LTC 0495
Series Dinion^{XF} Day Night Cameras

Security Systems

- 15-bit DSP Technology
- High sensitivity
- Mechanically switching IR filter for IR sensitivity at night
- XF-Dynamic for unsurpassed wide dynamic range
- Bilinx Communication for remote set-up and control
- Default Shutter eliminates motion blurring
- Four area video motion detection
- 540 TVL resolution

The LTC 0495 High Performance 1/3-inch Digital CCD Day/Night Camera ensures the highest image quality possible at any time. Depending on the available light the camera will automatically switch from color to monochrome.

A unique combination of 15-bit digital video processing that enhances sensitivity and XF-Dynamic which extends the dynamic range provides a sharper, more detailed image with outstanding accuracy in color reproduction.

All Dinion cameras are supplied ready to operate. Simply attach and focus the lens, then connect power. No tools are required for back focus and power connection. For especially challenging situations where fine tuning or special settings are required, the camera parameters can be individually set using the control buttons on the side of the camera and On-screen Display (OSD). The camera automatically detects the lens type. The Lens Wizard ensures accurate back-focusing for perfectly sharp pictures at all times.

Functions

XF-Dynamic

The highly accurate 15-bit digital signal is automatically processed to optimally capture the detail in both the high and low light areas of the scene simultaneously, maximizing the information visible in the picture.

Bilinx Technology

Bilinx is a bi-directional communication capability embedded in the video signal of all Bosch Dinion cameras. Technicians can check status, change camera settings and even update firmware from virtually anywhere along the video cable. Bilinx reduces service and installation time, provides for more accurate set-up and adjustment, and improves overall performance. In addition, Bilinx uses the standard video cable to transmit alarm and status messages, providing superior performance without additional installation steps.

Security you can rely on.

BOSCH

Video Motion Detection

The built-in video motion detector allows you to select up to four fully programmable areas with individual thresholds. The global scene change detector minimizes false alarms caused by sudden lighting condition changes, such as switching on or off the indoor or security lighting. When motion is detected alarms may be displayed in the video signal while the output relay can be closed in addition to alarm message transmission on Bilinx.

Auto Black

The automatic black level feature enhances contrast by compensating for reduced contrast (i.e. glare, fog, mist).

Default Shutter

The LTC 0495 features a fast, default shutter speed in sufficient lighting conditions to capture moving objects. When light levels fall and other adjustments have been exhausted, the shutter speed reverts to the standard setting to maintain sensitivity.

Back Light Compensation (BLC)

Offering a fully programmable BLC area of interest, and a variable BLC level, the camera can be easily set up for even the most challenging entrance applications.

Lens Wizard

The Lens Wizard automatically detects the lens type and helps focus the lens at the maximum opening to ensure proper focus is maintained throughout the 24-hour cycle. No special tools or filters are required.

Programmable Modes

Three independent, preprogrammed operating modes support typical applications, but are fully programmable for individual situations. Switching between modes is easy via Bilinx or the external alarm input.

Day/Night Mode

The Day/Night Mode LTC 0495 provides enhanced night viewing by increasing the IR sensitivity. The IR filter can switch from color to monochrome automatically by either sensing the illumination level or via the alarm input. The filter can be switched manually via the alarm input, through the camera menu or via the Bilinx coaxial control interface. An internal through the lens IR detector enhances the monochrome mode stability, as it prevents reverting to the color mode when IR illumination is dominant.

SensUp

By increasing the integration time on the CCD up to 10 times, the effective sensitivity is dramatically enhanced.
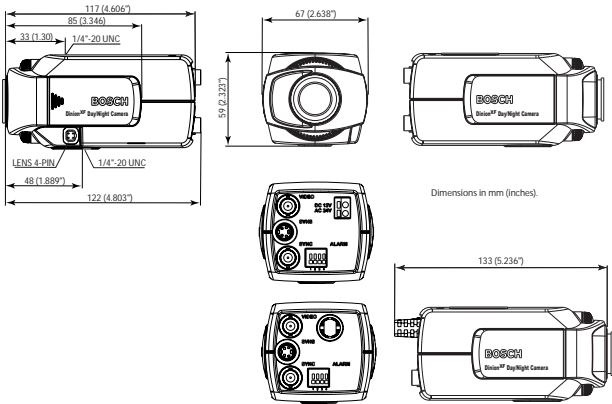This is especially useful when relying only on moonlight for illumination.

