The self-powered high-performance top **K 24 dp** is suitable for all sound applications requiring a fast set-up, very high power reserves and a good sound. The 2 x 12"/ 1.4" combination weighs just 37 kg including the integrated flying hardware, can be hung one above the other for longer arrays and is extremely compact. The optional flying bracket is very simple to attach using the ball lock pin and can be adjusted to the desired angle. The high-quality two channel DSP amplifier provides for a max. SPL of up to 139 dB. 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	2 x 12" Nd / 1,4" Nd
Description	High Power HiMid System
Amp Power	Ch. 1: 2400 W AES (LF) Ch. 2: 700 W AES (HF)
Rated Current	2,2 A @ 230 V
SPL Peak @ 1 m	139 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 - 6 dB	75 Hz - 19 kHz
Tuning Frequency excursion minimum	85 Hz
X - Overpoint acoustical	Depends on preset
Coverage horizontal / vertical	60° x 50° (60°-version) 90° x 50° (90°-version)
Max. Splay Angle	12°
Connectors	XLR in/thru, Ethercon, Powercon in/thru
Handles	2 x
Rigging / Fittings	5 x M10 / 4 x 6 mm socket, integrated flying hardware, 35 mm pole mount
Weight	37,0 kg (+ 7,0 kg wheel board)
Size height x width x depth	70,0 x 42,0 x 46,0 cm
Order No.	**01029/dp/60°** (60°-version) **01029/dp/90°** (90°-version)

Control Panel of the K 24 dp.
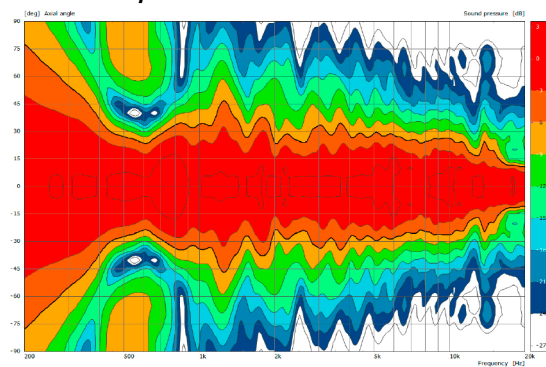
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acoustic line
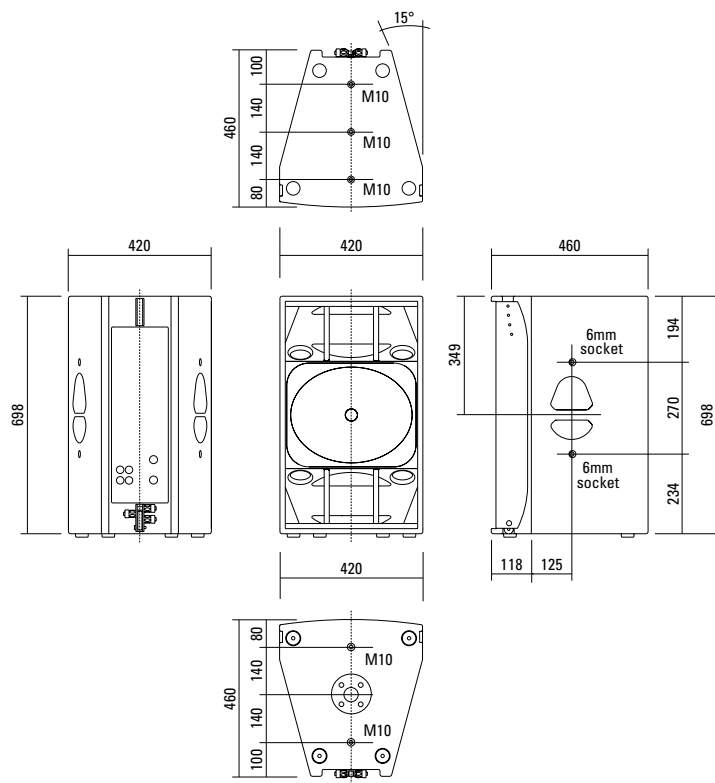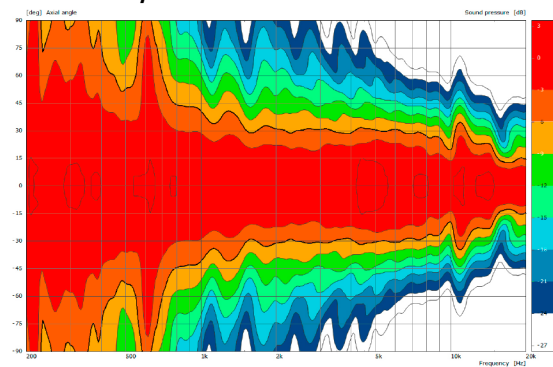
MEASUREMENTS

