

NUVICO®

EASYVIEW™ **LITE**



EASYVIEW LITE
Dome Camera

CD / CV Series

*For CD-H2N, CD-H39N, CD-HD2N-L, CD-HD39N-L
Vandalproof CV-H2N, CV-H39N, CV-HD2N-L, CV-HD39N-L
(NTSC and PAL)*

INSTALLATION MANUAL

Disclaimer

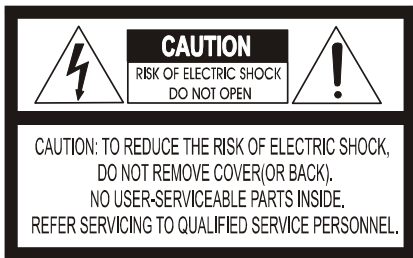
- While every effort has been made to ensure that the information contained in this guide is accurate and complete, no liability can be accepted for any errors or omissions.
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- NUVICO makes no warranties for damages resulting from corrupted or lost data due to a mistaken operation or malfunction of the cameras, peripheral devices, or unapproved/un supported devices.

Warning and Caution

WARNING!

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE. DO NOT INSERT ANY METALLIC OBJECTS THROUGH THE VENTILATION GRILLS OR OPENINGS ON THE EQUIPMENT.

CAUTION!



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instruction in the literature accompanying the product.

Important Safeguards

- Read these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this equipment near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other equipment (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the equipment.
- Only use attachments/accessories specified by the manufacturer.
- Unplug this equipment during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the equipment has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the equipment, the equipment has been exposed to rain or moisture, does not operate normally, or has been dropped.
- **CAUTION - THIS MANUAL IS FOR USE BY QUALIFIED SERVICE PERSONNEL ONLY. TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT PERFORM ANY SERVICING OTHER THAN THAT CONTAINED IN THE OPERATING INSTRUCTIONS UNLESS YOU ARE QUALIFIED TO DO SO.**
- Use Certified/Listed Class 2 power supply transformer only.

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Introduction

ABOUT THIS MANUAL

Thank you for purchasing our EasyView™ Lite dome camera.

Our EasyView™ Lite Dome Cameras are all equipped with high resolution 1/3" Interline transfer CCD Imager for enhanced lowlight sensitivity. Available in a host of different combinations, from standard fixed lens indoor color domes, to vari-focal day/night vandalproof dome, EasyView™ Lite series cameras accommodate a broad range of applications and demanding environments.

Before installing and using this camera, please read this manual fully and carefully, and be sure to keep it handy for later use. This installation manual covers the following models listed below. Any difference in features are indicated where necessary.

Available Models

FIXED LENS	INDOOR DOME	VANDALPROOF DOME
H Series 550 TVL	CD-H2N-I / CD-H2P-I (Ivory) CD-H2N-B / CD-H2P-B (Black)	CV-H2N / CV-H2P Available in ivory housing only.
HD Series 550 TVL • Day/Night • 18 IR LED	CD-HD2N-LI / CD-HD2P-LI (Ivory) CD-HD2N-LB / CD-HD2P-LB (Black)	CV-HD2N-L / CV-HD2P-L Available in ivory housing only.

VARI-FOCAL LENS	INDOOR DOME	VANDALPROOF DOME
H Series 550 TVL	CD-H39N-I / CD-H39P-I (Ivory) CD-H39N-B / CD-H39P-B (Black)	CV-H39N / CV-H39P Available in ivory housing only.
HD Series 550 TVL • Day/Night • 16 IR LED	CD-HD39N-LI / CD-HD39P-LI (Ivory) CD-HD39N-LB / CD-HD39P-LB (Black)	CV-HD39N-L / CV-HD39P-L Available in ivory housing only.

Content Verification

Before installing the camera, please make sure that all of the following items are included in the box.

EasyView™ Lite Dome CAMERA

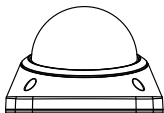
1. EasyView™ Lite Dome Camera
2. Installation Manual
3. Surface Mount Mounting Template
4. Service Monitor Cable - Model#: CA-SMC30
(Vari-focal Lens models only)
5. Mounting Hardware

- **(x1) Torx Wrench (Vandalproof Only)**
- **(x4) Philips ST4x30 Assembly Screws**

These screws are used to mount the Surface Mount Plate to a sturdy surface.

