Digital Surveillance System
Dome Camera

- DynaColor 2009 Dome Camera Series Catalogue -

High Speed Dome Camera   High Speed Dome Camera   High Speed Dome Camera   High Speed Dome Camera

DYNAC●L●R
always watching

AUTO Calibration	Schedule	400° Speed	Day/Night	WDR	DVR Protocols	Privacy	All-Weather

Introducing our new speed dome camera with 35× optical zoom and 540 TVL high resolution video, this new dome camera provides excellent image quality.

Building on an already comprehensive feature set, the Dyna**Hawk**™ 701 / 801[+] series introduces Image Stabilizer, a feature that allows the camera to capture sharp and clear image under vibration environment.

About DynaColor

DynaColor specializes in video surveillance products and CRT/LCD AOI systems. Headquartered in Taipei since 1991, DynaColor has achieved continuous growth and market recognition.

Digital Surveillance Solution

DynaColor designs and manufactures digital surveillance products, including speed dome cameras, megapixel IP cameras, digital video recorders (DVRs), multiplexers, video servers, and keyboard controllers. These products are used in various places, including retail stores, government facilities, schools, city halls, airports, military sites, prisons, parks, streets, banks, shopping malls, stadiums, and a wide range of other medium and high security applications.

DynaColor delivers digital surveillance solutions for small and large applications, from the very simple surveillance task with only a few cameras for small stores and buildings, to large installations with complex networks and needs.

A Reputation of Quality

DynaColor has established an excellent reputation not only in digital surveillance products, but also in the LCD AOI system and industrial cameras. Quality is controlled during every phase of development, as DynaColor is ISO-9001 certified by DNV.

Technological advances and customer orientation are the keys to DynaColor's success in a rapidly changing market.

Through focused management and revenue-based incentive programs, DynaColor has quickly identified, executed, and excelled every planned product. By working closely with our partners, many well-known companies worldwide, DynaColor constantly improves our technology, operation, quality control, and manufacturing.

It is our goal to become the leading provider of innovative products and a reliable business partner in each of our targeted sectors.

DynaColor has established overseas branches in Irvine, California and in Tokyo, Japan to facilitate sales activities and services for our customers abroad. To learn more about DynaColor, please visit our web sites:

http://www.dynacolor.com.tw

http://www.dynacolorusa.com

http://www.dynacolor.co.jp

Corporate Strategy

• Technology-Driven:

Enrich professional man-power, acquire and develop core technology.

• Strategic Alliance

Expand worldwide cooperative partnerships through technical alliance, marketing alliance and application alliance, 3 perspectives to provide professional total solutions and services.

• Niche Products

Provide full featured and value-added products, be customer orientated, and meet various market needs.

Greetings from CEO

For more than 18 years, DynaColor dedicates itself to be an "image solution provider." Starting with award-winning CRT alignment system, DynaColor became the industry leader in high quality, cost effective multiplexer and industrial camera over the years. In the rapidly changing digital surveillance market, DynaColor develops a wide range of competitive products, which offer our clients a comprehensive product portfolio and the flexibility for customization.

We believe having a strong R&D team is the foundation to providing our customers innovative solutions. With highly experienced engineers (over 50% of total employees) in DynaColor, we can assure our clients the competitiveness and reliability of our products. Through OEM projects, commissioned by top brands around the world, we possess the critical know-how and credentials to serve our clients in accordance to their specific needs. We adopt the ISO 9001 standard to regulate our administrative process and to ensure strict quality control process. It is our commitment to quality, innovation and customer support that provides our clients the advantage to excel in the ever evolving and highly competitive market.

In the new millennium, amid optimistic prospect yet challenged by fierce competition in the industry, DynaColor will focus on providing our customers the total video surveillance solution, synchronizing video camera products, digital video recorders and system control units. With our advanced video processing technology, solid system integration credential and competence in customized products, we believe DynaColor is the solution for your video surveillance requirement.

Speed Dome Camera Solutions

Integrated High Speed Dome Camera

Vandal Proof Mini Speed Dome Camera

Speed Dome Camera Installation Accessories

CCTV System Control Keyboard

Signal Distribution Unit

Coaxial Telemetry

	Auto-Calibration
	Schedule
	Wide Dynamic Range
	Protocols
	Privacy Mask
	All-Weather
	Network

▶Surveillance Camera Solutions

Vandal Proof Fixed Dome Camera

Dyna**Hawk**™ 210 ...26~27

Color Box Camera

Dyna**Hawk**™ 060 ...28~29

Color CCD Board Camera

Dyna**Hawk**™ 005 …30~31

Dyna**Hawk**™ 006 …30~31

Integrated High Speed Dome Camera

AUTO Calibration	Schedule	400° Speed	Day/Night	WDR	DVR Protocols	Privacy	All-Weather	Network

Dyna**Hawk**™ 701 / 801⁺ Series

The Dyna**Hawk**™ 701 / 801⁺ series integrated high speed dome cameras, built on quality and performance, are now available with 35× optical zoom, high resolution 540 TV lines, and advanced features. These dependable high speed dome cameras are not only part of a complete DynaColor surveillance solution, they also support other key global surveillance systems for effortless integration. Blending performance and compatibility, the Dyna**Hawk**™ 701 / 801⁺ series is a versatile surveillance solution for indoor / outdoor and day / night applications.

Features

Precise and Accurate Dome Camera Performance

• Preset speed up to 400°/sec.

• Preset accuracy of 0.225°

• Proportional Pan & Tilt Speed

• Preset Position / Auto-Pan / Sequence / Cruise

• Auto-Calibration

• Digital Image Flip (Optional)

Dynamic Dome Camera Applications

• Multi-language OSD **NEW**

• Schedule function

• Multiple built-in protocols **NEW**

• Up to 24 privacy masks (Optional)

• 8 alarm inputs, 1 alarm output

• Motion Detection (Optional)

• Flexible indoor / outdoor mountings

• Compact lightweight design for easy installation

• Weatherproof housing

• Integrated Pelco coaxitron® support **NEW**

• Integrated BOSCH Biphase® support **NEW**

Superior Camera Image Quality

• Minimum illumination 0.01 Lux (B/W)

• Digital Slow Shutter

• Electronic Shutter

• Wide Dynamic Range (Optional)

• Auto White Balance

• Backlight Compensation

• Auto Exposure

• Image Inverse (Optional)

• Electronic Image Stabilizer (Optional)

• Removable IR Cut Filter (Optional)

System Configuration

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⊳Integrated High Speed Dome Camera ⊳Vandal Proof Mini Speed Dome Camera ⊳Installation Accessories ⊳CCTV System Control Keyboard

Flexible Scalability

Comprising a myriad of models, there is a Dyna**Hawk**™ integrated high speed dome camera for every surveillance application. Encompassing models equipped with optical zoom ratio ranging from 18× to 35×, and different options for resolutions, rotation performance, indoor, outdoor, day or night, the Dyna**Hawk**™ 701 / 801⁺ series provides a top to bottom solution for all types of surveillance applications and scalability for installation experts.
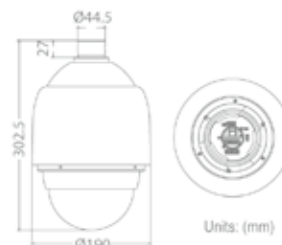
Indoor Integrated High Speed Dome Camera

The Dyna**Hawk**™ 701 series integrated high speed dome camera will fulfill your large scale surveillance operations. With features such as digital image flip and high resolution silent motor, the Dyna**Hawk**™ 701 series offers easy controls and precision tracking. The Dyna**Hawk**™ 701 series can be integrated into any existing digital surveillance system because of built-in major protocols such as DynaColor, Pelco, VCL, Philips, Kalatel, AD-422, and more.
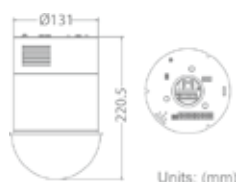
Outdoor Integrated High Speed Dome Camera

The Dyna**Hawk**™ 801⁺ series is a compact lightweight design high speed dome camera that includes a weatherproof housing which meets IP 66 international standards and can withstand the toughest environment. Additionally, with built-in heater and fan, the Dyna**Hawk**™ 801⁺ series is capable of operating at temperatures ranging from -45°C to 50°C, making it the best choice for extreme weather. With a full line of accessories, the Dyna**Hawk**™ 801⁺ series is capable of accommodating any indoor and outdoor installation requirements.

DH701
Integrated High Speed Dome Camera

DH801⁺
Integrated High Speed Dome Camera

Robust Performance

The DynaHawk™ 701 / 801+ series contains robust functions such as Schedule and Home functions. The Schedule and Home functions can be customized for various types of surveillance needs, enabling the camera to operate automatically and reducing user input for a more efficient surveillance solution. In addition, the DynaHawk™ 701 / 801+ series is capable of self-correction through Auto-Calibration if the dome camera head is disturbed by external forces.

