# VTX MSERIES

## PREMIUM STAGE MONITORS

## DESIGNED FOR THE MOST DEMANDING APPLICATIONS

VTX M Series is JBL's latest in premium stage monitoring products designed for the most demanding, highest output stage monitoring applications, including high profile concerts, broadcast events or fixed installations.

VTX M Series is comprised of the dual 10" VTX M20 and the dual 12" VTX M22 professional stage monitors, both featuring high performance differential drive woofers and the large-format D2 dual-diaphragm dual voice-coil high frequency driver. The option of Single-Channel (Passive) or Dual-Channel (Bi-Amp) operation modes comes standard, allowing the user to choose the right option for the application, with no compromise in output power or performance. Drawing on JBL's unique history of sharing technological innovations across product lines, the VTX M Series HF waveguide features Image Control Waveguide Technology, which gives both the VTX M20 and VTX M22 a broad and stable 60H x 60V coverage that delivers maximum gain-before-feedback. All of these premium, tour-ready features are enclosed in a pair of modern, low profile designs that are lightweight, ergonomic, and show-ready for even the most high profile concert or broadcast events. And because VTX M Series is part of the VTX family, it comes fully supported in JBL HiQNet Performance Manager with V5 presets.

# LOW PROFILE Ergonomic, lightweight SHOW-READY



#### **KEY FEATURES**

#### HIGH OUTPUT

State of the art JBL transducers, including Differential Drive<sup>™</sup> cone transducers and D2 dual diaphragm dual voice coil compression driver



#### LOW PROFILE DESIGN

Elegant, low profile, compact design suitable for touring and high profile broadcast applications

#### IMAGE CONTROL WAVEGUIDE

60x60 High Frequency Waveguide featuring JBL's patented Image Control Waveguide Technology

#### MAXIMUM FLEXIBILITY

Single-Channel (Passive) and Dual-Channel (Bi-Amp) Operation Modes for maximum flexibility in system configuration and deployment

#### EXCELLENT PERFORMANCE

Like all other VTX products, M Series comes fully supported in JBL HiQNet Performance Manager with V5 FIR Linear Phase presets





# **VTX M** S E R I E S





#### LOW FREQUENCY

The low frequency section of M Series utilize JBL's patented Differential Drive technology, allowing for excellent heat dissipation, low distortion, and very high output. These Differential Drive neodymium woofers feature dual three-inch voice coils, more than doubling the voice-coil area of traditional designs. One of the best features of this design is the unusually low weight which makes M Series some of the most lightweight monitors in their class; nearly half the weight of some competitors. The two woofers are supported by a bass-reflex enclosure with a large low frequency port, enabling the system to reproduce low frequencies down to 50Hz with minimal port turbulence and noise.



#### HIGH FREQUENCY

The M Series high frequency section utilizes the proven D2430 Dual 3" compression driven also found in JBL's large format VTX V25-II Line Array system. The D2 driver is coupled with a newly developed 60x60 degree high frequency waveguide that has a unique shape specifically tailored to M Series and stage monitoring applications. The new wavequide is based on JBL's Image Control Waveguide, a technology originally developed for the JBL M2 Master Reference studio monitor, and coupled with the D2 driver, it delivers a coverage pattern that is spatially consistent, allowing M Series to reach excellent gain before feedback performance.



#### SINGLE CHANNEL (PASSIVE) MODE

One of the best features of M Series is the inclusion of a new Single-Channel (Passive) mode. In this mode, up to two M20 or M22 monitors can be powered with a single Crown Audio I-Tech HD amplifier channel without any performance penalties. Unlike typical passively driven monitors, M Series splits the speaker preset responsibilities into two sections. Part of the speaker preset is processed in the Crown I-Tech HD amplifier and part of the preset is performed internally in the speaker enclosure by a passive high-pass and a lowpass filter. The external DSP is responsible for frequency response correction, phase response linearizion and component protection. The combination of internal and external processing duplicates Bi-Amplified speaker preset performance while using only one amplifier and DSP channel. The frequency response, phase response and maximum SPL capabilities of M Series are identical in both the Single-Channel and Dual-Channel modes.



#### MODE SELECTION

Both the M20 and M22 feature a set of easily accessible mode selection switches. The first switch allows for selecting between Single Channel (Passive) and Dual Channel (Bi-Amp) operating modes. When in single channel mode the second switch is engaged allowing for selecting between Channel 1 (pin 1) or Channel 2 (pin 2) of the driving amplifier. The combination of the two switches allows for a variety of drive options making M Series flexible and cost effective for any application.

#### SPECIFICATIONS



Coverage Pattern: Maximum Peak Output:\*

System Power:\*\*

Frequency Range (-10 dB): Nominal Impedance - Single Channel (Passive): Nominal impedance - Dual Channel (Bi-Amp) Transducers: Amplification:

Dimmensions (mm/in):



**M20** 60°H x 60°V

136dB

1250 W Continuous (IEC / 100 hour) LF: 1250 W Continuous (IEC / 100 hour) HF: 100 W Continuous (IEC / 100 hour)

55 Hz - 19.5 kHz

4-ohm

LF: 4-ohm | HF: 8-ohm LF: 2 x 10" | HF: 1 x Dual-3"

Crown ITech HD

342.9 mm x 575.0 mm x 515.3 mm (13.6 in x 22.6 in x 20.3 in)



M22

60°H x 60°V 138dB

1500 W Continuous (IEC / 100 hour) LF: 1500 W Continuous (IEC / 100 hour) HF: 100 W Continuous (IEC / 100 hour)

45 Hz - 19.5 kHz

4-ohm

### LF: 4-ohm | HF: 8-ohm

LF: 2 x 12" | HF: 1 x Dual-3"

Crown ITech HD

380.1 mm x 670.8 mm x 555.0 mm (15.0 in x 26.4 in x 21.8 in)



Peak, unweighted SPL, measured under half-space conditions at 1 meter using broadband pink noise with a 10dB crest factor and specified preset. IEC Standard: IEC shaped noise with 6dB crest factor based on Nominal impedance and a duration of 100 hours

### **VTX** MSERIES

# CONFIGURATION EXAMPLES

#### SINGLE CHANNEL (PASSIVE) MODE



#### **DUAL CHANNEL (BI-AMP) MODE**



professional HARMAN