- **(x4) Philips ST4x30 Anchors**

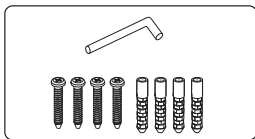
These anchors are used to fasten the assembly screws securely to the mounting surface.



EasyView™ Lite Dome Camera

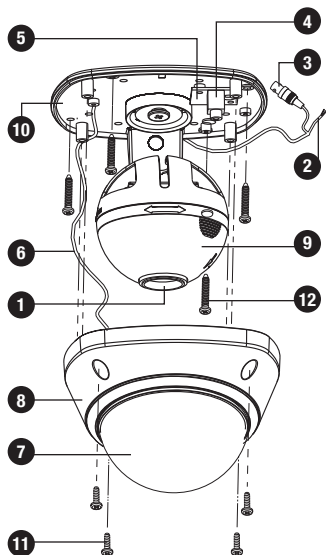


Service Monitor Cable
(CA-SMC30)



Assembly & Mounting Accessories

Parts & Descriptions



- 1 Lens
- 2 Power input Connector
12VDC/24VAC Dual Voltage (Vari-focal Only)
- 3 Video Output Connector - BNC
- 4 Service Monitor Output Connector
Model #: CA-SMC30 (Vari-focal Only)
- 5 Camera Power Board (Vari-focal Only)
- 6 Safety Wire
- 7 Bubble
- 8 Dome Cover
- 9 Camera Module
- 10 Surface Mount Plate
- 11 Assembly Screws
Philips M3x12 (Indoor)
Torx M4x11 (Vandalproof)
- 12 Mounting Screws
Philips ST4x30 (Indoor & Vandalproof)



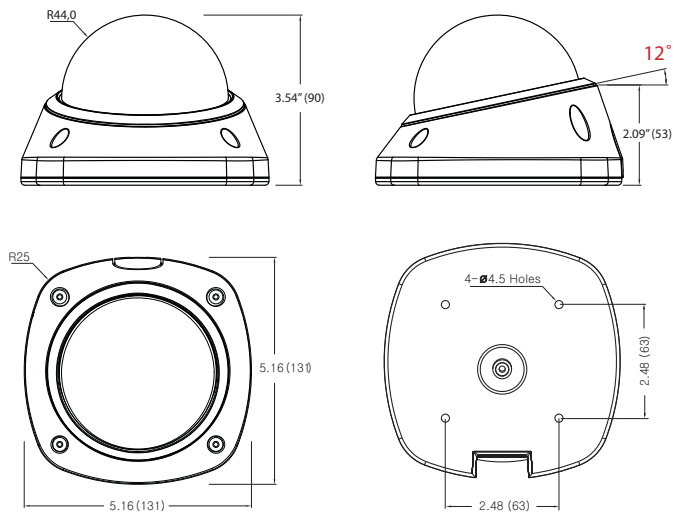
REMINDER

For longer, more consistent performance, avoid installation locations prone to direct sunlight.

Camera Dimensions

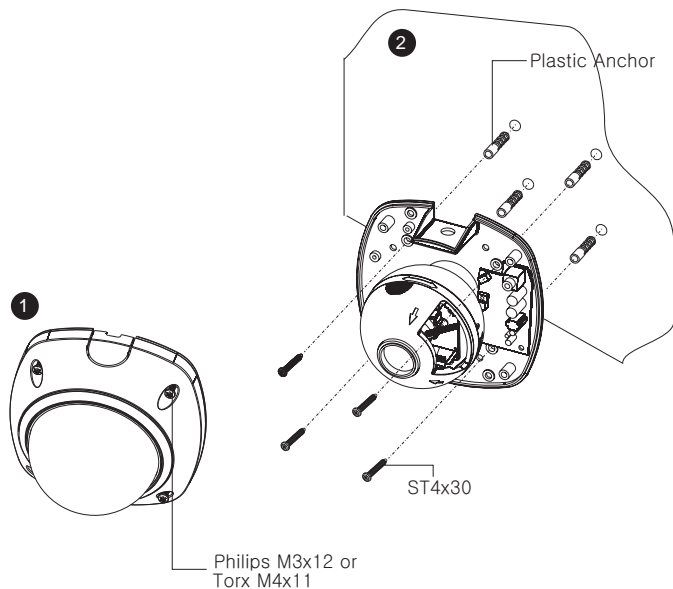
EasyView™ Lite dome camera housing is specially designed allowing for additional 12° tilt of the 3-Axis Gimbal. Even at full 90° tilt, the view out of the EasyView™ Lite will be unobstructed. See the diagrams below for the exact dimensions of the EasyView™ Lite dome camera.

