User's Manual

HIGH SPEED DOME SERIES



HEAVY DUTY MODEL

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PREFACE

The speed dome is a new subcompact dome camera system designed to deliver superb performance and durability with a pristine housing that looks good in any security and surveillance installation.

This speed dome contains new generation advanced DSP color camera, with 25X optical zoom multiply 12X digital magnifier (22X optical zoom with 12X digital magnifier, or 23X optical zoom with 12 digital magnifier are selectable items), delivers the power of a 300X zoom (264X ,276X zoom) to make sure that the finest details are captured. Continuous auto focus, back light compensation, auto iris controls, IR cut filter removable, privacy mask functions (IR cut filter removable and privacy mask functions are not included in 22X lens) are some of the salient features incorporated to fit your needs.

High speed tilt and 360° endless rotation and auto flip function allows this speed dome to be installed in the most demanding applications. RS-485 communication channel is available for remote control purposes, 128 preset points can be programmed for precise location of target areas, and you can also define multiple cruise routes for the camera to operate automatically.

Home function allows the user to specify a preset position as the 'home position'. Dome camera can come back to home position when the user stops to move the camera for a while.

Dependability and ultra high reliability are key factors in the speed dome design cycle. Every speed dome is assembled with meticulous care and thorough testing at our ISO 9001 compliant factory. High performance, reliability, and reasonably pricing, this speed dome is an ideal solution to your tough surveillance requirement.

FEATURES

CAMERA FEATURES

- 1. Optical performance:
 - (1). S model: 25X optical zoom with 12X digital magnifier.
 - (2). K model: 23X optical zoom with 12X digital magnifier.
 - (3). R model: 22X optical zoom with 12X digital magnifier.
- 2. Continuous Auto-focus or manual focus
- 3. Minimum illumination:
 - (1). S model: 25X lens: 0.01 lux (0 lux: IR illuminator ON)
 - (2). K model: 23X lens: 0.01 lux (0 lux: IR illuminator ON)
 - (3). R model: 22X lens: 1 lux
- 4. Advanced DSP camera provide:
 - (1) Auto white balance
 - (2) Back-light compensation
 - (3) Auto iris control
 - (5) IR-cut filters removable mechanism. (S, K model only)
 - (6) Electronic shutter
- 5. **Slow Shutter** function enable dome to gain a brighter video output through shutter speed control. (S, K model only)
- 6. **Title Display** function enable dome to display a string for a view. The title will be displayed on screen if you pass through the region what you saved before.
- 7. IR-Cut Filter Removable:
 - (1). S model: 25X lens: Equipped
 - (2). K model: 23X lens: Equipped
 - (3). R model: 22X lens: N/A
- 8. **WDR**
 - (1). S model: 25X lens: N/A
 - (2). K model: 23X lens: Equipped
 - (3). R model: 22X lens: N/A
- 9. Privacy Mask
 - (1). S model: 25X lens: Equipped
 - (2). K model: 23X lens: Equipped
 - (3). R model: 22X lens: N/A

ROTARY BODY FEATURES

- 1. 5" compact, low profile color dome camera
- 2. 360° endless rotation
- 3. Pan speed up to 375° /sec
- 4. Tilt speed up to 300° /sec
- 5. **Preset** function enable user to record different 128 viewpoints what you want. You can set Pan/ Tilt/ Zoom for every preset position.
- 6. **Proportional Zoom** enables Pan/ Tilt speed inverse proportional to Zoom ratio. You can track an object easily with this function.
- 7. **Auto-Turn Around** function allows user to keep tracking object even the object pass through the bottom of camera. You needn't rotate 180 degrees in pan direction to keep observing the object. This function will do this for you quickly.
- 8. **Auto-Pan** function enable dome camera to scan a specific region repeatedly with user defined speed. You can set start point, end point and scan speed to scan a specific region. User can make dome camera to do continuously panning without limit through setting the start point the same as end point
- 9. **Sequence** function enable dome camera to switch viewpoints between presets. There are three parameters can be filled into sequence function. You can set "Preset number", "Dwell Time" and "Speed" for sequence line.
- 10. **Cruise** function enable dome camera to scan a user defined path. User can manipulate dome camera with joystick to establish this path.
- 11. **Home** function enables the possibility to lock a viewpoint or a function. Home function will go back to home position or functions (Auto-pan/ Sequence/ Cruise) when user move the camera to other position and the time period is expired.
- 12. **Auto Restoring** function will record current position when user defined period of time is reached. Dome will go to the position if the power of your installation site is recovery after shutdown.
- 13. **Remote V-Sync Adjustment** function enable user to adjust the line lock signal remotely. You can adjust the phase of line lock signal to synchronize the system from keyboard.
- 14.**D Protocol and P Protocol Supported from OSD.** You can control our dome camera easily from any keyboard of **PELCO (Pelco Corporation)**.
- 15.VCL Telemetry Control Protocol Supported from OSD. You can control our dome camera easily from system of DM (Dedicated Micros Corporation).
- 16. Remote control via RS-485
- 17. Build-in 4 alarm input connectors
- 18. On Screen Display for camera control
- 19.12VDC/ 24VAC power model available
- 20. Twist lock release from bracket for easy installation and servicing

PRECAUTIONS

1. Handle the camera carefully

Do not abuse the camera. Avoid striking, shaking, etc. The camera could be damaged by improper handing or storage.

2. Do not disassemble the camera

To prevent electric shock, do not remove screws or covers. There are no user serviceable parts inside. Ask a qualified service person for servicing.

3. Do not block cooling holes on the bracket

This camera has a cooling fan inside. Blocking the cooling holes leads to build up of heat the camera and may cause malfunction.

Do not operate the camera beyond the specified temperature, humidity or power source ratings

Use the camera under conditions where temperature is between 0° C $\sim 40^{\circ}$ C $(32^{\circ}$ F $\sim 104^{\circ}$ F), and humidity is below 90%.

5. Do not expose the camera to rain or moisture, or try to operated it in wet areas

This product is designed for indoor use or locations where it is protected from rain and moisture. Turn the power off immediately and ask a qualified service person for servicing. Moisture can damage the camera and also create the danger of electric shock.

6. Do not use strong or abrasive detergents when cleaning the camera body Use a dry cloth to clean the camera when dirty. In case the dirt is hard to remove, use a mild detergent and wipe gently.

7. Never face the camera towards the sun

Do not aim the camera at bright objects. Whether the camera is in use or not, never aim it at the sun or other extremely bright objects. Otherwise, blooming or smear may be caused.

^{*} **PELCO** is a registered trademark of **PELCO** Corporation.

^{*} P protocol and D protocol are protocols what PELCO corporation used.

^{*} **DM** is a registered trademark of **Dedicated Micro** Corporation.

QUICK STARTING

The section is a quick reference for users to manipulate a dome camera in a short time. We explain the operational method through different keyboards.

FUNCTION DEFINITION

■ Preset Function Definition

Preset point means that dome camera will save pan/tilt/zoom positions to its memory.

You can recall the preset position through this function.

Auto-Pan Function Definition

Auto-Pan means that dome camera will scan a predicted region. The region is defined by "start point", "end point", "scan direction" and "scan speed".

Dome camera will scan a region from "start point" to "end point" according to the "scan direction" and "scan speed".

Dome camera will do pan motion continuously without limit if user set the start point the same as end point.

You can manipulate zoom in/out function when the dome camera is executing Auto-Pan function.

Sequence Function Definition

Sequence means that dome camera will switch its view between different preset positions.

The sequence parameters are "preset point", "jump speed" and "dwell time".

Dome camera will switch its view according to the sequence parameters. It will go to the "preset position N" with "jump speed S" and stay there for a period with "dwell time T". Then dome camera will go to the second preset position with the parameter 2....etc.