Frequency Response with Preset
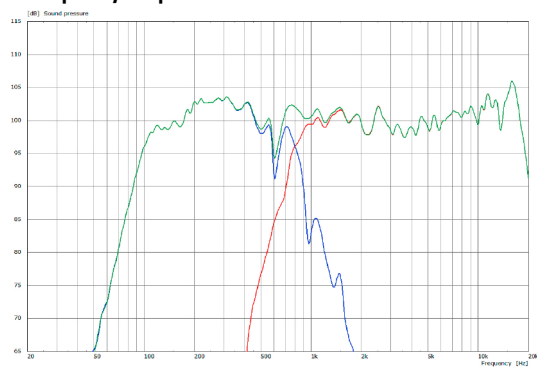
2D Directivity Plot - vertical

2D Directivity Plot - horizontal 60°

2D Directivity Plot - horizontal 90°

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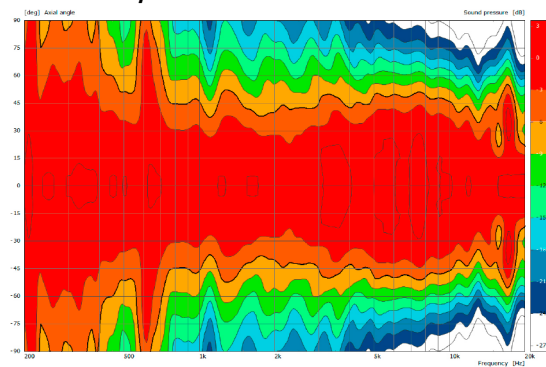
The technical performance features of the K 24 and its exceptional compactness were only possible by means of a complex acoustic interplay between the individual components and their control systems.
As a result, the performance characteristics and quality attributes were optimised to such a level that they are able to compete with and even surpass significantly larger systems.

To increase the degree of efficiency, the two 12" low-midrange speakers are initially directed into an acoustic bandpass and then into a hybrid horn. The symmetrical set-up ensures even and balanced coverage.

The generously dimensioned elliptical horn featuring a curved design for wide coverage ensures a highly accurate and long throw.

The cabinet is fitted with a sophisticated reinforcement system in order to prevent unwanted resonance.

K 24

The drivers are installed such that the voice coils are in the same vertical plane to ensure phase coherence even when using the passive crossover.

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The integrated Flying System

The Flying Cradle – up to three K 24 systems can be flown vertically.

Simple interconnection of systems by means of integrated Spacer.

Spacer with "parking space" for the Ball Lock Pin.

Integrated Flying System with four adjustable Splay Angles.
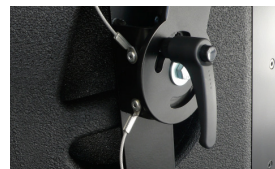
Bracket

K 24 as Stack
with K Sub 1801.

Accessories

Removable Wheel Board for simple transportation.

The Flying Bracket is very simple to attach using the Ball Lock Pin and can be adjusted to the desired angle.

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a c o u s t i c   l i n e

The K 24 System

The K 24 dp not only performs well when used in the basic version, but can also be extended as desired to a larger system suitable for halls and open-air events.

