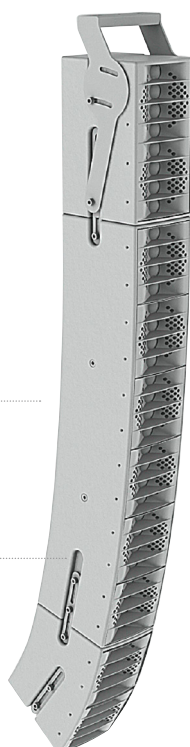
GL 24 j (50°-j-curved)



GL 24 Full Version (Extra)

Continuous internal steel frame
with integrated M10 threads.

Fitting with elongated holes
for connecting two systems together.

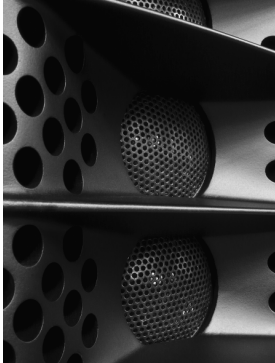


GL 8 i

GL 24 Full Version

GL 8 c



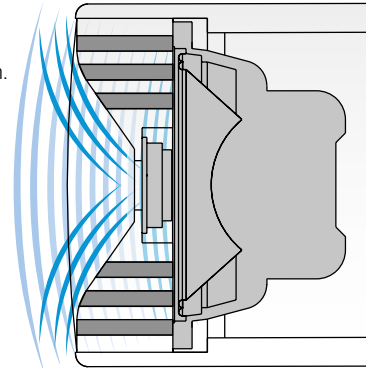


AMR® Principle.*

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.

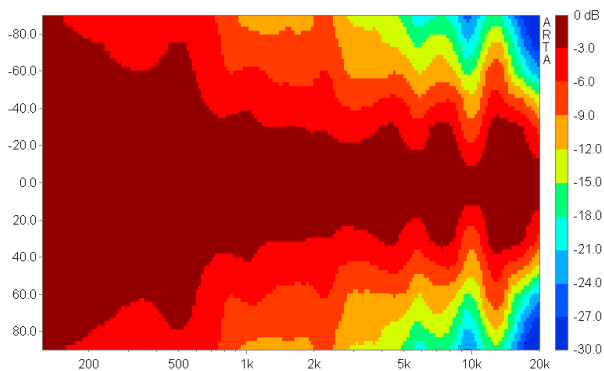


*patentrechtlich geschützt

COVERAGE PATTERNS

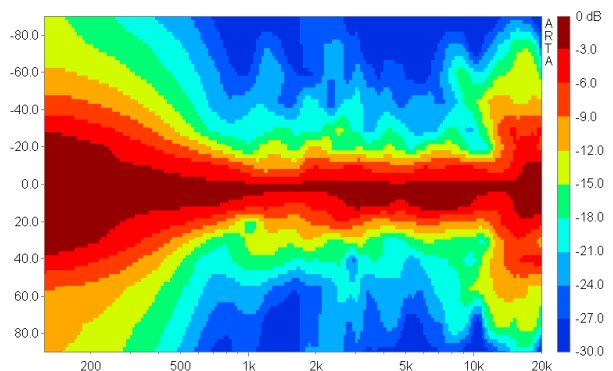
GL 24 horizontal - 2D Directivity Plot

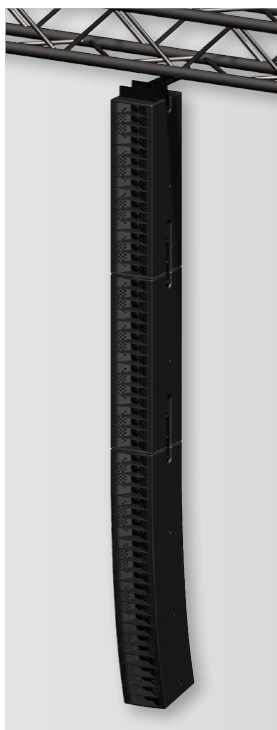
100° horizontal dispersion for good performance in wide venues.



GL 24 vertikal - 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.





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



GL 8 i / GL 24



GL 8 i / GL 24 j



GL 8 i / GL 24 j / GL 8 c



Flying Cradle



Integrated 35 mm pole mount.



Flying Bracket



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



GL 16 i / GL 24 / G Sub 1801
For applications up to 40 m distance.



GL 24 / 2 x GL 16 Sub

The GL 24 dp features integrated digital amplifier electronics with a DSP controller (dp = digitally powered). Various factory-configured presets and volume settings can be called up directly on the box or via a network connection.

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 > Quick Start Manual](#)

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.

Ethercon

Interface for remote control and audio transfer via ethernet (AES 67).

XLR

- Symmetrical analog input.
- Effective filter protection against HF interference and DC Voltages.
- Electronically balanced to prevent noise.



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.

