FOR A GOOD REASON

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Owner's Manual

HD-SDI Cameras & Domes

GCH-K0274P 2 Megapixel Full HD Outdoor Motorised Dome SDI-Camera
18x Zoom ICR WDR

GCH-K0274P.41.1.20.01.2012

Content:

1. Introduction

Based on the Television Standard for Full HD Television, HD-SDI products feature 2 Megapixel (1920x1080) pictures in real-time (30fps) transmitted over coax cabling.
Get the advantages of an IP technology without their drawbacks. Get 16:9 megapixel pictures without network configuration, bandwidth problems and network security risks. Use existing coax cables and only exchange the cameras and recorders. Get a "real" live picture and see the things that happen in the now, not a few seconds later. Connect a monitor directly to a camera using only a HD-SDI-to-HDMI converter.
HD-SDI products are easy to handle, easy to install and produce amazing high quality pictures.

Combing the HD-SDI standard with a high quality SONY CMOS sensor, the HD-SDI High Speed Camera delivers up to 18x optical zoom ratio to capture a clear image in the distance. Continuous Auto Focus, Back Light Compensation and Auto Exposure functions are provided for clear and high quality images. A removable IR cut filter ensures 24 hours operation, while Privacy Masks are especially designed to avoid any intrusive monitoring at specific regions. All of the salient functions can be incorporated to meet your needs. The Home function allows users to specify a preset position as the 'home position' or home functions (Sequence/Auto-pan/Cruise). Under this mode, HD-SDI Motordome Cameras can come back to the preset home position or functions when the camera has been idle for a user-defined period of time. Additionally, the unique Schedule function enables users to program a preset point or function (Sequence/Auto-pan/Cruise) so that these actions can be automatically performed in a certain period of time.

The HD-SDI Motordome Camera provides variable pan/tilt speeds ranging from a fast patrol of 90° per second to a slow ramble of 0.5° per second with 0.225° pan/tilt accuracy for fast and accurate tracking ability. The 360° endless rotation and -10°~190° tilt travel make tracking the object passing directly beneath the dome possible. A maximum of 256 preset points can be programmed for precise location of target areas, and users can also define Sequence lines, Auto-Pan lines and Cruise routes for the camera to operate automatically. In addition, the RS-485 communication port is available for remote control purposes.

2. Important Safety Instructions

Be sure to use only the standard adapter that is specified in the specification sheet. Using any other adapter could cause fire, electrical shock, or damage to the product. Incorrectly connecting the power supply may cause explosion, fire, electric shock, or damage to the product. Do not connect multiple products to one single adapter. Exceeding the capacity may cause abnormal heat generation or fire.

Do not place conductive objects (e.g. screwdrivers, coins or any metal items) or containers filled with water on top of the product. Doing so may cause personal injury due to fire, electric shock, or falling objects.

If any unusual smells or smoke comes out of the unit, stop using the product. In this case, immediately disconnect the power source and contact the service center. Continued use in such a condition may cause fire or electric shock.

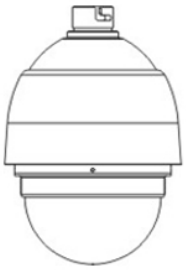
If this product fails to operate normally, contact the nearest service center. Never disassemble or modify this product in any way. (GRUNDIG is not liable for problems caused by unauthorised modifications or attempted repair.)

To prevent fire or electric shock, do not expose the inside of this device to rain or moisture.

If the PTZ system looses its power supply during freezing temperatures and the power supply returns afterwards, the Swiftdome Camera will first heat up internally to +3° C and then the initialisation will start. In this way, it can be prevented that the sliding contacts and the motors get damaged through a cold start.

3. Package Contents

These parts are included:



Camera with
Outdoor Mount Kit

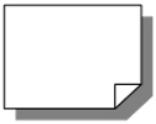
M3 Standard Screw (x1)
M3 Security Screw (x1)
M5 Standard Screw (x1)
M5 Security Screw (x1)

Waterproof
Rubber

Lubricant

Optical Cover

Security Torx



Quick Guide

CD
(Manuals and Software)

4. Installation

4.1. Installation Remarks

Do not install the product in a location subject to high temperature (over 50°C), low temperature (below -10°C), or high humidity. Doing so may cause fire or electric shock. Keep out of direct sunlight and heat radiation sources. This may cause fire. Avoid aiming the camera directly towards extremely bright objects such as the sun, as this may damage the image sensor.

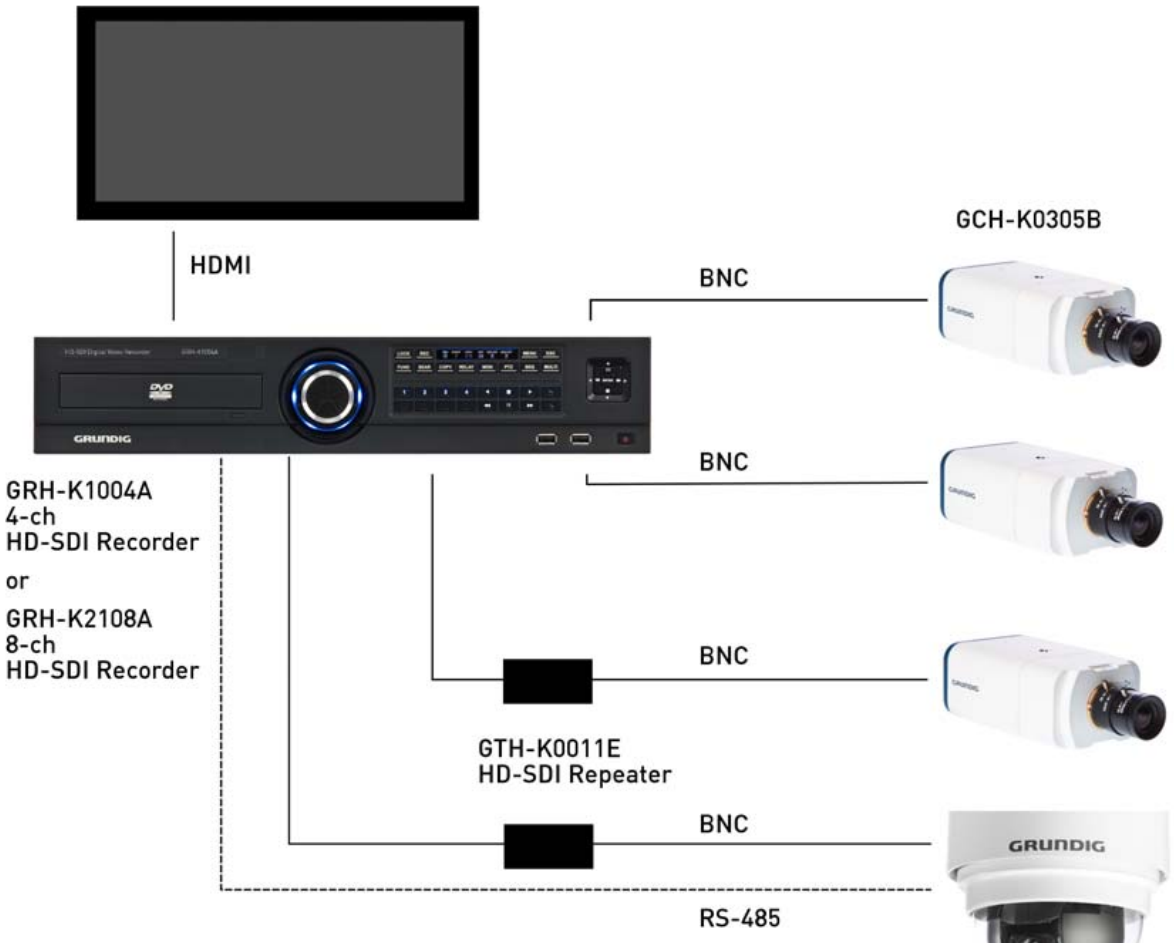
Do not install the unit in humid, dusty or sooty locations. Doing so may cause fire or electric shock. Install it in a place with good ventilation.

When installing the unit, fasten it securely and firmly. A falling unit may cause personal injury.

If you want to relocate the already installed product, be sure to turn the power off and then move or reinstall it.

General Operation Requirements:
At least one control device is required for operation, such as a Control Keyboard, a DVR or a PC. The Motordome Cameras contain a built-in receiver that decodes commands originating from a control device.

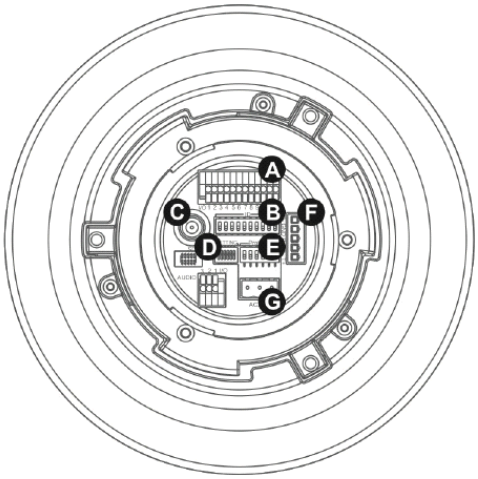
Connect the HD-SDI Motordome Camera to other devices as shown in the diagram to complete a video surveillance solution.



