

**Electro-Voice** | EVH-1152D/94 Premium arrayable point-source coaxial horn-loaded loudspeaker

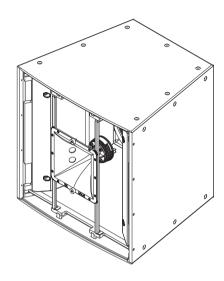
# EVH-1152D/94 Premium arrayable point-source coaxial horn-loaded loudspeaker

- Rotatable Mid-bass and High Frequency Waveguides for consistent pattern control down to 500 Hz
- Rotatable mid- and high-frequency constant directivity waveguides
- Partially-weatherized PI and fully-weatherized FG versions available with gland nut and stainless-steel grille rated IEC 60529 IP55
- Integrates easily with EVF Low Frequency and Subwoofer Systems
- EN54-24 type B certification 1438-CPR-0299 with CDG cover installed (Only available in select regions)

The Electro-Voice EVH-1152D/94 is a high-power, two-way horn-loaded coaxial loudspeaker system that can be used in a wide variety of applications where excellent intelligibility, wide bandwidth directivity control, and high efficiency are required in a compact, cost-effective package.

For high frequencies, the EVH-1152D/94 utilizes the DH7N, a high-output 3-inch titanium compression driver, coupled to a rotatable Constant Directivity 90° x 40° waveguide. Both the mid-bass and high frequency waveguides may be rotated to maintain uniform pattern control over the entire critical vocal range regardless of enclosure orientation. For low frequencies, the SMX2151 15-inch woofer was developed using FEA optimization for motor, suspension, and electrical design to ensure very low distortion, high efficiency, and maximum intelligibility at high SPL. The crossover uses steep, 24-dB peroctave slopes with equalization for very smooth response in the vocal range, linear off-axis response, and an HF protection circuit for long-term reliability. This combination of technologies results in extended frequency response and excellent pattern control down to 500 Hz.

The EVH-1152D/94 features make it ideal for many fixed-install applications. The trapezoidal enclosure is constructed out of weather-resistant birch and coated with EVCoat for enhanced durability. For protection against outdoor elements, weatherized versions are available (PI and FG). The enclosure is built with 28



M10 suspension points for single hang (four shoulder eyebolts included) or an array (optional HRK or VRK kits).

The innovative input panel provides Phoenix-style connectors (included in all models) and a dual gland nut cover plate (CDG included in PI and FG models). For convenience in temporary installation you may add a dual NL4 type connector cover plate (CDNL4). An external easy to access jumper card is provided with each loudspeaker to assist you in the selection of passive (standard shipping configuration) or bi-amp operation. An available 70.7/100 Volt internal transformer kit (TK-150) may be easily mounted to the input panel for use in distributed systems. No matter what the application and budget, all these features provide you with the tools to increase flexibility during system design to meet and support your customer's requirements with fewer items in inventory.

EVF and EVH loudspeakers feature precise acoustics and rigging design for easy to configure vertical and horizontal arrays as part of the solutions provided in the EV innovation family.

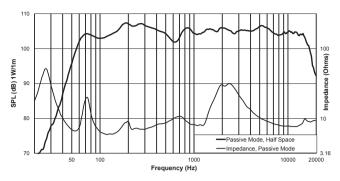
# **Technical specifications**

Frequency response (-3 dB)	60 Hz-17 kHz <sup>1</sup>
Frequency range (-10 dB)	50 Hz-20 kHz <sup>1</sup>
Rotatable coverage	90° x 40°
Rec. high-pass frequency	60 Hz

