

# STX800

S E R I E S



STX812M

STX815M

STX825

STX835

STX818S

STX828S



# JBL Heritage

For over 65 years JBL has been at the forefront of loudspeaker design and an industry leader wherever professional audio needed to be “mission critical”. When performance simply could not be compromised professionals the world over have turned to JBL.

**We employ time tested practices to ensure that the products we create deliver superior sound quality, durability and practicality.**

Every JBL Professional product undergoes stringent testing above and beyond what the product will face when deployed in the real world so that you can have confidence when your reputation is on the line. This is our culture and our legacy.

JBL Professional Anechoic Chamber, Power Testing Facilities (Right), Northridge, California USA



## Total Performance

Many loudspeaker companies focus just on their specifications in an attempt to separate themselves from the competition with numbers. We know that “performance” is much more than just numbers. Total Performance is a design principle we embrace that embodies every characteristic of the product.

**Spectral Balance, Ergonomics, Practicality, Extreme Power Handling, Versatility and Appearance** are all factors that make a

substantial difference in the real world of professional audio. And when all of these attributes are combined, the whole becomes greater than the sum of the parts. By adhering to the Total Performance principle we can ensure that our customers end up with a product that is relevant for a lifetime.

The STX800 Series embodies that principle. Their superb sonic performance is based on time tested JBL technology: high power handling transducers that deliver extremely low distortion, precision waveguides for precise pattern control, and intelligent cabinet architecture that is engineered for easy handling, minimal space displacement and rugged transport. And the appearance was sculpted to complement our high end VTX touring systems as well as our current PRX portable PA offerings. But it doesn't stop there... STX is VTX Series compliant with tunings available in Performance Manager™ and Crown® ITHD power amplifiers.

**STX800**



# Design Goals

The STX800 Series was designed to bridge the space between light-duty portable PA speakers and flown full-size line array tour sound systems. Our goals at the inception of this project were simple:

**Offer a high performance, high density system solution in a truck-pack friendly format**

**Develop concert-worthy floor monitors and side fills that could affordably complement any touring sound system**

**Deliver an affordable, great sounding subwoofer that could reproduce true low frequency at elevated sound pressure levels**



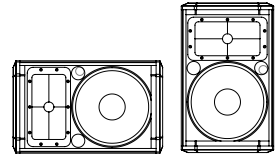
With four full-range systems and two subwoofers, the STX Series can cover just about any professional application.

Whether you're in need of ancillary speakers for a full-blown tour sound system, ground-stacking for a live concert performance, installing speakers in dance clubs or performance venues, touring clubs with your band, or you are a performing mobile DJ, STX800 Series is the smart choice.

# All of the Right Tools

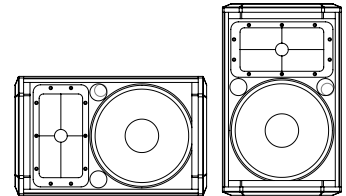
## STX812M

Designed specifically to be a high performance 12" two-way floor monitor, it can also do double duty as a utility speaker for use on a tripod stand or over a subwoofer, utilizing a single-position pole mount. A 70 degree by 70 degree waveguide is utilized for precise coverage.



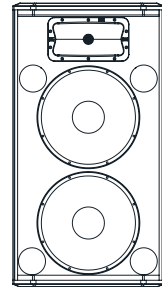
## STX815M

A single 15" lightweight two-way system designed to function as a high-power handling, FOH loudspeaker system or as an extended range floor monitor, it offers an extremely high level of performance either ground, pole or stand mounted. A 70 degree by 70 degree coverage angle for focused directivity control.



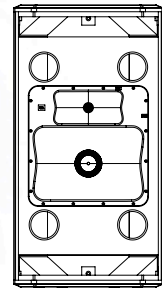
## STX825

A dual 15" two-way speaker designed for maximum impact, portability and ease of use. With a wide frequency range and broad 90 degree by 50 degree coverage angles, this speaker is ideal for bands or DJ's as their primary PA, use as a side-fill on a concert stage, or as an install speaker in a dance club or performance venue.