4.2. Switch & Connector Definition

Before connecting the Dome Camera to other devices of a CCTV system, please complete first the Dome Camera's ID and communication switch settings. These switches are located on the bottom of the Dome Camera. Additionally, the 22-Pin Connector for Data Cable connection and the ISP Connector for firmware upgrade kit connection are located on the back plate of the analogue Swiftdome Camera.

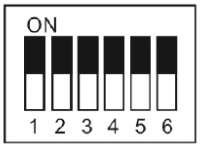
There are various switches and connectors located on the Dome Camera's back plate as shown in the pictures below. Please refer to the diagram and the table for use of each switch/connector.



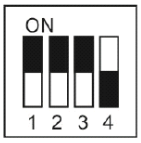
Item	Definition	Remark
A	I/O	ALARM I/O
B	ID	Dome Camera ID Setup DIP Switch
C	HD-SDI	HD-SDI Signal Output
D	SETTING	Communication Switch Setting
E	Protocol	Camera Control Protocol Setting
F	RS485	RS485 Connector
G	AC24V Connector	Power Connector

4.3. Communication Switch Setting

The Dome Camera's communication switches are specified in the table below.

Communication Switch		
	SW 1	RS-485 Setting
	SW 2	
	SW 3	
	SW 4	
	SW 5	Reserved
	SW 6	Reserved

RS-485 is the interface for communication between the Dome Camera and its control device. For this reason, the RS-485 setup of the Dome Camera and the control device must be the same. The RS-485 default setting is half-duplex (see the following diagram). Please do not change the default setting without the notice of a qualified specialist or supplier.

RS-485 Setting	
Half-duplex	**Full-duplex**
	

4.4. ID Configuration

Please change the Dome Camera's ID if there is more than one Dome Camera in the same network. Use this switch to change your Motordome Camera's ID by setting the 10-bit dip switch. For instance, if the camera's ID is 006, set the SW 8 and SW 9 to "ON", the rest to "OFF," as shown below.

For switch configuration details, please refer to the Switch Settings Index Table (Chapter 6) in this manual.

NOTE: No two Dome Cameras should be given the same ID, otherwise a communication conflict may occur.

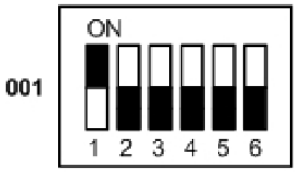
4.5. Camera Control Protocol Setup

Define the protocol you are going to use based on the devices of your surveillance system. Generally, the use of one protocol is recommended even if the devices are provided from different manufacturers. Please refer to the table below for all supported protocols with their matching switch numbers and baud rate and choose a protocol for your Motordome Camera.

The table below shows various protocols with their matching switch numbers and baud rates.

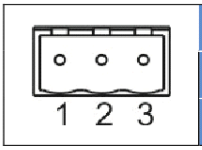
No.	Protocol	Baud Rate	Switch Setting					
			SW 1	SW 2	SW 3	SW 4	SW 5	SW 6
00	VCL	9600	OFF	OFF	OFF	OFF	OFF	OFF
01	Pelco D	2400	ON	OFF	OFF	OFF	OFF	OFF
02	Pelco P	4800	OFF	ON	OFF	OFF	OFF	OFF
04	Chiper	9600	OFF	OFF	ON	OFF	OFF	OFF
05	Philips	9600	ON	OFF	ON	OFF	OFF	OFF
07	DSCP	9600	ON	ON	ON	OFF	OFF	OFF
08	AD422	4800	OFF	OFF	OFF	ON	OFF	OFF
09	DM P	9600	ON	OFF	OFF	ON	OFF	OFF
11	Pelco D	4800	ON	ON	OFF	ON	OFF	OFF
12	Pelco D	9600	OFF	OFF	ON	ON	OFF	OFF
13	Pelco P	2400	ON	OFF	ON	ON	OFF	OFF
14	Pelco P	9600	OFF	ON	ON	ON	OFF	OFF
15	JVC	9600	ON	ON	ON	ON	OFF	OFF
21	Kalatel-485	9600	ON	OFF	ON	OFF	ON	OFF
22	Kalatel-422	4800	OFF	ON	ON	OFF	ON	OFF
23	Panasonic	19200	ON	ON	ON	OFF	ON	OFF

Use the 6-bit dip switch (Camera Control Protocol Switch) to set your camera's control protocol and its baud rate.



4.6. Power Connection

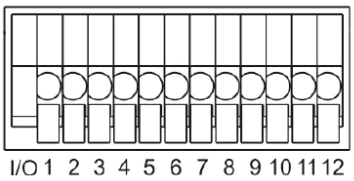
Please refer to the illustrations below for power connector definition before wiring.



SW 1	AC24V_1
SW 2	GND
SW 3	AC24V_2

4.7. Alarm Application

The Camera supports 4 digital alarm inputs and 2 digital alarm outputs. Please make sure the alarm connections are properly wired before starting to configure the alarm related settings. Please refer to the pin definition table below for alarm system wiring.

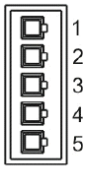


Pin	Definition
1	ALM_IN_1
2	ALM_IN_2
3	ALM_IN_3
4	ALM_IN_4
5	GND
6	ALM_OUT_COM_2

Pin	Definition
7	ALM_OUT_NC_2
8	ALM_OUT_NO_2
9	GND
10	ALM_OUT_COM_1
11	ALM_OUT_NC_1
12	ALM_OUT_NO_1

4.8. RS-485 Connector Definition

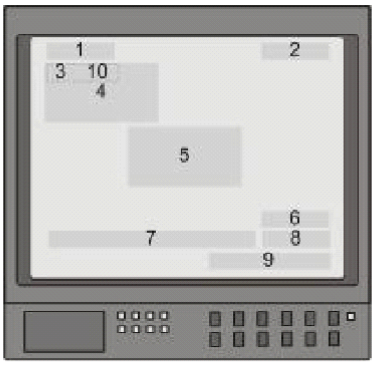
Please refer to the illustrations below for RS485 connector definition before wiring.

RS485 Connector		
	SW 1	R-
	SW 2	GND
	SW 3	R+
	SW 4	T-
	SW 5	T+

5. Operation and Configuration

5.1. OSD Display Format

Regarding information about the OSD display, position and function description, please refer to the table below.



No.	Function	OSD Display	Description
1	Motion	MOTION	Alarm Detection Message
2	Alarm	ALARM 1	Alarm Message
3	Focus Modes & Backlight	A	Auto Focus Mode
		M	Manual Focus Mode
		X	Back Light Compensation OFF
		B	Back Light Compensation ON
4	Booting Message	XX...(Dome Type); ID: 001 (Default) Pelco-D/9600 (Default) INITIALIZING	Shows Dome Type, ID Address, Protocol and Baud Rate
5	Error Message	PAN ERROR TILT ERROR CAM MODULE ERROR	Shows the system initialising error message
6	Zoom Ratio	x1	Present Zoom Ratio (Optical Zoom/Digital Zoom)
7	Title	• Maximum 20 characters for each title • 16 sets of title are available	
8	Camera ID	001	Shows the camera ID
9	Time	XXXX/XX/XX XX:XX	Year/Month/Day Hour: Minute
10	Position Display	XX YYY/YY	**XX:** facing direction of PTZ including N, E, Z, W, NE, SE, SW, SN **YYY/YY:** angle of PTZ, 0~359/ 10~-90

5.2. OSD Menu Tree

The OSD setup menu structure is listed in the following section. The star symbol indicates the factory default. For detailed function description, please refer to 5.3. Configuration Menu.

Item	Layer 1	Layer 2	Layer 3	Default
VIDEO TYPE	VIDEO TYPE	PAL/ NTSC		-
	RESOLUTION	1920 x 1080, 1280 x 720		-
	SAVE & RESET			-
DEFAULT CAMERA	<ON>, <OFF>			ON
BACKLIGHT	<ON>, <OFF>			OFF
FOCUS	AUTO	AF MODE: <NORMAL>, <Z. TRIG.>, <PTZ TRIG.>		☆
		EXIT+SAVE		-
	MANUAL			-
AE MODE	EXPOSURE COMP.	<ON>, <OFF>		OFF
	AE MODE	AUTO	BRIGHT VALUE/ SHUTTER SPEED/ IRIS VALUE/ GAIN VALUE: AUTO	☆
			EXIT + SAVE	-
		SHUTTER	SHUTTER SPEED: PAL: <1/50> ~ <1/10000> SEC. NTSC: <1/60> ~ <1/10000> SEC.	-
			EXIT + SAVE	-
		IRIS	IRIS VALUE: <F1.6> ~ <F28>	-
			EXIT + SAVE	-
		MANUAL	BRIGHT VALUE: AUTO	-
			SHUTTER SPEED: PAL <1/50> ~ <1/10000> SEC. NTSC <1/60> ~ <1/10000> SEC.	-
			IRIS VALUE: <F1.6> ~ <F28>	-
			GAIN VALUE: <-3>dB ~ <28>dB	-
			EXIT + SAVE	-
	EXIT+ SAVE			-
WBC MODE	AUTO (Auto White Balance)			☆
	INDOOR			-
	OUTDOOR			-
	ATW (Auto-tracing WBC)			-
	MANUAL	R GAIN: <000> ~ <127>		-
		B GAIN: <000> ~ <127>		-
		EXIT + SAVE		-
SETUP MENU 1	SLOW SHUTTER: NONE			NONE
	D.N.R.	<ON>, <OFF>		OFF
	IMAGE INVERSE	<ON>, <OFF>		OFF
	APERTURE:	<01> ~ <16>		04
	EXIT			-
SETUP MENU 2	FLIP	FLIP: <OFF>, <M.E.>, <IMAGE>		OFF
		EXIT & SET		-
	ANGLE ADJUSTER	MIN ANGLE: <-10> ~ <+10> DEG		00
		MAX ANGLE: ME: <80> ~ <100> DEG; IMAGE: <170>~<190> DEG		90
		EXIT SET		-