Dimensions Unit: Inches (mm)



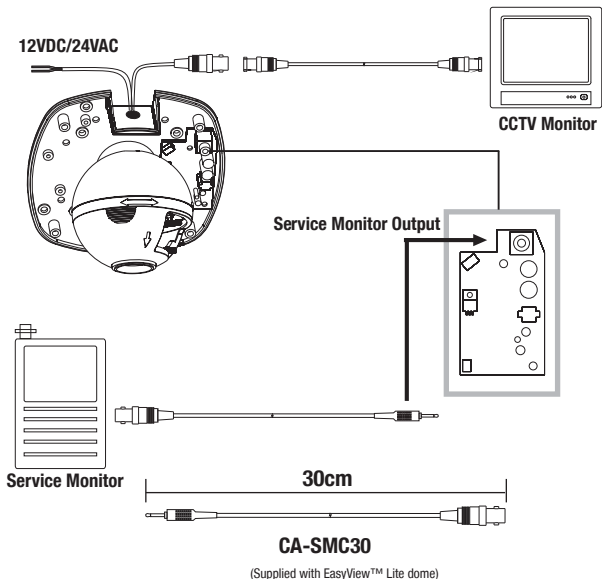
Base Installations

1. Remove the dome cover by loosening the 4 screws located at the Dome Cover Ring. EasyView™ Lite indoor domes use the standard philips screws, while vandal domes uses the torx screws. Use the Torx Wrench supplied.
2. Using four ST4x30 screws provided, mount the surface mount plate to a sturdy surface. Using four M3x12(Indoor) screws, or M4x11(Vandalproof) screws, affix the dome cover back on to the surface mount plate.



Connecting to Monitors

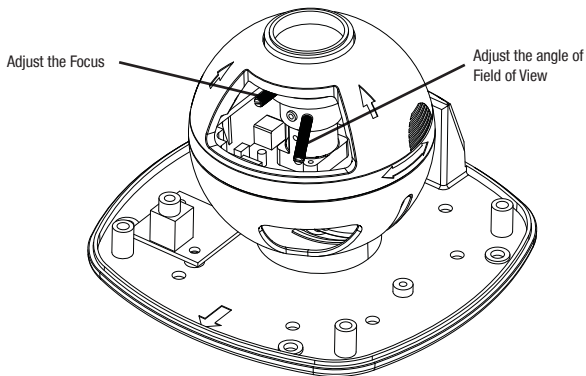
Follow the diagram below to make proper connections to the CRT Monitor or the Service Monitor.



- Power connection (Auto polarity detection and protection) - 12VDC/24VAC Dual Voltage on Vari-focal Lens models, otherwise 12VDC Voltage for Fixed Lens models.
- Service monitor outputs are located on the Camera Power Board, and are only available in the EasyView™ Lite dome cameras equipped with a Vari-focal lens.

Adjusting the Vari-focal DC Auto Iris Lens

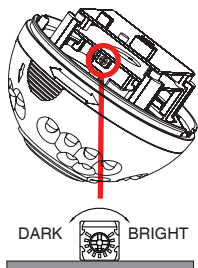
Follow the instruction provided below to make any lens adjustments.



Zoom: Tele ← - → Wide

Focus: Far ← - → Near

- 1 Loosen the Zoom & Focus screws.
- 2 Using the screw, move it LEFT or RIGHT to the desired position.
- 3 Once the desired adjustments have been made, tighten the screw to lock in place.
- 4 Adjust the Field of View by moving the screw towards the RIGHT(Wide) to zoom in, or towards the LEFT (Tele) to zoom out.
- 5 Adjust the Focus the same way as described above after the desired zoom position is established.