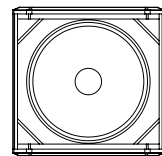
## STX835

A slot-loaded dual 15" three-way system with horn-loaded mid and high sections, designed for full-range use in stand-alone applications or for use in high performance environments as the premier ground stack passive top box. Designed to be placed over the STX828, this cabinet can be used in multiples in a high density situation; the STX835 can deliver amazing sound clarity at high SPL's. The STX835's 60 degree by 40 degree mid- and high-frequency waveguides allows two cabinets to be splayed for wide angle coverage.



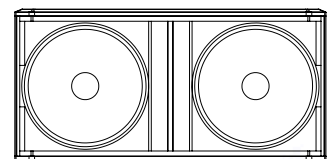
## STX818S

A single 18" compact high power subwoofer system in a front-loaded, vented enclosure designed for minimum frontal area provides 1,000 watts of continuous pink noise power handling, 2 kW program and 4 kW peak. The STX818S also comes equipped with a top-mounted M20 pole-mount and an optional wheel kit.



## STX828S

A dual 18" high power subwoofer system in a front-loaded, vented enclosure designed for maximum low-frequency performance. The STX828 has an optional wheel kit. Two drivers give 2,000 watts of continuous pink noise power handling, 4kW program and 8 kW peak.



# Proven Technology

## Higher Power Handling, Lower Distortion Super Vented Gap Cooling Technology

As with all JBL sound reinforcement products, the technology of the STX Series is designed from the ground up employing the best componentry JBL has to offer in products of this class. STX800 speakers feature the latest evolution of our Vented Gap Cooling: Super Vented Gap Technology. Building on the advantages of VGC - low power compression, low distortion, high power handling, lower weight and smoother response - SVG transducers attain higher power handling capabilities due to more effective heat sinking, with minimal dynamic compression and magnet topology enhancements for even lower distortion.

## CMCD™ Cone Midrange Compression Driver

The STX835 features JBL's patented CMCD Cone Midrange Compression Driver technology that provides very low mid-range distortion, increased sensitivity, extended bandwidth and improved phase coherence. Coupled to the CMCD is JBL's Progressive Transition™ (PT) waveguide providing optimal array ability and predictable acoustic performance in real world applications.

## High-Frequency Compression Drivers

High frequencies are handled by JBL 2432H 3" voice-coil or 2453H 4" voice-coil, titanium diaphragm, neodymium compression drivers. In addition to the weight reduction provided by neodymium, the large voice coils and diaphragms in these drivers are capable of handling high power levels with reduced distortion and increased phase coherence resulting in smooth, crystal clear high frequencies.

## Patented Progressive Transition (PT) Waveguides

High frequency drivers use JBL's patented Progressive Transition Waveguides which offer dramatically advanced constant beamwidth and directivity, lower distortion, and overall smooth frequency response free of high-Q peaks. Wide coverage angles are achieved without compromise and harmonic distortion is minimized to allow maximum SPL capability of the compression drivers without harshness.



## Bi-Amp or Full-Range Operation

All STX800 two and three-way models may be operated full-range or bi-amplified. The selection is made by means of a high-current, recessed switch mounted on the input plate. The same switch arrangement is used on the subwoofer to select  $\pm 1$  or  $\pm 2$  operation.

## 100 Hour Torture Test

Like all JBL Professional products, the STX Series is brutalized in JBL's speaker torture test. Unique in the industry, the JBL torture extended life test submits each component and the complete system to 100 hours of continuous, high level input, ensuring that your system will deliver extraordinary sound even after years of tough handling and thousands of hours of performance.

## Enclosures

The STX Series multi-ply enclosures are manufactured with precision CNC engineering techniques that allow precise tolerances and consistent production. All STX enclosures are constructed from top quality birch/poplar plywood with extensive use of internal braces and bulkheads reducing acoustically harmful internal resonances. Coated in JBL's rugged DuraFlex™ finish, they will stand up to years of real world abuse. All speakers feature road tough 14-gauge steel grilles lined with acoustically transparent cloth to provide minimal acoustic interference and maximize driver protection.

