



# C10CH Series Digital CCD Color Camera

## 1/3-INCH, ULTRA HIGH RESOLUTION, 540 TVL (NTSC/PAL), COMPACT

### Product Features

- Compact Body Style
- 1/3-Inch Format CCD Imager
- Digital Signal Processing
- 540 TV Lines
- 0.4 Lux Sensitivity
- CS Lens Mount (C Mount Lenses Require Optional Adapter)
- Autosensing DC/Video Drive Auto Iris
- On-Screen Menu Configuration with Side Joystick
- Automatic/Manual White Balance Settings for Difficult Lighting Situations
- Selectable Automatic Gain Control, Electronic Shutter Control, and Backlight Compensation
- Flickerless Mode
- Eclipser Function
- Autosensing Power (24 VAC/12 VDC with Line Lock or Internal Synchronization)
- Internal Top/Bottom Mount
- Long Distance Cable Compensation

The **C10CH Series** is Pelco's smallest full-featured digital color CCD camera. It is designed to provide superior picture quality over a wide range of conditions. The camera's compact size, combined with its numerous features, makes it the ideal camera for most applications.

The **C10CH Series** is an ultra high resolution digital camera with 540 TVL of resolution and 0.3 lux minimum illumination. Camera features include autosensing power (24 VAC with internal line lock or 12 VDC with internal synchronization), automatic gain control (AGC), electronic shutter control (ESC), and flickerless mode. The **C10CH Series** also includes automatic white balance (AWB) for difficult lighting situations, an analog eclipser function that allows the auto iris lens to create clear images in a dark area with a strongly backlit background, and backlight compensation (BLC) that adjusts the picture to prevent objects from appearing dark due to a strong backlight. These features are easily set using the on-screen menus.



**C10CH-6/C10CH-6X**  
(LENS NOT SUPPLIED WITH CAMERA)



**C10CH-7X**  
(LENS NOT SUPPLIED WITH CAMERA)

The **C10CH Series** has a standard CS lens mount and can be used with fixed, manual, or auto iris (DC or video drive) lenses. The iris is controlled through a standard 4-pin square connector that is included on all Pelco auto iris lenses.

The convenient on-screen menu allows you to select area masking, titling, pixel correction, and preset lighting profiles, features which are not typically found in a compact camera.

The **C10CH Series** is quick and easy to install. The C10CH-6 and C10CH-6X are ideal for use with DF5, DF8A, EH100, EH3508, and EH2508 enclosures. The camera is also featured in Pelco's DomePak® and ImagePak® fixed camera dome/enclosure packages. The optional C10-UM wall/ceiling/rail mount kit offers easy installation in many nonenclosure applications, for all models (C10CH-6, C10CH-6X, C10CH-7X).



# TECHNICAL SPECIFICATIONS

## MODELS

C10CH-6	1/3-inch ultra high resolution digital color CCD camera, 24 VAC or 12 VDC, NTSC format
C10CH-6X	1/3-inch ultra high resolution digital color CCD camera, 24 VAC or 12 VDC, PAL format
C10CH-7X	1/3-inch ultra high resolution digital color CCD camera, 230 VAC, PAL format

## GENERAL

Imaging Device	1/3-inch interline transfer CCD
Picture Elements	
NTSC	768 (H) x 494 (V) (approx. 380k)
PAL	752 (H) x 582 (V) (approx. 440k)
Sensing Area	3/16 x 1/8-inch (4.7 x 3.5 mm)
Scanning System	
NTSC	525 lines, 2:1 interlace
PAL	625 lines, 2:1 interlace
Synchronization System	AC line lock/internal
Horizontal Resolution	540 TV lines
Auto Iris Lens Type	DC/video drive (autosensing)
Sensitivity	0.4 lux, f/1.2, 50 IRE, AGC on, 89% scene reflectance
Minimum Illumination	0.3 lux, f/1.2, 50 IRE, AGC on, 75% reflectance
Signal-to-Noise Ratio	> 48 dB
Vertical Phase	Adjustable $\pm 90^\circ$
Automatic Gain Control	Selectable
Electronic Shutter Control	Selectable
Electronic Shutter Range	
NTSC	1/60 sec to 1/100000 sec
PAL	1/50 sec to 1/100000 sec
Backlight Compensation	Selectable
Eclipser Function	Selectable
Auto White Balance	Selectable
Internal Synchronization	Selectable
Gamma	Selectable
Flickerless Mode	Selectable
Signal Processing	Digital signal processing (DSP)
Video Output	1 V <sub>p-p</sub> , 75 ohms
Auto White Balance Range	2,500° to 9,500°K