Digital Image Flip

The Digital Image Flip function can reverse the image through the digital processing without interruption while tracking the object passes directly beneath the dome camera. This advanced function enables smooth and continuous tracking.
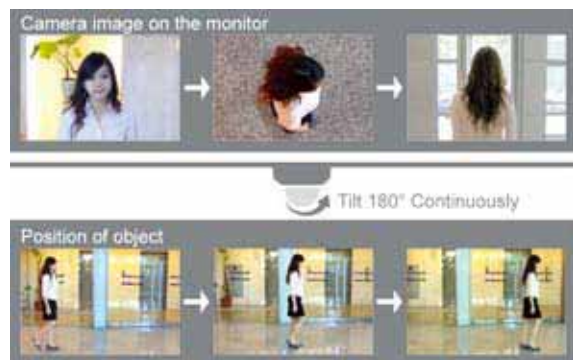
Auto-Calibration

The DynaHawk™ 701 / 801+ series is capable of self-correction if the dome camera head is disturbed by external forces. The dome camera will constantly align itself against vertical and horizontal check points to maintain accurate operation.

Image Inverse

The Image Inverse feature enables the integrated high speed dome camera to inverse video image both vertically and horizontally. This feature allows the dome camera to be used as a conference camera on the desktop.

Motion Detection

With the Motion Detection function, as the speed dome camera detects any image changes via motion or intrusion within its visual range, it triggers alarm output for warning. In order to satisfy various light condition, there are multiple detection modes ensuring maximum detection and accurate reactions.

Home Function

The DynaHawk™ 701 / 801+ series can be setup to execute a variety of functions if left idle for a period of time. These functions include: Preset Position, Sequence, Auto-Pan, and Cruise. The users can also configure the length of camera's idle time before automatically running these functions. The Home function will ensure persistent and accurate monitoring for constant surveillance, preventing missed events and minimizing user manipulation.

Automatically return to Preset, Sequence, Auto-Pan or Cruise

Schedule Function

The Schedule function enables users to program the dome camera to carry out a function – Preset Position, Sequence, Auto-Pan, or Cruise – at a specified time of the day, enabling users to customize their dome camera behavior to meet their needs.

Automatically execute Preset, Sequence, Auto-Pan or Cruise

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Superior Image Quality

The DynaHawk™ 701 / 801$^+$ series is equipped with many advanced image processing features that reduce distortion caused by environmental factors and deliver superior video quality. With the internal image stabilizer, the speed dome cameras can eliminate environmental vibration and deliver sharp and smooth image. In complex light condition, the DynaHawk™ 701 / 801$^+$ series high speed dome cameras excel with the Wide Dynamic Range function and guarantee all the details of captured image. The Day / Night function and Digital Slow Shutter function are designed to enhance low-light image detail, perfect for 24-hour surveillance applications.

35× zoom

Image Stabilizer

With the Image Stabilizer function, the high speed dome camera can capture images that would otherwise be blurred due to the vibration. The built-in Electronic Image Stabilizer filters out the vibrations of up to 80% movement at 10 Hz, as caused by wind or other environmental conditions.

Without Image Stabilization   With Image Stabilization

Wide Dynamic Range (WDR) Function

The Wide Dynamic Range (WDR) function is especially effective in environment with extreme contrast. The WDR function records images at different shutter speeds, and digitally combines the images to prevent over-or under-exposed picture.

High-speed Shutter Image (Progressive)

Normal Exposure Image (Progressive)

Composite Image by Wide Dynamic Range Technology
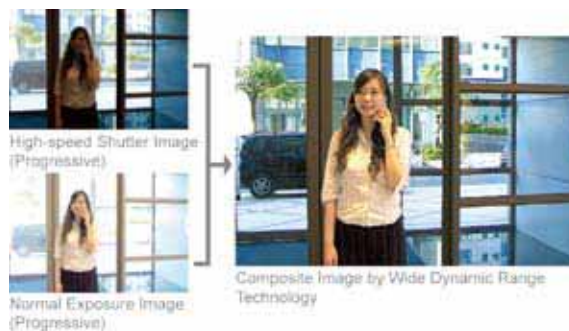
Privacy Masking Function

Allows users to mask selected areas to avoid any intrusive monitoring.

Day / Night Function with Removable IR Cut Filter

The IR Cut Filter can be automatically or manually removed depending on the light condition, enabling the dome camera to capture color video in light condition and black-and-white video in low light condition.

Day/Night Switching

Day (Color Mode)
Set the lens aperture to the bright section, and the dark section is invisible.

Night (B/W Mode)
Set the lens aperture to the dark section, and the bright section is invisible.

⊹Signal Distribution Unit	⊹Coaxial Telemetry	⊹Vandal Proof Dome Camera	⊹Color Box Camera	⊹Color CCD Board Camera

Technical Specification

Item		R Model	G Model	M Model	V Model	L Model	T Model
Camera							
CCD Sensor		1/4" CCD	1/4" EXview CCD	1/4" CCD	1/4" EXview CCD	1/4" CCD	1/4" Exview CCD
Progressive Scan		-	-	Yes	-	Yes	-
Optical Zoom		22×	18×	23×	26×	35×	36×
Digital Zoom		1× ~ 12× variable					
Effective Pixels	NTSC	380 k					
	PAL	440 k					
Horizontal Resolution	NTSC	480 TVL	530 TVL	540 TVL	530 TVL	540 TVL	530 TVL
	PAL	480 TVL	530 TVL	540 TVL	530 TVL	540 TVL	530 TVL
Scanning System		NTSC / PAL					
Synchronization		Internal / Line Lock					
Video Output		1.0 Vpp / 75 Ω, BNC					
S/N Ratio		>50 dB (AGC Off)					
Minimum Illumination		1 lux	0.07 lux, 0.01 lux (B/W)	0.1 lux, 0.01 lux (B/W)	0.09 lux, 0.01 lux (B/W)	0.05 lux, 0.01 lux (B/W)	0.1 lux, 0.01 lux (B/W)
Focal Length		4 ~ 88 mm	4.1 ~ 73.8 mm	3.6 ~ 82.8 mm	3.5 ~ 91 mm	3.4 ~ 119 mm	3.4 ~ 122.4 mm
Focus Mode		Auto / Manual					
White Balance		Auto / Manual					
Iris Control		Auto / Manual					
Electronic Shutter	NTSC	1/60 ~ 1/30k sec.	1/1 ~ 1/10k sec.	1/2 ~ 1/30k sec.	1/1 ~ 1/10k sec.	1/2 ~ 1/30k sec.	1/1 ~ 1/10k sec.
	PAL	1/50 ~ 1/30k sec.	1/1 ~ 1/10k sec.	1/1.5 ~ 1/30k sec.	1/1 ~ 1/10k sec.	1/1.5 ~ 1/30k sec.	1/1 ~ 1/10k sec.
AGC Control		Auto / Manual					
Back Light Compensation		On / Off					
Operation							
Built-in Protocol		DynaColor, Pelco D & P, Philips, Kalatel, VCL, AD-422, JVC, etc.					
Multi-language OSD		English, French, German, Italian, Japanese, Polish, Portuguese, Russian, Spanish, Turkish, S. Chinese					
Pan Travel		360° endless					
Tilt Travel		-10° ~ 100°	-10° ~ 190°				
Manual Speed		0.5° ~ 90°/s					
Presets		256					
Preset Accuracy		0.225°					
Preset Speed		5° ~ 400°/s					
Sequence		8					
Auto-Pan		4					
Cruise		4					
Privacy Mask		-	24	8	24	8	24
Proportional Pan & Tilt		On / Off (Pan and tilt speed is proportional to zoom ratio)					
Resume after Power loss		Yes					
Zone Title		16					
Home Function		Preset, Sequence, Auto-Pan, Cruise					
Auto-Flip		Mechanical / Off	Digital / Mechanical / Off				
Digital Slow Shutter		-	On / Off	On / Off	On / Off	On / Off	On / Off
Electronic Image Stabilizer		-	-	-	-	On / Off	-
Motion Detection		-	On / Off	On / Off	On / Off	On / Off	On / Off
Wide Dynamic Range		-	On / Off	On / Off	On / Off	On / Off	On / Off
Day / Night: IR Cut Filter		-	On / Off	On / Off	On / Off	On / Off	On / Off
Image Freeze		-	On / Off	On / Off	On / Off	On / Off	On / Off
Image Inverse		-	On / Off	On / Off	On / Off	On / Off	On / Off
Alarm Input		8					
Alarm Output		1					
Alarm Reaction		Preset, Sequence, Auto-Pan, Cruise					
General							
Environment		Indoor / Outdoor					
Controller Interface		RS-485					
Operating Temperature	DH701	0 °C ~ 40 °C (32 °F ~ 104 °F)					
	DH801⁺	-45 °C ~ 50 °C (-49 °F ~ 122 °F)					
Weatherproof Standard		IP 66 Standard (DH801⁺ series only)					
Dimensions	DH701	131 × 226 mm (5.2 × 8.9 inches)					
	DH801⁺	Ø172 × 302.5 mm (6.7 × 11.9 inches) / Ø190 × 302.5 mm (7.5 × 11.9 inches), with sunshield					
Weight	DH701	1.6 kg (3.5 lbs)					
	DH801⁺	2.6 kg (5.7 lbs)					
Power Source	DH701	DC 12V / AC 24V ±10%					
	DH801⁺	AC 24V ±10%					
Power Consumption	DH701	20 W					
	DH801⁺	65 W (with Heater)					
Regulatory		CE, FCC, RoHS					

