

HCCWD484

ULTRA WIDE DYNAMIC COLOR CAMERA

Honeywell's HCCWD484 is the ideal camera for environments with high contrast and changing light conditions. Using Next Generation Image Capture Technology, images are converted from analog to a digital format within each pixel immediately after the image is captured. Even in high contrast lighting conditions, the HCCWD484 delivers higher quality images; significantly better dynamic range (120 dB max), and higher frame rates than conventional CCD cameras.

While conventional cameras record every pixel in a frame with the same exposure time, the HCCWD484 records each of its 388,800 pixels at its optimum exposure time. This results in correct color rendering and capturing of details in all applications including high contrast scenes with shadows and glare. Typical CCD cameras would render the same scene washed out or under exposed. Next Generation Image Capture Technology eliminates multiple processing steps prior to being digitized and stored, significantly reducing noise. This delivers crisp, high resolution images without the presence of blooming or smearing, in both moving and still pictures.

Market Opportunities

The HCCWD484 is a surveillance solution designed in locations where high contrast and variable light conditions exist. Setup is quick and easy and can be customized with on-screen displays and preset modes. This provides optimum performance for both indoor and outdoor applications including: lobbies, atriums, vestibules, gated entrances, foyers, loading docks, and driveways.

Features

- 1/3" Wide Dynamic Digital Imager
- 14-bit digital processing
- 480 TV lines of resolution (NTSC, PAL)
- Independent per-pixel exposure
- Dynamic range: 95 dB typical/120 dB max – 100 to 200 times greater than conventional CCD cameras
- Transient protection on inputs and outputs
- Temperature range: -4°F to 95°F
- Higher frame rates – 50/60 fps progressive video capture for sharp image definition in all lighting conditions
- 0.4 lux @ F1.2 for true color representation in low light conditions
- 12 VDC/24 VAC with line lock
- C/CS lens mount
- DC, Video and Manual Iris lens support



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www.honeywellvideo.com

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CCD Camera

Wide Dynamic Range Capabilities

Since every pixel can have its own exposure time optimized, high contrast scenes with shadows and glare, such as loading bays and lobbies, can be properly exposed through the entire field of view. The minimum 95 dB of dynamic range eliminates the need for selecting a portion of the scene to be properly exposed using backlighting compensation, but instead allows the entire scene to be properly exposed.

Preset Scenes

The HCCWD484 offers five preset scene settings to ensure fast installation and setup of the camera.

General Scenes High Contrast scenes with no specific optimization for light or dark areas

Fluorescent Office environments lit with fluorescent lighting having low dynamic range

Indoor General indoor scenes

Outdoor Outside environments and high contrast scenes where the camera is focused on the darker areas of the scene

User Defined Allows the user to adjust the dynamic range of the camera to optimize the image for a given lighting condition

Progressive Scan for Sharper Images

The HCCWD484 image processor uses progressive scanning technology to render a sharper picture than is produced by interlaced scanning technology used in conventional CCD cameras. The image is also smoother with less visual artifacts as there is less of a time delay in rendering the pictures captured by the individual pixels than there is in trying to combine two complete images that are captured sequentially.

Low Light Performance

The HCCWD484 offers 0.4 lux of low light sensitivity – the best of any of the ultra wide dynamic range cameras on the market today. Honeywell offers three Vari-focal Auto Iris lenses which have the widest maximum apertures of comparable lenses having the same focal length range. These are the HLD25V6F12L, 2.5 – 6 mm, F1.2, the HLD28V8F95L, 2.8 – 8 mm, F0.95, the HLD27V13DNL, 2.7 – 13.5 mm, F1.3 and the HLD5V50F13L, 5 – 50 mm, F1.3. The HCCWD484 combined with one of Honeywell's Vari-focal Auto Iris lenses offer the best low light performance of any ultra wide dynamic camera system in the market today.

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On Screen Display Menu

The HCCWD484 can be quickly set up and configured using the built-in OSD menu. This includes choosing preset scene settings, modifying the camera setup, and adding a camera ID.