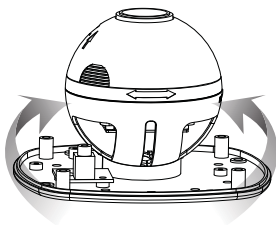


For brighter screen turn the DC Iris level clockwise. For a darker screen, turn the DC Iris level counter-clockwise.

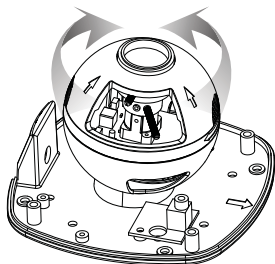
Adjusting the 3-Axis Gimbal

The Gimbal mechanism yields maximum rotation and placement as shown below.

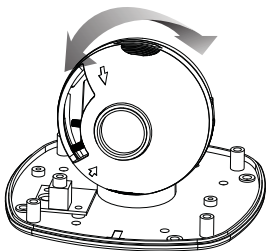
- ❶ **Z-Axis:** Rotation 355°
- ❷ **Y-Axis:** Tilting 90°
- ❸ **X-Axis:** Panning 355°



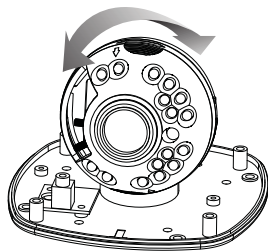
❶ Rotation 355°



❸ Panning 355°



❷ Tilting 90°



❷ Tilting 90° w/ IR LED

Opening the 3-Axis Gimbal Cover

Dip Switches on the EasyView™ Lite dome cameras are located on the camera module inside of the Gimbal assembly. To access the Dip Switches, remove the Gimbal cover temporarily by following the instructions below.

STEP 1

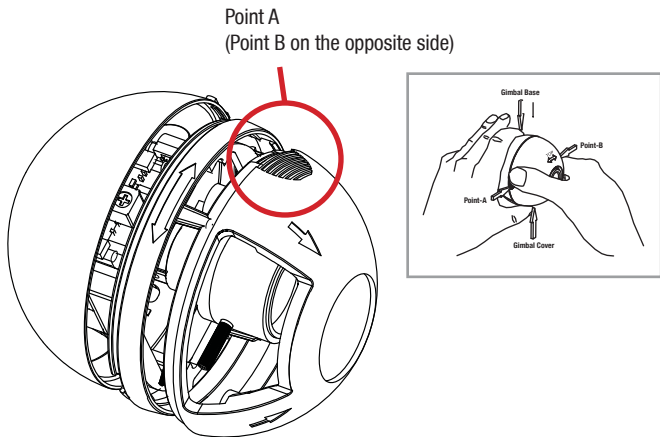
Firmly hold the Gimbal base free of any movement. Press points A & B and pull the Gimbal cover off from the Gimbal base.

STEP 2

Make the desired Dip Switch adjustments.

STEP 3

Place the Gimbal cover back at the Gimbal base.



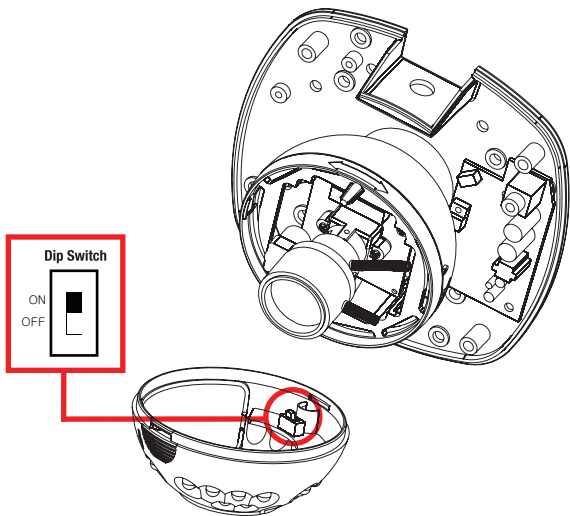
Switching OFF/ON the IR LEDs

IR LED Dip Switch

This Dip Switch is used to switch OFF/ON the IR LEDs.

