

High Power HiMid System - digitally powered **K 24 dp**



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

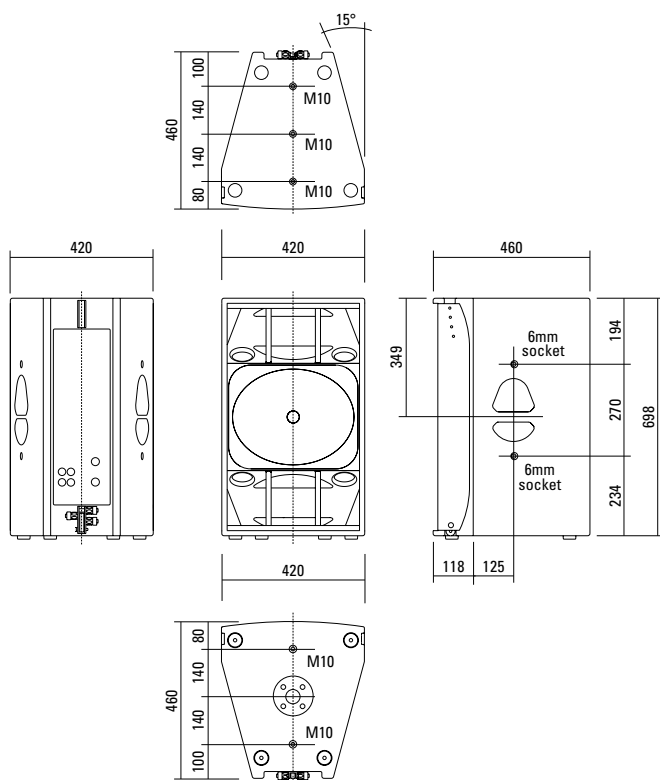
Speaker Components	2 x 12" Nd / 1.4" Nd
Description	High Power HiMid System
Amp Power	Ch. 1: 2400 W AES (LF) Ch. 2: 700 W AES (HF)
Rated Current	2,2 A @ 230 V
SPL Peak @ 1 m	139 dB
Max. Input Signal	25 dBu
DSP	DPLMx FPGA Processing 32 bit floating point
AD / DA	24 bit / 96 kHz
Latency	0,8 ms (analog 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°
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



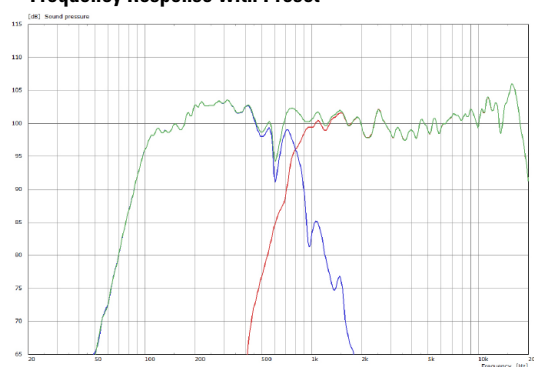
Control Panel of the K 24 dp.