Product Selection

```
DH701-  □□□□□□□□
DH801⁺-□□□□□□□□
```

Interface	Camera	Motor	Video System	Body Color	Cover Color	Schedule	Sunshield	Power
0: Analog	**R:** 22×	**F:** Standard	**N:** NTSC	**W:** White	**T:** Transparent	**2:** Without	**0:** Without	**1:** DC 12V
E: Ethernet	**G:** 18×, ICR		**P:** PAL		**S:** Smoke	**3:** With	**1:** With	**2:** AC 24V
X: Coaxial	**M:** 23×, ICR				**V:** Vandal Proof			
B: Biphase	**V:** 26×, ICR							
	L: 35×, ICR							
	T: 36×, ICR							

Technical Specification

Item		S1 Model	S2 Model
Camera			
CCD Sensor		1/4" EXview CCD	
Progressive Scan		-	
Optical Zoom		30×	36×
Digital Zoom		1 ~ 12× variable	
Effective Pixels	NTSC	380k	
	PAL	440k	
Horizontal Resolution	NTSC	540 TVL	
	PAL	540 TVL	
Scanning System		NTSC / PAL	
Synchronization		Internal / Line Lock	
Video Output		1.0 Vp-p / 75 Ω, BNC	
S/N Ratio		> 50 dB (AGC Off)	
Minimum Illumination		0.1 lux, 0.01lux (B/W)	
Focal Length		3.6 ~ 108 mm	3.4 ~ 120 mm
Focus Mode		Auto / Manual	
White Balance		Auto / Manual	
Iris Control		Auto / Manual	
Electronic Shutter	NTSC	1/1 ~ 1/10k sec.	
	PAL	1/1 ~ 1/10k sec.	
AGC Control		Auto / Manual	
Back Light Compensation		On / Off	
Operation			
Built-in Protocol		DynaColor, Pelco D&P, VCL, Philips, AD-422, JVC, Kalatel, etc.	
Multi-language OSD		English, French, German, Italian, Japanese, Polish, Portuguese, Russian, Spanish, Turkish, S. Chinese	
Pan Travel		360° endless	
Tilt Travel		-10° ~ 190°	
Manual Speed		0.5° ~ 90°/s	
Presets		256	
Preset Accuracy	Pan	0.225°	
	Tilt	0.225°	
Preset Speed	Pan	5° ~ 400°/s	
	Tilt	5° ~ 400°/s	
Sequence		8	
Auto-Pan		4	
Cruise		4	
Privacy Mask		16	
Proportional Pan & Tilt		On / Off (Pan and tilt speed proportional to zoom ratio)	
Resume after Power loss		Yes	
Zone Title		16	
Home Function		Preset, Sequence, Auto pan, Cruise	
Auto-Flip		Digital / Mechanical / Off	
Digital Slow Shutter		On / Off	
Electronic Image Stabilizer		-	
Motion Detection		On / Off	
Wide Dynamic Range		On / Off	
Day / Night: IR Cut Filter		On / Off	
Image Freeze		On / Off	
Image Inverse		On / Off	
Noise Reduction	2D	On / Off	
	3D	On / Off	
Alarm Input		8	
Alarm Output		1	
Alarm Reaction		Preset, Sequence, Auto pan, Cruise	
General			
Environment		Indoor / Outdoor	
Controller Interface		RS-485	
Operating Temperature	DH701	0°C ~ 40°C (32°F ~ 104°F)	
	DH801⁺	-45°C ~ 50°C (-49°F ~ 122°F)	
Weatherproof Standard		IP66 standard (DH801⁺ series)	
Dimensions	DH701	Ø131 × 226mm (5.2 × 8.9 Inches)	
	DH801⁺	Ø172 × 302.5mm (6.7 × 11.9 Inches) / Ø190 × 302.5mm (7.5 × 11.9 Inches), with sunshield	
Weight	DH701	1.6 kg (3.5 lbs)	
	DH801⁺	2.6 kg (5.7 lbs)	
Power Source	DH701	DC 12V / AC 24V ± 10%	
	DH801⁺	AC 24V ± 10%	
Power Consumption	DH701	20 W	
	DH801⁺	65 W (with Heater)	
Regulatory		CE, FCC, RoHS	

Product Selection

DH701- ☐☐☐☐☐☐☐☐
DH801⁺-☐☐☐☐☐☐☐☐

Interface	Camera	Motor	Video System	Body Color	Cover Color	Schedule	Sunshield	Power
0: Analog	**S1:** 30×, ICR	**F:** Standard	**N:** NTSC	**W:** White	**T:** Transparent	**2:** without	**0:** without	**1:** DC 12V
E: Ethernet	**S2:** 36×, ICR		**P:** PAL		**S:** Smoke	**3:** with	**1:** with	**2:** AC 24V
X: Coaxial					**V:** Vandal Proof			
B: Biphase								

*ICR, IR Cut Filter Removable, enables Day / Night function

DynaHawk™ Family Features

Comprehensive System Compatibility

The DynaHawk™ 500 / 600 / 701 / 801[+] series speed dome cameras support all major protocols – Pelco, Philips, AD, VCL, and more. With our enhanced compatibility, the DynaHawk™ speed dome cameras can be seamlessly integrated into any existing surveillance system.

Common Installation Accessories

Installation accessories, such as the Coaxial Telemetry and Signal Distribution Unit, are designed to offer even more flexibility to the users whether for all coaxial system or for large installation over wide area. And our mounting accessories provide quick and elegant setup that is inconspicuous and durable.

Multi-Language OSD

The dome camera supports multi-language OSD operation; the available languages include English, French, German, Italian, Japanese, Polish, Portuguese, Russian and Spanish.

Alarm Triggered Functions

The DynaHawk™ speed dome cameras can be configured to execute pre-determined functions automatically when an alarm is triggered. There are a total of 8 alarm inputs that can be set to initiate different functions. Similarly, the Motion Detection function can also trigger pre-determined functions when motion is detected.

Firmware Upgrade via RS-232

With the newly integrated upgrade connector, the dome camera firmware can be upgraded instantly via RS-232 connection. This feature will allow easy support even after installation.

Indoor Model Feature Comparison

Feature	DH701						DH500
	L	V	M	F	D	R	
Camera							
Optical Zoom	35×	26×	23×	18×	30×	22×	12×
Digital Zoom	12×	12×	12×	12×	12×	12×	10×
Resolution	540 TVL	530 TVL	540 TVL	480 TVL	480 TVL	480 TVL	470 TVL
Day / Night (ICR)	■	■	■	■	-	-	□
Wide Dynamic Range	■	■	■	-	-	-	-
Motion Detection	■	■	■	■	-	-	-
Digital Image Flip	■	■	■	■	-	-	-
Electronic Image Stabilizer	■	-	-	-	-	-	-
Operation							
Endless Pan Rotation	■	■	■	■	■	■	720˚
Preset Positions	256	256	256	256	256	256	256
Sequence Lines	8	8	8	8	8	8	8
Auto-pan	4	4	4	4	4	4	4
Cruise	4	4	4	4	4	4	1
Privacy Mask	8	24	8	24	4	-	-
Schedule Function	□	□	□	□	□	□	□
Home Function	■	■	■	■	■	■	■
Multi-language OSD	■	■	■	■	■	■	■
Multiple Protocols	■	■	■	■	■	■	■
Resume after Power Loss	■	■	■	■	■	■	■
Proportional Pan & Tilt	■	■	■	■	■	■	■
Option							
Vandal Proof Cover	□	□	□	□	□	□	■

■ Support   □ Option   - Not Support

Application

Stores and Banks

Users can simply configure the DynaHawk™ speed dome camera to execute different functions in different time period and circumstances with its Schedule function. For Banks or Stores, it is more appropriate to configure the speed dome camera to execute a Sequence line or Auto-Pan function to capture important points or a broad view during daytime.

During the nighttime, the speed dome camera can be set to focus on the entrance and trigger alarm as it detects motion. The DynaHawk™ series can also integrate with other security system with its alarm inputs. As other security devices are triggered, the speed dome camera will receive the signal and execute pre-determined function. The DynaHawk™ series speed dome cameras will satisfy all your surveillance needs with robust and flexible functions.

Airport

Equipped with 35× optical zoom ratio, the DynaHawk™ 701 / 801[+] series can cover a wide area with ease. It allows users to view ultra high resolution images at 540 TV lines capturing minute detail. By configuring the Alarm functions, the DynaHawk™ 701 / 801[+] series will automatically zoom in on sensitive areas when an access alarm is triggered. The high resolution, high zoom ratio DynaHawk™ 701 / 801[+] series provides the performance and convenience for wide area surveillance.

