



- 1/3" CCD Sony Super HAD II™
- Low Light DSP
- 650TVL
- 2.8~12mm AVF Lens
- 3 Axis / 3DDNR
- SENS-UP / DC 12V
- True Day & Night - ICR



## FEATURES

- **IP-68 Water & Vandal-Proof**
- **Easy Twist and Lock Installation** : No Drilling thru Camera Required (Drill Hole Guide Included)
- **3-Axis Construction** : By adjusting '3-Axis' control, you get a straight view regardless whether camera is installed on a wall or ceiling
- **TRUE Day & Night : ICR (IR-Cut Filter Removal)**
  - Daytime Advantage : 'IR-Cut Filter' blocks infrared light causing color distortion.
  - Night-time Advantage : By removing the 'IR-Cut Filter' at night, camera can take advantage of infrared light to enhance image brightness.
- 1/3" Sony Super HAD II Color CCD Sensor with HERO Chipset
- High Resolution - 650 (H) TV Line in Color
- Minimum Illumination - 0.001 Lux ~ 0.00008 Lux (Sens-up ×256)
- Single Scan Wide Dynamic Range (SS-WDR) : Shows more detail level in dark area at Semi-Realtime (15fps) speed
- 2.8~12mm Auto-Iris Zoom Lens Installed
- **SENS-UP** : Intensified Low Light
  - Instead of changing camera mode to B&W for enhancing image brightness, it stays in color mode and increases its shutter speed to gather more light to bright up the image.
- **HLM** - High Light Mask Function
- **DIS** - Digital Image Stabilizer
- **LSC** - Lens Shading Compensation
- **OSD** (On Screen Display) - Easy Camera Setup
- **3DDNR** (3D Digital Noise Reduction) - Clear Motion Noise
- DC 12V only

Resolution	650 TV Lines
Sensor	1/3 inch SONY Super HAD II CCD
Total Pixels	811(H) × 508(V) 410K pixels
Effective Pixels	768(H) × 494(V) 380K pixels
Scanning System	2:1 Interlace
Frequency	Horizontal : 15.734KHz / Vertical : 59.94Hz
S/N (Y signal)	More than 50dB (AGC off)
Video Output	CVBS : 1.0Vp-p / 75ohm
Min. Illumination	0.001 Lux ~ 0.00008 Lux/W Sens-up (@ x256 Sens-up)
White Balance	ATW / AWC / PUSH / Manual
Electronic Shutter Speed	Auto / Manual (1/60 sec ~ 1/100,000 sec)
WDR (Wide Dynamic Range)	Auto / Off
OSD	Built-in
Backlight Compensation	Low / Middle / High / HLM / Off Selectable
AGC (Auto Gain Control)	Low / Middle / High / Off Selectable
3D DNR	Low / Middle / High / Off Selectable
Day & Night	Auto / Color / BW / CDS
Privacy Mask	ON / OFF (6 Zone)
Motion Detection	ON / OFF (240 Zone)
Image Conversion	FREEZE / V-FLIP / H-FLIP / ROTATE / NEGA : All ON / OFF Adjustable
DIS (Digital Image Stabilizer)	ON / OFF
LSC (Lens Shading Compensation)	ON / OFF
Digital Zoom	ON (×1~10) / Off
Sharpness	Adjustable
Operating Temperature / Humidity	-10°C~+40°C(14°F ~ 104°F) / 30~80% RH
Storage Temperature / Humidity	-20°C~+60°C(-4°F ~ 140°F) / 20~90% RH
Power Source	DC 12V
Dimensions	6.0"(Ø) x 4.5"(H)





650TVL

### HIGH-RES 650 TV LINE

The camera is powered by HERO chipset that is embodied the top grade of the world at 650 TVL resolution by own image signal technology which is to change the frequency of luminance signal adaptively by a monitoring sector



HLM On

### HLM : HIGH LIGHT MASKING

HLM Function is being prevented against headlights of vehicle effectively. It is the most suitable function to see license plates at night.



DSS On

### DSS (Sens-up x256)

DSS (Digital Slow Shutter) is realized in the most low illumination quality and it provides the image without a noise at the low illumination quality.



3DDNR On

### 3DDNR (3D DIGITAL NOISE REDUCTION)

Improved S/N ratio 52dB and more clean the low illumination quality and can be monitoring at night clearly without the image drag and noise phenomenon.

### AUTO IR CUT FILTER REMOVAL : ICR

At daytime, IR light is filtered away in the camera by the IR-cut filter in order to render color images that humans are used to. When light conditions are too dark to render color images, the IR-cut filter is automatically removed to enable the camera to make use of the IR light to produce a high quality black & white video.

### OSD CAMERA SETUP

It has a small program built-in to the camera to help users to setup the camera function without difficulties. No more reading a manual and tipping dip-switches to configure the camera.

### VANDAL-RESISTANT CASE

The poly-carbonated impact resistant dome can withstand repeated blows from a 10-pound hammer and not break. They are perfect for prisons, banks, military installations and other high risk areas.

### 3-AXIS DOME CONSTRUCTION

Accompanying with 3-Axis construction, the Dome camera can be rotated, shifted horizontally or vertically so you can position the camera to get the pictures you need

