The GL 16 is a high-performance line array system for high definition voice and music transmission in acoustically challenging venues, particularly in long throw situations. Acoustic coupling between two line arrays arranged one behind the other within the cabinet is exploited in the innovative design of the GL series to provide vertical directivity up to 15 kHz without any loss of power in the lower frequencies, and exceptionally homogenous and symmetrical horizontal dispersion. The design principle also allows the cabinet width to be kept down to a slim 19 cm. The acoustic and mechanical properties of the GL 16 system make it particularly suitable as an alternative to conventional column speakers and compact line arrays. From single element installations in churches, auditoriums and conference facilities to multiple element applications in array configurations in theatres and concert halls, the GL 16 is suitable for a multitude of application. **For operation without separate amplifiers and controllers, active dp (digitally powered) version of the GL 16 is available.**

GL 16 i + GL 16 c

GL 16 with front grille available in all RAL-colors.

GL 16 i dp on Monopod.

Integrated fittings for easy connection.

GL 16 with Front Grill
for unobtrusive installation
(custom version).

GL 16 i   GL 16 c   GL 16 i Front Grill Version   GL 16 c Front Grill Version

|	GL 16 dp 1000	GL 16 a	GL 16 xov
Speaker Components	4 x 6,5" Nd / 16 x 1" Nd Tweeter	4 x 6,5" Nd / 16 x 1" Nd Tweeter	4 x 6,5" Nd / 16 x 1" Nd Tweeter
Description	Digitally Powered Cylindric Wave Radiator	Cylindric Wave Radiator	Cylindric Wave Radiator
Power AES / Peak	- - -	LF: 400 W / 1200 W HF: 150 W / 450 W	400 W / 1200 W
Amp Power	2 x 500 W AES biamped/ 110-230 V	- - -	- - -
Impedance nominal	- - -	LF: 8 Ω / HF: 8 Ω	8 Ω
Rated Current	0,85 A @ 230 V	- - -	- - -
SPL 1 W / Peak @ 1 m	- - -	LF: > 96 dB / 127 dB HF: > 97 dB / 124 dB	> 127 dB
SPL Peak @ 1 m	> 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 (analog in to analog out)	- - -	- - -
Usable Range	80 Hz - 20 kHz (- 6 dB)	80 Hz - 20 kHz (- 6 dB)	80 Hz - 20 kHz (- 6 dB)
Tuning Frequency excursion minimum	90 Hz	90 Hz	90 Hz
X-Overpoint acoustical	Depends on preset	Depends on preset	1,1 kHz
Coverage horizontal / vertical	100° x 7° (i-version) 100° x 23° (c-version)	100° x 7° (i-version) 100° x 23° (c-version)	100° x 7° (i-version) 100° x 23° (c-version)
Mechanical Splay Angle	0° (i-version) 16° (c-version)	0° (i-version) 16° (c-version)	0° (i-version) 16° (c-version)
Connectors	Neutrik XLR in/out Neutrik PowerCon in/out	2 x Neutrik Speakon NL4MP in/out Coding: 1 +/- HF, 2 +/- LF	2 x Neutrik Speakon NL4MP in/out Coding: 1 +/- HiMid, 2 +/- loop thru
Handles	1 x	1 x	1 x
Rigging / Fittings	12 x M10 Integrated flying hardware	12 x M10 Integrated flying hardware	12 x M10 Integrated flying hardware
Weight	17 kg	16 kg	16,5 kg
Size height x width x depth	70,8 x 18,9 x 24,5 cm (i-version) 72,0 x 18,9 x 26,2 (24,5) cm (c-version)	70,8 x 18,9 x 24,5 cm (i-version) 72,0 x 18,9 x 26,2 (24,5) cm (c-version)	70,8 x 18,9 x 24,5 cm (i-version) 72,0 x 18,9 x 26,2 (24,5) cm (c-version)
Order No.	00500/2x500W (i-version) 00501/2x500W (c-version)	00500/a (i-version) 00501/a (c-version)	00500/xov (i-version) 00501/xov (c-version)

