

PRO

PUBLIC ADDRESS

PRODUCT SPECIFICATION SHEET

TYPE:
POWERED &
PASSIVE

SAMSON

PRODUCT

DB500A

DESCRIPTION

ACTIVE PA SPEAKER

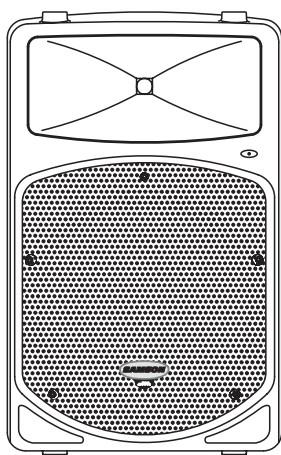
SERIES
DB

CATEGORY

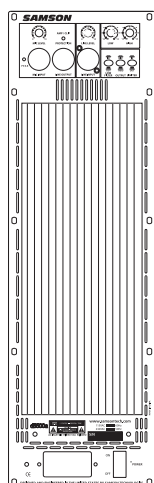
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FRONT PANEL



BACK PANEL



GENERAL DESCRIPTION

The dB500a speaker system by Samson takes the concept of powered PA systems to a new level. By combining 500 watts of power, advanced active processing and the highest quality speaker and cabinet components, the dB500a provides studio quality sound for any kind of live application. The monitor features a super heavy-duty, custom designed 15-inch low frequency driver and a 1.75 inch titanium diaphragm high frequency driver on a 1" throat, wide dispersion horn. The dB500a offers crystal-clear audio and an ultra-wide sound field. The top end is clean, smooth and vivid. The low-end is enormous. The dB500a is powered by a Class G amplifier that pumps 400 Watts to the low frequency driver and a Class AB amp that provides 100 Watts to the high frequency section—more than enough power to fill any large club. The efficient Class G amplifier design provides the power to deliver transient spikes with incredible punch and sonic purity. The dB500a goes beyond concert-quality to studio-quality thanks to Samson's exclusive Optimax processing. Optimax processing uses sophisticated circuitry to compress and limit output at ideal levels. This allows the dB500a to provide huge volume levels without sacrificing low end. The dB500a offers a practical back-panel, mixer-like preamp section that provides mic and line inputs with individual input level controls. Controls for the selectable low pass filter and Optimax dynamics are also included. The trapezoidal shape of the speaker cabinet offers more than just superior acoustics, not only is it a front-firing PA speaker, the dB500a's are also designed to operate as wedge-style monitors. The cabinet's right and left side panels are joined at different angles, so depending on the side you choose, you get a different dispersion angle, allowing for greater flexibility on stage. Adding to the dB500a's practical design is a catalog of mounting options. The compact cabinet can be easily stacked, permanently installed, mounted using the integral 1 3/8" pole mount receptacle or suspended using the ten built-in fly points. With the dB500a, setup and break down is quick and easy. Heavy-grade steel grill, scuff-resistant textured finish and rigid corners offer excellent protection against wear and tear. As fixed sound reinforcement or as a durable, great-sounding road PA, the dB500a active monitor is ideal for sound professionals and performers looking for serious power and studio monitor sound quality from a PA speaker system.

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FEATURES

- > Two-way Active Loudspeaker – Standard speaker stand receptacle, 15 and 30 degree monitor angles, arrayable with 10 Fly Points.
- > Custom designed, heavy-duty, 15-inch low frequency driver with a 2.5-inch voice coil and 50 oz. magnet.
- > 1" Throat, high-frequency compression driver with 1.75" titanium diaphragm and 75 oz. magnet structure.
- > Efficient 400 watt, Class G power amplifier for low frequency transducer with High Speed, High Current MOSFET rail switches.
- > 100 watt class AB amplifier for high frequency compression driver.
- > Massive torroidal power transformer.
- > Sophisticated, multi-band dynamics processor with audibly transparent, switchable limiting.
- > Internal 24 dB/octave time aligned electronic crossover.
- > Separate bass and treble controls.
- > Defeatable low cut filter.
- > Balanced microphone input with level control and Phantom Power for condenser microphones.
- > Balanced line level input with level control.
- > Rugged, road-worthy construction for high reliability.
- > Multi-point protection for all fault conditions.
- > Quality build and rugged construction ensure reliable performance from venue to venue.
- > Three-year extended warranty.

ARCHITECT'S & ENGINEER'S SPECIFICATIONS

The DB500A shall be a 2 way, heavy duty plastic trapezoidal speaker cabinet to be used as a FOH speaker or as a long or short throw monitor with 15 degree and 30 degree side angles for monitoring applications. It shall be dark gray and have metal mesh grills. It shall have a 400 watt, class G power amplifier for the woofer and a 100 watt, class AB amplifier for the tweeter. It shall have a 15 inch woofer for low frequencies and a one inch throat, 1.75 inch titanium diaphragm tweeter for high frequencies. The DB500A shall have a mic input with peak LED and level control. It shall have a line input and level control. The DB500A shall have an amplifier clip and protection LED indicator. It shall have high frequency and low frequency cut and boost equalization. The DB500A shall also have a switchable low cut filter, limiter, and pass through switch. A standard IEC connector and cable will be supplied for connection to AC power sources.

DB500A SPECIFICATIONS

Inputs

Microphone Balanced XLR
Line..... Balanced Combo XLR/Line

Outputs

Extension..... Balanced XLR

Controls

Mic Level Rotary
Line Level Rotary
Low EQ..... Rotary Center Detent, +/- 12dB @100Hz
High-EQ..... Rotary Center Detent, +/- 12dB @ 10kHz
Low Filter Switch Push Switch, High Pass (low-cut) 12dB per octave @80Hz
Output Switch Push Switch, Selects Mix or Thru for Line Output Connector
Limiter Switch Push Switch, Optimax Multi-band dynamics - In/Out

Power Rating

Low Frequency 400 Watt RMS
High Frequency 100 Watt RMS

Frequency Response 58 Hz – 24 kHz \pm 5 dB

Crossover Frequency 2.3 kHz, 3 pole (24dB Per Octave)

LF Driver 15" heavy-duty bass transducer, 2.5" voice coil (Kapton Former), 50 oz. barium ferrite magnet

HF Driver..... 1.75" titanium compression driver, edge-wound copper voice coil, 75 oz. magnet structure

Mounting

Stand Integral 1 3/8", Pole Mount Receptacle
Fly Points..... 10
Stacking Large, gender mating stacking bumpers

Weight..... 61 lbs. (27.7 kg.)

Dimensions (H x W x D) 30" x 19" x 18"
762mm x 483mm x 457mm