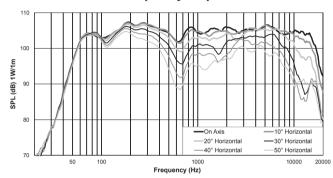
Passive crossover frequency	1300 Hz				
Axial sensitivity	105 dB (1 W	//1 m) <sup>1</sup>			
Max. calculated SPL	138 dB <sup>1</sup>				
Passive power handling	500 W continuous, 2000 W peak <sup>2</sup>				
Impedance	$8 \Omega$ (nominal), $6.0 \Omega$ (min.)				
Transformer	70 V	0 V 100 V Z no		Z nom	
Standard 50 Hz BW24 high pass	37.5 W	75	W	130 Ω	
	75 W	150 W		65 Ω	
	150 W	Do Not Use		33 Ω	
Transformer	70 V	100	) V	Z nom	
89 Hz high pass per EN54-24 spectrum	50 W	100	W	100 Ω	
	100 W	200	W	50 Ω	
	200 W	400	W	25 Ω	
LF transducer - SMX2151, 15 in	(381 mm) dr	river			
LF axial sensitivity	106 dB (1 W/1 m) <sup>4</sup>				
LF max. calculated SPL	138 dB				
LF power handling	400 W continuous, 1600 W peak <sup>3</sup>				
LF impedance	$8 \Omega$ (nominal), $6.1 \Omega$ (min.)				
HF transducer - DH7N, 3 in (76 m	nm) diaphrag	m compr	essio	n driver	
HF axial sensitivity	112 dB (1 W/1 m) <sup>4</sup>				
HF max. calculated SPL	137 dB				
HF power handling	75 W continuous, 300 W peak <sup>3</sup>				
HF impedance	$8 \Omega$ (nominal), $6.0 \Omega$ (min.)				
Connectors	Dual four-pir AWG Phoeni Block screw- terminals	nix/Euro CDG dual-gland-nut			
Enclosure	13-ply weather- resistant birch with EVCoat		FG Version: 13-ply weather-resistant birch with fiberglass finish		
Grille	16 GA powder- coated galvanneal with rotatable logo		PI/FG Versions: Stainless steel with hydrophobic cloth		
Environmental	IEC 60529 IP55 for PI and FG versions				
Suspension	(28) M10 threaded suspension points				
Dimensions (H x W x D)	30.26 in x 30.26 in x 26.77 in				
	(768.6 mm x 768.6 mm x 680.1 mm)				
Net weight	145.5 lb (66.1 kg)				
INCL MCIRILL		0.			

<sup>&</sup>lt;sup>1</sup>Half-space measurement

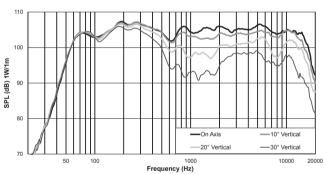
### Frequency response and impedance:



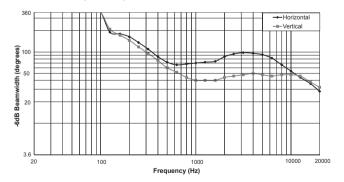
### Horizontal off-axis frequency response:



### Vertical off-axis frequency response:



### Beamwidth (active):

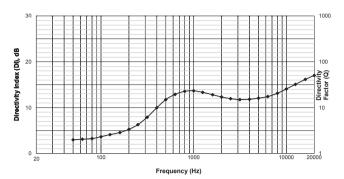


<sup>&</sup>lt;sup>2</sup>EIA RS-426A, tested for eight hours

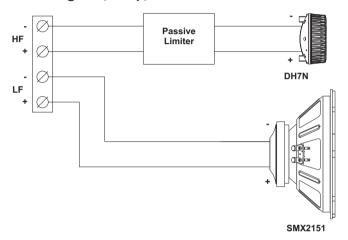
<sup>&</sup>lt;sup>3</sup>AES 2-1984, tested for eight hours

 $<sup>^4\</sup>mathrm{Arithmetic}$  averages, 300-1,300 Hz (LF) and 1,300-5,000 Hz (HF)

### **Directivity (Active):**

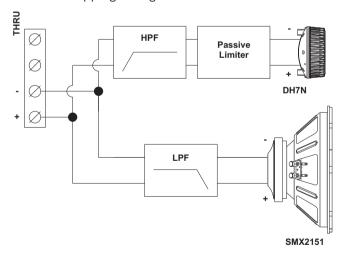


### Block diagram (biamp):



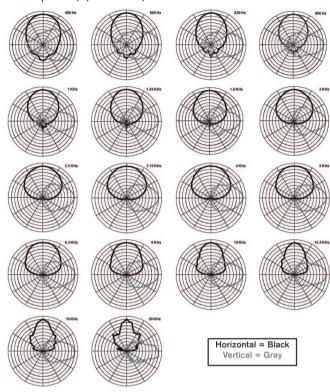
### Block diagram (passive):