Item	Layer 1	Layer 2	Layer 3	Default
	PT POSITION	PT DISPLAY: <ON>, <OFF>		OFF
		SET PAN ZERO: <PT MOVE>, <TO SAVE>		-
		EXIT		-
	SPEED BY ZOOM	<ON>, <OFF>		OFF
	AUTO CALI.	<ON>, <OFF>		OFF
	PASSWORD	<ON>, <OFF>		OFF
	OSD AUTO CLOSE	<OFF>, <5> ~ <30> SEC.		20
	SYSTEM RESET	SYSTEM RESET		-
		DEFAULT SYSTEM		-
		EXIT		-
	EXIT			-
ID DISPLAY	<ON>, <OFF>			ON
TITLE DISPLAY	<ON>, <OFF>			OFF
TITLE SETTING	<01> ~ <16>			01
PRESET	PRESET SET	<001>~<256>		-
	PRESET RUN	<001>~<256>		-
	EXIT			-
SEQUENCE	SEQUENCE LINE	<1> ~ <8>		-
	SEQUENCE POINT	<01> ~ <64>		-
	PRESET POS.	<001> ~ <255>, <END>		-
	SPEED	<01> ~ <15>		-
	DWELL TIME	<000> ~ <127> SEC.		-
	RUN SEQUENCE			-
	EXIT			-
AUTOPAN	AUTOPAN LINE	<1> ~ <4>		-
	START POINT	<PT MOVE>, <TO SAVE>		-
	END POINT	<PT MOVE>, <TO SAVE>		-
	DIRECTION	<RIGHT>, <LEFT>		-
	SPEED	<01> ~ <04>		-
	RUN AUTOPAN			-
	EXIT			-
CRUISE	CRUISE LINE	<1> ~ <8>		-
	RECORD START	<ENTER>		-
	RECORD END	<ENTER>		-
	RUN CRUISE	<ENTER>		-
	EXIT			-
HOME SETTING	HOME FUNCTION	<ON>, <OFF>		OFF
	SELECT MODE	<PRESET>, <SEQUENCE>, <AUTOPAN>, <CRUISE>		-
	PRESET POINT/ SEQUENCE LINE/ AUTOPAN LINE/ CRUISE LINE	PRESET POINT: <001> ~ <256>		-
		SEQUENCE LINE: <1> ~ <8>		-
		AUTOPAN LINE: <1> ~ <4>		-
		CRUISE LINE: <1> ~ <8>		-
	RETURN TIME	<1> ~ <128> MIN.		-
	GO			-
	EXIT			-
IR FUNCTION	AUTO	THRESHOLD: <MID>, <HI>, <LOW>		☆
		EXIT + SAVE		
	MANUAL	IR MANUAL: <ON>, <OFF>		-
		EXIT + SAVE		-
ALARM SETTING	ALARM PIN	<1> ~ <8>		-
	ALARM SWITCH	<ON>, <OFF>		OFF
	ALARM TYPE	<NO> (Normal Open), <NC> (Normal Close)		-
	ALARM ACTION	<PRESET>, <SEQUENCE>, <AUTOPAN>, <CRUISE>		-
	PRESET POINT/ SEQUENCE LINE/ AUTOPAN LINE/ CRUISE LINE	PRESET: <001> ~ <256>		-
		SEQUENCE: <1> ~ <8>		-
		AUTOPAN LINE: <1> ~ <4>		-
		CRUISE LINE: <1> ~ <8>		-

Item	Layer 1	Layer 2	Layer 3	Default
	DWELL TIME	<001> ~ <127> Sec., <ALWAYS>		-
	ALARM PRIORITY	<1> ~ <8>		-
	ALARM OUTPUT	<1>, <2>, <OFF>, <BOTH>		
	EXIT			-
WDR FUNCTION	<ON>, <OFF>			OFF
PRIVACY MASK	PRIVACY SWITCH	<ON>, <OFF>		OFF
	TRANSPARENCY	<ON>, <OFF>		-
	COLOR	<BLACK>, <WHITE>, <RED>, <GREEN>, <BLUE>, <CYAN>, <YELLOW>, <MAGENTA>		-
	SET MASK	<01> ~ <16>	H CENTER: L/R	-
			V CENTER: D/U	-
			H SIZE <000> ~ <080>	-
			V SIZE <000> ~ <060>	-
			EXIT + SAVE	-
	CLEAR MASK	<01> ~ <16>		-
	EXIT			-
TIME SETTING	TIME DISPLAY	<ON>, <OFF>		OFF
	SET YEAR	<00> ~ <99>		-
	SET MONTH	<01> ~ <12>		-
	SET DAY	<00> ~ <31>		-
	SET HOUR	<00> ~ <23>		-
	SET MINUTE	<00> ~ <59>		-
	EXIT+SAVE			-
SCHEDULE	SWITCH	<ON>, <OFF>		OFF
	POINT	<01> ~ <32>		-
	HOUR	<00> ~ <23>		-
	MINUTE	<00> ~ <59>		-
	MODE	NONE/ PRESET/ SEQUENCE/ AUTOPAN/ CRUISE/ IR FUNC.	NO FUNCTION	☆
			PRESET POINT: <001> ~ <256>	-
			SEQUENCE LINE <1> ~ <8>	-
			AUTOPAN LINE <1> ~ <4>	-
			CRUISE LINE <1> ~ <8>	-
			IR FUNCTION: <AUTO>, <ON>, <OFF>	-
	SCHEDULE RESET			-
	EXIT			-
EXIT OSD	YES			-

5.3. Configuration Menu

The detailed functions and parameter settings of your Motordome can be set by the OSD (On Screen Display) menu with a control device such as a control keyboard. The parameters that can be set through the OSD menu are described in the following sections.

To enter the OSD menu of the selected camera, use the PTZ menuof the Grundig HD-SDI recorder (see the manual of the GRH series recorder) or use a keyboard that can call the PTZ OSD by the used protocol.

To select a setup item, use the direction keys on the keyboard to move the OSD cursor in the OSD menu.

To set up items, use the direction keys on a keyboard to move the OSD cursor in the OSD menu. For items with <ENTER>, press the <CAMERA MENU> key on the control keyboard to enter their sub menus. For other items, users can use the right/left direction key to select the functions, and then press the <CAMERA MENU> key on the control keyboard to enter their sub menus.

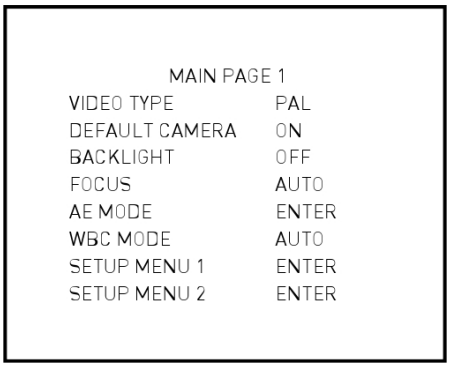
For further detailed setup procedures, please refer to the user's manual of your installed control devices.

NOTE: In the Camera OSD menu, the <CAMERA MENU> key functions as "ENTER" and "EXIT".

During the Motordome Camera's start-up, the OSD Start Page will display information including the ID number, protocol/baudrate and camera initialising message. Furthermore, when certain camera errors occur, the error message(s) will be shown on the screen. If the problem(s) cannot be solved at once, please contact your supplier for assistance.

5.3.1. VIDEO TYPE

Select the video format (NTSC/PAL) and resolution (1920x1080/1280x720) that matches the present TV system. When you select the resolution as <1920x1080>, the frame rate will be 30 fps for the NTSC system, and 25 fps for the PAL system. As for <1280x720>, the frame rate will be 60 fps for NTSC system and 50 fps for PAL system.



5.3.2. DEFAULT CAMERA

The DEFAULT CAMERA option is used to restore some camera settings back to default setting. The settings that are affected include Backlight, Focus, Exposure Compensation, AE, WBC, Aperture, Noise Reduction, IR Function, and WDR. Once any one of the items is modified, the setting will become <OFF> automatically. Select <ON> for this item to recall the mentioned camera parameters.