Cruise Function Definition

Cruise means that dome camera will patrol a special path. This path is generated by joystick movement. The memory sizes of dome camera limit the length of cruise path. After the memory of dome camera is filled up, it will stop to record the latter path. When you recall cruise function, it will patrol the path which is memorized in memory.

QUICK START FROM D7313 KEYBOARD

Please press <DOME> button and enter the ID of dome to start to control the selected dome camera.

Preset Function Operation

Setting

Press a number key for preset point such as <2>. Press <SET PRESET> to record this position as preset point 2.

Recall preset position

Press a number key for preset point such as <2>. Press <GO PRESET> to go to the preset position 2.

Auto-Pan Function Operation

Setting

- 1. Press <AutoPan> to entering Auto-Pan mode. The LCD on keyboard will display "1.RUN 2.SETTING".
- 2. Press <2> to edit parameters of Auto-Pan.
- 3. Move dome camera to a specific position and press <ENTER> to save it as start point of scan region.
- 4. Pan dome camera to another position and press <ENTER> to save it as end point of scan region.
- 5. Using direction key to select the scan direction what you want. Press <ENTER> to confirm this selection.
- 6. Using direction key to select speed of Auto-Pan. Press <ENTER> to confirm this selection.

Execute Auto-Pan function

- Press <AutoPan> to entering Auto-Pan mode. The LCD on keyboard will display "1.RUN 2.SETTING".
- 2. Press <1> to execute Auto-Pan function.

■ Sequence Function Operation

Setting

- Press a number key to set a sequence line such as <1>. Press <SET
 SEQ.> to start modifying parameters of sequence 1.
- 2. LCD is displaying "001. PST SPD DWELL" now. You can edit the parameters such as <4> <ENTER> for PST, <1> <5> <ENTER> for SPD and <5> <ENTER> for DWELL. That means that the first preset point for sequence 1 is preset point 4, dome camera will staying 5 seconds there and dome will go to next preset with speed 15.

- 3. LCD is displaying "002.PST SPD DWELL" now. Please edit the parameters.
- 4. LCD is displaying "003.PST SPD DWELL" now. Please press <SETUP> to end the session if you need two presets only.

Execute sequence function

- 1. Press a number key to specify a sequence number what you want to execution
- 2. Press <RUN SEQ.> to start sequence function.

Cruise Function Operation

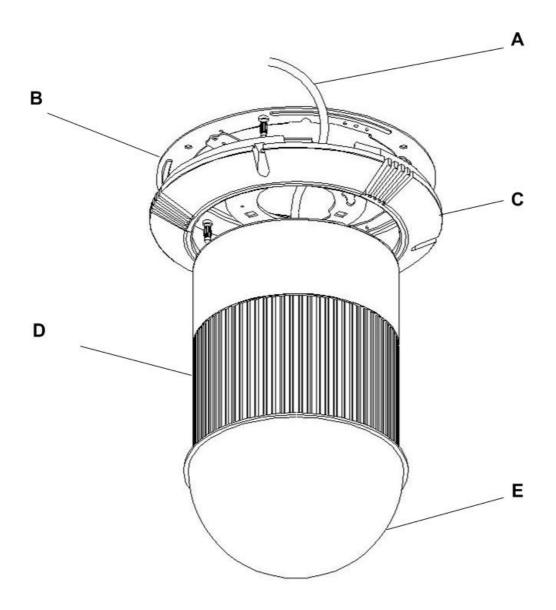
Setting

- 1. Press <CRUISE> key on keyboard to select execution mode of cruise function.
- 2. LCD is displaying "1. RUN 2.SETTING" now. Press <2> to enter modification mode.
- 3. LCD is displaying "ENTER for START POS". Press <ENTER> to start to input cruise path.
- 4. LCD is displaying "ENTER for END POS". You can move dome camera to patrol a path. Press <ENTER>
- 5. LCD is displaying "ENTER for SAVING". Press <ENTER> to command dome camera recording this cruise path.

Execute cruise function

- Press <CRUISE> key on keyboard to select execution mode of Cruise function.
- 2. LCD is displaying "1. RUN 2.SETTING" now. Press <1> to start cruise function.

CONSTRUCTION



A: Cable for Power Supply , Video and Telemetry

B: Mounting Plate

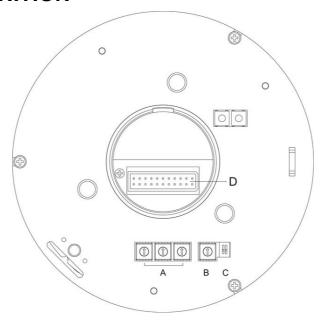
C: Decorative Cover

D: Dome Housing

E: Dome Cover

SWITCH SETTING

SWITCH DEFINITION



- A. ID Setting
- **B. Dome Control Protocol**
- C. RS-485 Setting

ID Setting

Use SW1 ~ SW3 to change your speed dome ID by turning the arrow to the desired number respectively.

Dome Control Protocol

Refer to below table and turn the arrow to choose a protocol for your speed dome.

SW No.	Protocol	SW No.	Protocol	SW No.	Protocol
0	VCL	6	None	С	None
1	Pelco D	7	DynaColor	D	None
2	Pelco P	8	AD 422	E	None
3	None	9	DS2P Pelco P	F	None
4	Chiper	Α	None		
5	Philips	В	Simplex DSCP		

RS-485 Setting

Refer to below table for desired RS-485 settings of your dome camera.

RS-485 Communication			
Half-duplex	Full-duplex *		
O N	O N		

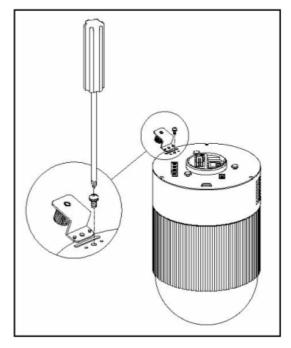
^{*} Not available.

INSTALLATION – HARD CEILING

HARD CEILING MOUNTING

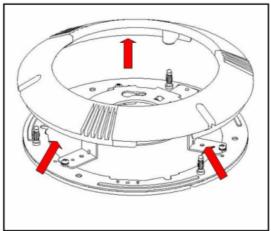
STEP1:

Screw the **Fixing Plate** to your **Dome Body**. Drill three holes on the hard ceiling.



STEP2:

Unpack the dome package and take out the **Decorative Cover**. Remove the **Mounting Plate** from the **Decorative Cover**.

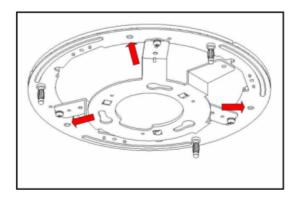


STEP3:

Attach the **Mounting Plate** to the ceiling. Insert a pencil or any other pen into the three ports to mark the locations where all three ceiling holes sould go.

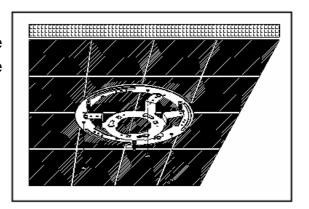
STEP4:

Drill these holes on the hard ceiling.



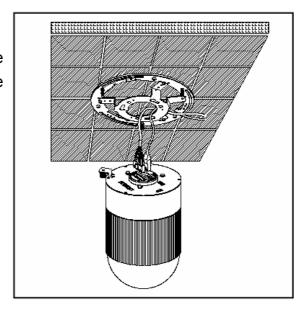
STEP5:

Fix the attached **Bracket** to the holes on the hard ceiling with three screws.