Parts Included

Quantity	Component
1	LTC 0495 Series Dinion^{XF} Day\Night Camera
1	C/CS – mount conversion ring
1	Spare male 4 – pin lens connector
	Lens not included

Certifications and Approvals

Electro Magnetic Compatibility	
Emission	EN55022 class B, FCC class B part 15
Immunity	EN50130-4 Alarm Systems, Part 4
Vibration	Camera with 500 g (1.1 lbs) lens according to IEC60068-2-27
Safety	
LTC 0495/11 and LTC 0495/51: EN60065	
LTC 0495/21 and LTC 0495/61: UL6500, cUL CAN/CSA E60065-00	

Installation/Configuration Notes

Dimensions in mm (inches)

Technical Specifications

Electrical

Model No.	Rated Voltage	
LTC 0495/11	12 - 28 VAC	45 - 65 Hz
	11 - 39 VDC	
LTC 0495/21	12 - 28 VAC	45 - 65 Hz
	11 - 39 VDC	
LTC 0495/51	110 - 240 VAC	45 - 65 Hz
LTC 0495/61	110 - 240 VAC	45 - 65 Hz
Power Consumption	4 W	
CCD Type	1/3-inch interline	
Active Pixels		
PAL Model:	752 x 582	
NTSC Model	768 x 492	
Sensitivity (3200 k)		
Sensitivity (Full video) [1]	2.4 lux (0.24 fc)	
Sensitivity 50 IRE[1]	0.59 lux / 0.08 lux (Monochrome mode)	
Minimum illumination[1]	0.24 lux / 0.038 lux (Monochrome mode)	
Minimum Illumination with SensUp	0.024 lux / 0.0038 lux (Monochrome mode)	
Horizontal Resolution	540 TVL	
Signal-to-Noise Ratio	> 50 dB	
Video Output	1 Vp-p, 75 ohm	
Y/C Output	Y: 1 Vp-p / C: 0.3 Vp-p	
Synchronization	Internal, Line Lock, HV-lock and Genlock (Burst lock) selectable	
Shutter	Auto (1/60 (1/50) to 1/500000), fixed, flickerless, default	
Sensitivity up	Off, Automatic continuous up to 10x	
Auto Black	On, Off selectable	
Range	32x dynamic range enhancement	
Dynamic Noise Reduction	Auto, Off selectable	
Contour	Sharpness enhancement level selectable	
BLC	Off, Area and Level selectable	
Gain	Auto (maximum level selectable to 28 dB) or fixed level selectable	
Lens Mount	CS (max lens protrusion 5 mm, 0.2 in,)	
White Balance	ATW (2500 - 10000 K), AWB hold, Manual WB selectable	
VMD	4 area, sensitivity selectable	
Alarm Output	VMD or Bilinx	

Electrical

Alarm Input (TTL)	Profile switching, +5 V nominal, +40 VDC max
Alarm Output Relay	max. 30 VAC or +40 VDC, Max 0.5 A continuous, 10 VA
External Synchronal Input	75 ohm or High Impedance selectable
Cable Compensation	Up to 1000 m (3000 ft.) coax without external amplifiers (automatic set-up in combination with coaxial communication)
Camera ID	16 character editable string, position selectable
Lens Types	Manual, DC- and Video-Iris auto-detect with override DC-iris drive: max. 50 mA continuous Video-iris: 11.5 ± 0.5 VDC, max 50 mA continuous
Remote Control	Bilinx coaxial communication

1) F/1.2, 89% reflection, SenseUp off

Mechanical

Dimensions (H x W x L)	59 x 67 x 122 mm (2.28 x 2.6 x 4.8 in.) without lens
Weight	450 g (0.99 lbs) without lens
Tripod Mount	Bottom (isolated) and top 1/4-inch 20 UNC
Controls	OSD with softkey operation

Environmental

Operating Temperature	-20°C to +50°C (-4°F to 122°F)
Storage Temperature	-25°C to +70°C (-13°F to +158°F)
Operating Humidity	20% to 93% RH
Storage Humidity	up to 98% RH