

# **FX F12**

## 12" 2-Way Loudspeaker

# **Application**

VTX F12 is a highly-versatile sound design tool delivering studio monitor sound quality in a premium two-way multipurpose enclosure. Patented D2 Dual Diaphragm Dual Voice Coil compression driver and Differential Drive® LF technologies employed in VTX V25 and the M2 Studio Reference Monitor along with BSS® Audio OmniDrive HD V5 processing provide uncompromised sound quality. With it's point and shoot flexibility, VTX F12 is ideal for sound reinforcement rental companies, live performance venues, theatrical sound design, performing arts centers, high-impact A/V presentations, houses of worship and themed entertainment venues.

#### **Key Features**

- ▶ Bi-Amplified 2-Way System
- ▶ D2430K D2 Dual Diaphragm Dual Voice Coil Compression Driver
- ► Progressive Transition Waveguide (90° x 50°)
- ▶ Differential Drive®, dual neodymium magnet, dual voice coil, Direct Cooled™ 12" transducer for low weight and high
- BSS Audio OmniDriveHD V5 Processing for use with Crown ITechHD and Crown **VRack**
- ▶ Dedicated OEM factory presets provide unparalleled application flexibility
- ► IBL HiOnet Performance Manager<sup>TM</sup> Control

VTX F12 is a perfect sound design complement to VTX V25 for fill applications due to the sonic consistency provided by common large format D2 and differential drive component technology. The patented D2 Dual Diaphragm, Dual Voice Coil high frequency compression driver delivers a dramatic increase in high frequency extension and sound pressure levels with significantly lower distortion, reduced power compression, increased dynamic headroom and reduced weight. For the low frequency section, JBL's patented Differential Drive® dual voice coil, dual magnetic gap cone transducer technology dramatically reduces weight while providing high linear excursion capability and greatly enhancing all critical performance parameters: frequency response, power output and distortion.

A comprehensive set of applicationspecific V5 OEM factory presets are available for Crown® ITech HD or Crown VRACK amplification options, providing optimized, plug-and-play performance for short throw (ST), long throw (LT) and stage monitor (MONITOR) modes with JBL HiQnet® Performance Manager™ facilitating system configuration, control and monitoring. Dedicated processing is also available for configurations where VTX F12 is paired with the VTX F18S subwoofer to provide a compact Front-of-House or Sidefill or Drum Monitoring solution.

Standard pole mount socket, M10 mount points and an optional U-bracket accessory allow VTX F12 to be used in a wide variety of distributed fill applications.