DIMENSIONS

GL 16 i

189   245   708   M10   M10

GL 16 c

189   262   720   M10   M10   8°
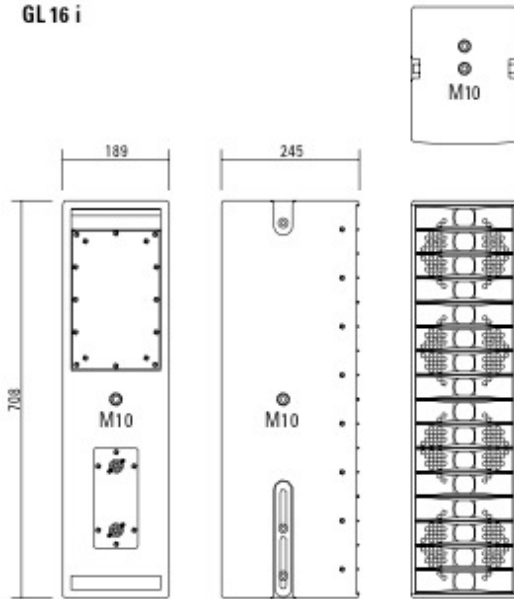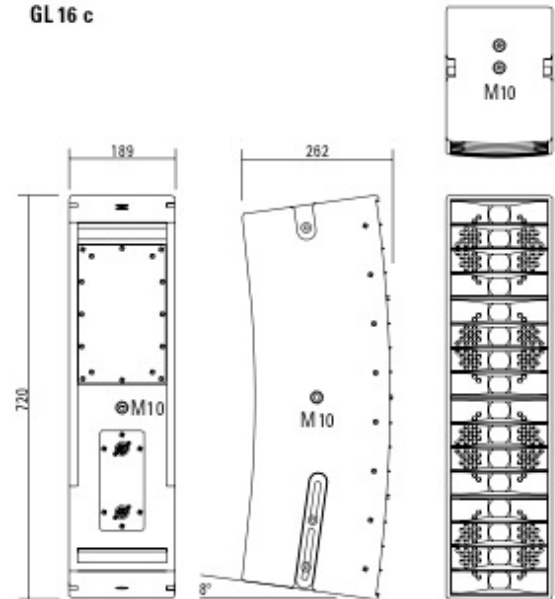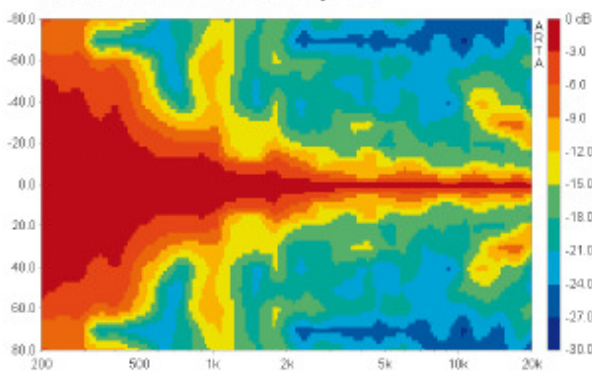
COVERAGE PATTERNS

GL 16 i / GL 16 c - horizontal - 2D Directivity Plot
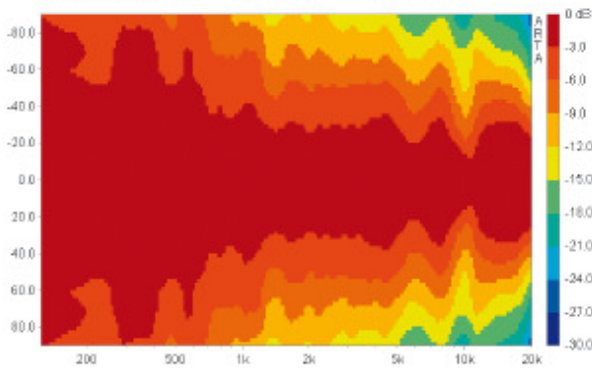
GL 16 c - vertical - 2D Directivity Plot
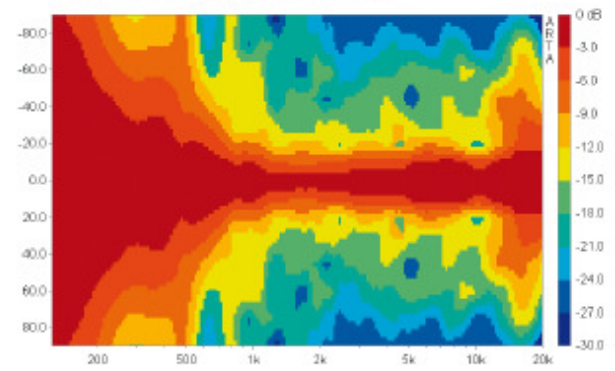
GL 16 i - vertical - 2D Directivity Plot

Controller Setups:

https://www.seeburg.net/en/downloads

Design of two GL 16 systems.

M10 threads for connection
of the Flying Cradle or ring screws.

