


BOSCH

Invented for life

LTC 0440 Series Dinion Color Cameras



- ▶ 1/3-inch format CCD imager
- ▶ High sensitivity
- ▶ Advanced digital signal processing
- ▶ High resolution with outstanding picture quality
- ▶ Auto detection of lens type with Lens Wizard
- ▶ Easy to install
- ▶ Accepts AC or DC voltages

The LTC 0440 series are compact rugged, 1/3-inch image format digital color CCD cameras. Their superior sensitivity, 480 TVL resolution and picture quality provide optimal performance in virtually all situations. This fully automatic camera is ready to work for you, and is easy to install in even the most demanding applications. Onscreen Displays (OSD) provide quick and easy access to all camera features. The LTC 0440 cameras also comes with a lens wizard that automatically detects the type of lens installed and provides an OSD guide that allows the installer to easily adjust the lens level and focus without special tools or filters.

Automatic sensing for tracking white balance, provides true to life color images in indoor and outdoor applications. The ability to operate on AC or DC provides added flexibility to system designs and reduces the amount of training and support items to keep on hand. Easy Installation, digital signal processing, on screen displays, superior picture quality and reliability brings the video performance of high resolution color cameras to a level never reached before and makes the LTC 0440 series the best choice for first time and professional users.

Certifications and Approvals

Electromagnetic Compatibility:

EMC Immunity:	According EN50130-4
EMC Emission:	According EN505022 class B
	According FCC, class B part 15

Safety:

LTC 0440/10 and LTC 0440/50:	EN60065
LTC 0440/20 and LTC 0440/60:	UL6500

Parts Included

Quantity	Components
1	LTC 0440 Series Color Camera
1	Spare male 4-pin lens connector
	Lens not included

Technical Specifications

Electrical

Model No.	Rated Voltage	Range	System
LTC 0440/10	12 VDC	10.8-39 VDC	PAL
	24 VAC 50Hz	12-28 VAC 45-65 Hz	PAL
LTC 0440/20	12 VDC	10.8-39 VDC	NTSC
	24 VAC 60Hz	12-28 VAC 45-65 Hz	NTSC
LTC 0440/50	230 VAC 50Hz	85-265 VAC 45-65 Hz	PAL
LTC 0440/60	120 VAC 60Hz	85-265 VAC 45-65 Hz	NTSC

Power Consumption	4 W, excluding lens
Imager	Interline transfer CCD, 1/3-inch image format

Active Pixels

PAL Models:	752 H x 582 V
NTSC Models:	768 H x 494 V

Sensitivity (3200 k)

	Min. Illumination(30 IRE)	Usable Picture (50 IRE)	Full Video
Scene Illumination ¹⁾	0.40 lux (0.04 fc)	0.87 lux (0.09 fc)	3.5 lux (0.35 fc)
Imager Illumination	0.060 lux (0.006 fc)	0.13 lux (0.013 fc)	0.53 lux (0.053 fc)

Horizontal Resolution	480 TVL
Signal-to-Noise Ratio	50 dB
AGC	21 dB (max)
Electronic Shutter	Automatic, 1/50 to 1/125000 sec. (CCIR), 1/60 to 1/50000 sec. (EIA)
Aperture Correction	Horizontal and vertical symmetrical.
Backlight Compensation	Center window weighting
Video Output	Composite video 1.0 Vpp, 75 ohm

Synchronization

Line-Lock (when powered by AC only)	Synchronizes the camera to the power line zero crossing for roll-free vertical interval switching. Vertical phase delay can be adjusted (0-358 degrees) to allow vertical synchronization in multi-phase power installations.
Free Running (when DC-supply or L/L off)	Internal crystal reference is standard on all models

Controls

Video level
Shutter: AES / off / flickerless
AGC: On / Off
BLC: On / Off
ATW: On / Hold
R-offset
B-offset
Vphase Adjustment: 0 - 358 degrees

1) For f/1.2 lens, 89% scene reflectance.

Mechanical

Connectors	- Video Output: BNC - Video/DC-iris connector: 4-pin EIA-J
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Power

LTC 0440/10 and LTC 0440/20	Push type connectors, polarity independent, isolated from video output terminals
LTC 0440/50	2-wire power cord with plug
LTC 0440/60	2-wire power cord with polarized plug
Lens Mounting	C and CS
Dimensions (H x W x D)	58 x 66 x 122 mm (2.28 x 2.6 x 4.8 inch) inc. connectors
Weight	0.45 kg (0.99 lb)

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	5% to 93% non-condensing

Ordering Information

LTC 0440/10 Dinion Color Camera 1/3-inch, 480 TVL, PAL, DSP, 12 VDC/24 VAC, 50Hz	LTC0440/10
LTC 0440/20 Dinion Color Camera 1/3-inch, 480 TVL, NTSC, DSP, 12 VDC/24 VAC, 60Hz	LTC0440/20
LTC 0440/50 Dinion Color Camera 1/3-inch, 480 TVL, PAL, DSP, 230 VAC, 50Hz	LTC0440/50
LTC 0440/60 Dinion Color Camera 1/3-inch, 480 TVL, NTSC, DSP, 120 VAC, 60Hz	LTC0440/60
Accessories	
TC120PS Power Supply Unit 110-120 VAC/15 VDC, 50/60 Hz, 300 mA	TC120PS
TC220PS Power Supply Unit 230 VAC/12 VDC, 50 Hz, 10 VA	TC220PS
TC220PSX-24 Power Supply Unit 230 VAC/20 VAC, 50 Hz, 20 VA	TC220PSX-24

Ordering Information

TC1334 Power Supply Unit
120 VAC/24 VAC, 60 Hz, 30 VA

TC1334

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