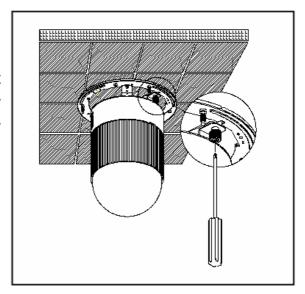
STEP6:

Connect data cable through the center hole of the Bracket to Dome Body.



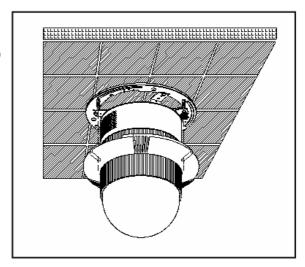
STEP7:

Mount Dome Body to the Bracket and rotate the Dome Body clockwise. Tighten the fixing screw to fix the Dome Body.



STEP8:

Assemble the **Decorative Cover** to the **Bracket**.

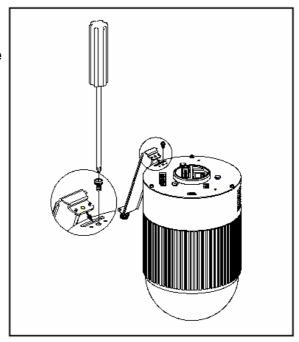


INSTALLATION – T-BAR CEILING

T-BAR CEILING MOUNTING

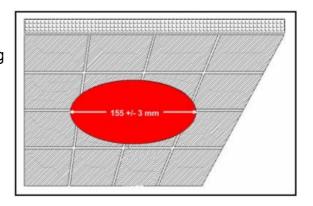
STEP1:

Screw the **Fixing Plate** to the **Dome Body**.



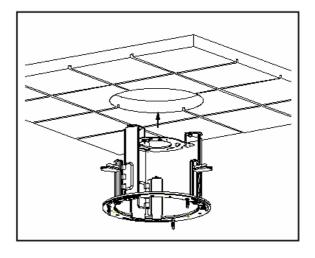
STEP2:

Place the **Red Sticker** on the ceiling plate, and cut the circle part out of the ceiling.



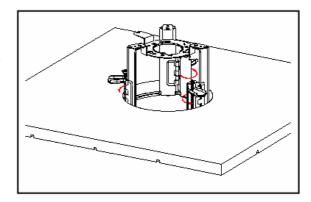
STEP3:

Put up the **T-Bar** into the ceiling hole.



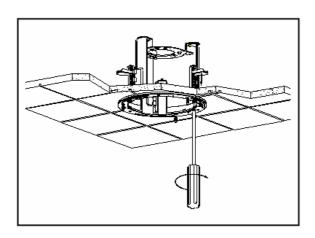
STEP4:

Rotate T-Bar wings of hinge to fix the T-Bar at the edge of the ceiling hole.



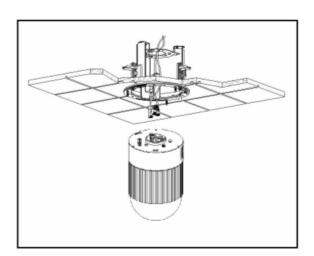
STEP5:

Tighten the screw of hinge.



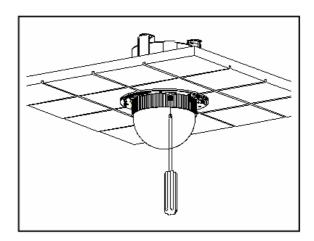
STEP6:

Connect data cable to **Dome Body** through the center hole of the **Bracket**.



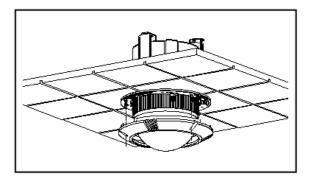
STEP7:

Mount **Dome Body** to the **Bracket** and rotate it clockwise. Tighten the fixing screw to fix the dome body.



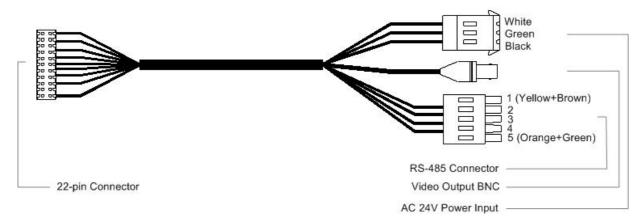
STEP8:

Assemble the **Decorative Cover** to the T-BAR.



CONNECTION

CABLE CONNECTION



22-PIN CONNECTOR DEFINITION

The definitions of the pins on the 22-pin connector are listed as below table.

No.	Pin	Color	Cable
1	AC24-1	White	
2	Empty		
3	AC24-2	Black	1007 20AWG
4	Empty		1007 ZUAVVG
5	FG	Green	
6	Empty		
7	T+	Yellow	
8	R-	Orange	1007 24AWG
9	T-	Green	1007 24AVVG
10	R+	Brown	
11-20	Empty		
21	VGND		
22	Video		

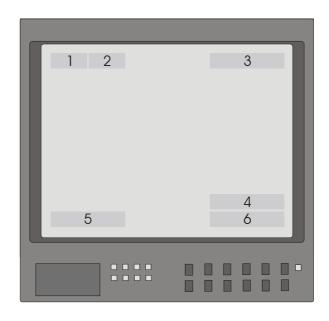
RS-485 Connector

Please connect keyboard to Speed Dome through the terminal block. The communication interface between Speed Dome and Keyboard is RS-485. Maximum cable length for RS-485 communication over 24-gauge wire is 4000 feet (1219 meters). The recommended cable for RS-485 communication is **CAT 5** cable.

Definition	Cable Color
T+ (D+)	Yellow
R- (D-)	Orange
T- (D-)	Green
R+ (D+)	Brown

OSD DISPLAY FORMAT

OSD DISPLAY FORMAT



< Fig1. OSD DISPLAY POSITION>

POSITION	FUNCTION	OSD DISPLAY	DESCRIPTION	
4 50010 4005		Α	Auto Focus Mode	
1	FOCUS MODES	M	Manual Focus Mode	
	BACKLIGHT	Х	Back Light Compensation OFF	
2	2 BACKLIGHT	В	Back Light Compensation ON	
3	ALARM	ALARM	Alarm Message	
4	ZOOM RATIO	X1	Present Zoom Ratio	
_	1. Max. 20 letters for each tit		etters for each title.	
5 TITLE		2. 16 sets of titles are available.		
6	CAMERA ID	Show the camera ID of this camera		

SPECIFICATIONS

GENERAL FEATURES

Environment	Indoor / Outdoor
Controller I/F	RS-485
Operating Temperature	0° – 40 °C
Power Source	24 VAC or 12VDC
Max Power Consumption	22W
Dimensions	ф130X200mm
Weight	1.5kg

ROTARY BODY FEATURES

NOTALL BODITE MORES				
Environment			D7723B	D7723C
Pan Travel		360 Degree Endless		
Tilt Traval	D7722		-10 ~ 99	Degree
Till Travel			-99 ~ 99 Degree	
Manual Speed		1~90 Deg/s	1~90 Deg/s	
Preset Pan		1~375 Deg/s High Resolution	1~375 Deg/s High Resolution	
Speed	Speed Tilt		6~360 Deg/s Standard	1~375 Deg/s High Resolution

