

HCCWD484X

WIDE DYNAMIC CAMERA

The HCCWD484X from Honeywell Video Systems is the ideal camera for environments with high contrast and changing light conditions. Using Next Generation Image Capture Technology, images are converted from analogue to a digital format within each pixel immediately after the image is captured. Even in high-contrast lighting conditions, the HCCWD484X delivers higher-quality images; significantly better dynamic range (120dB max) and higher frame rates than conventional CCD cameras.

Another area where the HCCWD484X separates itself from the competition is proper exposure of each pixel. While conventional cameras record every pixel in a frame with the same exposure time, the HCCWD484X records each of its 388,800 pixels at its optimum exposure time. This results in correct colour rendering and capturing of details in all applications including high contrast scenes with shadows and glare, where CCD cameras would render the same scene washed out or under exposed. Next Generation Image Capture Technology also eliminates multiple processing steps prior to being digitised and stored, which significantly reduces noise. This delivers crisp, high-resolution images without the presence of image artefacts, such as blooming or smearing, in both moving and still pictures.

Market Opportunities

The HCCWD484X from Honeywell Video Systems is a cost effective surveillance solution designed for locations where high contrast and variable light conditions exist. Setup is quick and easy and the HCCWD484X can be customised with on-screen displays and preset modes providing 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
- Independent per-pixel exposure
- Dynamic range: 95 dB typical / 120 dB max – 100 to 200 times greater than conventional CCD cameras
- Higher frame rates – 50/60 fps progressive video capture for sharp image definition in all lighting conditions
- 0.4 lux @ F1.2 for true colour representation in low light conditions
- 12 VDC or 24 VAC with line lock
- DC, Video and Manual Iris lens support



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Powerful new features offer exceptional performance for high contrast lighting conditions.

Wide Dynamic Range Capabilities

Since every pixel can have its own exposure time optimised, 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.

CCD Camera



HCCWD484X



Preset Scenes

The HCCWD484X offers five preset scene settings to ensure fast installation and setup of the camera.

These include:

General Scenes	High contrast scenes with no specific optimisation 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 optimise the image for a given lighting condition

Progressive Scan for Sharper Images

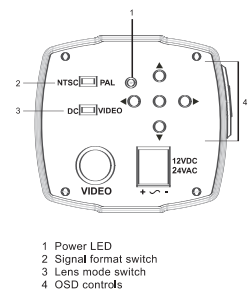
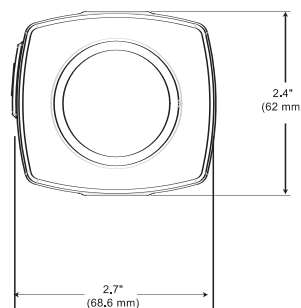
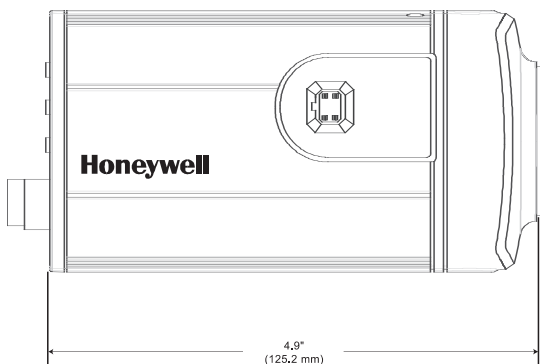
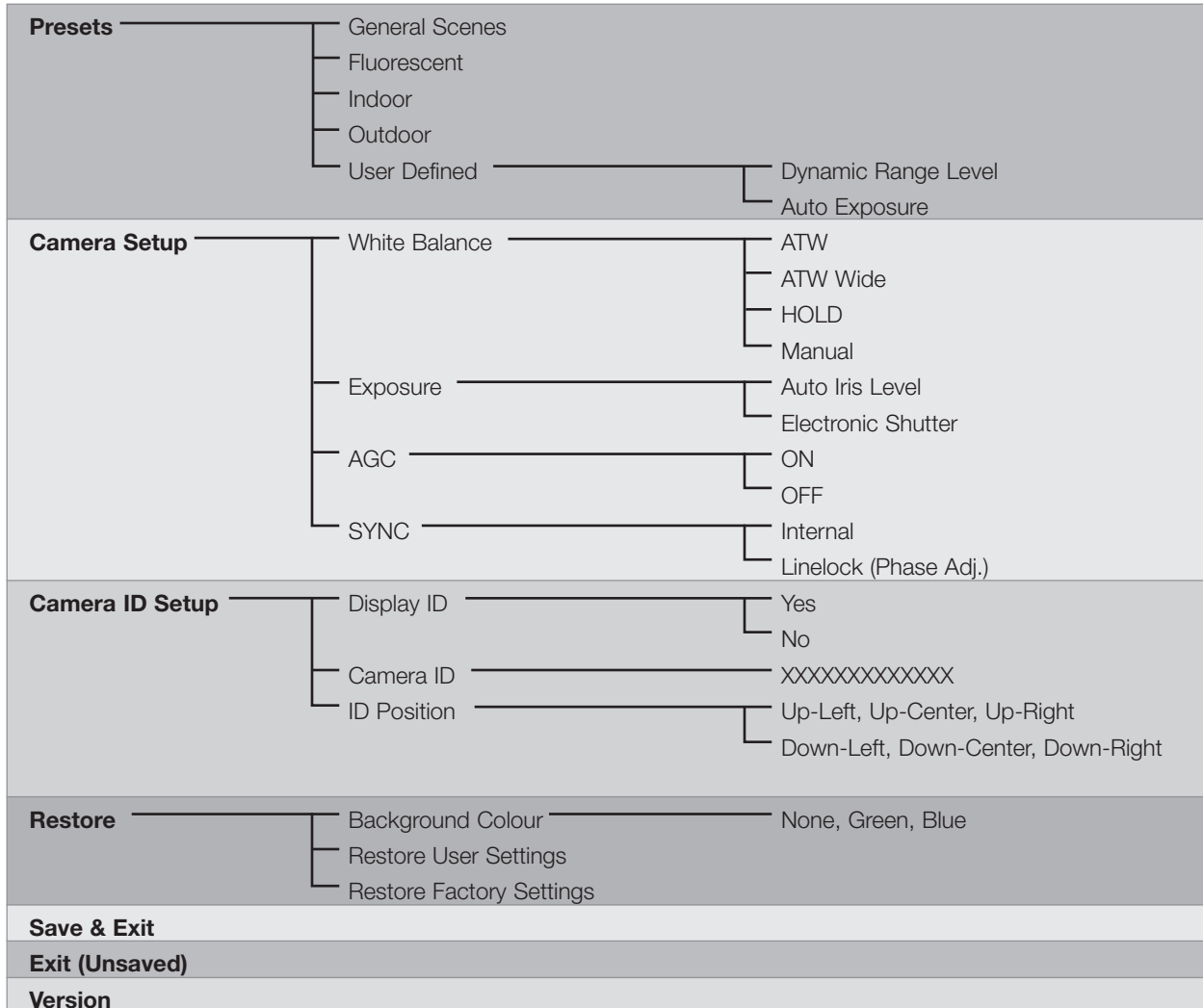
The HCCWD484X image processor uses progressive scanning technology to render a sharper picture than is produced by interlaced scanning technology used in conventional CCD cameras. The image is also smoother with less visual artefacts as there is less of a time delay in rendering the pictures captured by the individual pixels than there is in trying to combine two complete images that are captured sequentially.