5.3.3. BACKLIGHT

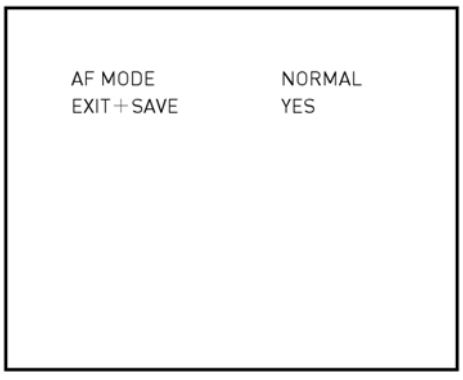
The Backlight Compensation function prevents the centre object from being too dark in surroundings where excessive light is behind the centre object.
When you set this item to <ON>, the centre object will be brightened in contrast to the edge of the picture (where backlight would most likely be located).

After completing the setup of backlight, go back to Main Page 1 and continue to set the focus values.

5.3.4. FOCUS

The Dome Camera's focus can be operated in two modes: Manual Focus mode and Auto Focus mode.

AUTO (AF MODE):
There are three options available for the AF Mode, including Normal mode, Zoom Trigger (Z. TRIG.) mode and PTZ Trigger (PTZ TRIG.) mode. The submenu of AUTO is shown below:



- Normal Mode:
In this mode, the camera will stay focussed automatically and continuously in any condition.

- Zoom Trigger Mode (Z. TRIG.):
In this mode, AF is activated at the time when zoom is changed.

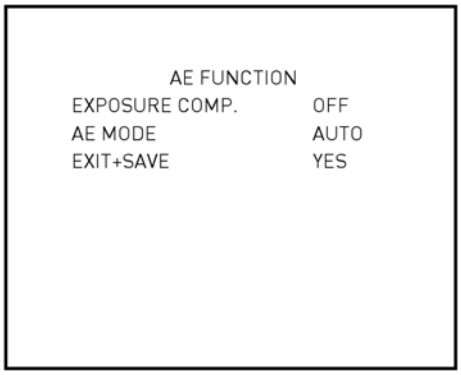
- PTZ Trigger Mode (PTZ TRIG):
In this mode, AF is triggered when the Dome Camera is set to pan, tilt or zoom.

- EXIT+SAVE:
Press <YES> to save the selected AF Mode.

MANUAL:
In this mode, users can adjust the focus to near/far via the control keyboard's Focus Near/Far key.

5.3.5. AE MODE

Exposure is the amount of light received by the image sensor and is determined by how wide you open the lens diaphragm (iris adjustment), by how long you keep the sensor exposed (shutter speed), and by other exposure parameters. With this item, users can define how the Auto Exposure (AE) function works.



EXPOSURE COMPENSATION:
The exposure value ranges from -10.5dB to 10.5dB. Select <OFF> to disable this function.

AE MODE:
- AUTO:
In this mode, the camera's Brightness, Shutter Speed, IRIS and AGC (Auto Gain Control) control circuits work together automatically to get consistent video output level.

- SHUTTER:
With this option, the Shutter speed takes main control of exposure. Bright Value, Iris and AGC will function automatically in cooperation with the shutter speed to achieve a consistent exposure output. The range of shutter speed starts from 1/10000 to 1/25 at PAL systems (NTSC: 1/10000 to 1/30).

- IRIS:
With this option selected the iris of the lens will control the exposure. Bright Value, Shutter Speed and AGC circuit will function automatically in cooperation with the Iris to get consistent exposure output. The opening of a lens controls the amount of light reaching to the surface of the selected device. By increasing the F-stop number (F1.6, F2, F2.4, etc.), less light is permitted to pass. The option range is from F1.6 to F28.

- MANUAL:
In this mode, users can adjust the Shutter Speed (NTSC: 1/10000 ~ 1/30, PAL:1/10000 ~ 1/25), the Iris Value (F1.6 ~ F28) and the Gain Value (-3dB ~ 28dB).

EXIT & SAVE:
Exit the AE FUNCTION menu and go back to the Main Page 1 to set the WBC mode.

5.3.6. WBC MODE

To display natural colours, the camera needs to know the reference colour temperature of the light source. Based on this reference colour temperature the camera will calculate the correct values for all colours. The camera can perform a measurement by itself or the user can set up the reference colour temperature manually. The scale unit of the colour temperature is Kelvin [K]. The following list shows the colour temperature of some light sources for reference.

Users can select one of the White Balance Control modes according to the operating environment.

Light Sources :
Cloudy Sky (Colour Temperature: 6,000 to 8,000 K)
Noon Sun and Clear Sky (Colour Temperature: 6,500 K)
Household Lighting (Colour Temperature: 2,500 to 3,000 K)
75-watt Bulb (Colour Temperature: 2,820 K)
Candle Flame (Colour Temperature: 1,200 to 1,500 K)

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

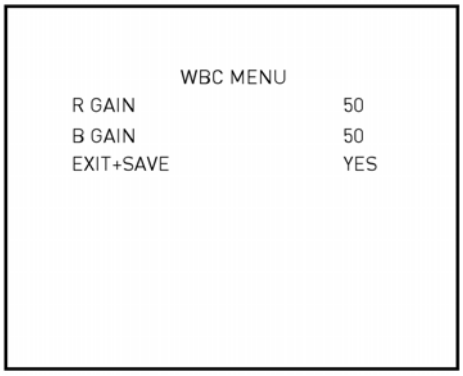
INDOOR:
3200 K Base mode.

OUTDOOR:
5800 K Base mode.

ATW (Auto Tracing White Balance):
The Dome Camera takes out the signals in a screen in the range from 2500 K to 10000 K.

MANUAL:
In this mode, users can change the White Balance value manually.

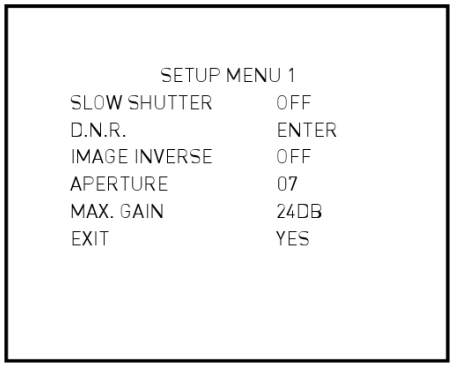
- R GAIN/ B GAIN:
R gain and B gain are adjustable and range from 0 to 127.



- EXIT & SAVE:
After the parameter setups relevant for WBC are completed, please exit the WBC MODE menu and go back to Main Page 1 to continue to set other functions under the Setup Menu 1.

5.3.7. SETUP MENU 1

In Setup Menu 1, users can set functions like Slow Shutter, Noise Reduction, Aperture and Video Type. Please refer to the following description for use of each function.



SLOW SHUTTER:
The shutter speed determines how long the image sensor is exposed to light. The Dome Camera will automatically adjust the shutter speed based on the light condition of the operating environment. With the Slow Shutter function, the camera will still produce a clear image in low light conditions under 0.1 lux.

DIGITAL NOISE REDUCTION:
With the Digital Noise Reduction (D.N.R.), the processor analyses pixel by pixel and frame by frame to eliminate environmental noise signal so that the highest quality image can be produced, even in low light conditions.

IMAGE INVERSE:
Users can select <ON> to make the displayed image inversed vertically and horizontally. Occasions to employ the function include conferences, demonstration, testing, etc. The default setting is <OFF>.

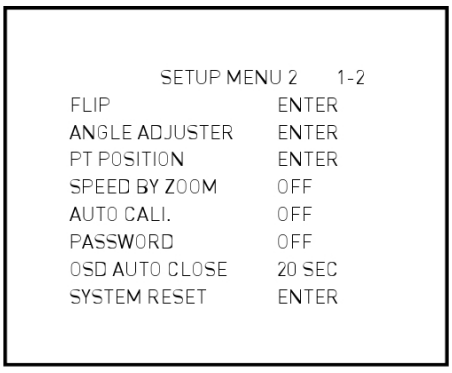
- Application:
Users can see the displayed images, when a dome is placed on top of a desk, for instance.

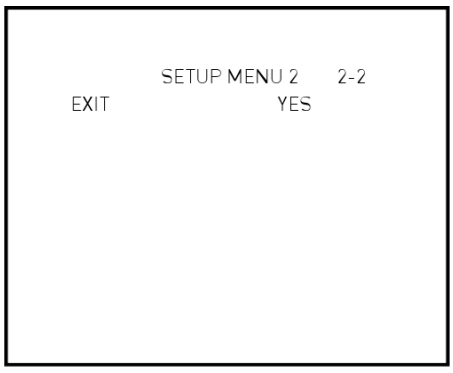
APERTURE:
Users can adjust the enhancement of the edges of objects in the picture. There are 16 levels of adjustment; the options are from <01> to <16>. <01> represents “no enhancement”. When shooting a text, this function can make the text sharp.

EXIT:
Exit the SETUP MENU 1 and go back to the MAIN PAGE 1 to set other functions under the Setup Menu 2.

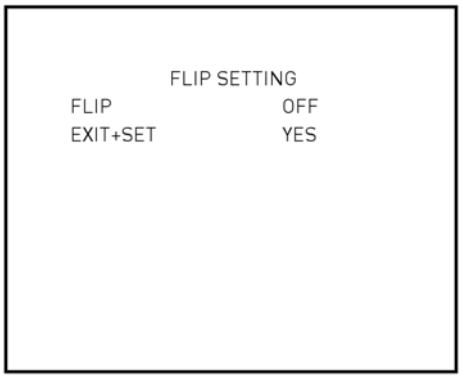
5.3.8. SETUP MENU 2

In Setup Menu 2, users can set functions including Flip, Angle Adjuster, PT Position, Speed by Zoom, Auto Calibration, Password, OSD Auto Close, and System Reset. Please refer to the following description for use of each function.





