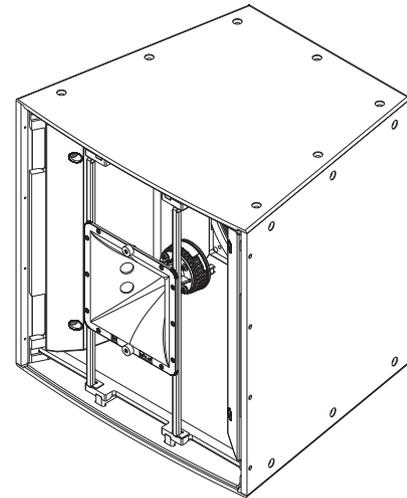


# EVH-1152D/99



# Electro-Voice

- Rotatable Mid-bass and High Frequency Waveguides for consistent pattern control down to 500 Hz
- Integrated Passive Network with PTP High Frequency Protection
- PI and 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/99 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/99 utilizes the DH7N, a high-output 3-inch titanium compression driver, coupled to a rotatable Constant Directivity 90° x 90° 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 per-octave 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/99 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 (4) shoulder eyebolts included) or cluster arrays (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 biamp 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 clusters as part of the solutions provided in the EV innovation family.

## Technical specifications

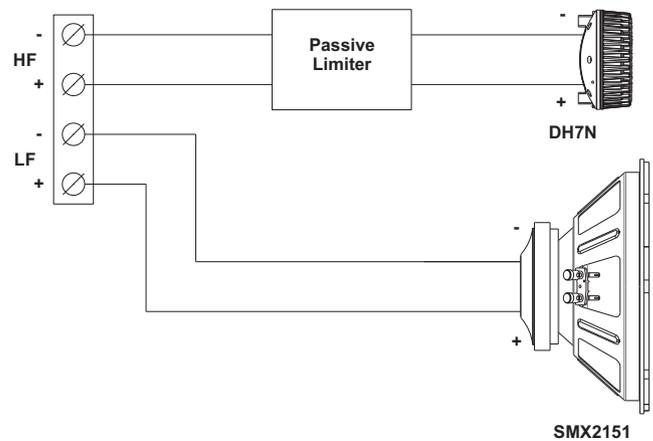
Frequency Response (-3 dB):	60 Hz–17 kHz <sup>1</sup>		
Frequency Range (-10 dB):	50 Hz–20 kHz <sup>1</sup>		
Rotatable Coverage:	90° x 90°		
Rec. High-Pass Frequency:	60 Hz		
Passive Crossover Frequency:	1300 Hz		
Axial Sensitivity:	104 dB (1 W/1 m) <sup>1</sup>		
Max. Calculated SPL:	137 dB <sup>1</sup>		
Passive Power Handling:	500 W Continuous, 2000 W Peak <sup>2</sup>		
Impedance:	8 Ω (nominal), 6.0 Ω (min.)		
Transformer: Standard 50 Hz BW24 High Pass	70 V	100 V	Z nom
	37.5 W	75 W	130 Ω
	75 W	150 W	65 Ω
	150 W	Do Not Use	33 Ω
	Transformer: 89 Hz High Pass per EN54-24 Spectrum	70 V	100 V
	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) driver			
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 Ω (nominal), 6.1 Ω (min.)		
HF Transducer - DH7N, 3 in (76 mm) diaphragm compression driver			
HF Axial Sensitivity:	110 dB (1 W/1 m) <sup>4</sup>		
HF Max. Calculated SPL:	135 dB		
HF Power Handling:	75 W Continuous, 300 W Peak <sup>3</sup>		
HF Impedance:	8 Ω (nominal), 6.0 Ω (min.)		
Connectors:	Dual four-pin 10 AWG Phoenix/Euro Block screw-terminals	PI/FG Versions: CDG dual-gland-nut input panel cover included	
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)	
Shipping Weight:	160.5 lb (72.9 kg)	

1. Half-space measurement.
2. EIA RS-426A, tested for eight hours.
3. AES 2-1984, tested for eight hours.
4. Arithmetic averages, 300–1,300 Hz (LF) and 1,300–5,000 Hz (HF).