Outdoor Model Feature Comparison

Feature	DH801[+]						DH600
	L	V	M	F	D	R	
Camera							
Optical Zoom	35×	26×	23×	18×	30×	22×	12×
Digital Zoom	12×	12×	12×	12×	12×	12×	10×
Resolution	540 TVL	530 TVL	540 TVL	480 TVL	480 TVL	480 TVL	470 TVL
Day / Night (ICR)	■	■	■	■	-	-	□
Wide Dynamic Range	■	■	■	-	-	-	-
Motion Detection	■	■	■	■	-	-	-
Digital Image Flip	■	■	■	■	-	-	-
Electronic Image Stabilizer	■	-	-	-	-	-	-
Operation							
Endless Pan Rotation	■	■	■	■	■	■	720°
Preset Positions	256	256	256	256	256	256	256
Sequence Lines	8	8	8	8	8	8	8
Auto-pan	4	4	4	4	4	4	4
Cruise	4	4	4	4	4	4	1
Privacy Mask	8	24	8	24	4	-	-
Schedule Function	□	□	□	□	□	□	□
Home Function	■	■	■	■	■	■	■
Multi-language OSD	■	■	■	■	■	■	■
Multiple Protocols	■	■	■	■	■	■	■
Resume after Power Loss	■	■	■	■	■	■	■
Proportional Pan & Tilt	■	■	■	■	■	■	■
Option							
Vandal Proof Cover	□	□	□	□	□	□	■
Outdoor Dome Camera							
Built-in Heater	■	■	■	■	■	■	■
Weather Resistant Housing (IP 66)	■	■	■	■	■	■	■
Sunshield Housing	□	□	□	□	□	□	□

■ Support   □ Option   - Not Support

![DYNACOLOR always watching]

▶Integrated High Speed Dome Camera ▶Vandal Proof Mini Speed Dome Camera ▶Installation Accessories ▶CCTV System Control Keyboard

▶Vandal Proof Mini Speed Dome Camera

| AUTO Calibration | Schedule | 300° Speed | All-Weather | Day/Night | Back Light Compensation | Vandal Proof | Compact size | Protocols | Network |

DynaHawk™ 500 / 600 Series

The DynaHawk™ 500 / 600 series vandal proof mini speed dome cameras are new members to the DynaHawk™ family, incorporating many well-known features from high speed dome camera series, such as multiple built-in protocols, Schedule and Home function. The DynaHawk™ 500 / 600 series is an affordable compact speed dome camera, delivering uncompromised functionality and performance at a competitive price.

Technical Specification

Item		DH510	DH610
Camera			
CCD Sensor		1/4" Sony CCD	
Optical Zoom		12×	
Digital Zoom		1× ~ 12× variable	
Effective Pixels	NTSC	380 k	
	PAL	440 k	
Horizontal Resolution		540 TVL	
Scanning System		NTSC / PAL	
Synchronization		Internal / Line Lock	
Video Output		1.0 Vp-p / 75 Ω, BNC	
Minimum Illumination		0.1 lux; 0.01 lux (B/W)	
Focal Length		3.8 ~ 45.6 mm	
Focus Mode		Auto / Manual	
White Balance		Auto / Manual / Indoor / Outdoor	
Iris Control		Auto / Manual	
Electronic Shutter	NTSC	1/1 ~ 1/10k sec.	
	PAL	1/1 ~ 1/10k sec.	
AGC Control		Auto / Manual	
Back Light Compensation		On / Off	
Operation			
Built-in Protocol		DynaColor, Pelco D & P, VCL, Philips, AD-422, JVC, etc.	
Multi-Language OSD		English, French, German, Italian, Japanese, Polish, Portuguese, Russian, Spanish, Turkish, S. Chinese	
Pan Travel		360° endless	
Tilt Travel		-10° ~ 190°	
Manual Speed		0.5° ~ 55°/s	
Presets		256	
Preset Accuracy		0.225°	
Preset Speed		5° ~ 300°/s	
Sequence		8	
Auto-Pan		4	
Cruise		8	
Privacy Mask		16	
Proportional Pan & Tilt		On / Off (Pan and tilt speeds proportional to zoom ratio)	
Resume after Power loss		Yes	
Zone Title		16	
Home Function		Preset, Sequence, Auto-Pan, Cruise	
Auto-Flip		Digital / Mechanical / Off	
Digital Slow Shutter		On / Off	
Wide Dynamic Range		On / Off	
Day / Night: IR Cut Filter		On / Off	
Image Freeze		On / Off	
Image Inverse		On / Off	
Noise Reduction	2D	On / Off	
	3D	On / Off	
Alarm Input		8	
Alarm Output		1	
Alarm Reaction		Preset, Sequence, Auto-Pan, Cruise	
General			
Environment		Indoor	Outdoor
Controller Interface		RS-485	RS-485
Operating Temperature		0 °C ~ 40 °C (32 °F ~ 104 °F)	-30 °C ~ 45 °C (-22 °F ~ 113 °F)
Weatherproof Standard		-	IP 66 Standard
Dimensions		Ø131 × 200 mm (5.2 × 7.8 inches)	Ø172 × 260 mm (6.8 × 10.2 inches) Ø190 × 260 mm (7.5 × 10.2 inches), with sunshield
Weight		1.2 kg (2.6 lbs)	2.1 kg (4.6 lbs)
Power Source		DC 12V / AC 24V±10%	AC 24V±10%
Power Consumption		14 W	52 W (with Heater)
Regulatory		CE, FCC, RoHS	

Product Selection

DH510-☐☐☐☐☐☐☐☐
DH610-☐☐☐☐☐☐☐☐

Interface	*Camera*	*Sensor*	*Motor*	*Video System*	*Body*	*Cover Color*	*Power*
0: Analog	**A:** 12×	**1:** EXview	**A:** Standard	**N:** NTSC	**1:** Standard (DH510)	**T:** Transparent	**1:** DC 12V
E: Ethernet	**B:** 12×, ICR			**P:** PAL	**2:** Classic (DH510)		**2:** AC 24V
	D: 12×, ICR, WDR				**A:** w/o Sunshield (DH610)		
					B: w/ Sunshield (DH610)		

*ICR, IR Cut Filter Removable, enables Day / Night function

![DYNACOLOR always watching]

▚Integrated High Speed Dome Camera   ▚Vandal Proof Mini Speed Dome Camera   ▚Installation Accessories   ▚CCTV System Control Keyboard

▚Speed Dome Camera Installation Accessories

Dyna**Hawk**™ Installation Accessories

The Dyna**Hawk**™ series speed dome cameras offer a wide range of accessories to facilitate all surveillance installations, including various indoor and outdoor mountings, special optical covers to match and complement the surroundings, and power supplies for different voltage requirements.

The Dyna**Hawk**™ series speed dome cameras are designed with various mounting options. Users can select the most suitable accessories to complete the installation depending on the camera mounting requirements. With various types and sizes of accessories, users can mount the cameras in virtually any environment.

Indoor Dome Camera Accessories

Transparent / Vandal Proof Cover

4.3" Optical Cover
Diameter: 109 mm (4.3 inches)
Compatible with: DH500

5.4" Optical Cover
Diameter: 137 mm (5.4 inches)
Compatible with: DH701

Smoke Cover

5.4" Smoke Cover
Diameter: 137 mm (5.4 inches)
Compatible with: DH701

Power Adapter

D77H07-A1015
Input: 100 ~ 115 VAC / Output: 24 VAC, 36 VA

D77H07-A2015
Input: 220 ~ 230 VAC / Output: 24 VAC, 36 VA

Connector Box

The D77H07-C00 connector box provides easy wiring and well organized connection between alarms, cameras and other devices, for easy installation.

Dimensions: 92 × 42 mm (3.7 × 1.7 inches)
Weight: 0.13 kg (0.3 lbs)

System Configuration
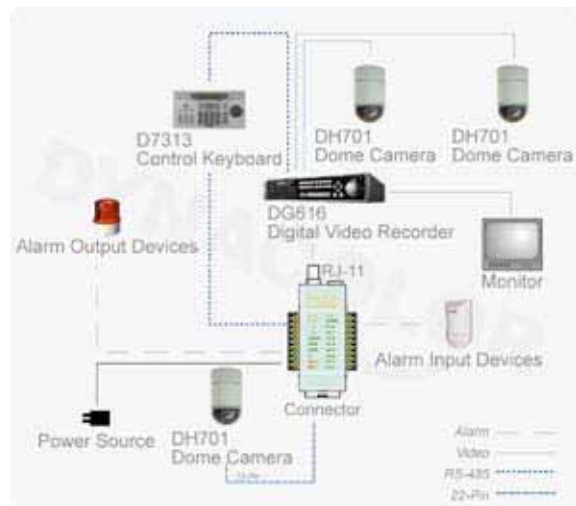
Outdoor Dome Camera Accessories

Transparent / Vandal Proof Cover

5.4" Optical Cover
Diameter: 137 mm (5.4 inches)
Compatible with: DH600

5.8" Optical Cover
Diameter: 147 mm (5.8 inches)
Compatible with: DH801^{+}

Smoke Cover

5.4" Smoke Cover
Diameter: 137 mm (5.4 inches)
Compatible with: DH600

5.8" Smoke Cover
Diameter: 147 mm (5.8 inches)
Compatible with: DH801^{+}

Power Adapter

D77H07-A1030
Input: 100 ~ 115 VAC / Output: 24 VAC, 72 VA

D77H07-A2030
Input: 220 ~ 230 VAC / Output: 24 VAC, 72 VA

Sunshield

Height: 89.9 mm (3.5 inches)
Diameter: 190 mm (7.5 inches)
Compatible with: DH600

Height: 129.5 mm (5.0 inches)
Diameter: 190 mm (7.5 inches)
Compatible with: DH801^{+}

Power Box

The D77H07 is a weatherproof power supply, with integrated connection for communication, alarm, and video, designed for outdoor applications with the Dyna**Hawk**™ 801[+] and Dyna**Hawk**™ 600 series speed dome cameras, providing water resistant protection. The unit has one fused output and can handle a total load of 72 VA.