Standard: 768 steps/circle High Res.: 1600 steps/circle

CONTROL FEATURES

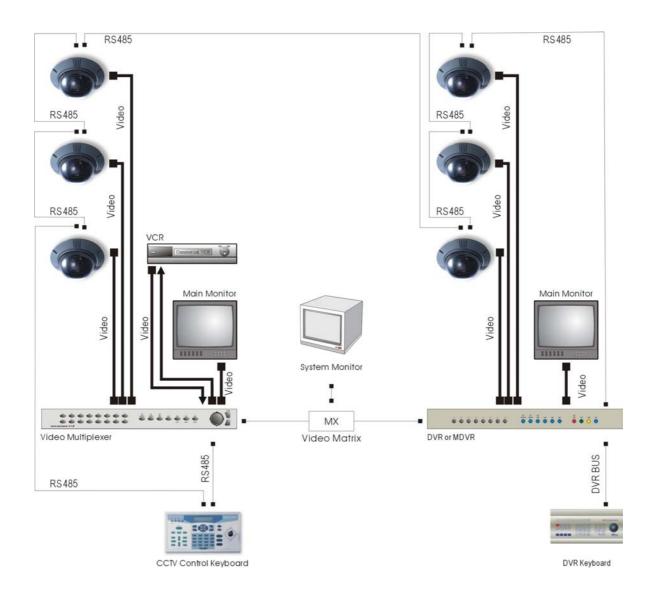
	D7723□-		
	Rooo	K	S
D&P protocol	YES	YES	YES
Presets	128	128	128
Preset	0.5	0.5	0.5
Accuracy	0.0	0.0	0.0
Patterns	1	1	1
Sequence	4	4	4
Auto-Pan	1	1	1
Masking	Х	8	24
Proportional	YES	YES	YES
Pan&Tilt			
Zone Title	YES	YES	YES
Home	YES	YES	YES
Function			
P/T/Z	YES	YES	YES
Auto-restoring			
Auto-Turn	YES	YES	YES
Around			
Digital Flip	Х	YES	YES
DSS	Х	YES	YES
IR	Х	YES	YES
WDR	Х	YES	Χ
Motion	Х	Х	YES
Detection	^`	,	. 20

CAMERA FEATURES

	D7723□-R□□	D7723□-K □□	D7723□-S □□
Total Pixels	NTSC 811(H)X 508(V) PAL 795(H)X 596(V)	NTSC 758(H)X 504(V) PAL 758(H)X 592(V)	-N/A
Effective Pixels	MTSC 768(H)X 494(V) PAL 752(H)X 582(V)		NTSC 680k pixels PAL 800k pixels
Scanning Area	1/4" (724(H)X 582(V) CCD	1/6" CCD
Scanning system	P.A	AL , NTSC , 2:1 interla	ce
Synchronization		Internal / Line Lock	
Video Output		1.0Vpp/75 Ω , BNC	
Horizontal	NTSC:470 TV lines.	NTSC:470 TV lines	NTSC:470 TV lines
Resolution	PAL:460 TV lines.	PAL:470TV lines	PAL:460TV lines
S/N Ratio	50dB	50dB	49dB
Minimum Illumination	1 lux	0.01 lux 0 lux (IR illuminator)	0.01 lux 0 lux (IR illuminator)
Focal length	4~88 mm	3.6~82.8 mm	2.4~60 mm
Zoom ratio	22x optical zoom	23x optical zoom	25x optical zoom
Digital Zoom	X1 ,X12 variable	X1 ,X12 variable	X1 ,X12 variable
Zoom Speed	3.9 sec / 6.3 sec	2.9 sec / 5.8 sec	2.3 sec / 4.8 sec
Focus Mode		Auto / Manual	I
White Balance		Auto / Manual	
Iris Control	Auto / Manual		
Electronic shutter	NTSC (1/60~1/30k sec) PAL	NTSC (1/2~1/30k sec) PAL	NTSC (1/4~1/10k sec) PAL
AGC control	(1/50~1/30k sec)	(1/1.5~1/30k sec) Auto / Manual	(1/3~1/10k sec)
BLC	On/Off		

SYSTEM ARCHITECTURE

SYSTEM ARCHITECTURE



APPENDIX - OSD MENU (R, K MODEL)

This camera utilizes a user setup menu that is displayed on-screen. This setup menu contains various sub menus that from a tree-type structure as shown below. This menu is described in the "SETUP MENU DESCRIPTION"

OSD TREE STRUCTURE (R, K MODEL)

DEFAULT	ON				
	OFF				
BACKLIGHT	ON	BLC LEVEL	000 ~ 100		
	OFF				
FOCUS	AUTO	Focus Length: 1cm 10cm 30cm 1m			
	MANUAL				
APERTURE	AUTO				
	MANUAL	H APERTURE	000 ~ 031		
		V APERTURE	000 ~ 031		
AE MODE	AUTO	IRIS OFFSET	000 ~ 100		
	SHUTTER	SHUTTER SPEED			
	IRIS	IRIS			
	AGC	AGC			
WBC MODE	AUTO				
	MANUAL	R GAIN			
		G GAIN	G GAIN		
ID DISPLAY	ON	•			
	OFF				
SETUP	ENTER	FLIP	IMAGE		
MENU			ME		
			OFF		
		ZOOM SPEED	FAST		
			SLOW		
		SPEED BY ZOOM	ON		
			OFF		
		AUTO CALI.	ON		
			OFF		
		DIGITAL ZOOM	1~12 (R model)		
			1~12 (K model)		
			1~12 (S model)		
		SLOW SHUTTER	1/2~1/60 (NTSC)		
			1/1.5~1/50 (PAL)		
		ANGLE ADJUSTER	R ADJUST MIN ANGLE		
			ADJUST MAX ANGLE		
			RESET		
		RESET	YES		
		EXIT			

TITLE	ON		
DISPLAY	OFF		
TITLE	000 ~ 016		
SETTING			
ALARM	ENTER	ALARM PIN	1 ~ 4
SETTING		ALARM SWITCH	OFF
		7127 11 1111 01111 011	ON
		ALARM TYPE	N.O.
			N.C.
		ALARM ACTION	POINT
			SEQUENCE POINT
		PRESET POS	001 ~ 128
		SEQUENCE LINE	1 ~ 4
		DEWLL TIME	001~ALWAYS SEC.
		EXIT	YES
HOME	ENTER	HOME FUNC.	ON / OFF
SETTING		SELECT MODE	PRESET
			SEQUENCE
			AUTO-PAN
			CRUISE
		RETURN TIME	1 ~ 127 MIN.
		PRESET/	
		AUTOPAN/	
		SEQUENCE/	
		CRUISE	
		GO	ENTER
		EXIT	
SEQUENCE	ENTER	SEQUENCE LINE.	1 ~ 4
		SEQUENCE	1 ~ 32
		POINT	
		PRESET POS.	1 ~ 128
		SPEED	1 ~ 15
		DWELL TIME	1 ~ 127
		RUN SEQUENCE	ENTER
		EXIT	
AUTOPAN	ENTER	START POINT	TO FIND
			TO SAVE
		END POINT	TO FIND
			TO SAVE
		DIRECTION	RIGHT
			LEFT
		SPEED	1 ~ 4
		RUN AUTOPAN	ENTER
		EXIT	
CRUISE	ENTER	RECORD START	ENTER
		RECORD END	ENTER
		RUN CRUISE	ENTER
		EXIT	

IR	AUTO	THRESHOLD	LOW. MID. HI.
FUNCTION		IR COLOR	B/W. COLOR
		EXIT	
	ON		
	NONE (22X)		
WDR	ENTER	WDR SWITCH	ON/OFF
SETTING		WDR FUNCTION	AUTO
			MANUAL
		EXIT	
	NONE (22X)		
PRIVACY	ENTER	PRIVACY SWITCH	OFF / ON
		SHADE	GRAY / WHITE /BLACK
		SET MASK	1/2
		RESET	YES
		EXIT	YES
	NONE (22X)		
EXIT OSD	YES		

OSD MENU (R, K MODEL)

There are two pages of OSD setup menu allow users to control the camera parameters, these functions are described in the following sections in detail. Please use LEFT/ RIGHT/ UP/ DOWN of direction keys to select your parameters.