**Specifications:** 

System	Frequency Range (-10 dB):	51 Hz - 21.5 kHz (short throw mode, free field) 44 Hz - 21.5 kHz (monitor mode, half-space)
	Frequency Response (±3 dB):	69 Hz - 20.0 kHz (short throw mode, free field)
	rrequency kesponse (±3 db):	58 Hz - 20.0 kHz (monitor mode, half-space)
	Coverage Pattern:	90 x 50 degrees nominal (Vertical Orientation)
	System Input Power Rating:	LF: 1000 W Continuous, 4000 W Peak (AES / 2 hour) HF: 200 W Continuous, 800 W Peak (AES / 2 hour)
	Maximum Peak Output <sup>1</sup> :	138 dB SPL (LF), 137 dB SPL (HF), half-space conditions 132 dB SPL (LF), 137 dB SPL (HF), free-field
	Recommended Amplification:	LF: 1400 - 2000 W into 8 ohms HF: 540 - 800 W into 20 ohms
	Recommended Signal Processing:	Crown® I-Tech HD power amplification VTX F Series presets available for download at www.jblpro.com
Transducers	<u>Low Frequency</u> :	One 2262H, 304 mm (12 in) dia., 76 mm (3 in) dual voice coil, dual neodymium magnet, Differential Drive®, Direct Cooled™
	Bandpass Nominal Impedance:	8 ohms
	Input Power Rating <sup>2</sup> :	1000 W Continuous, 4000 W Peak (AES / 2 hour) 700 W Continuous, 2800 W Peak (100 hour)
	Bandpass Sensitivity:	96 dB, 1W / 1m (2.83 Vrms at 3.3 ft) free-field 102 dB, 1W / 1m (2.83 Vrms at 3.3 ft) half-space
	<u>High Frequency</u> :	One 2430K D2 Dual Diaphragm Dual Voice Coil Compression Driver; two 76 mm (3 in) diameter voice coils; 38 mm (1.5 in) exit
	Bandpass Nominal Impedance:	20 ohms
	Input Power Rating <sup>2</sup> :	200 W Continuous, 800 W Peak (AES / 2 hour)
	Bandpass Sensitivity:	108 dB, 1W / 1m (2.83 Vrms at 3.3 ft)
Enclosure	Construction:	Symmetrical stage monitor (53 degree angle); 18 mm, 11-ply Baltic birch plywood; black DuraFlex™ finish; integral recessed handle
	Suspension:	Integral pole mount socket (35 mm diameter); 16 x M10 mount points; Optional U-bracket and extension rod (SS5-BK) accessories available
	Grille:	Powder coated 14 gauge hex-perforation steel with acoustically transparent black cloth backing
	Input Connectors:	Neutrik® Speakon® NL-4 (4x) Pins 1+/- LF, Pin 2+/- HF
	Dimensions (H x W x D):	548.6 x 396.2 x 304.8 mm (21.6 x 15.6 x 12 in)
	Net Weight:	19.1 kg (42 lbs)
	Shipping Weight:	22.7 kg (50 lbs)
Optional Accessories SS5-BK:		Adjustable extension rod with M20 thread for attachment to VTX F188; hand crank height adjustment; patented expanding mandrel system for secure vibration free attachment to F188 using either integral pole mount socket or optional UB universal bracket accessory
	VTX F12 UB:	Universal bracket accessory

<sup>1</sup>Calculated maximum SPL based on rated peak power and measured sensitivity
<sup>2</sup>AES Standard, one decade pink noise with 6 dB crest factor within device's operational band, free air. Standard AES 2 hr rating

plus long term 100 hr rating.

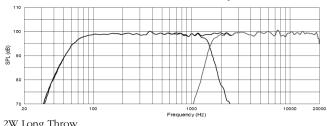
JBL continually engages in research related to product improvement. Some materials, production methods and design refinements are introduced into existing products without notice as a routine expression of that philosophy. For this reason, any current JBL product may differ in some respect from its published description, but will always equal or exceed the original design specifications unless otherwise stated.

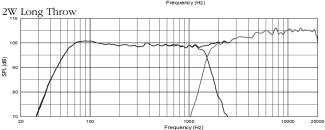
# ► VTX F12 12" 2-Way Loudspeaker

#### **Acoustical Measurements**

Frequency Response with Recommended V5 DSP (Individual Bandpasses with Composite Overlay)

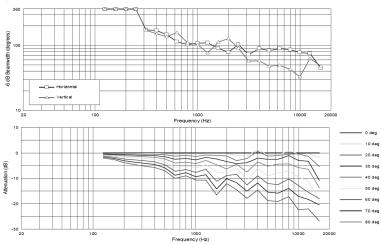
Short Throw (Freefield) or Monitor Mode (Half-space)



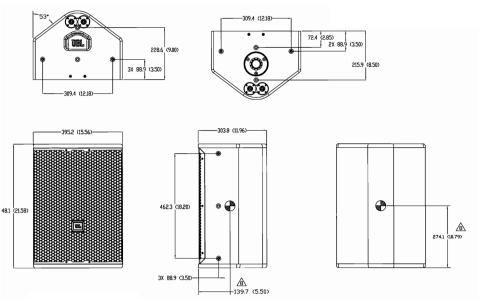


# Beamwidth and Normalized Off-Axis Response

(Vertical enclosure orientation)



#### **Dimensions**



### **System Configurations**



Floor Monitor



Small Format Front of House



Drum/ DJ Monitoring



JBL Professional
8500 Balboa Boulevard, P.O. Box 2200
Northridge, California 91329 U.S.A.
© Copyright 2014 JBL Professional

www.jblpro.com