# **ET90 High-performance Speakers**

www.boschsecurity.com





- ➤ 25 VRMS or 70 VRMS operation at a choice of seven taps from 0.125 W to 8 W
- ► Cost-effective two-wire design
- ▶ Low average current draw
- ► Extra protection and improved audibility through sealed-back speaker construction
- ▶ Easy wiring with screw terminals

The ET90 Speakers provide high audio output with clear audibility, and are designed to meet the critical needs of the life safety industry for effective emergency voice communications and tone signaling. The high-efficiency speakers are designed for maximum output at a minimum wattage across a frequency range of 400 Hz to 4 kHz. A speaker mounting plate with a built-in level adjustment allows for a faster and easier installation. The two-screw grill cover creates an attractive

# **Certifications and approvals**

appearance.

Cooper Wheelock, Inc. holds these Listings and Approvals:

Region	Certification	
USA	UL	UEAY: Speakers (UL464)
	CSFM	see our website

# Installation/configuration notes

## **Compatible Products**

The following products are compatible with the ET90 Speakers:

Category	Product ID	Product Description
Control Panels	D7022 <sup>1</sup>	Conventional FACP
	D7024 <sup>2</sup>	Addressable FACP
	D7024	Conventional FACP
	D8024	Analog FACP
	D9124	Addressable FACP
	D10024A	Analog FACP
	FPD-7024 <sup>2</sup>	Addressable FACP
	FPD-7024	Conventional FACP

These speakers are compatible with Wheelock SAFEPATH4 Facility Communication Systems and Bosch Voice Evacuation Systems.

- <sup>1</sup> When used, the D7022 must be set for 24 VDC operation.
- <sup>2</sup> When used with a D7039 Multiplex Expansion Module, the D7024 and FPD-7024 become addressable fire alarm control panels (FACPs).

#### Mounting

The low profile design of these notification appliances creates more wiring space in standard electrical back boxes. The speaker mounting plate incorporates a

built-in level adjustment feature allowing for a faster and easier installation. These speakers mount on the indicated back boxes for the indicated applications:

	Conduit Applications	Surface Mounted	Flush Mounted
Four-inch square*			•
SBB Back Box	•		

<sup>\*</sup> Requires an SER extension ring.

#### Wiring

The input terminals accept wires with diameters between 18 AWG and 12 AWG (ISO 0.75 mm<sup>2</sup> and 4 mm<sup>2</sup>).

## **Parts included**

Quant.	Component
1	Speaker
1	Mounting Plate
1	Hardware pack
1	Literature pack

## **Technical specifications**

#### **Electrical**

#### **Power Requirements**

Voltage (input):	24 VDC nominal; 16 VDC or FWR to 33 VDC or FWR

#### **Environmental**

Relative Humidity:	Up to 85%, non-condensing
Temperature (Operating):	+32°F to +120°F (0° to +49°C)

#### Mechanical

Dimensions (diameter x D):	7.25 in. x 2.9 in. (18.4 cm x 7.5 cm)
Material:	Molded plastic

## Speaker Volume at 10 ft (3 m)

0.125 (1/8) W:	75 dBA
0.25 (1/4) W:	78 dBA
0.5 (1/2) W:	81 dBA
1 W:	84 dBA
2 W:	87 dBA
4 W:	90 dBA
8 W:	93 dBA

## **Ordering information**

## ET90-N High-Performance Speaker (nickel)

Nickel finish, 24 VDC device providing high audio output with clear audibility, dual voltage capability (25 VRMS or 70 VRMS), and field-selectable taps from 1/8 W to 8 W

Order number ET90-N

#### ET90-R High-Performance Speaker (red)

Red, 24 VDC device providing high audio output with clear audibility, dual voltage capability (25 VRMS or 70 VRMS), and field-selectable taps from 1/8 W to 8 W Order number ET90-R

#### ET90-W High-Performance Speaker (white)

White, 24 VDC device providing high audio output with clear audibility, dual voltage capability (25 VRMS or 70 VRMS), and field-selectable taps from 1/8 W to 8 W Order number ET90-W

#### Accessories

#### SBB-R Surface-mount Back Box (red)

14 cm (5.5 in.) x 14.2 cm (5.6 in.) x 9.1 cm (3.6 in.) Order number **SBB-R** 

#### SBB-W Surface-mount Back Box (white)

14 cm (5.5 in.) x 14.2 cm (5.6 in.) x 9.1 cm (3.6 in.) Order number **SBB-W** 

#### SER-R Square Semi-flush Extension Ring (red)

12.7 cm (5 in.) square by 4 cm (1.5625 in.) deep Order number **SER-R** 

#### SER-W Square Semi-flush Extension Ring (white)

12.7 cm (5 in.) square by 4 cm (1.5625 in.) deep Order number **SER-W** 

## SSB-4 Ceiling Support Bridge

 $60.3~\mathrm{cm}$  ( $23.75~\mathrm{in.}$ ) long by  $16.5~\mathrm{cm}$  ( $6.5~\mathrm{in.}$ ) wide Order number SSB-4

#### Represented by:

## Americas:

Americas:
Bosch Security Systems, Inc.
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 800 289 0096
Fax: +1 585 223 9180 security.sales@us.bosch.com www.boschsecurity.us

# Europe, Middle East, Africa:

Bosch Security Systems B.V. P.O. Box 80002 P.O. Box 80002 5617 BA Eindhoven, The Netherlands Phone: + 31 40 2577 284 Fax: +31 40 2577 330 emea.securitysystems@bosch.com www.boschsecurity.com

#### Asia-Pacific:

Asia-Pacific:
Robert Bosch (SEA) Pte Ltd, Security
Systems
11 Bishan Street 21
Singapore 573943
Phone: +65 6571 2808
Fax: +65 6571 2699
apr.securitysystems@bosch.com
www.boschsecurity.asia

#### China:

China:
Bosch (Shanghai) Security Systems Ltd.
201 Building, No. 333 Fuquan Road
North IBP
Changning District, Shanghai
200335 China
Phone +86 21 22181111
Fax: +86 21 22182398 www.boschsecurity.com.cn

#### America Latina:

America Latina:
Robert Bosch Ltda Security Systems Division
Via Anhanguera, Km 98
CEP 13065-900
Campinas, Sao Paulo, Brazil
Phone: +55 19 2103 2860
Fax: +55 19 2103 2862
latam.boschsecurity@bosch.com
www.boschsecurity.com