FLIP:
Users can track an object continuously when it passes through underneath the Dome Camera by setting Flip to IMAGE (digital flip) or M.E. (mechanical flip).



- IMAGE:
IMAGE represents a digital IMAGE FLIP, which enables users to keep tracking objects seamlessly. Under this mode, almost no delay occurs, in contrast to M.E. mode.

NOTE: The Privacy Mask function will be automatically disabled if the Image Flip function is enabled, and the screen will show "MASK WILL BE SET OFF."

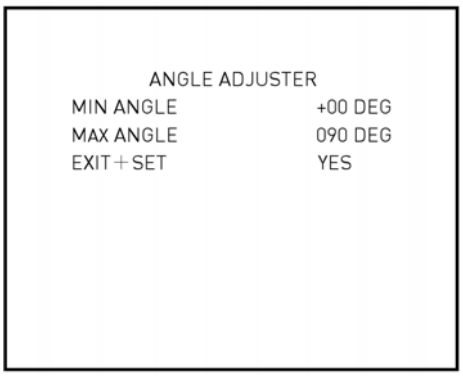
- M.E.:
M.E. is a standard mechanical operation. As the Dome Camera tilts to the maximum angle, it will pan 180°, and then continue tilting to keep tracking objects.

- OFF:
Select this item to disable the flip function.

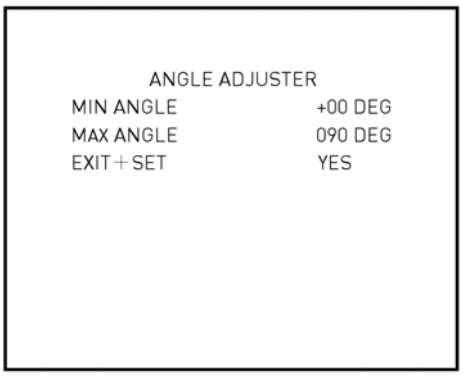
- EXIT & SET:
Exit the <FLIP Setting> menu and go back to <SETUP MENU 2> to set other functions.

NOTE: To make the Dome Camera tilt between a specific range, such as -10° to +100°, please go to ANGLE ADJUSTER (see next section) to set the angle range of the tilt. Otherwise, the camera will tilt 90° as set in the default setting.

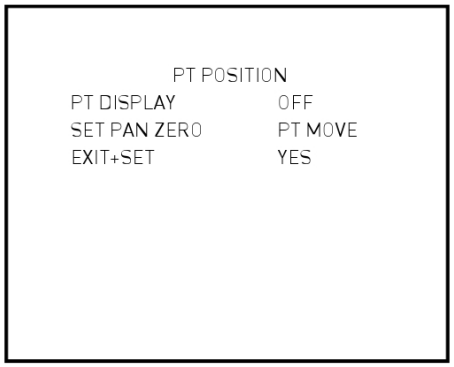
ANGLE ADJUSTER:
The item is for adjusting the angle range of tilt motion. The Range of tilt motion varies in different FLIP modes: the angle ranges from -10° to +100° in the M.E. FLIP and FLIP OFF modes and from -10° to +190° in the IMAGE FLIP mode.



- EXIT & SET:
Exit the <ANGLE ADJUSTER> menu and go back to <SETUP MENU 2> to set other functions.



PT POSITION:
PT Position can display the Pan/Tilt position of the Dome Camera on the screen.



- PT DISPLAY:
Turn the item to <ON> to display the pan/tilt position on the screen. The display format will be "XX YYY/ YY".

- SET PAN ZERO:
By using the <SET PAN ZERO> function, the user can set the north direction as coordinate zero.

The display will show eight different directions including N, E, S, W, NE, SE, SW, SN depending on the closest direction which the Dome Camera faces. The PAN range is from 0° to 359°, and the TILT range is from 10° to -90°. After lower than -90°, the PAN degree will be automatically added 180°.

Press <TO SAVE> to save the pan zero setting.

- EXIT & SET:
Exit the <PT POSITION> menu and go back to <SETUP MENU 2> to set other functions.

SPEED BY ZOOM:
If this item is set to <ON>, the pan/tilt speed will be adjusted by an internal algorithm when zooming automatically. A larger zoom ratio leads to a lower rotation speed.

AUTO CALI. (Auto Calibration):
There is one horizontal and one vertical infrared ray check point in each dome. When the dome camera's position is moved during installation or maintenance, the relative distance between the original set point and the check point can change. Enable the Auto Calibration function, so that the dome will automatically detect the distance change and reset the point back to the original position.

PASSWORD:
The administrator can activate the OSD Password function for security concerns. Once the function is turned on, the users are required to enter the password every time when accessing the OSD menu.

The password setting procedure is like the following:

STEP 1:
Choose a number with the direction keys and then press the <CAMERA MENU> key (ENTER) for input. For example: <0> <CAMERA MENU>, <1> <CAMERA MENU>, <2> <CAMERA MENU>, <3> <CAMERA MENU>.
PASSWORD: 0123

STEP 2:
In the second line, enter the same password again to confirm the setting.

STEP 3:
Move the cursor to <SAVE> and press <CAMERA MENU> to save the setting.

STEP 4:
Move the cursor to <EXIT> and press <CAMERA MENU to exit the password setting page.

If the OSD Password function is enabled and you press the <CAMERA MENU> key to enter the OSD menu, the password request message will be displayed as shown below. Please enter the password, press <ENTER> to access the OSD main menu.

NOTE: When you activate the Password Function for the first time, please enter first the following Master Password to be allowed to setup the new password. The Master Password is: 9527.

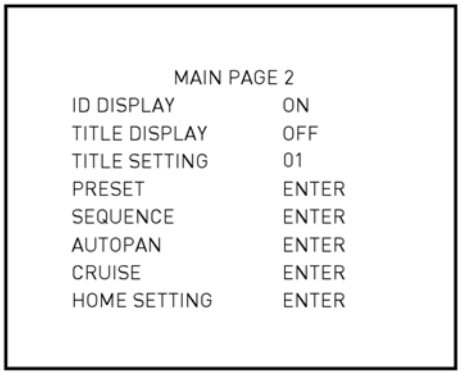
OSD AUTO CLOSE:
Users can specify the duration during which the OSD menu stays on the screen. The time selection ranges from 5 to 30 seconds. To let the OSD menu stay on the screen, please set this option to “OFF”.

SYSTEM RESET:
Two types of system reset can be implemented under this item:

- SYSTEM RESET:
Select this function for system reboot. Press “ENTER” and the system reboot will start.

- DEFAULT SYSTEM:
This function allows users to restore the camera to its factory default state. Press "ENTER" to start the reset.

EXIT:
Exit the SETUP MENU 2 and go to MAIN PAGE 2 to set other functions.



5.3.9. ID DISPLAY

Press the direction key down to turn the MAIN MENU page from 1 to 2, afterwards the menu item <ID DISPLAY> will be shown on the top. Users are allowed to choose whether the Dome Camera's ID will be displayed on the screen for identifying the domes. For more information, please refer to chapter 4.4. ID Configuration.

ON:
Display the ID of the selected dome at the right bottom of the monitor screen.

OFF:
Hide the ID of the selected dome.

5.3.10. TITLE DISPLAY

Users are allowed to name a certain view area and display its title for easy recognition. With this item, users can choose to display or not to display the titles set in advance.

ON:
A title set for a certain view will be displayed when the dome stays in the view area.

OFF:
When the TITLE DISPLAY is set to <OFF>, no title will be displayed on the screen, even when titles were set in advance.

5.3.11. TITLE SETTING

Up to 16 zone titles can be set with max. 20 characters for each title.

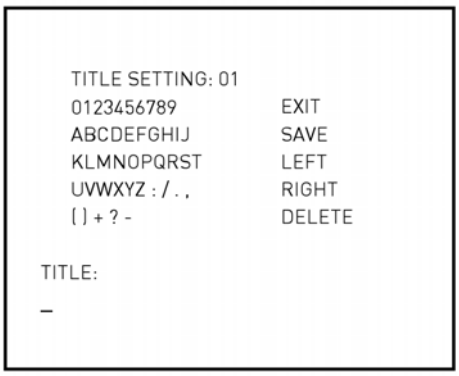
Follow the steps below to set a camera title.

STEP 1:
Move the dome to a view area for which you want to set a title.

STEP 2:
Access the OSD menu, go to MAIN PAGE 2 and select <TITLE SETTING>.

STEP 3:
Select a number that will represent the view area.

STEP 4:
Press the <CAMERA MENU> key (ENTER) to go to the editing page.



STEP 5:
Choose a character with the direction keys and then press the <CAMERA MENU> key (ENTER) for input. For example: <A> <CAMERA MENU>, <B> <CAMERA MENU>, <C> <CAMERA MENU>
TITLE: ABC

STEP 6:
To delete the input characters, move the cursor to <DELETE> and press <CAMERA MENU> to delete the selected character.

STEP 7:
When the setting is completed, move the cursor to <SAVE> and press <CAMERA MENU> to save.