Continous internal steel frame
with integrated M10 threads.

M10 thread
for installation of the Flying Bracket.

Fitting with elongated holes
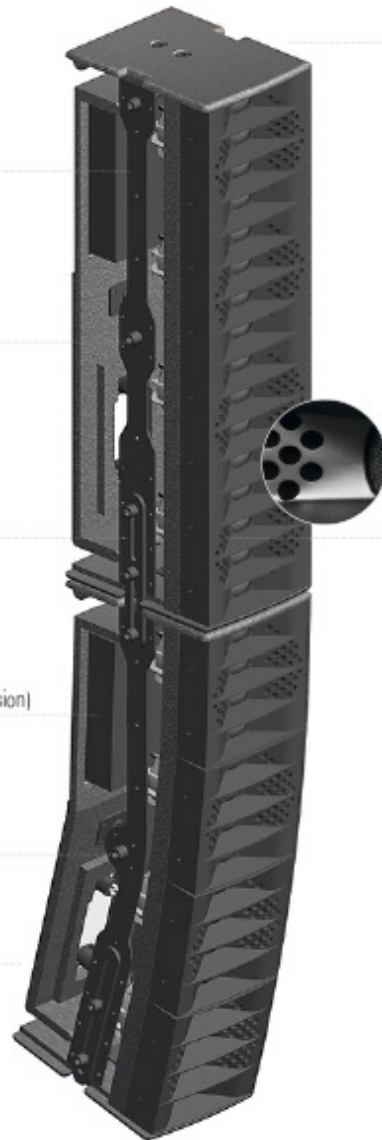for connecting two systems together.

AMR® - Channels

Integrated amplifier electronics (dp-version)
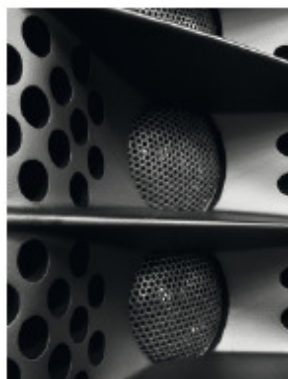Cover panel in the passive version.

M10 thread

Additional M10 thread
on the rear.

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.
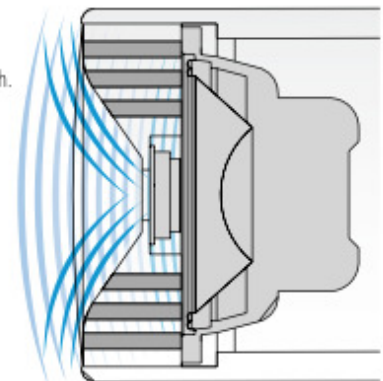
Wall Mount for Flying Bracket.

Flying Bracket.

Wall Mount with Spacer.

Flying Cradle.

Flying Bracket.

GL 16 c -> GL Sub
GL 16c systems can be mounted with the use of the Connection Adapter.

GL 16 i -> GL Sub
GL 16i systems can be mounted directly.

GL 16 i auf Monopod

GL 16 i / GL 16 c / GL Sub

GL 16 i / GL 24 / G Sub

Four GL 16 i mounted on XL Base Plate by means of a Connection Adapter.

GL 16 systems are available not only as „i" (straight) and „c" (curved) versions, but also as selfpowered dp- versions (dp = digitally powered), featuring 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.

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.
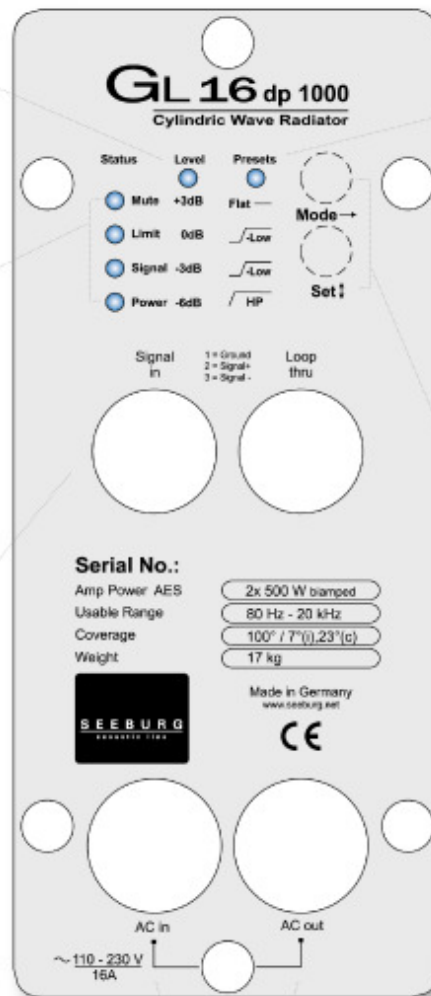
Presets

Flat
This setting provides a linear frequency response with a neutral sound characteristics. Standard setting for many applications.