MENU ITEM (R, K MODEL)

1. DEFAULT

If you select ON for this item, all the camera parameters will be restored to the factory initial (default) data. Once you modify any of the following items, this item becomes OFF.

2. BACKLIGHT

In case that excessive light is behind the center object, it is necessary to prevent the center object too dark.

Turn this item ON, the center object will be brighten in contrast to the edge of the picture (where a backlight would most likely be located).

3. FOCUS

The focus of the dome camera can be operated in two different modes: 'Manual Focus mode' and 'Auto Focus mode'.

Manual

Users can the move focus lens by pressing the "focus Near/Far button" on the control keyboard.

Auto

The optimum focus is achieved by the internal digital circuit. User can limit the minimum auto focus range through selecting a suitable item for some special condition.

4. APERTURE

You can edit the aperture setting of camera module.

AUTO

Camera will automatically assign a suitable aperture value for camera to achieve a better image.

MANUAL

You can set aperture value with higher value to enhance the incident ray of camera.

5. AE MODE

Here you can select how the auto exposure function works, five options are available in this item, they are explained in the following section:

AUTO

With this option, the camera's Shutter, IRIS and AGC control circuits work together automatically to compensate the light exposure of CCD sensor, in order to get consistent video output level. IRIS OFF SET is used to set the level of IRIS variation.

SHUTTER

With this option, the SHUTTER priority is higher than IRIS and AGC circuit will function automatically to get consistent exposure.

This option is available only for 22X and 23X lenses.

IRIS

With this option, the IRIS priority is higher than SHUTTER and AGC circuit will function automatically to get consistent exposure. After the IRIS is selected manually, the action of exposure compensation depends on the AGC circuit.

AGC

With this option, the AGC priority is higher than SHUTTER and IRIS circuit will function automatically to get consistent exposure. After AGC is selected manually, the action of exposure compensation depend on changing the IRIS of Lens

6. WBC MODE

You can select one of six White Balance Control modes as described follows:

AUTO

In this mode, white balance works within its color temperature range.

MANUAL

In this mode, you can control the Write Balance value manually, R gain and B gain adjustable range from 0 to 100.

7. ID DISPLAY

You can display the ID of dome on monitor or not.

ON

Display the ID address of this dome.

OFF

Do not display the ID address of this dome.

8. SETUP

You can adjust some parameters under SETUP item.

FLIP (IMAGE/ ME/OFF)

User can track an object continuously when it passes through under dome camera with setting flip item to IMAGE/ ME.

IMAGE item enable user to keep tracking object seamlessly through image flip technology. ME item is a standard function which is the same as AUTO-FLIP function.

ZOOM SPEED

You can select a suitable zoom speed.

SPEED BY ZOOM

The tracking speed is adjusted by internal algorithm. The lager zoom ratio the lower rotation speed.

AUTO CALI.

The default setting is OFF.

DIGITAL ZOOM

Digital zoom ratio is adjustable from 1 to 12 (S model), 1 to 12 (K model) or 1 to 12 (R model).

SLOW SHUTTER

You can set the slowest shutter speed. With the slowest shutter speed, you can see objects in a dark environment under 0.2 lux. With a higher shutter speed, you can see a smooth video image from camera

ANGLE ADJUSTER (MIN/MAX)

R Model: User can see more area higher if they adjust the MAX angle from +95 to +99 degree. User can see more area lower if they set the MIN angle to -10 degree.

K Model: User can see more area higher if they adjust the MAX angle from +95 to +99 degree. User can see more area lower if they set the MIN angle from -85 to -99 degree.

RESET

Reset the Speed Dome.

EXIT

Quit the SETUP menu.

9. TITLE DISPLAY

You can turn on or off the TITLE DISPLAY function of this dome

ON

It will display a mark what you input for this view when you came back to the view.

OFF

It will not display any mark what you input for this view when you came back to the view.

10. TITLE SETTING

You can name a view for dome camera and it will display the name when you came back to the view.

STEP 1: Operate dome to a view what you want to name it.

STEP 2: Turn on OSD and move blink words to "TITLE SETTING"

STEP 3: Select a number what you want to name it.

STEP 4: Press <ENTER> to go into edit mode.

SET TITLE: (XXX)

0 0123456789 S:SAVE 1 ABCDEFGHIJ /S:EXIT 2 KLMNOTPQRS ←:LEFT 3 UVWXYZ:/., →:RIGHT 4 ()+?-\$P

TITLE:

X

STEP 5: Choose a character what you want to input with direction key and press <ENTER>.

Example: A <ENTER>, B <ENTER>, C <ENTER>

TITLE: ABC

STEP 6: Move blink character to "S: SAVE" and press <ENTER> to save setting. You can erase the word what you don't like it through move blink character to "SP" and press <ENTER>

11. ALARM SETTING

Alarm parameters can be set on this page.

ALARM PIN

Choose an alarm connector what you want to set its status.

ALARM SWITCH

Turn ON/ OFF alarm function.

ALARM TYPE

There are two kind of alarm types can be selected. One is normal open the other is normal close.

ALARM ACTION

User can choose what kind of action should be executed when the alarm condition taken place. There are two kind of alarm actions can be set. One is go to a specific position when alarm taken place. The other is executing sequence function when alarm condition taken place.

Point Mode

PRESET POS.

Enter a preset position where the dome will go to when alarm pin is triggered.

Sequence Mode

SEQUENCE

Enter the sequence line you wish the Dome execute when alarm pin is triggered.

DWELL TIME (Seconds)

Camera will stay at the preset position for "DWELL TIME" seconds then go back to previous position. If you select "Always", dome will go to the preset position and stay there until alarm condition is released or user move its joystick on keyboard.

EXIT

Quit the ALARM SETTING menu.

12. HOME SETTING

Home parameters can be set on this page.

HOME FUNC

Turn home function on or off.

SELECT MODE (AUTOPAN/ SEQUENCE/ CRUISE/ PRESET)

Dome will go to execute this mode function when home function is enabled and the "RETURN TIME" is reached.

RETURN TIME (MIMUTES)

Dome will start to count "RETURN TIME" when user move the camera to arbitrary position.

AUTOPAN/ SEQUENCE LINE/ CRUISE/ PRESET POS

This item is detailed mode setting of home function. This item will vary with 'SELECT MODE' item.

GO

Go to execute home function (**HOME FUNC ON only**).

EXIT

Quit the HOME SETTING menu.

13. SEQUENCE

Sequence parameters can be set on this page.

SEQUENCE LINE

There are four sets of sequence lines built in dome camera. You can choose a line to execute. Please use LEFT/ RIGHT of direction key to select your sequence line.

SEQUENCE POINT

There are 32 sets of sequence points can be specified in every sequence line. The sequence points are linked list. Sequence function will go through the linked list again and again.

PRESET POSITION

You can specify a preset position where the dome should go to at this sequence point.

SPEED

Speed is adjustable from 1~15.

DWELL TIME

Dome will stay on the sequence point for "DWELL TIME" then go to next sequence point.

RUN SEQUENCE

User can command dome camera to execute sequence function.

EXIT

Quit the SEQUENCE menu.

14. AUTOPAN

AutoPan parameters can be set on this page. User can enable dome camera to do continuously panning without limit through setting the start point the same as endpoint.

START POINT

Start position of the "AUTOPAN path".

TO FIND: Press 'ENTER' to go into joystick mode. User can move camera to suitable position under joystick mode.

TO SAVE: Press 'ENTER' to set this position as start point and escape joystick mode.