Standard shipping configuration



### Horizontal and Vertical Polar Response (Active):

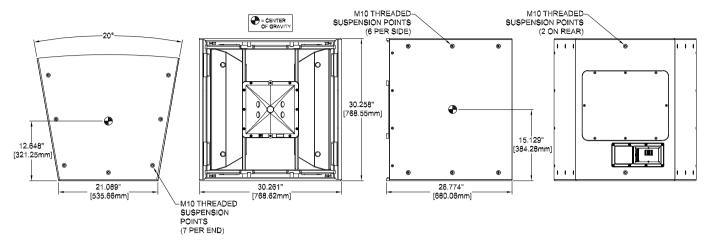
Polar plots (1/3 octave)



- (i) Notice
  Using EVH-1152D v.1.1 DSP standard IIR settings for the Beamwidth, Directivity and Polar Response.
- (i) Notice

Acoustic measurement reference axis is the center of the grille.

#### **Dimensions:**



### (i) Notice

This Electro-Voice loudspeaker should be suspended overhead only in accordance with the procedures and limitations specified in the User's Manual and possible manual update notices. This system should be suspended with certified rigging hardware by an authorized rigging professional and in compliance with local, state, and federal overhead suspension ordinances.



1438

Bosch Security Systems Inc. 12000 Portland Ave South, Burnsville, MN 55337, USA

1438-CPR-0299

EN 54-24:2008

Voice alarm loudspeakers for fire detection and fire alarm systems for buildings

Loudspeakers type: EVH-1152D/43, EVH-1152D/64, EVH-1152D/94, EVH-1152D/96, EVH-1152D/99 (BLK, WHT, PIB, PIW)

DoP: REG000666000

EN54-24 type B certification 1438-CPR-0299 with CDG cover installed (Only available in select regions)

### **Compatible System Solutions:**

EVH-1152D/43 40° x 30° Coverage	
EVH-1152D/64 60° x 40° Coverage	
EVH-1152D/66 60° x 60° Coverage	
EVH-1152D/96 90° x 60° Coverage	
EVH-1152D/99 90° x 90° Coverage	
EVF-2151D Dual 15 inch Bass Element	
EVF-1181S Single 18 inch Bass Element	

### **Compatible System Solutions, Electronics:**

Dx46 Loudspeaker Controller<sup>5</sup>

N8000 Digital Matrix Controller1

CPS 2.9 Power Amplifier<sup>1</sup>

CPS 2.12 Power Amplifier<sup>1</sup>

CPS 4.10 Power Amplifier<sup>1</sup>

<sup>1</sup>Contact your sales representative for voltage information.

# **Ordering information**

EVH1152D94BLB 15" speaker 90x40 indoor black

15" / 2-way Full-range Systems; SMX woofer & DH7N driver - 500 W cont.; 90° x 40°, EVCoat, black Order number **EVH1152D94BLB | F.01U.272.806** 

EVH1152D94WLB 15" speaker 90x40 indoor white

15" / 2-way Full-range Systems; SMX woofer & ND2B driver or DH7N driver - 500 W cont.; 90° x 40°, EVCoat, white

Order number EVH1152D94WLB | F.01U.272.807

EVH1152D94PBLB 15" speaker 90x40 weathrized black

15" / 2-way Full-range Systems; SMX woofer & DH7N driver - 500 W cont.; 90° x 40°, EVCoat, PI-weatherized, black

Order number EVH1152D94PBLB | F.01U.272.808

EVH1152D94PWLB 15" speaker 90x40 weathrized white

15" / 2-way Full-range Systems; SMX woofer & DH7N driver - 500 W cont.; 90° x 40°, EVCoat, PI-weatherized, white

Order number EVH1152D94PWLB | F.01U.272.809

**EVH1152D94-FBLB 15" speaker 90x40 fiberglass black** 15" / 2-way Full-range Systems; SMX woofer & DH7N driver - 500 W cont.; 90° x 40°, EVCoat, fiberglass, black

