



Compact subwoofer for GL-Systems and all applications where an inconspicuous appearance is required along with high performance. Due to its integrated flying hardware, the GL 16 Sub can be mechanically connected to any GL-systems in a flying or standing arrangement. The selfpowered GL 16 Sub dp+ version is equipped with 2-channel amplifier electronics with DSP. 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

	GL 16 Sub	GL 16 Sub dp+
Speaker Components	3 x 6,5" Nd, VC = 64 mm	3 x 6,5" Nd, VC = 64 mm
Description	Passive Bass Extension	Digitally Powered Bass Extension
Power AES / Peak	900 W / 1800 W	
Amp Power AES		Ch. 1 (internal): 800 W AES Ch. 2 (external): 800 W AES
Impedance nominal	5,3 Ω	
Rated Current		2,0 A @ 230 V
<b>SPL</b> 1 W / Peak @ 1 m	92 dB / 125 dB	/ 125 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	42 Hz - 300 Hz (-6 dB)	42 Hz - 300 Hz (-6 dB)
Tuning Frequency excursion minimum	53 Hz	53 Hz
Connectors	2 x Speakon NL4MP in/out Coding: 1+/- loop thru, 2+/- Sub	XLR in/thru, Ethercon, Powercon in/thru 2 x Speakon NL4MP out
Rigging / Fittings	10 x M10, Integrated flying hardware	10 x M10, Integrated flying hardware
Weight	14,5 kg	15,5 kg
Size height x width x depth	70,8 x 18,9 x 24,5 cm	70,8 x 18,9 x 24,5 cm
Order No.	00540	00540/dp+







GL 16 Sub dp+ Connection Panel









2 x GL 16 Sub / GL 16 c



2 x GL 16 Sub / 2 x GL 16 c



2 x GL 16 Sub / GL 16 i / GL 16 c



Flying Bracket



 $\ensuremath{\mathsf{GL}}\xspace\,16\ensuremath{\mathsf{c}}\xspace$  systems in combination with Connection Adapter (01276)



GL 16 Sub in combination with Connection Adapter (01276/GL16)



Integrated fittings for easy connection.



GL 24 / 2 x GL 16 Sub



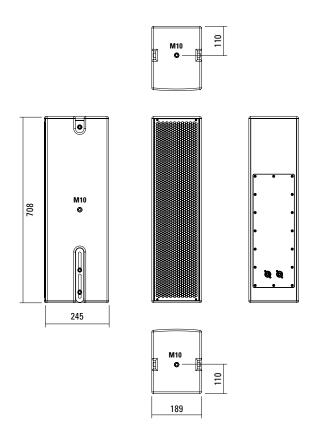
GL 16 c / 2 x GL 16 Sub



GL 16 i / 2 x GL 16 Sub



2 x GL 16 Sub / 2 x GL 16 i

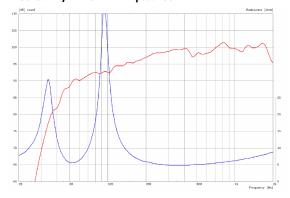


# **Controller Setups**:

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

# **MEASUREMENT**

# Sensitivity 1 W @ 1 m + Impedance





GL 16 Sub Connection panel

Level

Status

Mute LED

**Limit LED** 

Signal LED

Power LFD

is switched on.

Speakon NL4MP

a passive GL 16 Sub

Ethercon

noise

Adjustment in 3 dB steps

(-12 dB to + 6 dB).