Whether you opt for the G Sub 1801 dp (1 x 18") with its low tuning frequency, for the more punchy sounding K Sub 1502 dp (2 x 15") or for the direct radiating K Sub 1801 dp (1 x 18") is more or less a matter of taste. The system can be used flown or ground stacked and is easily extendable.
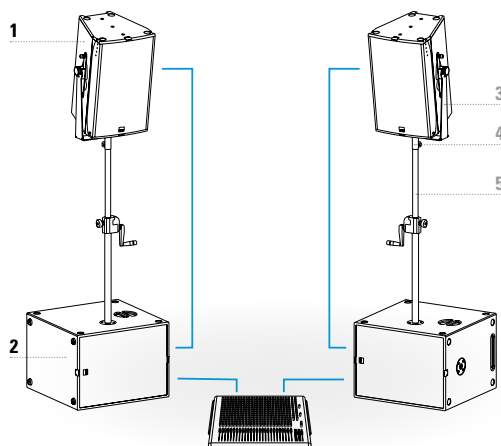
Basic System

Components		Order No.
1	**2 x K 24 dp**	01029/dp
2	**2 x K Sub 1801 dp** Selfpowered version	01060/dp

Accessories		Order No.
3	**Flying Bracket**	01209/set
4	**Pole Mount Adapter**	08127/nut
5	**Speaker Pole**	03022
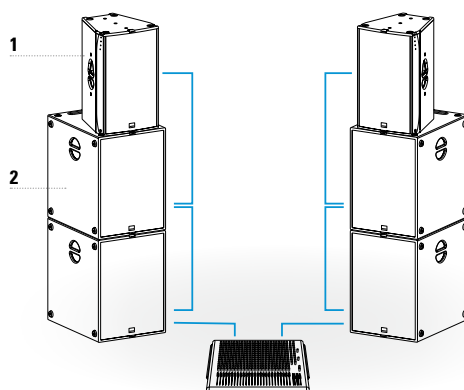
Standard System

Components		Order No.
1	**2 x K 24 dp**	01029/dp
2	**4 x K Sub 1801 dp** Selfpowered version	01060/dp
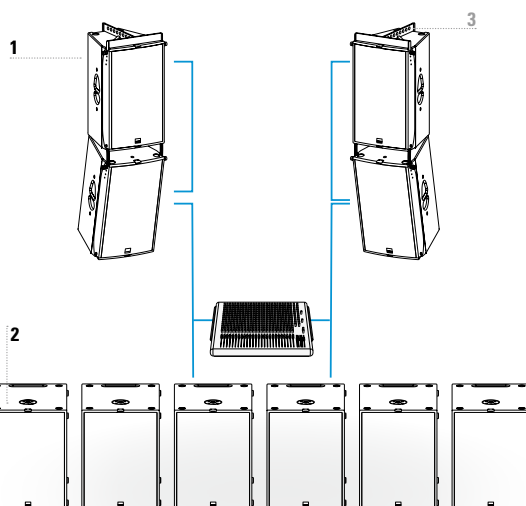
XL System

Components		Order No.
1	**4 x K 24 dp**	01029/dp
2	**6 x K Sub 1801 dp** Selfpowered version	01060/dp

Accessories		Order No.
3	**2 x Flying Cradle**	01355

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The K 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.