END POINT

End position of the "AUTOPAN path".

TO FIND: Press 'ENTER' to go into joystick mode. User can move camera to suitable position under joystick mode.

TO SAVE: Press 'ENTER' to set this position as end point and escape joystick mode.

DIRECTION

Rotational direction of dome camera.

SPEED

AUTOPAN function will rotate camera with this speed.

RUN AUTOPAN

Execute AUTOPAN function.

EXIT

Quit the AUTOPAN menu.

15. CRUISE

Cruise parameters can be set on this page.

RECORD START

Command dome to start to record "CRUISE PATH".

STEP1: Press 'ENTER' to go into joystick mode. Dome will move blink words to 'RECORD END' automatically.

STEP2: User can move camera to form a path.

STEP3: Press 'ENTER' to save the path.

RECORD END

Command dome to stop to record "CRUISE PATH".

RUN CRUISE

Execute "CRUISE" function.

EXIT

Quit the CRUISE menu.

16. IR FUNCTION

"IR Cut Filter" function can be set on this page.

AUTO

THRESHOLD: The Internal circuit will decide to remove the "IR Cut Filter"

according to its threshold value. You can set the sensitivity as high then dome will remove the filter immediately if the threshold value is reached. Of course, low sensitivity can

improve the reliability of lens.

IR COLOR: You can program the video output as color or B/W when IR

function is enabled.

ON

Turn on IR function.

17. WDR SETTING

The parameter of WDR (Wide Dynamic Range) function can be set on this page.

WDR SWITCH

You can turn on/off the WDR function.

WDR FUNCTION

You can edit all parameters of WDR by yourself.

EXIT

Exit this page.

18. PRIVACY

You can program the privacy zone position with this option.

PRIVACY SWITCH

You can display "Privacy masks" with this option.

SHADE

The color of privacy mask can be selected through this option.

SET MASK

After you press "ENTER" on this item, dome will memory this position as "privacy mask position". You can select form Mask1 to Mask8 for this item.

MAKS MENU

H CENTER 000~100

The original center of mask zone is the center of screen. User can move the center of mask zone to another position through adjust this value.

V CENTER`000~100

The original center of mask zone is the center of screen. User can move the center of mask zone to another position through adjust this value.

H SIZE 000~100

User can adjust the horizontal size of "privacy mask" through this item.

V SIZE 000~100

User can adjust the vertical size of "privacy mask" through this item.

EXIT+SAVE

Exit this page and save the privacy zone data into dome camera.

EXIT

Exit this page.

19. EXIT OSD

You can exit OSD mode with this item. Of course, you can close the OSD menu through "ESC" button on D7312.

APPENDIX - OSD MENU (S MODEL)

This camera utilizes a user setup menu that is displayed on-screen. This setup menu contains various sub menus that from a tree-type structure as shown below. This menu is described in the "SETUP MENU DESCRIPTION"

OSD TREE STRUCTURE (S MODEL)

DEFAULT	ON				
DEFAULT	OFF				
DACKLICHT					
BACKLIGHT	ON				
	OFF	AEMODE MODM	Λ.1		
FOCUS	AUTO	AF MODE – NORMAL			
		AF MODE – ZOOM TRIGGER			
		AF MODE – INTERVAL			
	MANUAL	FOCUS MANUAL SPEED			
AE MODE	AUTO	EXPORSURE COMP			
	BRIGHT	BRIGHT VALURE			
	SHUTTER	SHUTTER SPEED			
	GAIN	GAIN VALUE			
	IRIS	IRIS VALURE			
WBC MODE	AUTO				
	INDOOR				
	OUTDOOR				
	ATW				
	MANUAL	R GAIN, B GAIN			
ID DISPLAY	ON	•			
	OFF				
SETUP	ENTER	FLIP	IMAGE		
MENU1			ME		
			OFF		
		ZOOM SPEED	FAST		
		SPEED BY ZOOM	ON		
			OFF		
		AUTO CALI.	ON		
			OFF		
		DIGITAL ZOOM	1 ~ 12 (R model)		
		DIGITAL ZOOW	1 ~ 12 (K model)		
			1 ~ 12 (K model)		
		SLOW SHUTTER	ON ON		
		SLOW SHUTTER	OFF		
		ANGLE ADJUSTER			
			ADJUST MAX ANGLE		
		DECET	RESET		
		RESET	YES		
		EXIT			

SETUP	ENTER	APERTURE	
MENU2	LIVILIX	FREEZE	ON
		FREEZE	OFF
		DIOTUDE EFFECT	
		PICTURE EFFECT	
			NEG.
			B/W
		STABILIZER	ON
			OFF
		MASK DISPLAY	FIRST
			LAST
TITLE	ON		
DISPLAY	OFF		
TITLE	000 ~ 016		
SETTING			
ALARM	ENTER	ALARM PIN	1 ~ 4
SETTING		ALARM SWITCH	OFF
			ON
		ALARM TYPE	N.O.
			N.C.
		ALARM ACTION	POINT
		ALAMINACTION	SEQUENCE POINT
		PRESET POS	001 ~ 128
		SEQUENCE LINE	1 ~ 4
		DEWLL TIME	001~ALWAYS SEC.
		EXIT	YES
HOME	ENTER	HOME FUNC.	ON / OFF
SETTING		SELECT MODE	PRESET
			SEQUENCE
			AUTO-PAN
			CRUISE
		RETURN TIME	1 ~ 127 MIN.
		PRESET/	
		AUTOPAN/	
		SEQUENCE/	
		CRUISE	
		GO GO	ENTER
		EXIT	LIVILIX
CECHENCE	ENTER	SEQUENCE LINE.	1 1
SEQUENCE	ENTER		1 ~ 4 1 ~ 32
		SEQUENCE	1 ~ 32
		POINT	4 400
		PRESET POS.	1 ~ 128
		SPEED	1 ~ 15
		DWELL TIME	1 ~ 127
		RUN SEQUENCE	ENTER
		EXIT	
AUTOPAN	ENTER	START POINT	TO FIND
			TO SAVE
		END POINT	TO FIND
		JEND POINT	I O FIND
		END POINT	TO SAVE
		DIRECTION	

			LEFT
		SPEED	1~4
		RUN AUTOPAN	ENTER
		EXIT	1
CRUISE	ENTER	RECORD START	ENTER
		RECORD END	ENTER
		RUN CRUISE	ENTER
		EXIT	
IR	AUTO		
FUNCTION	ON		
ALARM	ENTER	DETECT SWITCH	ON/OFF
DETECT		DETECT MODE	FIX FOCUS
			INT. AE
			FIX AE
			INT. FOCUS
		EXIT	
PRIVACY	ENTER	PRIVACY SWITCH	OFF / ON
		TRANSPARENCY	OFF/ON
		COLOR	
		SET MASK	1 ~ 24
		RESET	YES
		EXIT	YES
EXIT OSD	YES		

OSD MENU (S MODEL)

There are two pages of OSD setup menu allow users to control the camera parameters, these functions are described in the following sections in detail. Please use LEFT/ RIGHT/ UP/ DOWN of direction keys to select your parameters.

MENU ITEM (S MODEL)

1. DEFAULT

If you select ON for this item, all the camera parameters will be restored to the factory initial (default) data. Once you modify any of the following items, this item become OFF.

2. BACKLIGHT

In case that excessive light is behind the center object, it is necessary to prevent the center object too dark.

Turn this item ON, the center object will be brighten in contrast to the edge of the picture (where a backlight would most likely be located).

3. FOCUS

The focus of the dome camera can be operated in two different modes: 'Manual Focus mode' and 'Auto Focus mode'.