DIMENSIONS

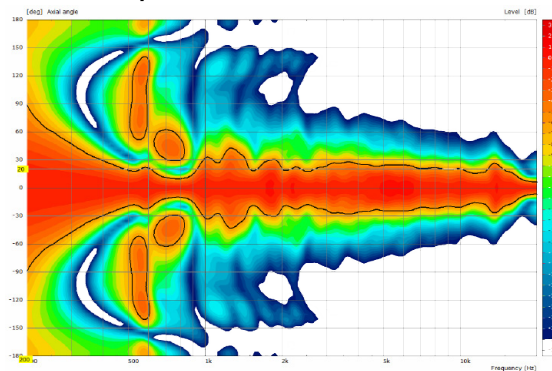


Frequency Response with Preset

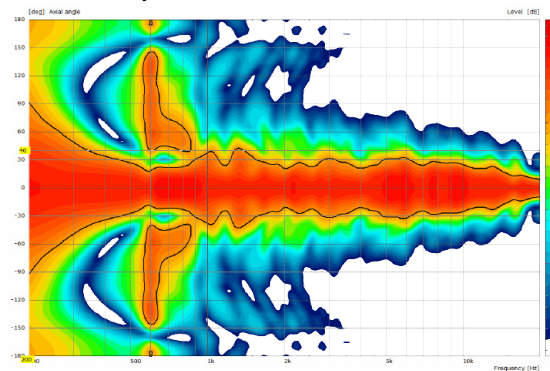


MEASUREMENTS

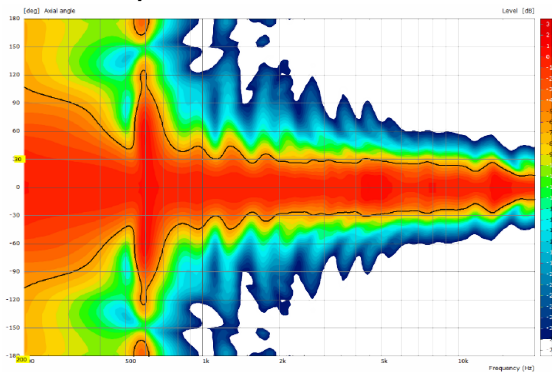
2D Directivity Plot - vertical - 60°



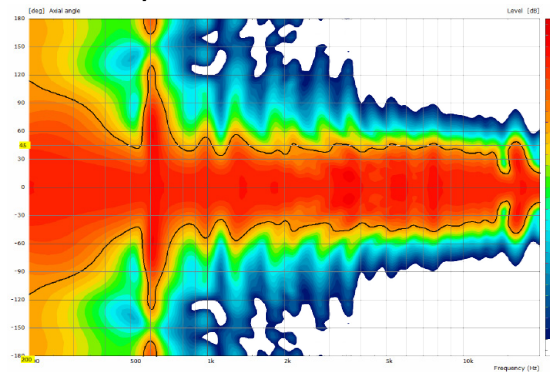
2D Directivity Plot - vertical - 90°



2D Directivity Plot - horizontal - 60°



2D Directivity Plot - horizontal - 90°



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.





The integrated Flying System



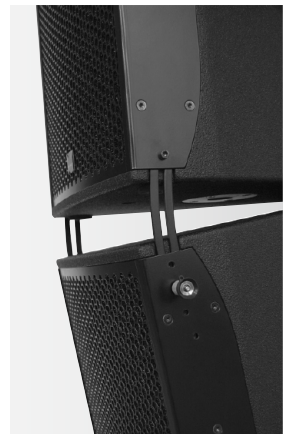
The Flying Cradle – up to three K 24 systems can be flown vertically.



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.

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.

[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

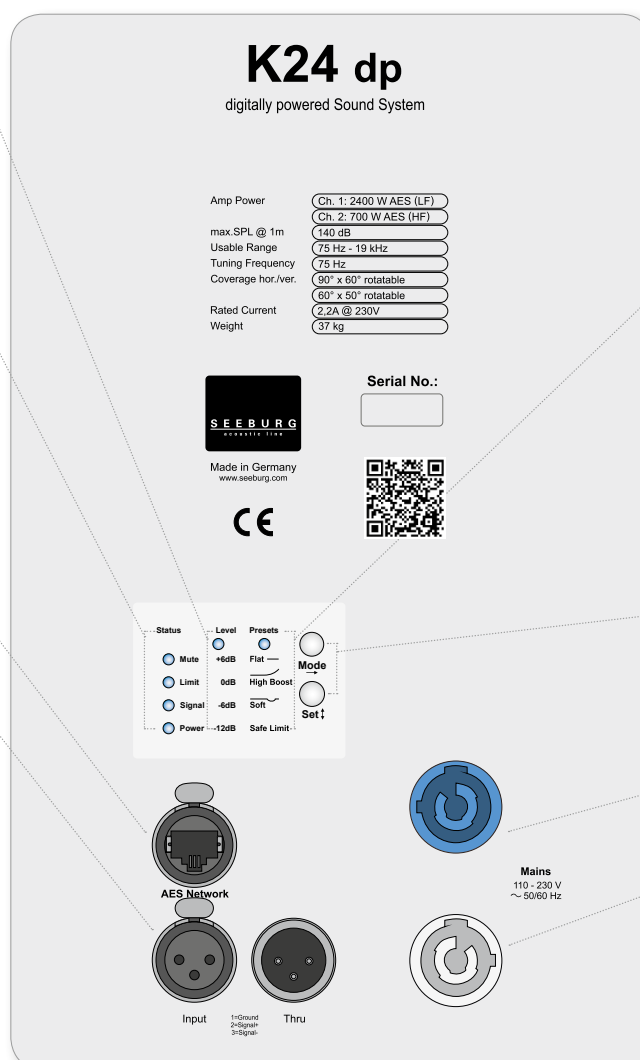
Green light when the system is switched on.