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
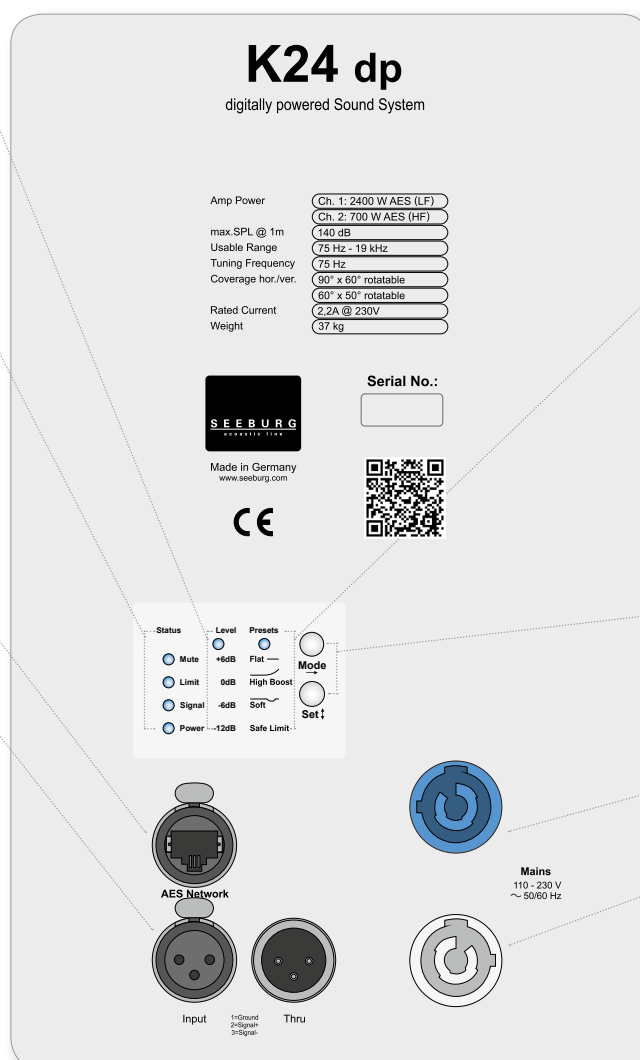Green light when the input signal
exceeds -20 dBu.

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.

K24 dp
digitally powered Sound System

Amp Power	Ch. 1: 2400 W AES (LF)
	Ch. 2: 700 W AES (HF)
max.SPL @ 1m	140 dB
Usable Range	75 Hz - 19 kHz
Tuning Frequency	75 Hz
Coverage hor./ver.	90° x 60° rotatable
	60° x 50° rotatable
Rated Current	2,2A @ 230V
Weight	37 kg

Serial No.:

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Made in Germany
www.seeburg.com

CE

Status | Level | Presets
Mute | +6dB | Flat
Limit | 0dB | High Boost
Signal | -6dB | Soft
Power | -12dB | Safe Limit

Mode

Set

AES Network

Input   1=Ground
         2=Signal+
         3=Signal-

Thru

Mains
110 - 230 V
~ 50/60 Hz

Presets

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

High Boost
For use on long distances.

Soft
Reduces the level in the frequency
range from 2.5 - 5 kHz, to which the
ear is particularly sensitive. This
setting is recommended for high level
reproduction of highly compressed
music tracks.

Safe Limit
-3 dB reduction of the limiter threshold to avoid damage by misuse.