Dimensions: 186.5 × 147 mm (7.3 × 5.8 inches)
Weight: 2.6 kg (5.8 lbs)
D77H07-P1030 (Input: 110 ~ 115 VAC / Output: 24 VAC, 72 VA)
D77H07-P2030 (Input: 220 ~ 230 VAC / Output: 24 VAC, 72 VA)

Mounting Accessories

There are three types of Indoor dome camera mounting methods: hard-ceiling mounting, in-ceiling (T-Bar Mount) mounting and pendent mounting. With the Indoor Mount Kit, the Dyna**Hawk**™ 701 series will be able to apply to all other dome camera mounting accessories, such as straight tube, wall mount, corner mount and pole mount.

Hard Ceiling Mount: DH701

DH77H06-HC
Height: 21.4 mm (0.8 inches)
Diameter of the three holes: 4.5 mm (0.2 inches)
Diameter of the bracket: 158 mm (6.2 inches)
Weight: 0.2 kg (0.4 lbs)
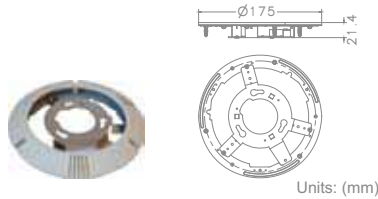
Units: (mm)

Hard Ceiling Mount: DH500

DH500HC
Height: 19 mm (0.75 inches)
Diameter of the three holes: 4.5 mm (0.2 inches)
Diameter of the bracket: 158 mm (6.2 inches)
Weight: 0.2 kg (0.4 lbs)
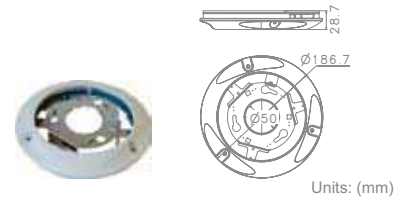
Units: (mm)

T-Bar (in-ceiling) Mount: DH701

D77H06-TB
Height: 160 mm (6.3 inches)
Diameter: 180 mm (7.1 inches)
Weight: 0.5 kg (1.1 lbs)
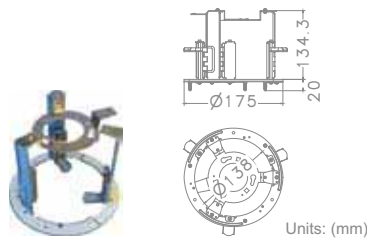
Units: (mm)

T-Bar (in-ceiling) Mount: DH500

DH500TB1
Height: 85 mm (3.4 inches)
Diameter: 180 mm (7.1 inches)
Weight: 0.5 kg (1.1 lbs)
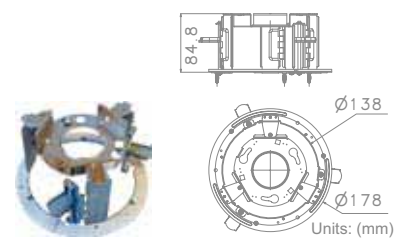
Units: (mm)

Indoor Mount Kit: DH701 / DH500 / DH210

D77H05-IMK / D77H05-IMK5 / D77H05-IMK2
For mounting indoor dome camera onto a gooseneck / straight tube.
Height: 74 mm (2.9 inches)
Diameter: 140 mm (5.5 inches)
Weight: 0.5 kg (1.1 lbs)
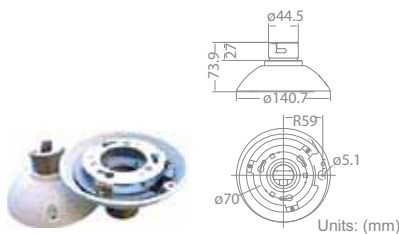
Units: (mm)

Straight Tube

D77H03-ST1 / ST2
Height: 250 / 500 mm (9.8 / 19.7 inches)
Diameter: 50 mm (2 inches)
Weight: 1 kg / 1.8 kg (2.2 lbs / 4 lbs)
Compatible with: DH701 / DH801^{+} / DH500 / DH600

Units: (mm)

18
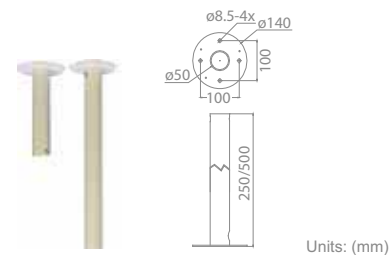
Indoor / Outdoor Mounting Accessories

Swan Tube
D77H03-WBG
Dimension: 835 × 300 mm (32.9 × 11.8 inches)
Diameter: 45 mm (1.8 inches)
Weight: 3.8 kg (8.4 lbs)
Compatible with: DH701 / DH801^{+} / DH500 / DH600
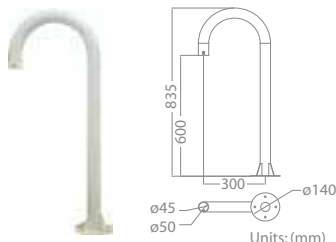
Gooseneck Tube
D77H03-GT
Dimensions: 298 × 385 mm (11.7 × 15.2 inches)
Diameter: 92 × 45 mm (3.7 × 1.8 inches)
Weight: 2.1 kg (4.6 lbs)
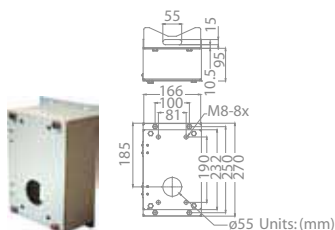Compatible with: DH701 / DH801^{+} / DH500 / DH600
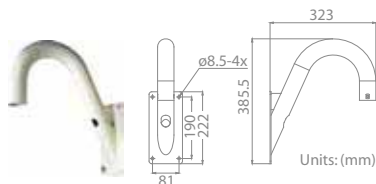
Mini Pendent Mount
D77H03-MP
Dimensions: 184 × 104 × 115.2 mm (7.2 × 4.1 × 4.5 inches)
Diameter: 45 mm (1.8 inches)
Weight: 0.6 kg (1.3 lbs)
Compatible with: DH701 / DH801^{+} / DH500 / DH600
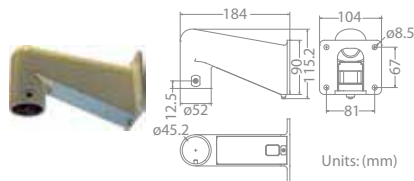
Wall Box Mounting
D77H05-WBM
Dimensions: 270 × 166 × 95 mm (10.6 × 6.5 × 3.7 inches)
Weight: 2.2 kg (4.8 lbs)
Compatible with: D77H03-GT / D77H03-MP

Corner Standard Mounting Plate
D77H05-CST
Dimensions: 222 × 204 × 117 mm (8.7 × 8 × 4.6 inches)
Weight: 2 kg (4.4 lbs)
Compatible with: D77H03-GT / D77H03-MP
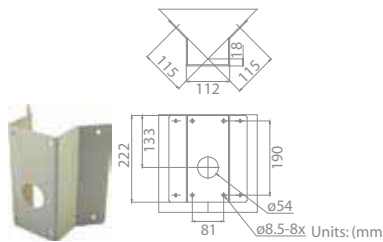
Corner Plate Mini
D77H05-CSTM
Dimensions: 270 × 166 × 95 mm (10.6 × 6.5 × 3.7 inches)
Weight: 0.8 kg (1.8 lbs)
Compatible with: D77H03-MP
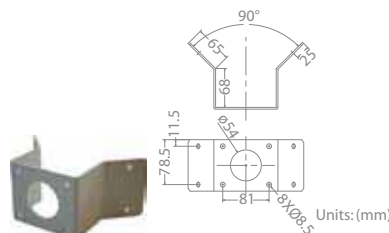
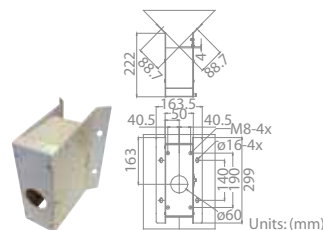## Corner Wide Box Mounting
D77H05-CWB
Dimensions: 232 × 234 × 205 mm (9.1 × 9.2 × 8.1 inches)
Weight: 2.7 kg (6 lbs)
Compatible with: D77H03-GT / D77H03-MP
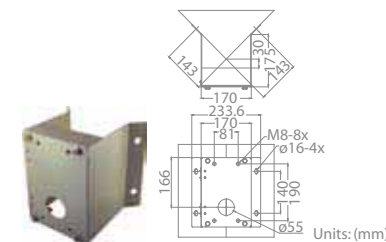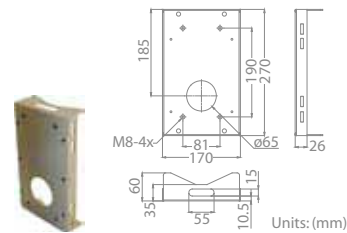

Corner Thin Box Mounting
D77H05-CTB
Dimensions: 300 × 164 × 254 mm (11.8 × 6.5 × 10 inches)
Weight: 3 kg (6.7 lbs)
Compatible with: D77H03-GT / D77H03-MP
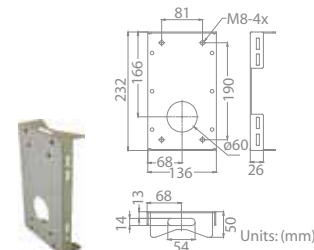