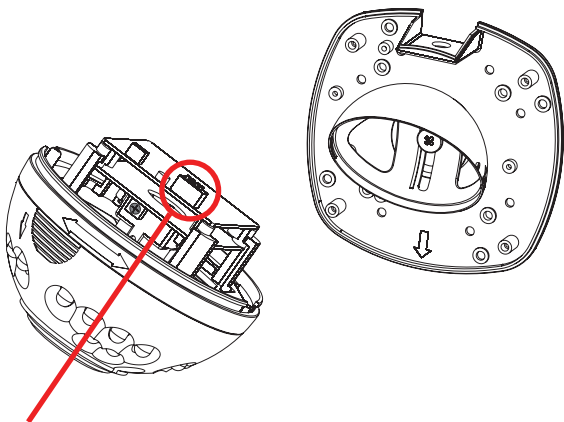
Too much IR reflection from a subject causes over-exposure on the most focused area causing 'Hot Spots' within the picture. Adjust this setting can help avoid such problems.

- **OFF:** Select the OFF setting if the subject in the picture has extreme IR LED reflection.
- **ON:** Select the ON setting if the subject in the picture has no IR LED reflection.



Dip Switch Functions and Operation

Follow the instructions provided below to switch ON/OFF the various available camera functions and modes.



Function Dip Switch

Each Dip Switch represents the various functions and modes. Switch On/Off the various functions and modes by following the Dip Switch position on the right.

DIP Switch Functions	1	2	3	4
ICR Switch Time (2-3 Sec)	On			
ICR Switch Time (4-5 Sec)	Off			
FLK On		On		
FLK Off		Off		
BLC On			On	
BLC Off			Off	
ATW				On
AWC				Off

Dip Switch Menu Control Terms

A. ICR Filter Delay Timer (ICR Switch Time)

This switch is used to delay the automatic ICR cut-filter.

- **ON:** The automatic ICR cut-filter is delayed only by 2~3 seconds.
- **OFF:** The automatic ICR cut-filter is delayed by 4~5 seconds.

B. FLK Mode

This function is used to correct flickering of the screen when the camera is operating under certain fluorescent lighting. Flickering most commonly occurs if the fluorescent light uses a 50Hz power supply.

- **OFF:** Select the OFF mode if the flickering is observed.
- **ON:** Select the ON mode for normal operation (Default).

C. BLC (Back Light Compensation)

This function is used to compensate for exposure problem associated with extremely bright backgrounds causing the subjects to bloom or silhouette.

- **OFF:** The Backlight Compensation function is turned OFF.
- **ON:** Select the ON setting for strong backlit environments.

D. WHITE BALANCE (Automatic White Balance)

This function is used to control the white balance under different lighting conditions. Adjust this setting to calibrate the camera for correct color rendering. *The factory default of 'ATW' is recommended for optimal performance.*

- **ATW (Auto Tracking White Balance):** Select the ATW mode, the camera will continuously monitor changes in the ambient color temperatures and automatically set the White Balance according to the color temperature.
- **AWC (Auto White Balance Control):** Select the AWC mode and the camera will calibrate the White Balance to the most optimal setting to the present lighting condition. This setting will NOT monitor changes in the ambient color temperatures automatically.

Technical Specifications | NTSC

Technical Specifications	CD-H2N	CD-H39N
Video Format	NTSC/PAL	
Image Sensor	1/3" CCD	
Horizontal Resolution	550 TV Lines	
Day/Night Functionality	No	
Lens Type	Fixed 2.9mm	Vari-focal 3.8mm-9.5mm
Angle of View	120°	95.5°(W) ~ 37.3°(T)
Sync System	Internal	
Effective Pixels	768(H) x 494(V)	
Scanning System	525 Lines. 2:1 Interlaced	
Electronic Shutter	1/60 ~ 1/100,000 sec.	
Main Video Output	1.0 Vp-p Composite, 75 ohm	
Service Monitor Output	1.0 Vp-p Composite, 75 ohm	
Minimum Illumination	0.1 Lux	
S/N Ratio	More than 48dB (AGC Off)	
General Information	CD-H2N	CD-H39N
Operating Temperature	23°F ~ 113°F	
Operating Humidity	Within 90% RH	
Power Consumption	500 mA	
Input Voltage	12VDC	12VDC/24VAC Dual Voltage

*specifications are subject to change without any prior notice.

