

# EX80 Infrared Imager

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**BOSCH**  
Invented for life



- ▶ Daytime color, active-infrared night vision
- ▶ No focus shift, IR bleed or other distortions
- ▶ Black Diamond infrared technology
- ▶ Detection-level imaging to 60 m (200 ft)
- ▶ Packed with installer-friendly enhancements

The EX80 is a dual-sensor, dual-lens, Infrared Imager that delivers exceptional color performance by day and award-winning night vision for important applications in 24/7 surveillance.

Building from its patented Integrated Day/Night design, the new EX80 Infrared Imager combines field-proven optics and ground-breaking Black Diamond technology for High-Fidelity night vision imaging, the most advanced level of night vision performance available today.

Capable of fulfilling all four DCRI surveillance levels (Detection, Classification, Recognition and Identification), the EX80 provides effective 24/7 imaging across a wide range of applications including commercial and residential surveillance.

## Functions

### Black Diamond High Fidelity Night Vision

- Award-winning Black Diamond technology eliminates hotspot foregrounds and underexposed backgrounds
- Detection-level imaging at 60 m (200 ft)
- Enables effective 24/7 operation across a wide variety of surveillance applications

### Patented Dual Sensor Integrated Day Night Design

- 480 TVL Hi-Res color CCD for outstanding daytime color

- 420 TVL Day/Night CCD for award-winning night vision
- Completely eliminates focus shift, IR bleed and other image distortions typical in conventional night vision cameras

### Installer-Friendly Features

- Sliding optical chassis for fast, easy-access lens and CCD adjustments
- Captive screws
- Adjustable infrared intensity and photocell sensitivity
- Weather-sealed housing design to NEMA 4X
- 4 to 9 mm varifocal, auto-iris lenses
- Cable-managed wall bracket, pan-tilt adjustable

### DCRI Performance

Our CCTV Infrared Imagers are tested for performance to DCRI surveillance levels. Conformance to these criteria ensure that our cameras deliver outstanding video at any one of the four levels of surveillance shown below, assuring security specifiers the broadest range of capability.

Parameters at 850 nm

Detection	60 m (200 ft)
Classification	45 m (150 ft)

Recognition	30 m (100 ft)
Identification	15 m (50 ft)

### Technical specifications

#### Video

Sensor	C5 Hi-Res Color CCD	SX3 Monochrome CCD
Effective Pixels	NTSC: 768 x 494 (HxV)	EIA: 510 x 492 (HxV)
	PAL: 752 x 582 (HxV)	CCIR: 500 x 582 (HxV)
Resolution	480 TVL	420 TVL
S/N Ratio	Greater than 48 dB	Greater than 50 dB
Daytime Sensitivity	1 lux at F2	0.05 lux at F2
Night time Sensitivity	0.0 lux (works in total darkness)	
Lens Options	4 to 9 mm varifocal auto-iris	
Gamma	0.45	
Video Output	1 Vpp, 75 ohm	
Day-Night Switching	Photocell-controlled, automatic	
Photocell	Automatic, sensitivity adjustable	
LEDs	Black Diamond High-Fidelity Infrared, intensity adjustable	
Wavelength	850 nm (semi-covert) or 940 nm (covert)*	

#### Electrical

Voltage Supply	12 VDC or 24 VAC
Power Consumption	36 W max

#### Mechanical

Construction	Robust aluminum casting
Finish	Baked enamel finish, black standard
Bracket	Cable managed wall bracket included
Dimensions	131 x 139 x 207 mm (H x W x D) 5.2 x 5.5 x 8.2 in (H x W x D)
Weight	1.4 kg (3.4 lb)

#### Environmental

Operation Temperature Range	-50 °C to +50 °C (-58 °F to +122 °F)
Environment	NEMA 4X compliant



#### Notice

\* For 940 nm, 50-60% distance loss from stated distances at 850 nm

### Ordering information

#### EX80D8V0409BN-N Infrared Imager

Day/Night dual sensor, VA4-9 mm, 850 nm  
BlackDiamond, black, NTSC  
Order number **EX80D8V0409BN-N**

#### EX80D8V0409BN-P Infrared Imager

Day/Night dual sensor, VA4-9 mm, 850 nm  
BlackDiamond, black, PAL  
Order number **EX80D8V0409BN-P**

#### EX80D9V0409BN-N Infrared Imager

Day/Night dual sensor, VA4-9 mm, 940 nm  
BlackDiamond, black, NTSC  
Order number **EX80D9V0409BN-N**

#### EX80D9V0409BN-P Infrared Imager

Day/Night dual sensor, VA4-9 mm, 940 nm  
BlackDiamond, black, PAL  
Order number **EX80D9V0409BN-P**

#### EX80D8V0409W-N Infrared Imager

Day/Night dual sensor, VA4-9 mm, 850 nm  
BlackDiamond, white, NTSC  
Order number **EX80D8V0409W-N**

#### EX80D8V0409W-P Infrared Imager

Day/Night dual sensor, VA4-9 mm, 850 nm  
BlackDiamond, white, PAL  
Order number **EX80D8V0409W-P**

#### EX80D9V0409W-N Infrared Imager

Day/Night dual sensor, VA4-9 mm, 940 nm  
BlackDiamond, white, NTSC  
Order number **EX80D9V0409W-N**

#### EX80D9V0409W-P Infrared Imager

Day/Night dual sensor, VA4-9 mm, 940 nm  
BlackDiamond, white, PAL  
Order number **EX80D9V0409W-P**

#### Accessories

##### EXPS.009 VAC Power Supply

Power supply 24 VAC, 2500 mA RoHS  
Order number **EXPS.009**

##### EXMB.015B Pole Mount Adapter Bracket

Pole Mount Adapter, black  
Order number **EXMB.015B**

##### EXMB.015W Pole Mount Adapter

Pole Mount Adapter, White  
Order number **EXMB.015w**

##### EXMB.017B Wall Mount Adapter Bracket

Wall Mount Adapter, Black  
Order number **EXMB.017B**

**EXMB.017W Wall Mount Adapter Bracket**

Wall Mount Adapter, White  
Order number **EXMB.017W**

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**EXMB.029B Ceiling Mount Bracket**

Ceiling Mount Bracket, Black  
Order number **EXMB.029B**

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**EXMB.029W Ceiling Mount Bracket**

Ceiling Mount Bracket, white  
Order number **EXMB.029W**

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**EXMB.061 Pole Top Bracket**

Stainless Pole Top Bracket  
Order number **EXMB.061**

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**EXSH.01B Sunhood**

Sunhood, black  
Order number **EXSH01B**

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**EXSH.01W Sunhood**

Sunhood, white  
Order number **EXSH01W**

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**PSU-230-24 Power Supply**

Power Supply, 230 VAC / 24 VAC, 50 W  
Order number **PSU-230-24**

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