Pole Wide Direct Mounting
D77H05-PWD
Dimensions: 270 × 170 × 60 mm (10.6 × 6.7 × 2.4 inches)
Recommend Pole Diameter: 112 ~ 130 mm (4.4 ~ 5 inches)
Weight: 1 kg (2.2 lbs)
Compatible with: D77H03-GT / D77H03-MP

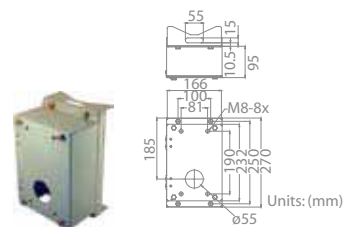## Pole Thin Direct Mounting
D77H05-PTD
Dimensions: 232 × 136 × 50 mm (9.1 × 5.4 × 2 inches)
Recommend Pole Diameter: 112 ~ 140 mm (4.4 ~ 5.5 inches)
Weight: 0.7 kg (1.6 lbs)
Compatible with: D77H03-GT / D77H03-MP
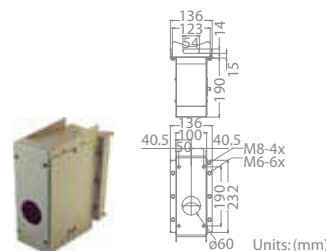

Pole Wide Box Mounting
D77H05-PWB
Dimensions: 270 × 166 × 155 mm (10.6 × 6.5 × 6.1 inches)
Recommend Pole Diameter: 112 ~ 140 mm (4.4 ~ 5.5 inches)
Weight: 3.2 kg (7.1 lbs)
Compatible with: D77H03-GT / D77H03-MP

Pole Thin Box Mounting
D77H05-PTB
Dimensions: 291 × 136 × 242 mm (11.5 × 5.4 × 9.5 inches)
Recommend Pole Diameter: 112 ~ 130 mm (4.4 ~ 5 inches)
Weight: 3.1 kg (6.9 lbs)
Compatible with: D77H03-GT / D77H03-MP

▪CCTV System Control Keyboard

D7313 Control Keyboard

The D7313 CCTV system control keyboard can be easily integrated with DynaColor's full range of CCTV products, such as DVRs and speed dome cameras via RS-485 interface for remote control and system configuration. The D7313 is specially useful in a large CCTV system, where up to 255 devices can be controlled on the same bus through the CCTV system control keyboard, including 223 cameras or receivers, 16 system control keyboards, and 16 DVRs.

The D7313 CCTV system control keyboard supports multiple protocols, such as Pelco D and Pelco P, allowing users to integrate our products into existing systems of the other brands and to extend the system compatibility and connectivity. The keyboard system settings and accessibility are protected by the password verification as well as the key-lock function.

The equipped back lit LCD display and 3-axis control joystick offer user-friendly operations. The system firmware upgrade can be easily implemented through the RS-232 port and built-in firmware upgrade circuits. The D7313 CCTV system control keyboard is an ideal solution for your demanding surveillance requirements.
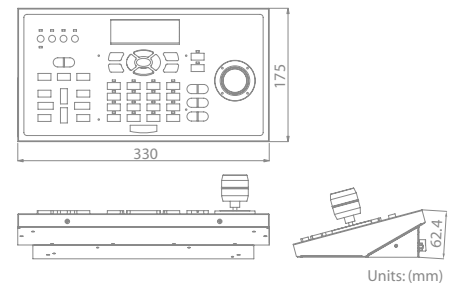
Features

• Remote control via RS-485 interface

• 3-axis joystick control of PTZ

• Can control up to 255 devices

• Firmware upgrade via RS-232 port

• Built-in clock for date and time recording

• Supports Pelco D, Pelco P, and DSCP protocols

• Password protection and key-lock function

Technical Specification

Control	D7313
Dome Camera Control	Manual Pan / Tilt / Zoom
	Preset
	Sequence
	Cruise
	Auto-Pan
	Zoom: Tele / Wide
Camera Lens Control	Focus	Near / Far / Auto
	Brightness	+ / -
DVR / Multiplexer	Mode Selection	Split screen mode: full, 2 × 2, 3 × 3, 4 × 4
	Menu Control	Yes
Supported Protocols	Pelco D & P, DSCP (Baud rate selectable)
General	
Environment	Indoor
Controller Interface	RS-485
Operating Temperature	0°C ~ 40 °C (32°F ~ 104°F)
Power Source	DC 12V
Power Consumption	5 W
Dimensions	103 × 330 ×175 mm (4.1 × 13 × 6.9 inches)
Weight	1.7 kg (3.7 lbs)

Dimensions

175
330
62.4

Units: (mm)

System Configuration

D7313
Control Keyboard

DG616 Digital Video Recorder
DG616 Digital Video Recorder
DG616 Digital Video Recorder
DG616 Digital Video Recorder
DG616 Digital Video Recorder

Dome Cameras   Dome Cameras   Dome Cameras   Dome Cameras   Dome Cameras

Product Selection

D7313- ☐

S: 2-axis joystick
H: 3-axis joystick

▶Signal Distribution Unit

D77S1

D77S1 is an intelligent signal distribution unit (SDU) packaged in an 1U rack mount chassis and designed to amplify and convert control signals between control keyboards and speed dome cameras. It is used to amplify RS-485 control signals that travel long distances between the controller and receiver. It can also be used to convert RS-232 control signal into RS-485 signal format. One signal input can be distributed among up to 16 outputs.

The SDU can be installed in either "star" or "daisy chain" configuration with up to 160 cameras. Its versatile installation configuration making surveillance system expansion an easy task; ideal for large-scale installation sites include airports, hospitals, schools, stadiums, etc.

| Signal Distribution Unit | Coaxial Telemetry | Vandal Proof Dome Camera | Color Box Camera | Color CCD Board Camera |

Features

- Distributes RS-485 control signal
- 1× RS-232 input and RS-485 input
- Up to 16× RS-485 outputs (Model option)
- Capability to output to 160 cameras maximum
- Maximum data transmission distance is 1.0 km

- Selectable system baud rate
- Standard 1U rack mount size
- Power and Code LEDs

Technical Specification

Item	D77S1
Electrical	
Operating Voltage	DC 12V
Power	8 W
Indicators	
Power	LED
Code	LED
Connectors	
Input	RJ-11, RS-232 (9-pin Connector), RS-485 (2-wire Connector)
Output	16 RS-485 Ports (4 & 8 Ports Model Available)
Maximum Cable Distance	1.0 km
Maximum Camera Output	Up to 160 Cameras
Communication Speed	2400, 4800, 9600, 19200, 38400 bps (Selectable)
Mechanical	
Operating Temperature	-10°C ~ 50°C (14°F ~ 122°F)
Dimemsions	432 × 47 × 90 mm (17 × 1.9 × 3.5 inches)
Weight	1.2 kg

Dimensions

Units: (mm)
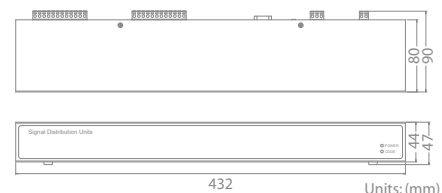
System Configuration

Star Configuration

Daisy-chain Configuration

Product Selection

D77S1-0□□

Channel
04: 4 channels
08: 8 channels
16: 16 channels

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Coaxial Telemetry

D70CB1

D70CB1, a device combining coaxial telemetry transmitter and receiver, allows a dome camera to transmit video signal, RS-485 control signal, and alarm signal over one single coaxial cable. The coaxial telemetry takes advantage of existing coaxial cable in surveillance systems consisting of fixed cameras and enables users to upgrade to dome cameras without additional wiring. The transmission distance can easily reach 500 meters and up to 900 meters, eliminating the need for repeaters / amplifiers and reducing the cost of wiring.

Features

• Supports all RS-485 protocols

• Supports DSCP and Pelco Coaxitron® protocols

• AC / DC dual power input

• Normally Open / Close alarm in

• Signal delivery distance up to 900 m (DC resistance below 2.8 Ω)

• Supports up to 255 devices

• Supports parity check

• Supports multiple baud rate (2400, 4800, 9600, 19200, 38400 bps)

Technical Specification

Item		D70CB1
Operating voltage		DC 12V; AC 12 ~ 24V
Input		BNC (Video In), RS-485 (RJ-11), Terminal Block
Output		BNC (Video Out), RS-485 (RJ-11), Terminal Block
Maximum Device ID		255 sets
Baud Rate		2400, 4800, 9600, 19200, 38400 bps
Protocol Type	UART	DSCP, general type (1 byte ~ 8 bytes)
	Coaxitron	Pelco D
UART Parity Check		None, Odd, Even
Maximum Distance		900 m (DC Resistance: 2.8 Ω / 100 m; AC Impedance: 75 Ω)
Dimensions		100 × 90 × 28 mm (3.9 × 3.5 × 1.1 inches)
Unit Weight		280 g
Operation Temperature		0°C ~ 40°C (32°F ~ 104°F)

