

# LTC 0455 Series Color Cameras



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

The LTC 0455 series are compact rugged, 1/3-inch image format digital color CCD cameras. Their superior sensitivity, 540 TVL resolution and picture quality provide optimal performance in virtually all situations. 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 0455 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. Onscreen Displays (OSD) provide quick and easy access to all camera features.

The LTC 0455 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. NightSense is used to further extend the excellent sensitivity by a factor 3 in monochrome operation. This mode can be automatically activated under low light situations.

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.

#### **Functions**

#### **Bilinx Technology**

The LTC 0455 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 0455/11 and LTC 0455/51: EN60065 LTC 0455/21 and LTC 0455/61: UL6500

#### **Parts Included**

Quantity	Components
1	LTC 0455 Series Color Camera
1	Spare male 4-pin lens connector
	Lens not included

### **Technical Specifications**

#### **Electrical**

Electrical				
Model No.	Rated Voltag	e Voltage Rar	nge Sys	tem
LTC 0455/11	12 VDC 24 VAC 50 Hz	10.8-39 12-28 45-65	VAC	PAL
LTC 0455/21	12 VDC 24 VAC 60 Hz	10.8-39 12-28 45-69	VAC	NTSC
LTC 0455/51	230 VAC 50Hz	85-265 45-65		PAL
LTC 0455/61	120 VAC 60Hz	85-265 45-65		NTSC
Power Consum	ption	4 W, exclud	ling lens	
Imager		Interline tra 1/3-inch im	,	
Active Pixels				
PAL Models		752 H x 58	2 V	
NTSC Models		768 H x 49	4 V	
Sensitivity (3200 k)				
				and the second second
		Usable Picture (30 IRE)	Usable Pic- ture (50 IRE)	Full Video
Scene Illumina (color mode)				
	tion (	(30 IRE) 0.30 lux	ture (50 IRE) 0.65 lux	2.6 lux
(color mode) ImagerIllumina	tion ( tion <sup>1)</sup> (	(30 IRE) 0.30 lux (0.03 fc) 0.045 lux	0.65 lux (0.07 fc) 0.10 lux	2.6 lux (0.26 fc) 0.40 lux
(color mode) ImagerIllumina (colormode) SceneIlluminat	(ition (ition)	(30 IRE) 0.30 lux 0.03 fc) 0.045 lux 0.005 fc) 0.12 lux	ture (50 IRE) 0.65 lux (0.07 fc) 0.10 lux (0.010 fc) 0.26 lux	2.6 lux (0.26 fc) 0.40 lux (0.040 fc) 1.04 lux
(color mode) ImagerIllumina (colormode) SceneIlluminat (nightmode) ImagerIllumina	(ition (ition <sup>1)</sup> (ition <sup>1)</sup> (ition (ition (ition))	(30 IRE) 0.30 lux (0.03 fc) 0.045 lux (0.005 fc) 0.12 lux (0.012 fc) 0.018 lux	ture (50 IRE) 0.65 lux (0.07 fc) 0.10 lux (0.010 fc) 0.26 lux (0.026 fc) 0.040 lux	2.6 lux (0.26 fc) 0.40 lux (0.040 fc) 1.04 lux (0.104 fc) 0.16 lux
(color mode) ImagerIllumina (colormode) SceneIlluminat (nightmode) ImagerIllumina (nightmode)	(ition (ition (ition)) (ition (ition)) (ition (ition))	(30 IRE) 0.30 lux (0.03 fc) 0.045 lux 0.005 fc) 0.12 lux (0.012 fc) 0.018 lux (0.002 fc)	ture (50 IRE) 0.65 lux (0.07 fc) 0.10 lux (0.010 fc) 0.26 lux (0.026 fc) 0.040 lux	2.6 lux (0.26 fc) 0.40 lux (0.040 fc) 1.04 lux (0.104 fc) 0.16 lux
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(color mode) ImagerIllumina (colormode) SceneIlluminat (nightmode) ImagerIllumina (nightmode) Horizontal Res	tion ( cion¹) ( tion ( cion¹) ( cion²)	(30 IRE) 0.30 lux (0.03 fc) 0.045 lux 0.005 fc) 0.12 lux (0.012 fc) 0.018 lux (0.002 fc) 540 TVL 50 dB 21 dB, (max) Automatic,	0.65 lux (0.07 fc) 0.10 lux (0.010 fc) 0.26 lux (0.026 fc) 0.040 lux (0.004 fc)	2.6 lux (0.26 fc) 0.40 lux (0.040 fc) 1.04 lux (0.104 fc) 0.16 lux (0.016 fc)
(color mode) ImagerIllumina (colormode) SceneIlluminat (nightmode) ImagerIllumina (nightmode) Horizontal Res Signal-to-Noise Gain	tion ( cion¹) ( cion²) ( cion²	(30 IRE) 0.30 lux (0.03 fc) 0.045 lux 0.005 fc) 0.12 lux (0.012 fc) 0.018 lux 0.002 fc) 540 TVL 50 dB 21 dB, (max) Automatic, (CCIR), 1/6	0.65 lux (0.07 fc) 0.10 lux (0.010 fc) 0.26 lux (0.026 fc) 0.040 lux (0.004 fc)	2.6 lux (0.26 fc) 0.40 lux (0.040 fc) 1.04 lux (0.104 fc) 0.16 lux (0.016 fc)
(color mode) ImagerIllumina (colormode) SceneIlluminat (nightmode) ImagerIllumina (nightmode) Horizontal Resi Signal-to-Noise Gain ElectronicShut	tion ( ti	(30 IRE) 0.30 lux (0.03 fc) 0.045 lux (0.005 fc) 0.12 lux (0.012 fc) 0.018 lux (0.002 fc) 540 TVL 50 dB 21 dB, (max Automatic, (CCIR), 1/6 Horizontal a	0.65 lux (0.07 fc) 0.10 lux (0.010 fc) 0.26 lux (0.026 fc) 0.040 lux (0.004 fc)	2.6 lux (0.26 fc) 0.40 lux (0.040 fc) 1.04 lux (0.104 fc) 0.16 lux (0.016 fc)
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#### 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  $vertical \, synchronization \, in \, multi-phase \, power \, in stall at ions. \, Free \,$ 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 Black: On / Off NightSense On / Auto / Forced ATW: On / Hold R-offset, B-offset Vphase Adjustment: 0 - 358 degrees