## Suspension

All full range STX800 enclosures (except the STX812M monitor) include multiple M10 rigging points for fast, safe and secure suspension.

# Configurations and Applications



**Simple Sound System**  
 STX812M or STX815M on tripod  
 or STX815M suspended

- Public Address
- FOH for Small Bands
- House of Worship
- Mobile DJ

**Floor Monitors**  
 STX812M and STX815M

- Vocalists
- Public Speaking
- Instrumentalists

**Simple Sub/Sat**  
 STX815M or STX812M and  
 an STX818S subwoofer

- Live Bands
- Music Playback
- Mobile DJ
- Public Address

**Mid-Sized System**  
 STX825

- Live Bands
- (When all instruments are put through the PA)
- Loud Mobile DJ
- Loud Dance Clubs
- Side-fills on a Concert Stage

**Mid-Sized Sub/Sat**  
 STX825 and STX818S or STX828S

- Live Bands
- (When all instruments are put through the PA)
- Loud Mobile DJ
- Side-fills on a Concert Stage
- Loud Dance Clubs

**Large Scale**  
 STX835 and STX828S ground stack  
 (Can be doubled and top cabs splayed)

- Outdoor or Indoor Live Performance
- Theaters and Concert Halls
- Side-Fills on a Concert Stage
- Loud Dance Clubs

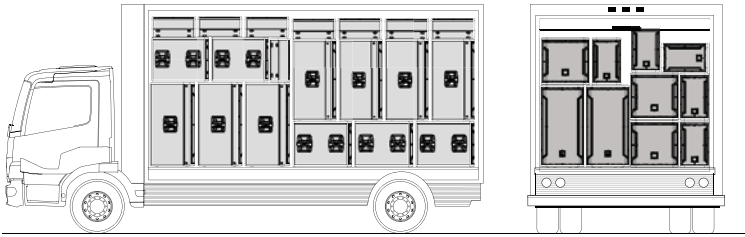
## Seamless Integration

STX800 Series is compatible with Crown® Audio VRack, with V5 Level processing, ensuring that STX Series enclosures are optimally powered and processed. There is no need for laborious rack building, no chance that a component might be improperly connected, and a dramatically lower chance of connection failure. VRack also ensures compatibility when integrating STX Series enclosures with a VTX Line Array system.

## JBL HiQnet® Performance Manager™ Software

The STX Series integrates with JBL HiQnet Performance Manager which guides the system design, configuration and control process in a user friendly fashion much like a simple step-by-step wizard. And since Performance Manager is compatible with VTX Line Array systems, integrating STX enclosures is managed in an efficient and intelligent fashion. All test, tuning and calibration control interfaces are embedded eliminating the need to design control panels and the dedicated “show mode” provides all the monitoring and control needed to run a live performance.





## Truck Pack Friendly

All STX800 Series cabinets were sized in an effort to maximize the interior compartments of most standard transport vehicles. Considerations were made to help STX owners exploit the given area in an effort to reduce fuel costs by eliminating additional vehicles or extra trips.