Connectivity

Front Panel

1 Video Input   3 RS-485 ID
2 Video Output   4 Configuration

System Configuration

Default Configuration
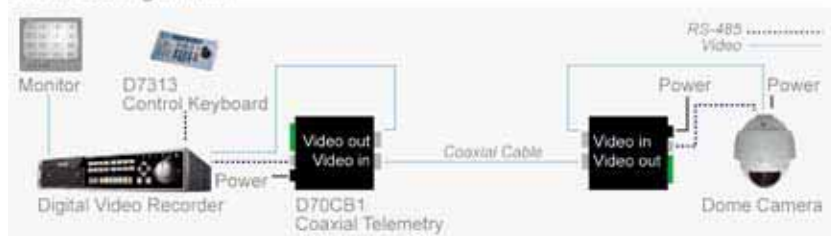
Pelco Coaxitron® Encoder

Pelco Coaxitron® Decoder

Rear Panel

1 Alarm I/O & RS-485   3 Power Jack
2 RS-485 (RJ-11)

DYNAC LOR
always watching

▶Integrated High Speed Dome Camera   ▶Vandal Proof Mini Speed Dome Camera   ▶Installation Accessories   ▶CCTV System Control Keyboard

▶Vandal Proof Fixed Dome Camera

| Vandal Proof | Mirror | Flickerless | X3 Varifocal Lens X3 | ATW | Back Light Compensation | Compact size | All-Weather | Day/Night |

Dyna**Hawk**™ 210 Series

The Dyna**Hawk**™ 210 series is a 1/3" CCD color vandal proof fixed dome camera with high image quality, increased sensitivity, and Day / Night switching for both indoor and outdoor surveillance systems. The built-in Backlight Compensation, Auto Exposure, and Automatic Gain Control functions achieve superior image quality and stable camera performance. With die-cast aluminum construction and IP 66 weatherproof dome housing design, the Dyna**Hawk**™ 210 vandal proof dome camera guarantees uncompromised security for both indoor and outdoor applications. Its vandal proof body will protect the camera in damage prone environment such as prisons, schools, stations, or warehouses.

| Signal Distribution Unit | Coaxial Telemetry | Vandal Proof Dome Camera | Color Box Camera | Color CCD Board Camera |

Features

Dome Body:

• Weatherproof (IP 66 international standard)

• Vandal proof structure with metallic base

• 3-axis (Pan / tilt / rotation) position adjustment

• Security Torx against tampering **NEW**

• Built-in heater and fan (Optional) **NEW**

• 4S mount support **NEW**

Camera:

• SONY 1/3" Super HAD / EXview CCD sensor.

• High sensitivity, low smear and high S/N ratio

• CCD Blemish Compensation

• Backlight Compensation (BLC)

• Auto Exposure

• Anti-color-rolling

• Automatic Tracing White Balance

• Automatic Iris Control

• Automatic Gain Control (AGC)

• Auto Electronic Shutter

• Flickerless mode

• Mirror function

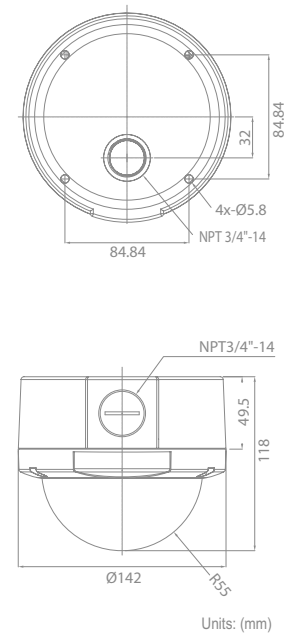• Built-in anti-aliasing optical low pass filter

• RoHS, CE, and FCC

Technical Specification

Item		DH210-010M / H	DH210-020M / H
Lens			
Max Aperture		Wide F1.4, Tele F2.8	
Lens Focal Length		F = 3.7 ~ 12 mm	
Angle of View		Wide end: Diagonal 97.61° / Horizontal 76.92°	
		Tele end: Diagonal 28.37° / Horizontal 22.73°	
Camera			
Sensor		1/3" Sony Super HAD	1/3" Sony EXview
Effective Pixels	NTSC	Middle Resolution: 510 × 492 (250 k) / High Resolution: 768 × 494 (380 k)	
	PAL	Middle Resolution: 500 × 582 (290 k) / High Resolution: 752 × 582 (440 k)	
Horizontal Frequency		NTSC: 15.734 KHz / PAL: 15.625 KHz	
Vertical Frequency		NTSC: 59.94 Hz / PAL: 50 Hz	
Scanning System		NTSC / PAL	
Synchronization		Internal	
Video Output		1.0 Vpp / 75 Ω, BNC	
Horizontal Resolution		420 TVL / 520 TVL	
S/N Ratio		More than 50 dB (AGC Off)	
Low Light Sensitivity		0.2 lux (Color) / 0.03 lux (B/W) at F1.2	
Gamma Correction		R = 0.45	
White Balance		Auto Tracking White Balance (ATW)	
Electronic Shutter		Auto: 1/60 (50) sec. ~ 1/100,000 sec.	
AGC Control		On / Off	
Flickerless Control		On / Off	
Backlight Compensation		On / Off	
Mirror		On / Off	
Auto Exposure / Auto Iris		On / Off	
General			
Power Source		DC 12V / AC 24V & DC 12V	
Power Consumption		without heater: 3.6 W / with heater: 21 W	
Operating Temperature		without heater: -10 °C ~ 50 °C (14°F ~ 122°F)	
		with heater: -40°C ~ 50 °C (-40°F ~ 122°F)	
Weatherproof Standard		IP 66 Standard	
Dimensions		Ø142 × 119 mm (5.6 × 4.7 inches)	
Weight		1 kg (2.2 lbs)	
Shipping Dimensions		188 × 188 × 180 mm (7.4 × 7.4 × 7.1 inches)	
Shipping Weight		1.2 kg (2.6 lbs)	

Dimensions

84.84
32
84.84
4x-Ø5.8
NPT 3/4"-14

NPT3/4"-14
49.5
118
Ø142
R55

Units: (mm)

Product Selection

DH210- ☐☐☐☐☐☐☐

Interface	Sensor Type	Resolution	Lens Type	Video	Power	Day / Night	Heater / Fan
0: Analog	*1:* Super HAD	*H:* High	*A:* 3.7 ~ 12 mm	*N:* NTSC	*1:* DC 12V	*0:* without	*0:* without
	2: EXview	*M:* Middle	*B:* 3 ~ 9 mm	*P:* PAL	*2:* AC 24V / DC 12V	*1:* with	*1:* with

▶Color Box Camera

| Day/Night | Mirror | Flickerless | ATW | Back Light Compensation | Compact size |

DynaHawk™ 060 Series

The DynaHawk™ 060 series color box camera, adopting superior 1/3" CCD sensor and Digital Signal Processor (DSP), is developed basing on DynaColor's enriched and professional video surveillance knowledge to produce outstanding image quality. The horizontal resolution of more than 520 TV lines and a signal to noise ratio of more than 50 dB ensure sharp video clarity. Advanced camera features, such as Backlight Compensation, Auto Tracking White Balance, Auto Gain Control, etc., guarantee superior image quality and enhance various application possibilities.

With the built-in infrared cut filter, the Day / Night DynaHawk™ 060 series color box camera captures color video in light conditions down to 0.2 lux, and automatically switch from color to monochrome to capture detailed image in dark conditions as low as 0.03 lux, enabling 24-hour surveillance.

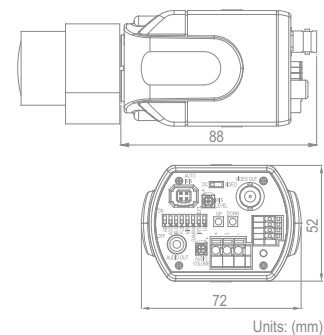| Signal Distribution Unit	Coaxial Telemetry	Vandal Proof Dome Camera	**Color Box Camera**	Color CCD Board Camera

Features

- Sony 1/3" EXview / Super HAD CCD sensor
- High resolution > 520 TVL, Middle resolution > 420 TVL
- Employs Sony Digital Signal Processor (DSP)
- High sensitivity, low smear and high S/N ratio
- Day / Night function (Removable IR Cut Filter) **NEW**
- Excellent low-light performance
- Auto Exposure / Auto Iris
- Auto Gain Control (AGC)
- Unshielded Twisted Pair Connection (Optional) **NEW**

- Backlight Compensation
- Flickerless Control **NEW**
- Auto Tracking White Balance (ATW)
- Built-in anti-aliasing optical low pass filter
- RoHS, CE, and FCC

Technical Specification

Item		DH060 - 01M / H	DH060 - 02M / H
Camera			
Sensor		1/3" Sony Super HAD	1/3" Sony EXview
Effective Pixels	NTSC	High Resolution: 768 × 494 (380 k) ; Middle Resolution: 510 × 492 (250 k)	
	PAL	High Resolution: 752 × 582 (440 k) ; Middle Resolution: 500 × 582 (290 k)	
Horizontal Frequency		NTSC: 15.734 KHz / PAL: 15.625 KHz	
Vertical Frequency		NTSC: 59.94 Hz / PAL: 50 Hz	
Scanning System		NTSC / PAL	
Synchronization		Internal	
Analog Video Output		1.0 Vp-p / 75 Ω, BNC	
Horizontal Resolution		High Resolution > 520 TVL / Middle Resolution > 420 TVL	
S/N Ratio		More than 50 dB (AGC Off)	
Low Light Sensitivity		0.2 lux (Color) / 0.03 lux (B/W) at F1.2	
Gamma Correction		R = 0.45 / 1.0 (switchable)	
White Balance		Auto Tracking White Balance (ATW) 2500 °K ~ 9500 °K	
Electronic Shutter		Auto: 1/60 (50) sec. ~ 1/100,000 sec.	
Day / Night Function (Optional)		IR-Cut Remover	
Day / Night Trigger Source		Internal Auto / Alarm Input	
Day / Night Alarm Input		10 KΩ pull up	
Day / Night Alarm Output		Photocoupler Transistor Output	
Auto Exposure / Auto Iris		AE / AI (switchable)	
Backlight Compensation		On / Off	
Flickerless Control		On / Off	
AGC Control		On / Off	
Mirror		On / Off	
Operation Temperature		-10 °C ~ 50 °C (14 °F ~ 122 °F)	
Power Source		DC 12V / AC 24V & DC 12V / AC 100 ~ 240V / UTP (DC 20 ~ 48V)	
Power Consumption		< 2 W	
Dimensions		88 × 72 × 52 mm (3.5 × 2.8 × 2.0 inches)	
Weight		145 g (0.32 lbs)	