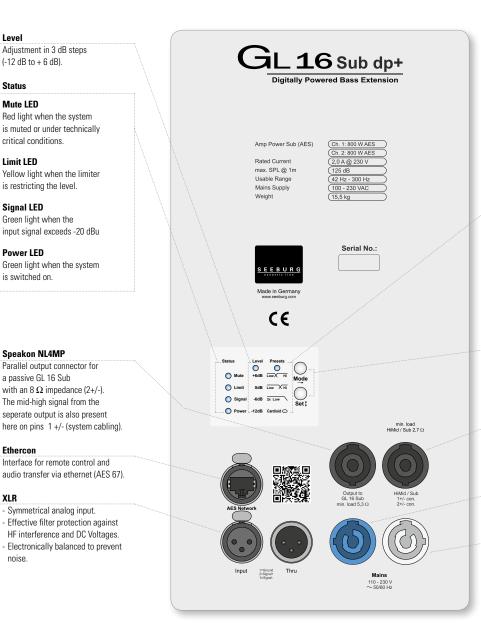
critical conditions.

is restricting the level.

Green light when the

The GL 16 Sub dp+ is equipped with 2-channel amplifier electronics with DSP. Various factory-configured presets and volume settings can be called up directly at the speaker. Three preset banks are available. Extensive functions can be managed via the SEEBURG Network Manager and audio signals can also be transmitted via "audio over ethernet".

High-grade electronic components from the industrial sector and a firstclass 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 (Factory default)

2-way active preset with Lowpass 100 Hz und GL-series xov Flat.

#### Low/Hi

2-way active preset with Lowpass 120 Hz und GL-series xov Flat.

Pure subwoofer operation with 120 Hz crossover frequency. A total of three GL 16 Sub can be operated.

#### **Cardioid** mode

Backward sound is reduced by partial cancellation in the range around 80 Hz. For this purpose a GL 16 Sub is con-nected to the second amplifier output (right socket) and positioned at a distance of 0.5 m from the main system. This effect is independent of structural conditions.

#### Mode - kev

Switches between control modes Status, Level and Presets.

#### Set - key

Setting of various values and Mute on / off.

# Speakon NL4MP

Connector for passive tops or subs or both on the second amplifier channel. (pins 1 +/- top and 2 +/- sub).

#### Powercon (blue)

Power supply  $\sim$  110-230 V / 16 A max.

#### Powercon (grey)

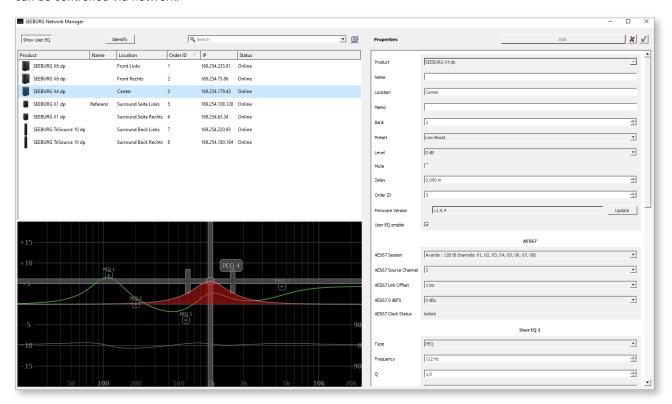
 $\sim$  110-230 V / 16 A max. loop through connector

### **Controller Setups:**

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

# **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 simultanious 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.



# **AES NETWORK interface**

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

This is used for  $\boldsymbol{remote\ control}$  via the

**SEEBURG Network Manager** and for

Audio-over-Ethernet (AoE)
audio transmission via AES 67.



AES Network



# **ACCESSORIES GL 16 Sub**



# Flying Bracket

for GL System, 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



### **Connection Adapter**

for stacking GL 16 i / GL 16 Sub, incl. M20 x 80 flat head screw

Order No. 01276/GL16



# **Connection Adapter**

for GL 16 c -> GL 16 Sub Order No. **01276** 



# **Height Extender**

for stacking GL 8 i, GL 16 i, GL 16 Sub, height 35,4 cm

Order No.01277/35

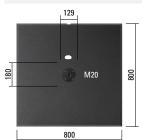


# Base Plate, Small

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

Order No. 01278

Order No. **01278/w** (RAL 9010)



## Base Plate, XL

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

Order No. 01279

Order No. 01279/w (RAL 9010)



GL 16i / GL 16 Sub / Height Extender