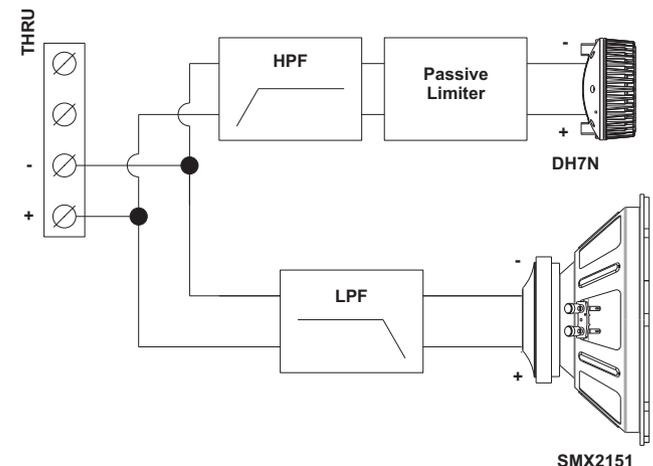
## System overview

### Block Diagram (Biamp):

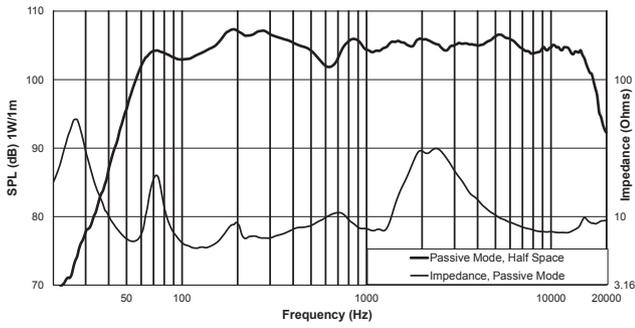


### Block Diagram (Passive):

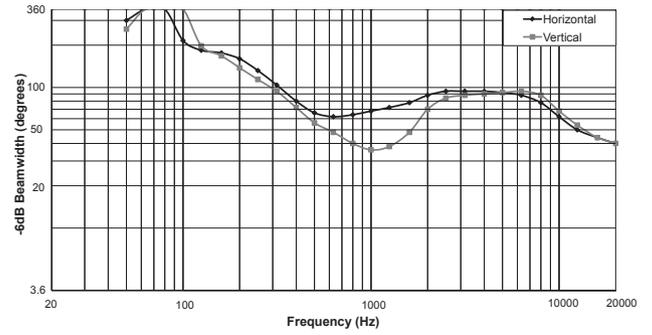
Standard shipping configuration



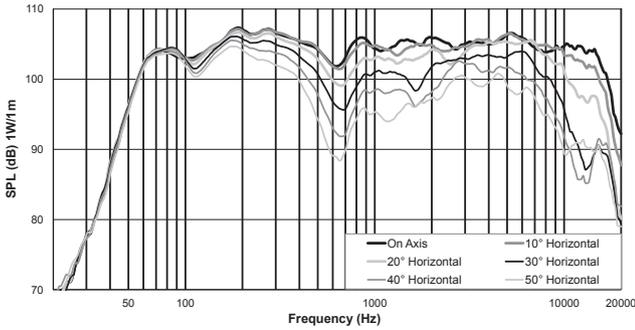
**Frequency Response and Impedance:**



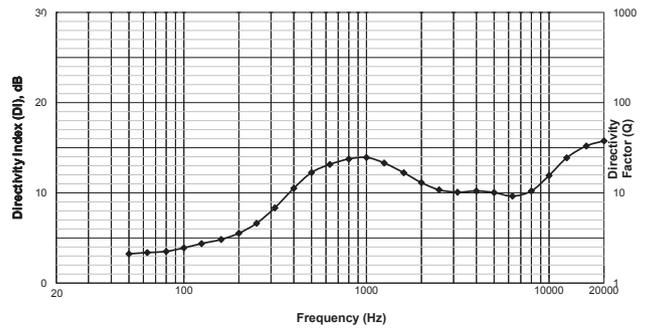
**Beamwidth (Active):**



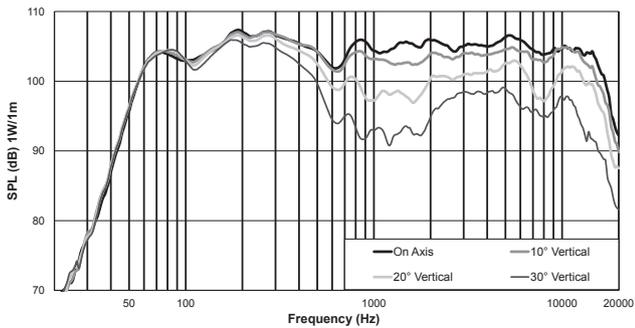
**Horizontal Off-Axis Frequency Response:**



**Directivity (Active):**



**Vertical Off-Axis Frequency Response:**



**Notice!**



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

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/94	90° x 40° Coverage
EVH-1152D/96	90° x 60° Coverage
EVF-2151D	Dual 15 inch Bass Element
EVF-1181S	Single 18 inch Bass Element
DX46	Dx46 Loudspeaker Controller <sup>5</sup>
N8000	N8000 Digital Matrix Controller <sup>5</sup>
CPS2.9	CPS 2.9 Power Amplifier <sup>5</sup>
CPS2.12	CPS 2.12 Power Amplifier <sup>5</sup>
CPS4.10	CPS 4.10 Power Amplifier <sup>5</sup>