Low Light Performance

The HCCWD484X offers 0.4 lux of low light sensitivity, which is 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 HLD29V8DNL, 2.9 – 8 mm F0.95, the HLD27V13DNL, 2.7 – 13.5 mm F1.3 and the HLD5V50DNL, 5 – 50 mm F1.6. The HCCWD484X 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.

On Screen Display Menu

The HCCWD484X 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.



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SPECIFICATIONS

Technical	
Signal Format	NTSC or PAL (switch selectable)
Imager Format	1/3" WDR digital image device
Resolution	480 TVL
Number of Effective Pixels	388,800 Pixels (720H X 540V)
Dynamic Range	95 dB typical/120 dB max
S/N Ratio	52 dB typical
Video Output	1 Vp-p, 75 Ohms
Light Sensitivity	0.4 lux @ F1.2 (50 IRE)
Sensitivity Auto Gain	Up to 16X (8X, 4X, 2X)
Colour Balance	ATW, ATW-WIDE, MANUAL / HOLD (2,000 to 11,000K)
AGC Control	Off/On (0 – 44 dB max)
Sync. System	Internal or line-lock
Scanning System	625/50 lines (PAL)
V-Phase	Adjustable line-lock vertical phase
ALC	Adjustable level control for direct drive Auto Iris lenses
Power Supply	12 VDC / 24 VAC
Power Consumption	4.5 W (complete system)
Surge Suppression	1.5 kW transient
Lens Mount	C/CS adjustable mounting ring
Camera Mount	1/4 – 20 UNC (top and bottom)
Housing Material	Aluminium
Dimensions (WxHxD)	2.7 in. x 2.4 in. x 4.9 in. (68.6 mm x 62 mm x 125.2 mm)
Weight	12 oz. (340 g) camera only
Video Output	BNC connector
Power Input	2-pin screw terminal
Power Indicator	LED
Operating Temperature	14°F to 113°F (-10°C to 45°C)
Relative Humidity	20% to 80%
Regulatory	
Safety	73/23/EEC Low Voltage Directive
Emissions	EN 55022 Class A, FCC: Part 15
EMC Immunity	EN 61000
Ordering	
CAMERAS	LENS OPTIONS VARI-FOCAL AUTO IRIS
HCCWD484X PAL	HLD29V8DNL 2.9 – 8 mm F0.95
	HLD27V13DNL 2.7 – 13.5 mm F1.3
	HLD5V50DNL 5 – 50 mm F1.6

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

Honeywell Security

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