IMPORTANT: All *CV Series EasyView™ Lite Vandalproof Dome Cameras* have the same technical specifications as the CD Series indoor dome cameras but has a special impact resistant dome (IP66) with aluminum housing.

Technical Specifications | NTSC

Technical Specifications	CD-HD2N-L	CD-HD39N-L
Video Format	NTSC/PAL	
Image Sensor	1/3" CCD	
Horizontal Resolution	550 TV Lines	
Day/Night Functionality	Yes	Yes w/ ICR
Lens Type	Fixed 2.9mm	Vari-focal 3.8mm-9.5mm
Angle of View	120°	95.5°(W) ~ 37.3°(T)
IR LED	18	16
IR LED Distance	Up to 50ft.	
LED Illumination Angle	100°	60°
Sync System	Internal	
Effective Pixels	768(H) x 494(V)	
Scanning System	525 Lines. 2:1 Interlaced	
Electronic Shutter	1/60 ~ 1/100,000 sec.	
Main Video Output	1.0 Vp-p Composite, 75 ohm	
Service Monitor Output	1.0 Vp-p Composite, 75 ohm	
Minimum Illumination	0.1 Lux (Color), 0.00 Lux (B/W, IR LEDs On)	
S/N Ratio	More than 48dB (AGC Off)	
General Information	CD-HD2N-L	CD-HD39N-L
Operating Temperature	23°F ~ 113°F	
Operating Humidity	Within 90% RH	
Power Consumption	1 Amp (LED On), 500 mA (Camera Only)	
Input Voltage	12VDC	12VDC/24VAC Dual Voltage

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Technical Specifications | PAL

Technical Specifications	CD-H2P	CD-H39P
Video Format	NTSC/PAL	
Image Sensor	1/3" CCD	
Horizontal Resolution	550 TV Lines	
Day/Night Functionality	No	
Lens Type	Fixed 2.9mm	Vari-focal 3.8mm-9.5mm
Angle of View	120°	95.5°(W) ~ 37.3°(T)
Sync System	Internal	
Effective Pixels	752(H) x 582(V)	
Scanning System	625 Lines. 2:1 Interlaced	
Electronic Shutter	1/50 ~ 1/100,000 sec.	
Main Video Output	1.0 Vp-p Composite, 75 ohm	
Service Monitor Output	1.0 Vp-p Composite, 75 ohm	
Minimum Illumination	0.1 Lux	
S/N Ratio	More than 48dB (AGC Off)	
General Information	CD-H2P	CD-H39P
Operating Temperature	-5°C ~ +45°C	
Operating Humidity	Within 90% RH	
Power Consumption	500 mA	
Input Voltage	12VDC	12VDC/24VAC Dual Voltage

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Technical Specifications | PAL

Technical Specifications	CD-HD2P-L	CD-HD39P-L
Video Format	NTSC/PAL	
Image Sensor	1/3" CCD	
Horizontal Resolution	550 TV Lines	
Day/Night Functionality	Yes	Yes w/ ICR
Lens Type	Fixed 2.9mm	Vari-focal 3.8mm-9.5mm
Angle of View	120°	95.5°(W) ~ 37.3°(T)
IR LED	18	16
IR LED Distance	Up to 50ft.	
LED Illumination Angle	100°	60°
Sync System	Internal	
Effective Pixels	752(H) x 582(V)	
Scanning System	625 Lines. 2:1 Interlaced	
Electronic Shutter	1/50 ~ 1/100,000 sec.	
Main Video Output	1.0 Vp-p Composite, 75 ohm	
Service Monitor Output	1.0 Vp-p Composite, 75 ohm	
Minimum Illumination	0.1 Lux (Color), 0.00 Lux (B/W, IR LEDs On)	
S/N Ratio	More than 48dB (AGC Off)	
General Information	CD-HD2P-L	CD-HD39P-L
Operating Temperature	-5°C ~ +45°C	
Operating Humidity	Within 90% RH	
Power Consumption	1 Amp (LED On), 500 mA (Camera Only)	
Input Voltage	12VDC	12VDC/24VAC Dual Voltage

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Memos & Notes

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