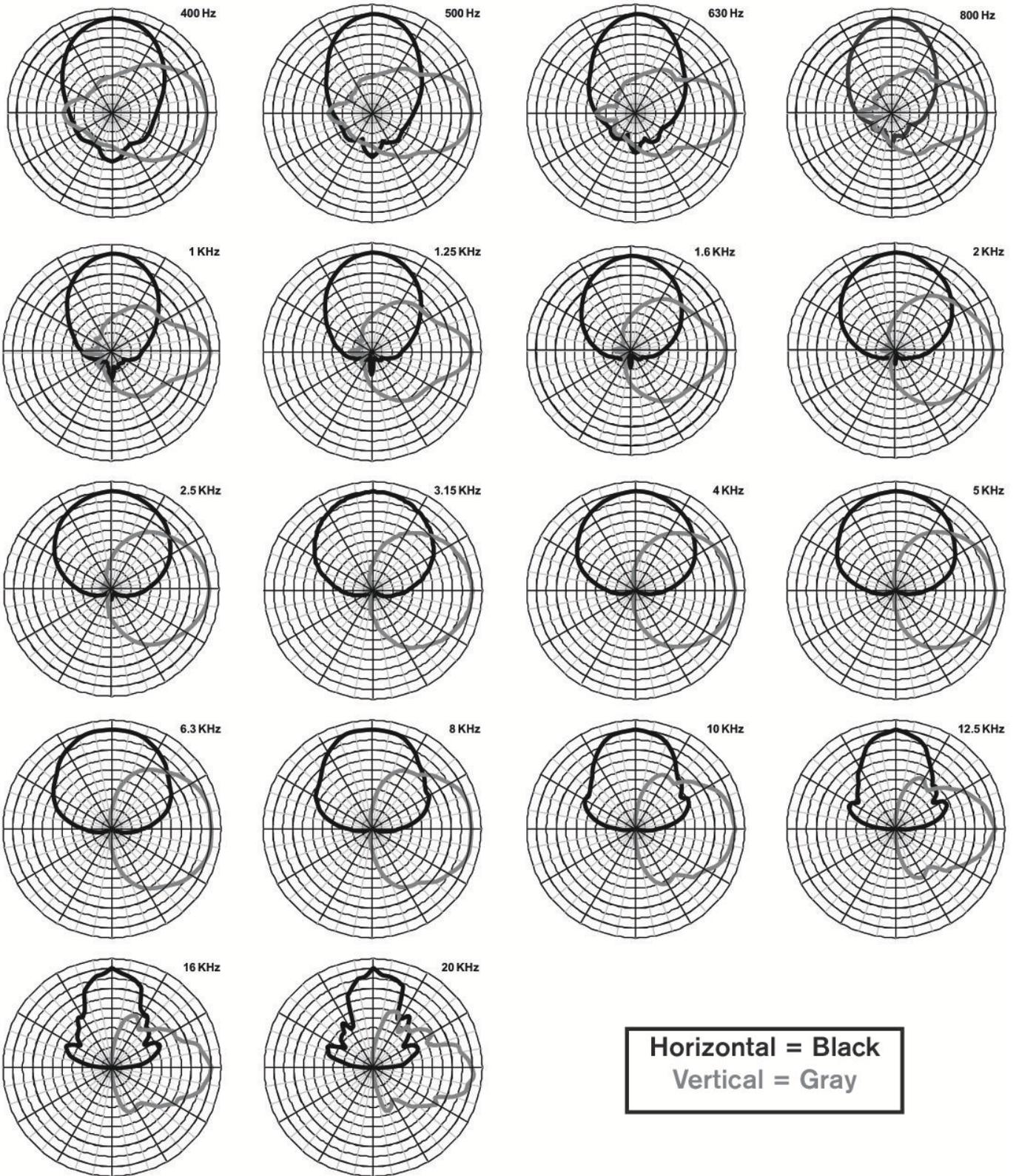
**Caution!**

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.

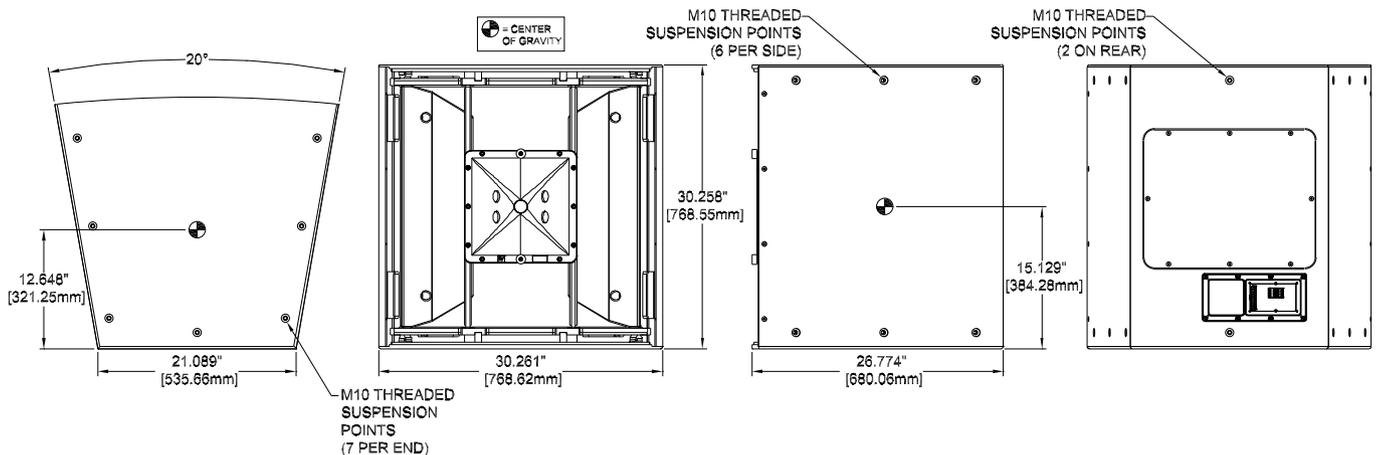


5. Contact your sales representative for voltage information.

**Horizontal and Vertical Polar Response (Active):**  
Polar plots (1/3 octave)



**Dimension Drawing:**



**Notice!**

Acoustic measurement reference axis is the center of the grille.