Manual

Users can the move focus lens by pressing the "focus Near/ Far button" on the control keyboard. The focus speed of lens can be adjusted through this item.

Auto

The optimum focus is achieved by the internal digital circuit. User can select a suitable item for different condition.

Normal AF Mode: This is the normal mode for AF operations.

Interval AF Mode: The mode used for AF movements carried out at particular intervals. The time intervals for AF movements and for the timing of the stops can be set in one-second increments using the Set Time Command. The initial value for both is set to five seconds.

Zoom Trigger Mode: When the zoom is changed with the TELE or the WIDE buttons, the pre-set value (initially set at 5 seconds) becomes that for AF Mode. Then, it stops.

4. AE MODE

Here you can select how the auto exposure function works, five options are available in this item, they are explained in the following sections:

AUTO

With this option, the camera's IRIS and AGC control circuits work together automatically to compensate the light exposure of CCD sensor, in order to get consistent video output level. At this condition the shutter speed is fixed to 1/60 (NTSC) or 1/50 (PAL). User can offset the internal brightness reference level through **EXPOSURE COMP.** to control the brightness of camera. The value of EXPOSURE COMP. is selectable from 0 to 16 and the gain is varying from -10.5 dB to 10.5 dB. Each step is 1.5dB gain. The value 7 is equal to 0dB. The camera will not compensate the brightness when the **EXPOSURE COMP.** is set to **OFF.** The default setting is **OFF.**

BRIGHT

The bright control function adjusts both gain and iris using an internal algorithm, according to a brightness level freely set by the user. Exposure is controlled by gain when dark, and by iris when bright.

SHUTTER

With this option, the SHUTTER speed is selectable. Auto IRIS and AGC circuit will function automatically to get consistent exposure output.

GAIN

With this option, the GAIN value is selectable. GAIN priority is higher than SHUTTER and IRIS. The internal circuit will function automatically to get consistent exposure.

IRIS

With this option, the IRIS value is selectable. Auto SHUTTER speed and AGC circuit will function automatically to get consistent exposure output.

5. WBC MODE

You can select one of six White Balance Control modes as described follows:

AUTO

In this mode, white balance works within its color temperature range. This mode computes the white balance value output using color information from the entire screen. It outputs the proper value using the color temperature radiating from a black subject based on a range of values from 3000 to 7500K.

INDOOR

3200 K Base Mode

OUTDOOR

5800 K Base Mode

ATW

Auto Tracing White balance (2000 to 10000 K).

MANUAL

In this mode, you can control the Write Balance value manually, R gain and B gain is adjustable.

6. ID DISPLAY

You can display the ID of dome on monitor or not.

ON

Display the ID address of this dome.

OFF

Do not display the ID address of this dome.

7. SETUP MENU1

You can adjust some parameters under SETUP MENU1 item.

FLIP (IMAGE/ ME/ OFF)

User can track an object continuously when it passes through under dome camera with setting flip item to IMAGE/ ME.

IMAGE item enable user to keep tracking object seamlessly through image flip technology. ME item is a standard function which is the same as AUTO-FLIP function.

ZOOM SPEED

User can select a suitable zoom speed.

SPEED BY ZOOM

The tracking speed is adjusted by internal algorithm. The lager zoom ratio the lower rotation speed.

AUTO CALI.

The default setting is OFF.

DIGITAL ZOOM

Digital zoom ratio is adjustable from 1 to 12.

SLOW SHUTTER

User can enable the slow shutter function. With the slowest shutter speed, user can see objects in a dark environment under 0.01 lux. With a higher shutter speed, you can see a smooth video image from camera

ANGLE ADJUSTER (MIN/ MAX)

User can see more higher if they adjust the MAX angle to +99 degree. Users can see more area lower if they set the MIN angle to -10 degree.

RESET

Reset the Dome camera.

EXIT

Quit the SETUP menu.

8. SETUP MENU2

You can adjust some parameters under SETUP MENU2 item.

APERTURE

Aperture control is a function which adjusts the enhancement of the edges of objects in the picture. There are 16 levels of adjustment, starting from "no enhancement." When shooting text, this control may help by making them sharper.

FREEZE

This function captures an image in the field memory of the camera so that this image can be output continuously.

PICTURE EFFECT

User can select a special video output type.

STABILIZER.

When the Image Stabilizer Function is ON, it helps in obtaining a stable image free of vibration caused by jarring movements. For a vibration frequency of around 10 Hz, correction is approximately 90%. But this function will make user feel a doesn't exist residual motion around 1 second after the dome camera finish a quick motion. This function is only suitable for fixed point observation.

MASK DISPLAY.

User can enable masking zone or disable masking zone through this item.

9. TITLE DISPLAY

You can turn on or off the TITLE DISPLAY function of this dome

ON

It will display a mark what you input for this view when you came back to the view.

OFF

It will not display any mark what you input for this view when you came back to the view.

10. TITLE SETTING

You can name a view for dome camera and it will display the name when you came back to the view.

STEP 1: Operate dome to a view what you want to name it.

STEP 2: Turn on OSD and move blink words to "TITLE SETTING"

STEP 3: Select a number what you want to name it.

STEP 4: Press <ENTER> to go into edit mode.

SET TITLE: (XXX)

```
0 0123456789 S:SAVE
1 ABCDEFGHIJ /S:EXIT
2 KLMNOTPQRS ←:LEFT
3 UVWXYZ:/., →:RIGHT
4 ()+?-$P
```

TITLE:

STEP 5: Choose a character what you want to input with direction key and press <ENTER>.

Example: A <ENTER>, B <ENTER>, C <ENTER>

TITLE: ABC

STEP 6: Move blink character to "S: SAVE" and press <ENTER> to save setting. You can erase the word what you don't like it through move blink character to "SP" and press <ENTER>

11. ALARM SETTING

Alarm parameters can be set on this page.

ALARM PIN

Choose an alarm connector what you want to set its status.

ALARM SWITCH

Turn ON/OFF alarm function.

ALARM TYPE

There are two kind of alarm types can be selected. One is normal open the other is normal close.

ALARM ACTION

User can choose what kind of action should be executed when the alarm condition taken place. There are two kind of alarm actions can be set. One is go to a specific position when alarm taken place. The other is executing sequence function when alarm condition taken place.

Point Mode

PRESET POS.

Enter a preset position where the dome will go to when alarm pin is triggered.

Sequence Mode

SEQUENCE

Enter the sequence line you wish the Dome execute when alarm pin is triggered.

DWELL TIME (Seconds)

Camera will stay at the preset position for "DWELL TIME" seconds then go back to previous position. If you select "Always", dome will go to the preset position and stay there until alarm condition is released or user move its joystick on keyboard.

EXIT

Quit the ALARM SETTING menu.

12. HOME SETTING

Home parameters can be set on this page.

HOME FUNC

Turn home function on or off.

SELECT MODE (AUTOPAN/ SEQUENCE/ CRUISE/ PRESET)

Dome will go to execute this mode function when home function is enabled and the "RETURN TIME" is reached.

RETURN TIME (MIMUTES)

Dome will start to count "RETURN TIME" when user move the camera to arbitrary position.

AUTOPAN/ SEQUENCE LINE/ CRUISE/ PRESET POS

This item is detailed mode setting of home function. This item will vary with 'SELECT MODE' item.

GO.

Go to execute home function (HOME FUNC ON only).

EXIT

Quit the HOME SETTING menu.

13. SEQUENCE

Sequence parameters can be set on this page.

SEQUENCE LINE

There are four sets of sequence lines built in dome camera. You can choose a line to execute. Please use LEFT/RIGHT of direction key to select your sequence line.