Presets

- General Scenes
- Fluorescent
- Indoor
- Outdoor
- User Defined... .. Dynamic Range Level
Auto Exposure

Camera Setup

- White Balance... .. ATW
ATW Wide
HOLD
Manual
- Exposure... .. Auto Iris Level
Electronic Shutter
- AGC... .. ON
OFF
- SYNC... .. Internal
Line lock (Phase Adjustment)

Camera ID Setup

- Display ID... .. Yes
No
- Camera ID... .. XXXXXXXXXXXXX
- ID Position... .. Up-Left, Up-Center,
Up-Right, Down-Left,
Down-Center, Down-Right
- Background Color..... None, Green, Blue

Restore

- Restore User Settings
- Restore Factory Settings

Save & Exit

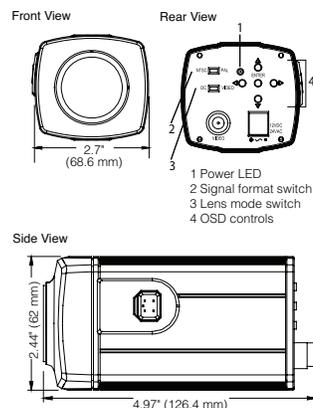
Exit (Unsaved)

Version

SPECIFICATIONS

Operational	
Video Standard	NTSC, PAL
Scanning System	525/60 lines (NTSC) 625/50 lines (PAL)
Image Sensor	1/3" WDR digital imager, 388K Pixels
Number of Pixels (H x V)	720 x 540
Minimum Illumination	0.4 lux @ F1.2 (50 IRE)
Horizontal Resolution	480 TVL
Video Output	1.0 Vp-p @ 75 Ohms
Sync System	12 VDC: Internal 24 VAC: Line lock, Internal
S/N Ratio	52 dB typical
Auto Gain Control	Auto/Adjustable (4 – 26 dB max)
ALC	Adjust (with direct drive Auto Iris lenses)
Automatic Electronic Shutter	1/60 – 1/100,000 sec (NTSC) 1/50 – 1/100,000 sec (PAL)
Digital Slow Shutter	Up to 16X (8X, 4X, 2X)
White Balance	AWB/ATW
Dynamic Range	95 dB typical/120 dB max
Line Lock Phase Adjustment	Adjustable line lock vertical phase
Electrical	
Voltage Input	12 VDC/24 VAC
Input Range	10 – 16 DC/17 – 32 AC
Surge Suppression	1.5 kW transient
Power Consumption	4.5 W max
Mechanical	
Dimensions (W x H x D)	2.7" x 2.4" x 4.9" 68.6 mm x 62 mm x 125.2 mm
Weight	1 lb (0.45 kg) camera only
Construction	Housing: Aluminum Finish: Cool gray powder coat
Camera Mount	1/4 – 20 UNC (top and bottom)
Lens Mount	C/CS adjustable mounting ring
Connector	Video Output: BNC Connector Lens: 4-pin connector Power Input: 2-pin screw terminal
Power Indicator	LED

Environmental			
Temperature	Operating: 14°F to 113°F (-10°C to 45°C) Storage: -4°F to 140°F (-20°C to 60°C)		
Relative Humidity	20% to 80%, non-condensing		
Regulatory			
Emissions	FCC, CE (EN55013)		
Immunity	CE (EN50130-4)		
Safety	EU: 73/23/EEC LVD		
Accessories:			
Recommended Lens Options			
HLD25V6F12L	2.5 – 6 mm, F1.2, DC Auto Iris lens		
HLD28V8F95L	2.8 – 8 mm, F0.95, DC Auto Iris lens		
HLD27V13DNL	2.7 – 13.5 mm, F1.3, Aspherical Vari-focal lens		
HLD5V50F13L	5.0 – 50 mm, F1.3, DC Auto Iris lens		
Housings and Mounts			
HBC5WT	Wall/Ceiling Mount Bracket		
HHC12 Series	Environmental Housing		
Transformers			
HPT2420	24 VAC, 20 VA Class 2 plug-in with thermal cut-out		
HPT12DC500	12 VDC, 500 mA plug-in regulated 2.1 mm coaxial plug UL Listed/CSA Certified		
Power Supplies			
UL Listed	Fused	Smart Fused	Description
HPTV2404UL	HPTV2404	HPTV2404CB	4 A, 4 Output
HPTV2408UL	HPTV2408	HPTV2408CB	4 A, 8 Output
HPTV2416UL	HPTV2416	HPTV2416CB	8 A, 16 Output



Ordering	
HCCWD484	1/3" High Resolution Ultra Wide Dynamic Camera, 480 TVL, 0.4 lux, 12 VDC/24 VAC, NTSC
HCCWD484X	1/3" High Resolution Ultra Wide Dynamic Camera, 480 TVL, 0.4 lux, 12 VDC/24 VAC, PAL

NOTE: Honeywell reserves the right, without notification, to make changes in product design or specifications.

Honeywell Security

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