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 (high pass filter)
Activates a high pass filter (cut-off frequency 120 Hz) for use in combination with a subwoofer.

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

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

GL 16 dp 1000
Cylindric Wave Radiator

Status	Level	Presets
Mute	+3dB	Flat —
Limit	0dB	Low
Signal	-3dB	Low
Power	-6dB	HP

Mode →
Set

Signal in
1 = Ground
2 = Signal+
3 = Signal -
Loop thru

Serial No.:

Amp Power AES	2x 500 W biamped
Usable Range	80 Hz - 20 kHz
Coverage	100° / 7°(i) 23°(c)
Weight	17 kg

SEEBURG

Made in Germany
www.seeburg.net

CE

AC in
AC out
~ 110 - 230 V
16A

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

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

Flying Cradle

for up to 6 units GL 16 or
for one unit GL 24

Order No. **01354**

Shackle

for GL flying cradle,
max. load 1000 kg

Order No. **01372/GL**

Flying Bracket

for GL 16,
incl. (black version:
2 x M10 x 30 handle screws
white version:
2 x M10 x 30 socket head screws)

Order No. **01352/GL16/set/w** (RAL 9010)
Order No. **01352/GL16/set**

Steel Safety

6 mm x 600 mm, black,
max. load 22 kg (BGI 810-3),
quick connector undetachably

Order No. **01376/6**

Handle Screw

for flying brackets, adjustable

Order No. **08375/20** (M10 x 20)
Order No. **08375/30** (M10 x 30)

Ring Screw

M10– DIN 580

Order No. **73700**   (zinced)
Order No. **73700/sw**   (black zinced)

Knurled Head Screw

reduction screw for fastening
M10 Flange (08126).

Order No. **73755**

Chain Fastener

VBS 7 mm

Order No. **01378**

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**

TV Adapter

M20 external thread,
28 mm Ø

Order No. **08128/M20**

Doughty Quick Trigger Clamp

max. load 250 kg

Order No. **01223/250 kg**

Quick Trigger TV Clamp

max. load 200 kg

Order No. **01223/TV**

TV Adapter -> Flying Bracket

Wall Mount

2 x M6 fixing holes (d=70-76 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, 40 kg max., 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)

Connection Adapter

for small and XL base plate
for stacking GL 16 i -> base plate

Order No. **01276/GL16**

Connection Adapter

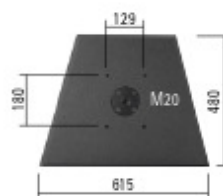for GL 16 c -> GL Sub

Order No. **01276**

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,
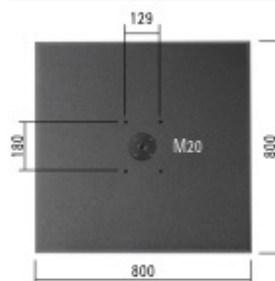max. load 50 kg

Order No. **03010**

Monopod

for GL 16,
height 110 cm

Order No. **01277**

Base Plate, Small

for GL 16 / GL Sub / L-Series
with M20 flange, 61,5 x 48,0 cm

Order No. **01278/M20**

Base Plate, XL

for stacked mounting
of multiple GL 16 units / GL Sub
with M20 flange,
80,0 x 80,0 cm

Order No. **01279/M20**

Spacer -> Wall Mount

ACCESSORIES GL 16

Stretch Cover

for one unit GL 16,
other colors available on request

Order No. **01230/GL16**

for two units GL 16,
several colors on request

Order No. **01230/GL16/long**

Rain Cover Set

for GL 16,
set incl. low lid and
high lid (by using flying cradle),
connectable to other covers of the
GL-system

Order No. **01230/outdoor**

Bag

for one unit GL 16

Order No. **01230**

Flight Case

for 2 pcs. GL 16 i/c units
and accessories, heavy duty, 9 mm
birch multiplex, PVC coated, hinged lid,
6 x recessed sprung handles,
2 x butterfly catches, 4 x 100 mm blue
wheels, 2 pcs. with brake, inserts for
accessories, interior lined with felt,
size (H x W x D): 48 x 77 x 61 cm

Order No. **16004/pro/T**

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**