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

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)

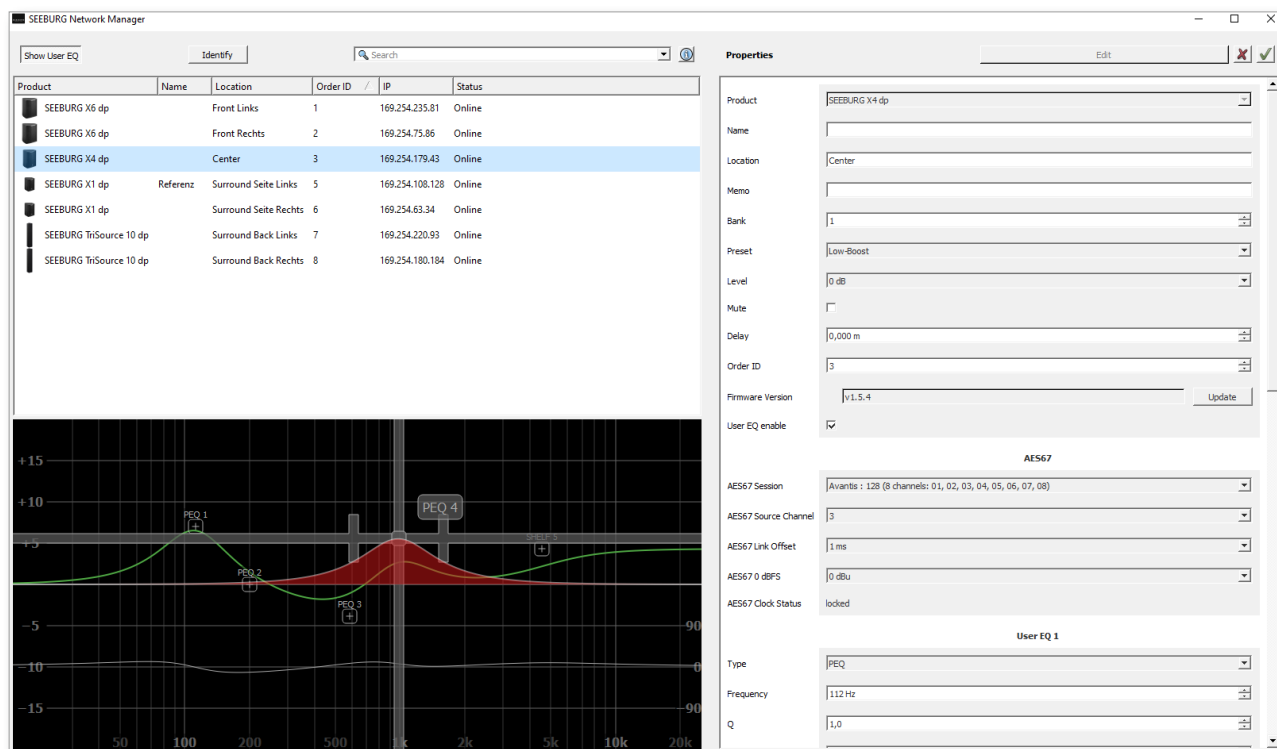
Power supply
~ 110-230 V / 16 A max.

Powercon (grey)

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

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

Order No. **01355**

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**

Handle Screw



M8 x 20 mm,
adjustable

Order No. **08376**

Ball Lock Pins



for K 24 (front), ø 6 x 17 mm

Order No. **01380/6x17**

for K 24 (rear), ø 6 x 25 mm

Order No. **01380/6x25**

MultiTilt™



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

Order No. **01370**

MultiTilt™ Heavy Duty



for Galeo C / C-Series / K 24,
to be used with FD34 / FD33 truss,
minimum truss length: 0,21 m
consisting of base plate with M20
and tilt adjuster (incl. socket head
screw M20 x 30 mm),
weight: 13,5 kg, max. load 150 kg

Order No. **01359** (without traverse)

Pole Mount Adapter - M20



for flying bracket,
M20 x 35 mm with nut,
(incl. 1 x socket head screw
M20 x 30 mm, 1 x flat)

Order No. **08127/nut**

Speaker Pole



250 mm, ø 35 mm, M20
with ring lock

Order No. **03020**

Quick Trigger TV Clamp



for M20 TV adapter,
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,
ø 28 mm

Order No. **08128/M20**

Shackle



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

Order No. **01372/1000**



TV Adapter -> Flying Bracket

ACCESSORIES K 24 dp

Wheel Board

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



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+**



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



Rain Cover

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



Cover

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



Cover

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