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

#### Mechanical

**Operating Temperature** Storage Temperature

OperatingHumidity

Connectors	<ul><li>- Video Output: BNC</li><li>- Video/DC-iris connector: 4-pin EIA-J</li></ul>
Power	
LTC 0455/11 and LTC 0455/21	Push type connectors, polarity independent, isolated from video output terminals
LTC 0455/51	2-wire power cord with Euro plug
LTC 0455/61	2-wire power cord with polarized plug
Camera mounting	Top and Bottom, 1/4-inch 20 UNC
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) including connectors
Weight	0.45 kg (0.99 lb)
Environmental	
Operating Temperature	-20°C to 50°C (-4°F to 122°F)

-25°C to 70°C (-13°F to 158°F)

5% to 93% non-condensing

Ordering Information	
LTC 0455/11 Color Camera 1/3-inch, 540 TVL, PAL, DSP, 12 VDC/24 VAC, 50 Hz	LTC0455/11
LTC 0455/21 Color Camera 1/3-inch, 540 TVL, NTSC, DSP, 12 VDC/24 VAC, 60 Hz	LTC0455/21
LTC 0455/51 Color Camera 1/3-inch, 540 TVL, PAL, DSP, 230 VAC, 50 Hz	LTC0455/51
LTC 0455/61 Color Camera 1/3-inch, 540 TVL, NTSC, DSP, 120 VAC, 60 Hz	LTC0455/61

Ordering Information			
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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