SEQUENCE POINT

There are 32 sets of sequence points can be specified in every sequence line. The sequence points are linked list. Sequence function will go through the linked list again and again.

PRESET POSITION

You can specify a preset position where the dome should go to at this sequence point.

SPEED

Speed is adjustable from 1~15.

DWELL TIME

Dome will stay on the sequence point for "DWELL TIME" then go to next sequence point.

RUN SEQUENCE

User can command dome camera to execute sequence function.

FXIT

Quit the SEQUENCE menu.

14. AUTOPAN

AutoPan parameters can be set on this page. User can enable dome camera to do continuously panning without limit through setting the start point the same as endpoint.

START POINT

Start position of the "AUTOPAN path".

TO FIND: Press 'ENTER' to go into joystick mode. User can move camera to suitable position under joystick mode.

TO SAVE: Press 'ENTER' to set this position as start point and escape joystick mode.

END POINT

End position of the "AUTOPAN path".

TO FIND: Press 'ENTER' to go into joystick mode. User can move camera to suitable position under joystick mode.

TO SAVE: Press 'ENTER' to set this position as end point and escape joystick mode.

DIRECTION

Rotational direction of dome camera.

SPEED

AUTOPAN function will rotate camera with this speed.

RUN AUTOPAN

Execute AUTOPAN function.

EXIT

Quit the AUTOPAN menu.

15. CRUISE

Cruise parameters can be set on this page.

RECORD START

Command dome to start to record "CRUISE PATH".

STEP1: Press 'ENTER' to go into joystick mode. Dome will move blink words to 'RECORD END' automatically.

STEP2: User can move camera to form a path.

STEP3: Press 'ENTER' to save the path.

RECORD END

Command dome to stop to record "CRUISE PATH".

RUN CRUISE

Execute "CRUISE" function.

EXIT

Quit the CRUISE menu.

16. IR FUNCTION

"IR Cut Filter" function can be set on this page.

AUTO

The Internal circuit will decide when to remove the "IR Cut Filter" according to its internal algorithm.

ON

Turn on IR function.

17. MOTION DETECT

This function instructs the camera to detect movement within the monitoring area and then send an alarm signal automatically.

DETECT SWITCH

You can turn on/ off the MOTION DETECTION function.

DETECT MODE

INT. FOCUS

Set the internal focus position. When focus movement is detected, the alarm condition is set. When focus goes back to the previous position, the alarm condition is cleared.

FIX FOCUS

Set a fixed period of time. When focus movement is detected, the alarm condition is set. When focus goes back to the previous position, the alarm condition is clear. When focus moves, the alarm condition is set. Afterwards when focus does not move for the fixed period of time, the focus position is memorized and the alarm condition is cleared.

INT. AE

Set the internal AE level. When AE movement is detected, the alarm condition is set. When AE Level goes back to the previous level, the alarm condition is cleared.

FIX AE

Set a period of time. When AE Level does not change during this time, the AE value is memorized as a rest value and the alarm condition is cleared. When AE value changes, the alarm condition is set. Afterwards when AE value does not change for the fixed period of time, the AE value is memorized and the alarm condition is cleared.

EXIT

Exit this page.

18. PRIVACY

You can program the privacy zone position with this option.

PRIVACY SWITCH

You can display "Privacy masks" with this option.

TRANSPARENCY

The color of privacy mask can be set as transparency related to background image.

COLOR

The color of privacy mask can be selected through this option.

SET MASK

After you press "ENTER" on this item, dome will memory this position as "privacy mask position". You can set up to 24 masks.

H CENTER 000~100

The original center of mask zone is the center of screen. Users can move the center of mask zone to another position through adjust this value.

V CENTER'000~100

The original center of mask zone is the center of screen. Users can move the center of mask zone to another position through adjust this value.

H SIZE 000~49

User can adjust the horizontal size of "privacy mask" through this item.

V SIZE 000~49

User can adjust the vertical size of "privacy mask" through this item.

EXIT+SAVE

Exit this page and save the privacy zone data into dome camera.

EXIT

Exit this page.

20. EXIT OSD

You can exit OSD mode with this item. Of course, you can close the OSD menu through "ESC" button on your D7312 control keyboard.

APPENDIX - PELCO

The Speeddome can be controlled through a keyboard which built in **D protocol** and **P protocol**. Please follow the instruction to manipulate our Speeddome with a keyboard which built in D protocol and P protocol.

SYMBOL DEFINITION

<preset go=""></preset>	A single button which can command a dome to go to specific preset position.
<preset set=""></preset>	(1) A single button which can set preset parameter (D Protocol).
Treser our	(2) A virtual button which is pressing <preset go=""> for 3 seconds to set preset parameter (P Protocol).</preset>

SPECIAL FUNCTION

7 7 <preset (30=""></preset>	(1) It can set display or close an OSD menu.(2) It is a virtual key to emulate "ENTER" button.
7 8 <preset go=""></preset>	Reset Dome Camera

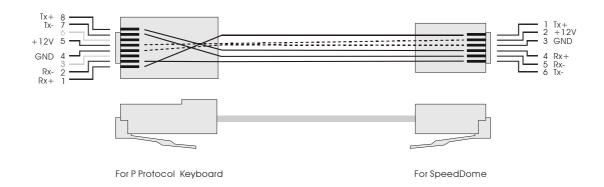
USING "PELCO KB" CONTROL DOME CAMERA

- 1. Some differences between different keyboards when OSD is open.
 - ■P protocol keyboard can move cursor up/ down/ right/ left with pushing joystick up/ down/ right/ left.
 - ■D protocol keyboard can move cursor up/down with pushing joystick up/down. But D protocol keyboard can move cursor right/ left with pushing joystick right/ left plus press button on joystick.
- 2. Some differences for 'ENTER' command.
 - ■P/D protocol keyboard couldn't issue 'ENTER' command directly. You can send a 'ENTER' command through " 7 7 < Preset Go> ".

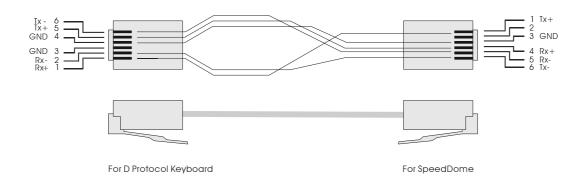
CABLE LENGTH

The communication interface between Speed Dome and Keyboard is RS-485. Maximum cable length for RS-485 communication over 24-gauge wire is 4000 feet (1219 meters). CAT 5 cable is recommended.

CABLE DEFINITION (P Protocol Keyboard to Speed Dome)



CABLE DEFINITION (D Protocol Keyboard to Speed Dome)



APPENDIX - PHILIPS ALLEGIANT

The dome cameras can be integrated into Philips Allegiant systems through D77R3 repeaters.

Please follow the instructions to control dome cameras through Philips Allegiant systems.

SYMBOL DEFINITION

<shot></shot>	A physical single button :
	Command dome cameras to go to specific preset position.
<set></set>	A physical single button :
	Set preset position.

SPECIAL FUNCTION

7 6 <set></set>	1. Exit OSD menu direct		
	1. Open or close OSD menu.		
	2. Virtual key to send an "ENTER" command when OSD is		
	opened.		
7 8 <set></set>	1. Reset Doma camera.		
I <iris (="")nen=""></iris>	A physical single button :		
	Send an "ENTER" command when OSD is opened.		

USING "ALLEGIANT KB" CONTROL DOME CAMERAS

- 1. Some differences between different keyboards when OSD is opened.
 - User can move cursor left/right/up/down through pushing joystick left /right/up/down.
- 2. Some differences for 'ENTER' command.
 - User cannot send 'ENTER' command directly. User can send a 'ENTER' command through " 7 7 <Set> ".