



# LTC 0435 Series Color Cameras



- ▶ 1/3- inch format CCD imager
- ▶ High sensitivity
- ▶ Advanced digital signal
- ▶ Processing
- ▶ Standard resolution
- ▶ Auto detection of lens type
- ▶ Easy to install
- ▶ Accepts AC or DC voltages

The LTC 0435 series are compact rugged, 1/3-inch image format digital color CCD cameras. Their superior sensitivity and resolution provide optimal performance in virtually all environments.

Easy Installation, digital signal processing, on screen displays, superior picture quality and reliability brings the video performance of standard resolution color cameras to a level never reached before and makes the LTC 0435 series the best choice for first time and professional users.

This fully automatic camera is ready to work for you, and is easy to install in even the most demanding applications. On-screen Displays (OSD) provide quick and easy access to all camera features.

The LTC 0435 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. The automatic black level feature, now introduced in color cameras, enhances contrast by removing veiling glare from the picture.

The wide range of through the lens automatic sensing tracking white balance provides true to life color images for 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.

## Functions

### Bilinx Technology

The LTC 0435 series cameras incorporate Bilinx. Bilinx is a bidirectional communication capability embedded in the video signal of all Bosch Dinion cameras. with Bilinx 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.

## Certifications and Approvals

### Electromagnetic Compatibility:

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

### Safety:

LTC 0435/10 and LTC 0435/50: EN60065
LTC 0435/20 and LTC 0435/60: UL6500

## Parts Included

Quantity	Components
1	LTC 0435 Series Color Camera
1	Spare male 4-pin lens connector
	Lens not included

## Technical Specifications

### Electrical

Model No.	Rated Voltage	Voltage Range	System
LTC 0435/10	12 VDC 24 VAC 50 Hz	10.8-39 VDC 12-28 VAC 45-65 Hz	PAL
LTC 0435/20	12 VDC 24 VAC 60 Hz	10.8-39 VDC 12-28 VAC 45-65 Hz	NTSC
LTC 0435/50	230 VAC 50Hz	85-265 VAC 45-65 Hz	PAL
LTC 0435/60	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	500 H x 582 V
NTSC Models	510 H x 494 V

### Sensitivity (3200 k)

	Usable Picture (50 IRE)	Full Video
Scene Illumination <sup>1)</sup>	0.39 lux (0.039 fc)	1.6 lux (0.16 fc)
Imager Illumination	0.06 lux (0.006 fc)	0.24 lux (0.024 fc)
Horizontal Resolution	330 TVL	
Signal-to-Noise Ratio	50 dB	
AGC	21 dB (max)	
Electronic Shutter	Automatic, 1/50 to 1/125000 sec. (CCIR), 1/60 to 1/150000 sec. (EIA)	
Aperture Correction	Horizontal & vertical symmetrical	
Backlight Compensation	Center window weighting	
White Balance	Automatic sensing (2500-9000 K)	
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
Auto ATW: on / hold black: on / off
R-offset
B-offset
Vphase adjustment: 0 - 358 degrees

1) For F/1.2, 89% scene reflectance.

## Mechanical

<b>Connectors</b>	- Video Output: BNC - Video/DC-iris connector 4-pin EIA-J
<b>Power</b>	
LTC 0435/10 and LTC 0435/20	Push type connectors, polarity independent, isolated from video output terminals
LTC 0435/50	2-wire power cord with Euro plug
LTC 0435/60	2-wire power cord with polarized plug
Tripod Mount	Top and Bottom, 1/4-inch 20 UNC
Lens Mount	C and CS
Dimensions (H x W x D)	58 x 66 x 122 mm (2.28 x 2.6 x 4.8 inch) including 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 0435/10 Color Camera 1/3-inch, 330 TVL, PAL, DSP, 12 VDC/24 VAC, 50 Hz	LTC0435/10
LTC 0435/20 Color Camera 1/3-inch, 330 TVL, NTSC, DSP, 12 VDC/24 VAC, 60 Hz	LTC0435/20
LTC 0435/50 Color Camera 1/3-inch, 330 TVL, PAL, DSP, 230 VAC, 50 Hz	LTC0435/50
LTC 0435/60 Color Camera 1/3-inch, 330 TVL, NTSC, DSP, 120 VDC, 60 Hz	LTC0435/60

## Accessories

LTC 3364/40 Varifocal Lens 1/3-inch, 2.8 – 12 mm, DC-iris, CS-mount F1.4-360, 4-pin	LTC3364/40
LTC 3374/20 Varifocal Lens 1/3-inch, 5 – 50 mm, DC-iris, CS-mount F1.4-185, 4-pin	LTC3374/20
TC 120PS Power Supply Unit 110-120 VAC/15 VDC, 50/60 Hz, 300mA	TC120PS
TC 220PS Power Supply Unit 230 VAC/12 VDC, 50 Hz, 10 VA	TC220PS
TC 220PSX-24 Power Supply Unit 230 VAC/20 VAC, 50 Hz, 20 VA	TC220PSX-24
TC 1334 Power Supply Unit 120 VAC/24 VAC, 60 Hz, 30 VA	TC1334

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