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

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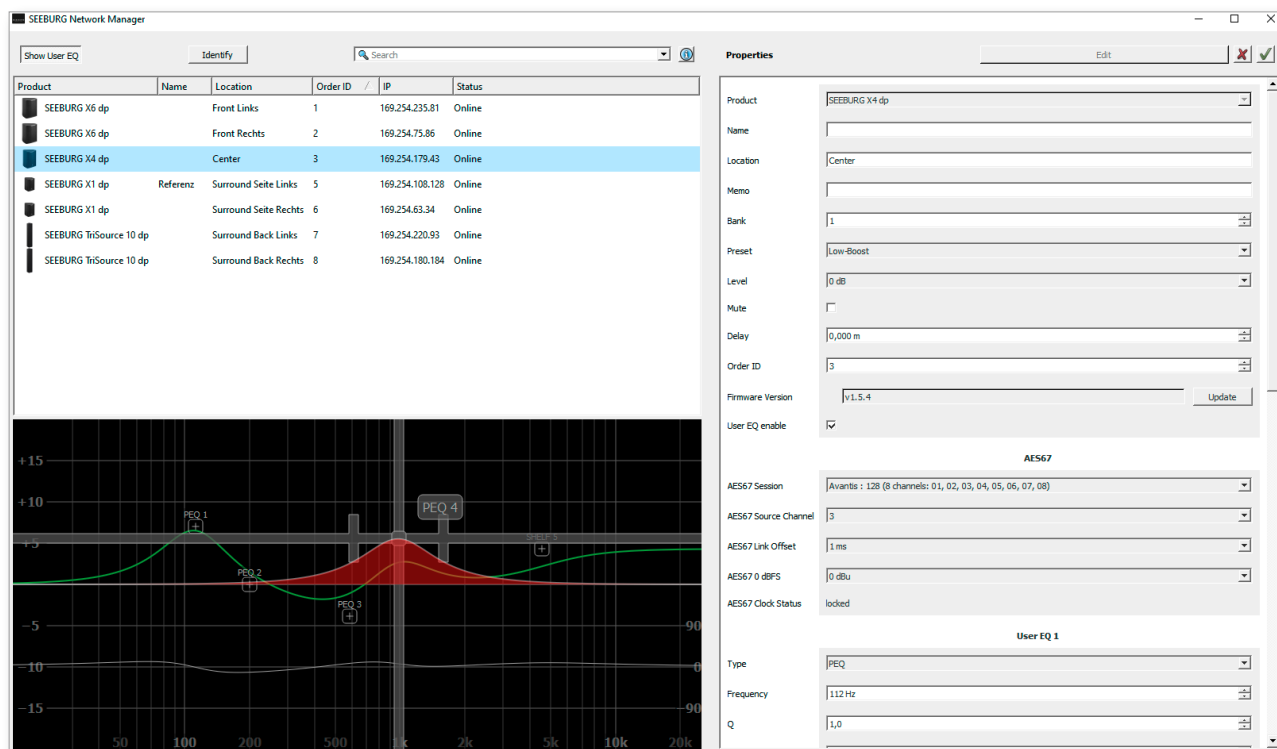Setting of various values and
Mute on / off.

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

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

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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.

SEEBURG Network Manager > Quick Start Manual (pdf)

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

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Flying Cradle

for K 24,
incl. (1 x 6 x 25 mm ball lock pin,
1 x steel rope)

Order No. **01355**

Quick Trigger TV Clamp

Max. load 200 kg

Order No. **01223/TV**

Flying Bracket

for K 24,
incl. (4 x ball lock pins 6 x 20 mm,
4 x steel ropes, 2 x handle screws
M8 x 20 mm)

Order No. **01209/set**

Quick Trigger Clamp

max. load 100 kg

Order No. **01223/100 kg**

Handle Screw

M8 x 20 mm,
adjustable

Order No. **08376**

TV Adapter

M20 external thread,
28 mm Ø

Order No. **08128/M20**

Ball Lock Pins

for K 24 (front)

Order No. **01380/6x20** (6 x 20 mm)

for K 24 (rear)

Order No. **01380/6x25** (6 x 25 mm)

Ring Screw

M10– DIN 580

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

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**

Shackle

cambered, high-quality tempered,
with bolt (ø 12 mm), weight: 0,14 kg,
WLL 1000 kg

Order No. **01372/1000**

Speaker Pole

250 mm, ø 35 mm, M20
with ring lock

Order No. **03020**

Steel Safety

8 mm x 600 mm, black,
max. load 40 kg (BGI 810-3),
quick connector undetachably

Order No. **01376/8**

MultiTilt™

Tilt adapter with adjustable tilt from
0° to 37,5° (2,5° steps), integr. pole
mount adapter with clamping device,
2 x knurled screws (M10 x 20 mm),
max. load 50 kg

Order No. **01370**

TV Adapter -> Flying Bracket

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ACCESSORIES K 24 dp

for K 24, 90° x 50°
Order No. **01598**

Rain Cover
for K 24
Order No. **01255/outdoor**

Wheel Board
for K 24, stackable
Order No. **01266**

Cover
for K 24 without wheel board
Order No. **01255**

Flight Case
for 2 pcs. K 24 and accessories,
heavy duty, 9 mm birch multiplex,
PVC coated, 10 x recessed sprung
handles, 4 x butterfly catches,
4 x 100 mm blue wheels with brake,
2 x scanner windows, inserts for
accessories, interior lined with felt.
Order No. **16030/K24+**

Cover
for K 24 by using wheel board
Order No. **01255/WB**

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**

SEEBURG acoustic line