After completing the title setting, go back to MAIN PAGE 2 to set up preset points.

5.3.12. PRESET

STEP 1:
Press the RIGHT/LEFT direction key on the keyboard to select a number (1 represents Preset Point 1, 2 represents Preset Point 2, etc.)

PRESET SET:
In total, 256 preset points can be set. Follow the steps below in the preset setting menu.

STEP 2:
Press the <CAMERA MENU> key (ENTER) on the keyboard, and then rotate the dome camera to a target shooting area/point.

STEP 3:
Press the <CAMERA MENU> key again to save the defined preset point.

Once the setup of a preset point is completed, users can move the cursor to the next item to run the preset point.

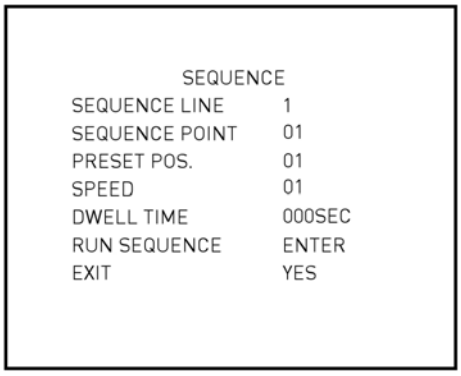
PRESET RUN:
Press the <CAMERA MENU> key (ENTER), and the camera will go to the appointed point. To run another defined preset point, simply press the right/left key on the keyboard, select the preset point to which you want to go to, and press the <CAMERA MENU> key (ENTER) again.

EXIT:
Exit the PRESET menu and go back to MAIN PAGE 2 to set up a sequence.

NOTE: Users can set preset points through a keyboard. Please refer to the control keyboard's quick guide for further information.

5.3.13. SEQUENCE

The function executes the pre-positioning of the pan, tilt, zoom and focus features in a certain sequence for a camera. Before setting this function, users must preset at least two preset points.



SEQUENCE LINE:
Up to eight sequence lines can be configured in this Camera. Please use the LEFT/RIGHT direction keys to first select a line and then set its sequence points.

SEQUENCE POINT:
Up to 64 points can be set up for each Sequence line. The Sequence Points represent the order of the preset points that the Dome Camera will automatically run. The following setup items, including Preset Position, Speed and Dwell Time, will influence how the camera runs through each sequence point.

PRESET POSITION:
Users can assign a specific preset position to the selected Sequence Point with this item. The available options are from <1> to <255> and <END>. <END> is used for the Sequence Point following the last Sequence Point when the amount of sequence points (please refer to the previous section) is less than 64 points.

NOTE: If you are not using all 64 points, please set the point following the last Sequence Point as <END> (PRESET POSITION) so that the sequence line can work properly. For example, if a user intends to set a Sequence Line with 5 sequence points. It is required to set the PRESET POSITION of Sequence Point 06 as <END>.

SPEED:
Users can set the pan/tilt speed of the Dome Camera from one Sequence Point to the next one. There are steps from 1 to 15 to define the speed the Dome Camera will use to move to the next Preset. Within this range, the PAN speed varies from 10 to 400 (degree/sec.), and the TILT speed varies from 8 to 400 (degree/sec.).

DWELL TIME:
The DWELL TIME is the duration time during which the Dome Camera will stay at a Sequence Point, and the range is from <000> to <127> seconds. The Dome Camera will go to the next sequence point when the DWELL TIME expires. If the setting is <000>, the Dome Camera will stay at this Sequence Point for less than 1 second and then shift to the next point.

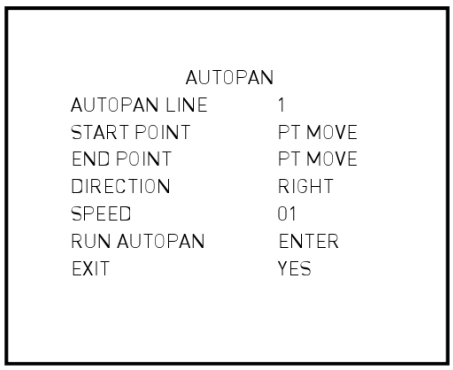
RUN SEQUENCE:
Users can command the Dome Camera to run the selected Sequence line manually. Press the <CAMERA MENU> key (ENTER) to execute a sequence line.

EXIT:
Select this item to exit the SEQUENCE menu and go back to MAIN PAGE 2 to set up an Auto Pan.

NOTE: Users can execute the sequence function through a keyboard. Please refer to the control keyboard's quick guide for further information.

5.3.14. AUTOPAN

To execute Auto Pan means scanning an area horizontally so that the Dome Camera can catch a horizontal view. The parameters are listed as follows.



AUTOPAN LINE:
Up to eight auto pan lines can be configured in this Camera. Users can choose to execute a line by using the LEFT/RIGHT direction keys. In addition, users are able to command the Dome Camera to do endless panning by setting the start point just like the end point.

START POINT:
Follow the description below to set the start position of the AUTOPAN path.

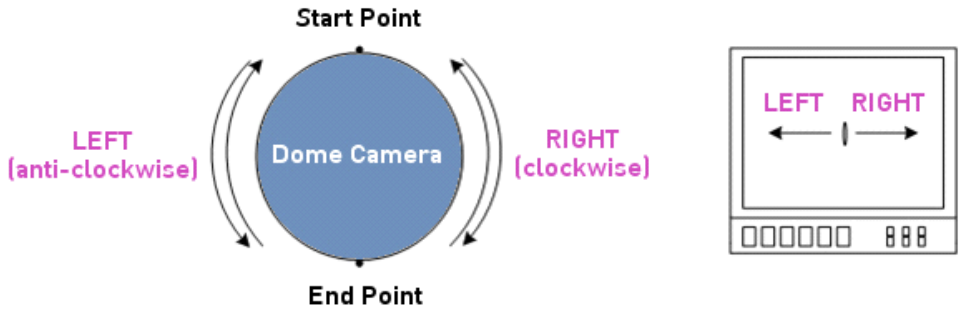
STEP 1:
Move the cursor to <START POINT> and press <ENTER> while the item <PT MOVE> is flashing. Then the item will turn to <TO SAVE> automatically.

STEP 2:
Move the Dome Camera to a desired position and press <ENTER> to save the position as the start point; the cursor will move to <END POINT> automatically. Make sure to set the end point to complete the Auto Pan setting.

NOTE: The tilt and zoom values of the start point will be recorded and fixed for the selected Auto Pan line.

END POINT:
Users are able to set the end point after the start point is defined. Pan the Dome Camera to another position and press <ENTER> to save the position as the end point.

DIRECTION:
This item is for setting the AUTOPAN direction of the Dome Camera. The camera will start to pan clockwise from the start point to the end point if your selection is <RIGHT>, and then return to the start point. The dome will start to pan anti-clockwise from the start point to the end point if your selection is <LEFT>. Please refer to the diagram below.



SPEED:
This item is for defining the Dome Camera rotation speed while running an Auto Pan. The speed is adjustable from 1 to 4 (10 ~ 45 degrees/sec.).

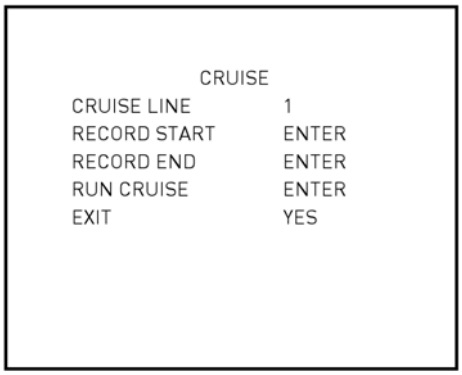
RUN AUTOPAN:
After all settings related to Auto-Pan are completed, select this item to execute the Auto-pan function. Press the <CAMERA MENU> key (ENTER) to run an Auto-Pan path.

EXIT:
Exit the AUTOPAN setup menu and go back to MAIN PAGE 2 to set up a cruise.

NOTE: Users can execute the Auto Pan function through a keyboard. Please refer to the control keyboard's quick guide for further information.

5.3.15. CRUISE

CRUISE is a route performed through manual operation, i.e. through adjusting the pan and tilt position manually. A saved Cruise can be recalled repeatedly, which means this Cruise can be executed time and time again when necessary.



CRUISE LINE:
Up to eight cruise lines can be configured in this Camera. Please use the LEFT/RIGHT direction keys to first select a line and then follow the steps below to start recording the cruise path.

RECORD START:
Follow the description below to record a CRUISE path.

STEP 1:
Rotate the Dome Camera to a desired view area (for some protocols, users may need to do it before entering the OSD menu), and press <ENTER> to perform a cruise path using the joystick on the control device. The already used up percentage of the memory buffer will be displayed on the screen.

STEP 2:
Pan and tilt the Dome Camera to form a path.

NOTE: Beware of the memory size when building a Cruise route. Once the buffer percentage reaches 100%, the recording of the path will stop.

RECORD END:
The cursor will be moved to RECORD END while creating the cruise line; when the setting is completed, press <ENTER> to save the path.