## ELECTRICAL

Power Requirements	
C10CH-6	24 VAC $\pm 15\%$ /12 VDC $\pm 15\%$ , 60 Hz
C10CH-6X	24 VAC $\pm 15\%$ /12 VDC $\pm 15\%$ , 50 Hz
C10CH-7X	230 VAC $\pm 15\%$ , 50 Hz
Power Consumption	3 W
Power Connector	2-pin terminal block with screw lock
Video Connector	BNC
Auto Iris Connector	4-pin connector (miniature square)
Controls	5-position button

## MECHANICAL

Lens Mount	CS mount
Camera Mount	1/4-inch UNC-20 screw, top or bottom of camera housing

## ENVIRONMENTAL

Operating Temperature	14° to 122°F (-10° to 50°C)
Storage Temperature	-40° to 140°F (-40° to 60°C)
Operating Humidity	20% to 80%, noncondensing
Storage Humidity	20% to 90%, noncondensing

## PHYSICAL

Dimensions (includes BNC)	
C10CH-6/C10CH-6X	2.95" L x 2.17" W x 1.97" H (7.5 x 5.5 x 5.0 cm)
C10CH-7X	5.50" L x 2.17" W x 1.97" H (13.97 x 5.5 x 5.0 cm)
Weight (without lens)	
C10CH-6/C10CH-6X	0.44 lb (0.20 kg)
C10CH-7X	0.88 lb (0.40 kg)
Shipping Weight	
C10CH-6/C10CH-6X	1 lb (0.45 kg)
C10CH-7X	2 lb (0.90 kg)

## CERTIFICATIONS

- CE, Class B
- FCC, Class B
- UL/cUL Listed

## RECOMMENDED MOUNTS

C10-UM	C10 series universal wall/ceiling/rail mount kit
--------	--

## RECOMMENDED POWER SUPPLIES

TF2000	Power supply for one 24 VAC camera, 20 VA
MCS Series	Multiple 24 VAC camera power supply, indoor
WCS Series	Single/multiple 24 VAC camera power supply, outdoor

## RECOMMENDED LENSES

13FA, FD Series	Fixed focal length lenses, 1/3-inch format. FA (manual iris); FD (auto iris, DD).
13VA, VD Series	Varifocal lenses, 1/3-inch format. VA (manual iris); VD (auto iris, DD).
13ZD Series	Motorized zoom lenses, 1/3-inch format (auto iris, DD).

## LENS ACCESSORIES

LDC100	Auto iris drive converter. Converts a DC drive auto iris lens to a video drive auto iris lens and is compatible with all lens size formats.
PCMA40	Lens adapter adapts standard C mount lenses to CS mount cameras.

**NOTE:** For outdoor camera installations, a Pelco enclosure is recommended.



**Pelco, Inc. Worldwide Headquarters:**  
3500 Pelco Way, Clovis, California 93612-5699 USA  
**USA & Canada** Tel: (800) 289-9100 • FAX (800) 289-9150  
**International** Tel: (559) 292-1981 • FAX (559) 348-1120  
[www.pelco.com](http://www.pelco.com)

Pelco, the Pelco logo, DomePak, and ImagePak are registered trademarks of Pelco, Inc. Specifications subject to change without notice. ©Copyright 2008, Pelco, Inc. All rights reserved.