**Certifications and approvals**


Sachsenring 60, 94315 Straubing, Germany 1438-CPR-0299 Year of affixing the CE-Mark: 2013
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/66, EVH-1152D/94, EVH-1152D/96, EVH-1152D/99 (BLK, WHT, PIB, PIW)

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

**Ordering information**

**EVH-1152D/99-BLK**

15" / 2-way Full-range Systems; SMX woofer & DH7N driver - 500 W cont.; 90° x 90°, EVCoat, black  
 Order number **EVH1152D99BLB**

**EVH-1152D/99-WHT**

15" / 2-way Full-range Systems; SMX woofer & DH7N driver - 500 W cont.; 90° x 90°, EVCoat, white  
 Order number **EVH1152D99WLB**

**EVH-1152D/99-PIB**

15" / 2-way Full-range Systems; SMX woofer & DH7N driver - 500 W cont.; 90° x 90°, EVCoat, PI-weatherized, black  
 Order number **EVH1152D99PBLB**

**EVH-1152D/99-PIW**

15" / 2-way Full-range Systems; SMX woofer & DH7N driver - 500 W cont.; 90° x 90°, EVCoat, PI-weatherized, white  
 Order number **EVH1152D99PWLb**

**EVH-1152D/99-FGB**

15" / 2-way Full-range Systems; SMX woofer & DH7N driver - 500 W cont.; 90° x 90°, EVCoat, fiberglass, black  
 Order number **EVH1152D99-FBLB**

**EVH-1152D/99-FGW**

15" / 2-way Full-range Systems; SMX woofer & DH7N driver - 500 W cont.; 90° x 90°, EVCoat, fiberglass, white  
 Order number **EVH1152D99-FWLb**

**EVH-1152D/99-BLK**

15" / 2-way Full-range Systems; SMX woofer & DH7N driver - 500 W cont.; 90° x 90°, EVCoat, black – EN54-24 certified  
 Order number **EVH-1152D/99-BLKE**

**EVH-1152D/99-WHT**

15" / 2-way Full-range Systems; SMX woofer & DH7N driver - 500 W cont.; 90° x 90°, EVCoat, white – EN54-24 certified  
 Order number **EVH-1152D/99-WHTE**

**EVH-1152D/99-PIB**

15" / 2-way Full-range Systems; SMX woofer & DH7N driver - 500 W cont.; 90° x 90°, EVCoat, PI-weatherized, black – EN54-24 certified  
 Order number **EVH-1152D/99-PIBE**

**EVH-1152D/99-PIW**

15" / 2-way Full-range Systems; SMX woofer & DH7N driver - 500 W cont.; 90° x 90°, EVCoat, PI-weatherized, white – EN54-24 certified  
Order number **EVH-1152D/99-PIWE**

---

**Accessories**

**CSG**

Single gland nut cover kit for EVA, EVF & EVH  
Order number **CSG-LB**

---

**CDG**

Dual gland nut cover kit for EVA, EVF & EVH  
Order number **CDG-LB**

---

**CDNL4**

Dual NL4 cover kit for EVA, EVF & EVH  
Order number **CDNL4-LB**

---

**TK-150**

Transformer kit for EVF & EVH, 150W / 70V  
Order number **TK-150**

---

**HRK-2B**

Horizontal rigging kit for EVF & EVH full-range to EVF sub, black  
Order number **HRK-2B-LB**

---

**HRK-2W**

Horizontal rigging kit for EVF & EVH full-range to EVF sub, white  
Order number **HRK-2W-LB**

---

**HRK-3B**

Horizontal rigging kit for EVH, black  
Order number **HRK-3B-LB**

---

**HRK-3W**

Horizontal rigging kit for EVH, white  
Order number **HRK-3W-LB**

---

**VRK-2B**

Vertical rigging kit for EVF & EVH full-range to EVF subs, black  
Order number **VRK-2B-LB**

---

**VRK-2W**

Vertical rigging kit for EVF & EVH full-range to EVF subs, white  
Order number **VRK-2W-LB**

---

**VRK-3B**

Vertical rigging kit for EVH, black  
Order number **VRK-3B-LB**

---

**VRK-3W**

Vertical rigging kit for EVH, white  
Order number **VRK-3W-LB**

---

**Represented by:**

---

**Germany:**

Bosch Sicherheitssysteme GmbH  
Robert-Bosch-Ring 5  
85630 Grasbrunn  
Germany

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

[www.electrovoice.com](http://www.electrovoice.com)