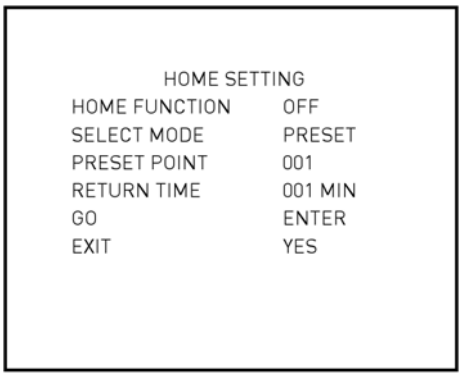
RUN CRUISE:
After the cruise setting is completed, press the <CAMERA MENU> key (ENTER) to run the defined Cruise path.

EXIT:
Exit the CRUISE setup menu and go back to MAIN PAGE 2 to set up a home setting.

NOTE: Users can also execute the cruise function through a keyboard. Please refer to the control keyboard's quick guide for further information.

5.3.16. HOME SETTING

Users are able to set an operation mode to ensure constant monitoring. If the Dome Camera idles for a period of time, the selected function will be activated automatically; this is the HOME function. The HOME function allows constant and accurate monitoring to avoid that the Dome Camera stops or misses events.



HOME FUNCTION:
The item is used to enable or disable the HOME function. Use the left/right direction keys of the control keyboard to change the setting.

SELECT MODE:
Select one of the modes that the Dome Camera should execute when the HOME function is enabled and the RETURN TIME is up. The options include <AUTOPAN>, <SEQUENCE>, <CRUISE> and <PRESET>. Use the LEFT/RIGHT direction keys on the control keyboard to change the setting, and the items mentioned below will change in cooperation with your selection.

- PRESET POINT:
Select a Preset Point to which the Dome Camera should go after the Return Time function, which will be explained later, is activated. The preset point(s) should be set in advance, either in the PRESET setup menu or through the keyboard.

- SEQUENCE LINE:
Select a Sequence Line that the Dome Camera should execute when an alarm is triggered. The Sequence Line(s) should be defined in advance in the SEQUENCE setup menu.

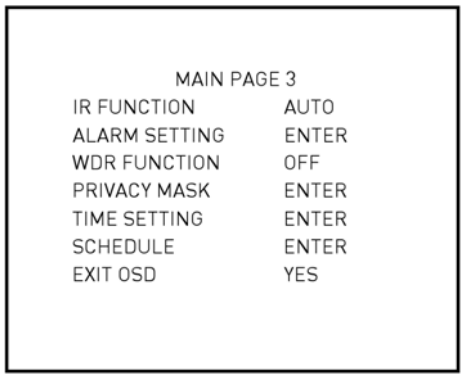
- AUTOPAN LINE:
Select an Auto Pan Line that the Dome Camera should execute when an alarm is triggered. The Auto Pan Line(s) should be defined prior in the AUTOPAN setup menu.

- CRUISE LINE:
Select a Cruise Line that the dome camera should execute when an alarm is triggered. The Cruise Line(s) cshould be defined prior in the CRUISE setup menu.

RETURN TIME:
The Dome Camera starts to count down the selected RETURN TIME when the camera idles, and it will execute the SELECT MODE function if the return time is up. The RETURN TIME ranges from 1 to 128 minutes.

GO:
If the HOME function is enabled, the users are allowed to execute the HOME function manually by selecting this item.

EXIT:
Exit the HOME SETTING menu. Then go to MAIN PAGE 3 to carry on with other setups.



5.3.17. IR FUNCTION

With the IR cut filter, the Dome Camera can still catch a clear image at night time or in a very dark light condition. During day time, the IR cut filter will be on to block the infrared light for a clear image. During night time or in dark light condition, the IR cut filter will be removed to catch infrared light, and the displayed images will become black and white.

AUTO:
The Internal circuit will automatically decide to remove the IR cut filter according to the light condition calculated by the internal light algorithm.

- THRESHOLD:
The Dome Camera will remove the filter immediately when the threshold value is reached. The threshold options are <LOW>, <MID> and <HI>. <LOW> threshold indicates a higher sensitivity and can improve reliability of the lens so that it is easier to switch to Day mode and relatively difficult to change into Night mode. While <HI> indicates that it is easier to switch to Night mode and difficult to change into Day mode.

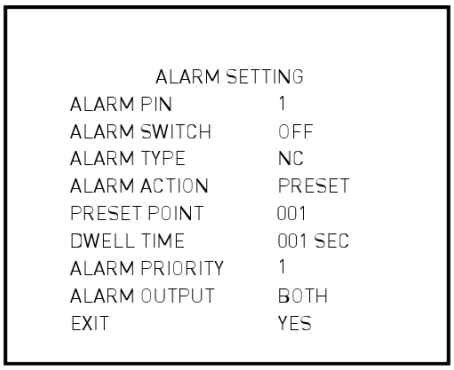
MANUAL:
- IR MANUAL ON:
Select the item to remove the IR cut filter. The camera will change to B/W (Night) mode.

- IR MANUAL OFF:
Select the item to attach the IR cut filter; the camera will be in Colour (Day) mode to disable the IR function.

EXIT & SAVE:
Exit the <IR FUNCTION> menus and go back to <MAIN PAGE 3> to set other functions.

5.3.18. ALARM SETTING

The Motordome Camera provides four alarm inputs and two alarm outputs (N.O. and N.C.) to connect alarm devices. With this function, the Motordome Camera will cooperate with the alarm system to catch the images of an event. For wiring, please refer to chapter section 4. Installation and/or qualified service personnel. The adjustable alarm parameters are listed below.

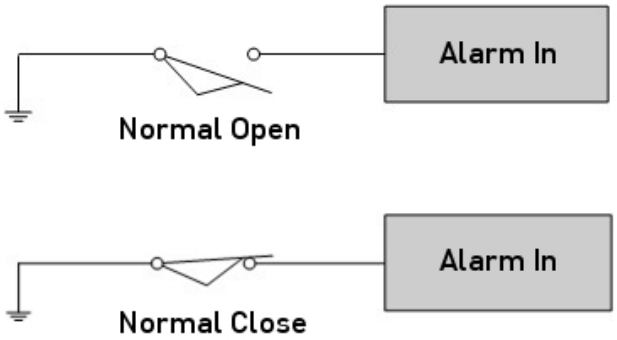


ALARM PIN:
The dome provides 4 alarm inputs and 2 outputs (N.O. or N.C.). Select an alarm connector of which you want to set the alarm-related parameters, and then set its alarm-related parameters in the Alarm Setting menu. For alarm pin definitions, please refer to chapter 4.7. Alarm Application.

NOTE: If two or more alarm pins are triggered at the same time, a smaller alarm pin number will have higher priority of being handled. For example, if Alarm-1 and Alarm-3 are triggered simultaneously, only Alarm-1 will actually be handled.

ALARM SWITCH:
This item is used to enable or disable the selected alarm pin function. Use the LEFT/RIGHT direction keys on the control keyboard to change the setting.

ALARM TYPE:
There are two kinds of alarm types: Normal Open and Normal Close, which are illustrated below. Select an alarm type that corresponds with your alarm application.



ALARM ACTION:
The alarm actions include PRESET, SEQUENCE, AUTOPAN and CRUISE functions. Select one of these modes for a certain action to be executed when an alarm is triggered. Use the RIGHT direction key of the control keyboard to select a particular action mode. The items listed below will change according to your selected alarm action. Additionally, when an alarm is triggered, there the flash warning notice "ALARM" will be displayed in the upper right corner of the screen.

NOTE: After an alarm condition (Dwell Time Setting: 1~127 seconds/ ALWAYS) was released, the Dome Camera will go back to the previous status before an alarm was triggered.

- PRESET POINT:
Select a Preset Point to which the Dome Camera should go when an alarm is triggered. The preset point(s) should be set in advance, either in the PRESET setup menu or through the keyboard.

- SEQUENCE LINE:
Select a Sequence Line that the Dome Camera should execute when an alarm is triggered. The sequence line(s) should be defined in advance, either in the SEQUENCE setup menu or through the keyboard.

- AUTOPAN LINE:
Select an Auto Pan Line that the Dome Camera should execute when an alarm is triggered. The Auto Pan Line(s) should be defined in advance, either in the AUTOPAN setup menu or through the keyboard.

- CRUISE LINE:
Select a Cruise Line that the Dome Camera should execute when an alarm pin is triggered. The Cruise Line(s) should be defined in advance, either in the CRUISE setup menu or through the keyboard.

DWELL TIME:
The DWELL TIME is the duration during which an alarm action is executed. If the PRESET mode is selected when an alarm takes place, the Dome Camera will go to the selected preset position and stay there for a user-defined period of time (1 ~ 127 seconds/Always) when an alarm takes place. If other modes (SEQUENCE/AUTOPAN/CRUISE) have been selected, the camera will keep executing the selected mode (DWELL TIME: ALWAYS) until the alarm condition is released or the users rotate the joystick to change the status of the Dome Camera.

NOTE: The dwell time is only adjustable when Preset is selected as the alarm action. When the dwell time is up, the Dome Camera will go back to the trigger position and recheck the alarm pin status.

ALARM PRIORITY:
Set the alarm priority from <1> to <4> for each alarm pin. If two or more alarms are triggered at the same time, a smaller alarm priority number will have higher priority of being handled. The default alarm priority is <1>.