Order number EVH1152D94-FBLB | F.01U.272.979

EVH1152D94-FWLB 15" speaker 90x40 fiberglass white

15" / 2-way Full-range Systems; SMX woofer & DH7N driver - 500 W cont.; 90° x 40°, EVCoat, fiberglass, white SMX/DH7N

Order number EVH1152D94-FWLB | F.01U.272.980

### EVH-1152D/94-BLKE

15" / 2-way Full-range Systems; SMX woofer & DH7N driver - 500 W cont.; 90° x 40°, EVCoat, black — EN54-24 certified

Order number EVH-1152D/94-BLKE | F.01U.246.018

### EVH-1152D/94-WHTE 15" 90x40 indoor white EN54-24

15" / 2-way Full-range Systems; SMX woofer & DH7N driver - 500 W cont.; 90° x 40°, EVCoat, white — EN54-24 certified

Order number EVH-1152D/94-WHTE | F.01U.246.019

# EVH-1152D/94-PIBE 15" 90x40 weatherized black EN54-24

15" / 2-way Full-range Systems; SMX woofer & DH7N driver - 500 W cont.; 90° x 40°, EVCoat, PI-weatherized, black — EN54-24 certified

Order number EVH-1152D/94-PIBE | F.01U.216.041

# EVH-1152D/94-PIWE 15" 90x40 weatherized white EN54-24

15" / 2-way Full-range Systems; SMX woofer & DH7N driver - 500 W cont.; 90° x 40°, EVCoat, PI-weatherized, white — EN54-24 certified

Order number EVH-1152D/94-PIWE | F.01U.246.020

#### Accessories

### CSG-LB Input panel cover plate single gland nut

Single gland nut cover kit for EVA, EVC, EVF & EVH, black Order number **CSG-LB | F.01U.283.496** 

# **CDG-LB Input panel cover plate, dual gland nut** Dual gland nut cover kit for EVA, EVC, EVF & EVH

Order number **CDG-LB | F.01U.283.497** 

## CDNL4-LB Input panel cover plate, dual NL4 type

Dual NL4 cover kit for EVA, EVC, EVF & EVH, black Order number **CDNL4-LB | F.01U.283.495** 

### TK-150 70/100 Volt transformer kit

Transformer kit for EVC, EVF, and EVH, 150W/70V Order number **TK-150 | F.01U.132.318** 

### HRK-2B-LB Horizontal rigging kit black, EVF + EVH

Horizontal rigging kit for EVF & EVH full-range to EVF sub, black

Order number HRK-2B-LB | F.01U.283.504

### HRK-2W-LB Horizontal rigging kit white, EVF + EVH

Horizontal rigging kit for EVF & EVH full-range to EVF sub, white

Order number HRK-2W-LB | F.01U.283.505

### HRK-3B-LB Horizontal rig kit black, EVH + EVH

Horizontal rigging kit for EVH, black

Order number HRK-3B-LB | F.01U.283.498

### HRK-3W-LB Horizontal rig kit white, EVH + EVH

Horizontal rigging kit for EVH, white

Order number HRK-3W-LB | F.01U.283.499

### VRK-2B-LB Vertical rigging kit black, EVF + EVH

Vertical rigging kit for EVF & EVH full-range to EVF subs, black

Order number VRK-2B-LB | F.01U.283.508

### Represented by:

#### Germany:

Bosch Sicherheitssysteme GmbH Robert-Bosch-Ring 5 85630 Grasbrunn Germany www.electrovoice.com Bosch Security Systems, LLC 12000 Portland Avenue South Burnsville MN 55337

### VRK-2W-LB Vertical rigging kit white, EVF + EVH

Vertical rigging kit for EVF & EVH full-range to EVF subs, white

Order number VRK-2W-LB | F.01U.283.509

### VRK-3B-LB Vertical rig kit black, EVH + EVH

Vertical rigging kit for EVH, black

Order number VRK-3B-LB | F.01U.283.500

### VRK-3W-LB Vertical rig kit white, EVH + EVH

Vertical rigging kit for EVH, white

Order number VRK-3W-LB | F.01U.283.501