*Lens not included

Dimensions

88
52
72

Units: (mm)

Product Selection

DH060- ▢▢▢▢▢▢

Interface	Sensor	Resolution	Day / Night	Video	Power	Audio
0: Analog	**1:** Super HAD	**H:** High	**0:** Without	**N:** NTSC	**1:** DC 12V	**0:** Without
U: UTP	**2:** EXview	**M:** Middle	**1:** With	**P:** PAL	**2:** AC 24V / DC 12V	**1:** With
					3: AC 100~240V	
					0: UTP	

▸Color CCD Board Camera

Flickerless   ATW   Back Light Compensation

Dyna**Hawk**™ 005 / 006 Series

The Dyna**Hawk**™ 005 / 006 series compact Color CCD board cameras employ the Sony Digital Signal Processor (DSP). With the features of superior sensitivity, low smear, anti-blemish and high S/N ratio, the color board cameras ensure image clarity, while the support functions of Auto Gain Control (AGC), Backlight Compensation and Auto Tracking White Balance (ATW) work together to achieve consistent video output level. In addition, the cameras provide Digital and Audio Output for versatile applications. The color board cameras are ideal for embedded system and concealed applications, such as ATM machines, POS machines and door phones.

▸Signal Distribution Unit   ▸Coaxial Telemetry   ▸Vandal Proof Dome Camera   ▸Color Box Camera   ▸Color CCD Board Camera

Features

- SONY 1/3" and 1/4" Super HAD / EXview CCD sensor
- Employs Sony Digital Signal Processor (DSP) for image control
- High sensitivity, low smear, excellent anti-blooming and high S/N ratio
- Digital Output ITU-656, 8 bits (DH006 only)
- Built-in anti-aliasing and IR-cut optical filter
- RoHS, CE, and FCC
- Built-in high sensitivity microphone (DH006 only)

- Support functions:
  - Auto Electronic Shutter
  - Auto Gain Control
  - Auto Tracking White Balance
  - Backlight Compensation
  - Flickerless Control
  - Auto Exposure / Auto Iris

Technical Specification

Item		DH005		DH006	
Model No.		DH005-01M / H	DH005-02H	DH006-01M / H	DH006-02M / H
Sensor		1/4" Sony Super HAD	1/4" Sony EXview	1/3" Sony Super HAD	1/3" Sony EXview
Standard Lens		2.5 mm (view angle 107.2°)		3.7 ~ 12 mm (vari-focal lens)	
Optional Lens		3.6 mm (view angle 96°)		3 ~ 9 mm (vari-focal lens)	
Effective Pixels	NTSC	High Resolution: 380 k Middle Resolution: 250 k	High Resolution: 380 k	High Resolution: 380 k Middle Resolution: 250 k	
	PAL	High Resolution: 440 k Middle Resolution: 290 k	High Resolution: 440 k	High Resolution: 440 k Middle Resolution: 290 k	
Horizontal Frequency		NTSC: 15.734 KHz / PAL: 15.625 KHz			
Vertical Frequency		NTSC: 59.94 Hz / PAL: 50 Hz			
Scanning System		NTSC / PAL			
Synchronization		Internal			
Video Output		1.0 Vpp / 75 Ω, BNC			
Horizontal Resolution		400 TVL / 500 TVL	500 TVL	420 TVL / 520 TVL	
S/N Ratio		More than 50 dB (AGC Off)			
Low Light Sensitivity		1 lux at F2.0		0.2 lux (Color) / 0.03 lux (B/W) at F1.2	
Gamma Correction		R = 0.45			
White Balance		Auto Tracking White Balance (ATW)			
Electronic Shutter		Auto		Auto: 1/60 (50) sec. ~ 1/100,000 sec.	
AGC Control		Standard SW1: AGC, SW2: BLC JAPAN SW1: AGC, SW2: Flickerless		On / Off	
Flickerless Control				On / Off	
Backlight Compensation				On	
Auto Exposure		On		On / Off	
Operating Temperature		-10°C ~ 50°C (14°F ~ 122°F)			
Power Source		DC 9 ~ 15V		DC 12V / DC 12V & AC 24V / AC 100 ~ 240V	
Power Consumption		< 1.7 W		< 1.8 W	
Dimensions		32 × 32 mm (1.26 × 1.26 inches)		42 × 42 mm (1.6 × 1.6 inches)	
Weight		17 g (Including lens)		48 g (Including lens)	

Dimensions

DH005

DH006

Units: (mm)   Units: (mm)
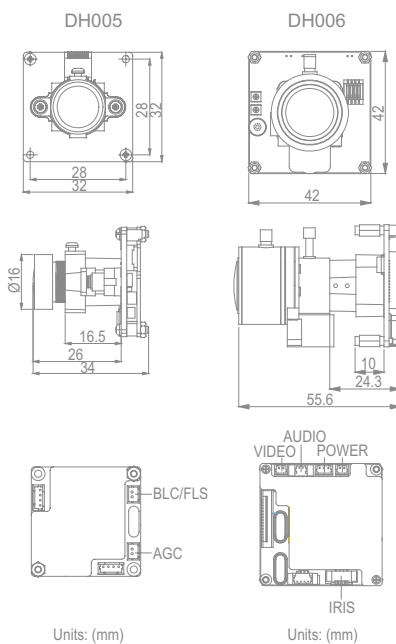
Product Selection

DH005- ☐☐☐☐☐☐☐

Interface	Sensor Type	Resolution	Lens	Switch	Video	Power
0: Analog	1: Super HAD 2: EXview	H: High M: Middle	1: 2.5 mm 2: 3.6 mm	1: Backlight Compensation 2: Flickerless	N: NTSC P: PAL	1: DC 9~ 15V

DH006- ☐☐☐☐☐☐☐

Interface	Sensor Type	Resolution	Lens	Video	Power	Option
0: Analog	1: Super HAD 2: EXview	H: High M: Middle	A: 3.7 ~ 12 mm B: 3.7 ~ 12 mm, w/ D/N C: 3 ~ 9 mm	N: NTSC P: PAL	1: DC 12V 2: AC 24V / DC 12V 3: AC 100 ~ 240V	1: Standard (with Audio & Digital out) 2: With Audio 3: With Digital out 4: No Audio & Digital out

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Service & Support

DynaColor designs and manufacturers video surveillance products and CRT / LCD AOI system, and dedicates itself to be an "image solution provider".

Downloads

http://www.dynacolor.com.tw/english/Download.asp

Help Desk

DynaColor, INC.	+886-2-2659-8898
DynaColor (USA), INC.	+1-949-297-3700
DynaColor (Japan), INC.	+81-3-5524-6655

AUTO Calibration	Schedule	300° Speed	All-Weather	Day/Night	Back Light Compensation	Vandal Proof	Compact size

Presenting the vandal proof mini speed dome camera, the Dyna**Hawk**™ 500 / 600 series. Sharing a common set of features with the Dyna**Hawk**™ 701 / 801+ series, the Dyna**Hawk**™ 500 / 600 series integrates advanced functions into a compact body, such as IR Cut Filter and Auto-Calibration. The Dyna**Hawk**™ 500 / 600 series delivers uncompromised functions at a competitive price.

High Speed Dome Camera   **High Speed Dome Camera**   **High Speed Dome Camera**   **High Speed Dome Camera**

DYNAC●L●R
always watching

DynaColor, INC.
No, 116, Jou Tz Street, Neihu, Taipei
114,Taiwan, R.O.C.
Tel: +886-2-2659-8898
Fax: +886-2-2659-8868
e-mail: info@dynacolor.com.tw
URL: http://www.dynacolor.com.tw

DynaColor (USA), INC.
Irvine Business Park, Suite 108, 9272
Jeronimo Road, Irvine, CA 92618, USA
Tel: +1-949-297-3700
Fax: +1-949-297-3737
e-mail: info@dynacolorusa.com
URL: http://www.dynacolorusa.com

DynaColor (Japan), INC.
News Kyobashi 1201 3-10-1 Kyobashi,
Chuo-ku, Tokyo, 104-0031 Japan
Tel: +81-3-5524-6655
Fax: +81-3-5524-6656
e-mail: info@dynacolor.co.jp
URL: http://www.dynacolor.co.jp

DynaColor (China) Factory
No.71-1,Dongwu Nan Rd, Wuzhong Economic
Development Zone, Suzhou, China

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