Specifications	STX812M	STX815M	STX825
<b>System Type:</b>	12" Two-Way, Bass-Reflex, Stage Monitor/Utility	15" Two-Way, Bass-Reflex, Stage Monitor/Utility	Dual 15" Two-Way, Bass-Reflex
<b>Frequency Range (-10 dB):</b>	50 Hz-20 kHz	41 Hz-20 kHz	34 Hz-20 kHz
<b>Frequency Response (± 3 dB):</b>	75 Hz-20 kHz	55 Hz-20 kHz	42 Hz-19 kHz
<b>Coverage Pattern:</b>	70° × 70° nominal	70° × 70° nominal	90° × 50° nominal
<b>Sensitivity (1W/1m):</b>	95 dB	96 dB	98 dB
<b>Power Rating<sup>2</sup> (Continuous Pink Noise / Program / Peak):</b>	800 W / 1600 W / 3200 W	800 W / 1600 W / 3200 W	1600 W / 3200 W / 6400 W
<b>Rated Maximum SPL<sup>3</sup>:</b>	130 dB SPL Peak	131 dB SPL Peak	136 dB SPL Peak
<b>Nominal Impedance:</b>	8Ω	8Ω	4Ω
<b>Input Connectors:</b>	Two NL4	Two NL4	Two NL4
<b>Operational Modes:</b>	Full Range/Bi-Amp	Full Range/Bi-Amp	Full Range/Bi-Amp
<b>Dimensions (H x W x D):</b>	571 mm x 355 mm x 264 mm 22.5" x 13.4" x 10.4"	721 mm x 436 mm x 329 mm 28.4" x 17.2" x 13.0"	1066 mm x 568 mm x 573 mm 42.0" x 22.4" x 22.6"
<b>Net Weight:</b>	19 kg (42 lbs)	26 kg (58 lbs)	51 kg (112 lbs)
<b>Suspension/Mounting:</b>	N/A	Twelve M10 Suspension Points	Twelve M10 Suspension Points
<b>Accessories:</b>	STX812M-YK Suspension/Mounting Yoke	Eyebolt Kit	Eyebolt Kit

Specifications	STX835	STX818S	STX828S
<b>System Type:</b>	Dual 15" Three-Way with Horn-Loaded MF/HF section, slot-loaded LF	Single 18" Bass Reflex	Dual 18" Bass Reflex
<b>Frequency Range (-10 dB):</b>	32 Hz-20 kHz	35 Hz-250 Hz	32 Hz-250 Hz
<b>Frequency Response (± 3 dB):</b>	43 Hz-20 kHz	40 Hz-120 Hz	37 Hz-120 Hz
<b>Coverage Pattern:</b>	60° × 40° nominal	N/A	N/A
<b>Sensitivity (1W/1m):</b>	96 dB	96 dB	99 dB
<b>Power Rating<sup>2</sup> (Continuous Pink Noise / Program / Peak):</b>	1600 W / 3200 W / 6400 W	1000 W / 2000 W / 4000 W	2000 W / 4000 W / 8000 W
<b>Rated Maximum SPL<sup>3</sup>:</b>	134 dB SPL Peak	132 dB SPL Peak	138 dB SPL Peak
<b>Nominal Impedance:</b>	4Ω	8Ω	4Ω
<b>Input Connectors:</b>	Two NL4	Two NL4	Two NL4
<b>Operational Modes:</b>	Full Range/Bi-Amp with internal passive mid-high crossover network	Subwoofer	Subwoofer
<b>Dimensions (H x W x D):</b>	1066 mm x 568 mm x 573 mm 42.0" x 22.4" x 22.6"	558 mm x 568 mm x 718 mm 22.0" x 22.4" x 28.3"	564 mm x 1137 mm x 714 mm 22.2" x 44.8" x 28.1"
<b>Net Weight:</b>	57 kg (126 lbs)	45 kg (100 lbs)	82 kg (180 lbs)
<b>Suspension/Mounting:</b>	Twelve M10 Suspension Points	N/A	N/A
<b>Accessories:</b>	Eyebolt Kit	WK-4 Caster Kit; SS4-BK Adjustable heavy-duty pole, M20 thread to 35 mm	

<sup>1</sup>Based on 2IT acoustic load

<sup>2</sup>IEC Filtered Noise with 6 dB Crest Factor, 2 hours duration

<sup>3</sup>Calculated based on power rating and sensitivity

## Environmental Responsibility

Harman GreenEdge systems combine environmentally-friendly design with dramatic energy savings without compromising the excellent performance for which Harman products are known: improved acoustic efficiency and heat dissipation, reduced transportation costs due to external design, lower system weight and packaging, reduced power consumption and amplifier efficiency.