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)

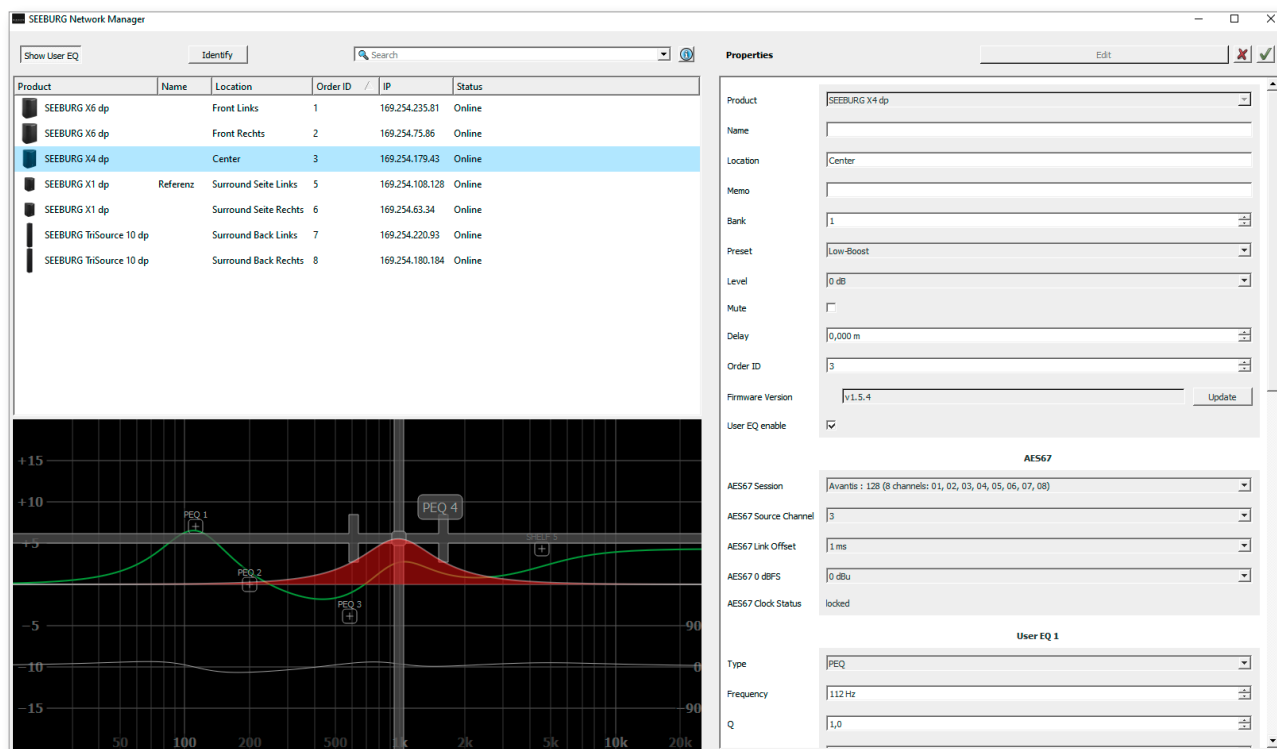
~ 110-230 V / 16 A max.
loop through connector

Speakon NL4MP

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

SEEBURG Network Manager

With the Software SEEBURG Network Manager all selfpowered systems can be controlled via network.



Features:

- > **Remote control** of functions such as recalling presets and banks, level control and mute, and locking the controls on the loudspeakers.
- > **Visual display** of all systems connected to the control network.
- > Storable names and location labels with a **global search function**.
- > **Selection of loudspeakers** in the list for simultaneous set-up and control changes.
- > **Fully parametric user EQs and delay settings** for time alignment, with a graphical user interface
- > **Time Delay** with up to **2.8 seconds runtime**.
- > **Audio-over-Ethernet (AoE) via AES 67.**
- > Connection with **media control systems** via **API**.
- > Basic **network settings**.
- > **Documentation** is available **online**.
- > **Identification function** by way of flashing LEDs on the dp loudspeaker systems.
- > **Firmware updates** can be applied.



Quick Start Guide:

www.seeburg.com > DOWNLOADS > User Manuals

AES NETWORK interface

All selfpowered systems are equipped as standard with an **AES Network interface**.

This is used for **remote control** via the **SEEBURG Network Manager** and for **Audio-over-Ethernet (AoE) audio transmission** via **AES 67**.



AES Network

Flying Cradle



for GL System,
max. load 120 kg,
incl. shackle (01372/GL)
Order No. **01354**

Flying Bracket



GL 24 / GL 24 j,
incl. (black version: 4 x M10 x 20
handle screws, 1 x knurled head nut,
white version: 4 x M10 x 20 socket
head screws 1 x knurled head nut)
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**

Connection Bar



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

Pole Mount Adapter - M20



for 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**

Quick Trigger Clamp



max. load 100 kg
Order No. **01223/100 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** (zincd)
Order No. **73700/sw** (black zincd)

Steel Safety



6 mm x 600 mm, black,
max. load 22 kg (BGI 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

Wall Mount



2 x M6 fixing holes (d=73 mm),
1 x M10 fixing hole (center),
max. load 25 kg
Order No. **03034/w** (RAL 9010)
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)
400 mm
Order No. **08130/F400/w** (RAL 9010)
Order No. **08130/F400**
269 mm
Order No. **08130/F/269/w** (RAL 9010)
Order No. **08130/F/269**

Speaker Stand



incl. wind up,
height 138,5 to 218 cm,
max. load 50 kg
Order No. **03011**
height 137,5 to 218,5 cm,
max. load 50 kg
Order No. **03010**

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



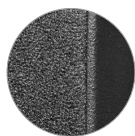
for 2 pcs. GL 24 units,
and accessories, heavy duty, 9 mm
birch multiplex, PVC coated, hinged lid,
8 x recessed sprung handles,
2 x butterfly catches, 4 x 100 mm blue
wheels, 2 pcs. with brake, stackable,
inserts for accessories, interior lined
with felt, loading measurements,
Size (H x W x D): 48,0 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**