ALARM OUTPUT:
Here you can define which Alarm Out output will be triggered when an event happened.

- OFF: Both outputs are disabled
- 1: The output no. 1 will be triggered
- 2: The output no. 2 will be triggered
- BOTH: Both outputs will be triggered

EXIT:
Exit the <ALARM SETTING> menu and go back to <MAIN PAGE3> to carry on with other setups.

5.3.19. WDR FUNCTION

The Wide Dynamic Range (WDR) function is especially effective in solving indoor and outdoor contrast issues to enhance better image quality and video display. It enables the Dome Camera to catch detailed data from the dark part (Indoor) without any saturation from the bright part (Outdoor).

NOTE: The Backlight function will be turned off automatically when the WDR function is enabled because the WDR function has better effects than Backlight Compensation.

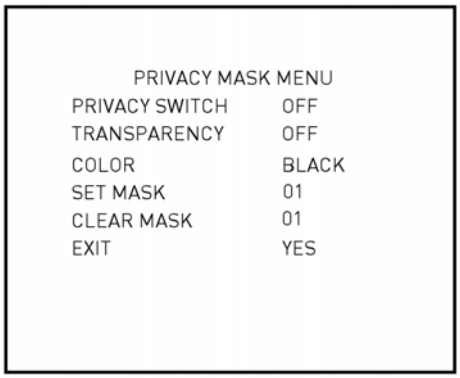
- ON:
Activate the WDR function by selecting this option. In this mode, the Dome Camera will operate the WDR function automatically.

- OFF:
Deactivate the WDR function.

Exit the WDR FUNCTION menu and go down in to MAIN PAGE 3 to set up a Privacy Mask.

5.3.20. PRIVACY MASK

The Privacy Mask function aims to avoid any intrusive monitoring. Users can adjust the camera view position using the joystick, and adjust the mask size and area via the direction keys on the control keyboard. When setting a mask, it is suggested to set it at least twice bigger (height and width) than the masked object. The Dome Camera will assume that the center of the selected view is the starting point, and the joystick will be locked as users enter the SET MASK menu (this will be explained later). Please refer to the following description for setting privacy masks.



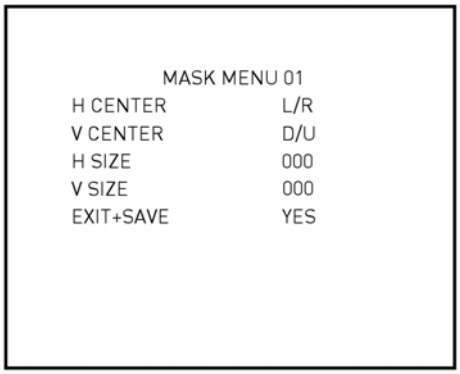
NOTE: The Image Flip function will be disabled automatically while the Privacy Mask function is enabled.

PRIVACY SWITCH:
Users can enable or disable the Privacy Mask function through this item. Set this item to <ON> before configuring mask zones.

TRANSPARENCY:
The colour of a privacy mask can be set as transparent. Select <ON> to display transparent masks.

COLOR:
The colour of a privacy mask can be set through this item. The available colours are black, white, red, green, blue, cyan, yellow and magenta.

SET MASK:
Use the control device to move the Dome Camera to the area where you want to set a mask. Press <ENTER> to enter the mask setting menu. The dome will memorise the present position as a privacy mask position. Up to 16 masks can be set.



- H CENTER:
The original horizontal centre of a mask zone is the centre of a screen. It is possible to move a mask zone to another position by adjusting the horizontal value with the LEFT/RIGHT direction keys on the keyboard. The camera will pan right or left according to user's control.

- V CENTER:
The original vertical centre of a mask zone is the center of a screen. It is possible to move a mask zone to another position by adjusting the vertical value with the LEFT/RIGHT direction keys on the keyboard. The camera will tilt up or down according to the user's control.

- H SIZE (00~80):
Users can adjust the horizontal size of a privacy mask through this item. Setting the H and V size to 0 can delete the selected mask.

- V SIZE (00~60):
Users can adjust the vertical size of a privacy mask through this item. Setting the H and V size to 0 can delete the selected mask.

- EXIT & SAVE:
Exit the <SET MASK> menu and save the settings.

CLEAR MASK:
Users can delete a preset mask zone with this item. Please follow the steps listed below.

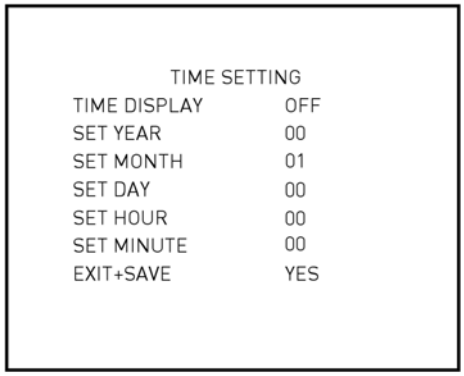
STEP 1: Select the mask zone that is to be erased (e.g. 01).

STEP 2: Press <ENTER> to confirm your selection.

EXIT:
Exit the PRIVACY MASK menu and go back to MAIN PAGE 3 to carry on with the time related setup.

5.3.21. TIME SETTING

The time setting function is used to set the TIME related parameters of the Motordome Camera. Each item in the menu is listed as follows.



TIME DISPLAY:
Select <ON> to display Time information on the screen or <OFF> not to display this information.

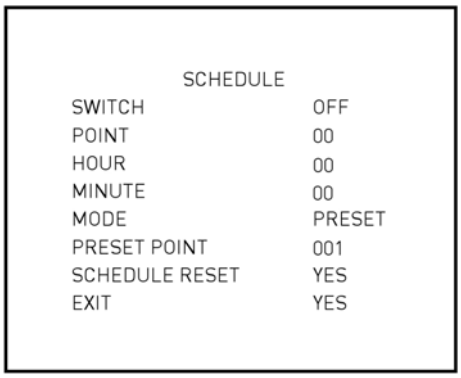
SET YEAR / MONTH / DAY:
These items are for setting up the system date.

SET HOUR / MINUTE:
These items are for setting up the system time.

EXIT+SAVE:
Exit the TIME SETTING menu and go back to MAIN PAGE 3 to set up a schedule.

5.3.22. SCHEDULE FUNCTION

The schedule function enables users to program the performance of a preset point or function (Sequence/Auto Pan/Cruise) automatically, in a specific period of time.



SWITCH:
Select <ON> to enable or <OFF> to disable the schedule function.

POINT:
Users are allowed to arrange 32 sets of schedule points, i.e. to each set of schedule points, one kind of schedule mode can be assigned.

HOUR / MINUTE:
These items are for setting up the time in which each schedule point is to be executed.

MODE:
This is for setting the schedule function of the selected schedule point. The options are listed as follows.

- NONE:
No action will be executed for the schedule if this item is selected.

- PRESET:
Users can select the PRESET mode as an action carried out in a schedule point.

- SEQUENCE:
Users can select the SEQUENCE mode as an action carried out in a schedule point.

- AUTOPAN:
Users can select the AUTOPAN mode as an action carried out in a schedule point.

- CRUISE:
Users can select the CRUISE mode as an action carried out in a schedule point.

- IR FUNC. (IR Function):
If the IR function mode is selected, the AUTO IR FUNCTION will be activated for a schedule point.

SCHEDULE RESET:
Users can reset the whole schedule with this item.

EXIT:
Exit the SCHEDULE menu and go back to MAIN PAGE 3.

5.3.23. EXIT OSD

To exit the OSD setup menu, users can select this item at the bottom of MAIN PAGE 1 and MAIN PAGE 2.

6. Switch Settings Index Table

Please refer to the switch settings below for the Dome Camera's ID and protocol setup.

Camera ID Setup

ID No.	SWITCH SETTING									
	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-7	SW-8	SW-9	SW-10
0	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
1	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
2	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
3	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
4	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
5	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
6	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
7	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
8	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
9	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
10	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
11	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
12	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
13	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
14	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
15	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
16	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
17	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
18	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
19	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
20	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
21	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
22	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
23	ON	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
24	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
25	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
26	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
27	ON	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
28	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
29	ON	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
30	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
31	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF

ID No.	SWITCH SETTING									
	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-7	SW-8	SW-9	SW-10
32	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
33	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
34	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
35	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
36	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
37	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
38	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
39	ON	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
40	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
41	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
42	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
43	ON	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
44	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
45	ON	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
46	OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
47	ON	ON	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
48	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
49	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
50	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
51	ON	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
52	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
53	ON	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
54	OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
55	ON	ON	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
56	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
57	ON	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
58	OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
59	ON	ON	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
60	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF
61	ON	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF
62	OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF
63	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF
64	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
65	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
66	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
67	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
68	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
69	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF

ID No.	SWITCH SETTING									
	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-7	SW-8	SW-9	SW-10
70	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
71	ON	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
72	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
73	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
74	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
75	ON	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
76	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
77	ON	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
78	OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
79	ON	ON	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
80	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
81	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
82	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
83	ON	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
84	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
85	ON	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
86	OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
87	ON	ON	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
88	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
89	ON	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
90	OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
91	ON	ON	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
92	OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF
93	ON	OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF
94	OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF	OFF
95	ON	ON	ON	ON	ON	OFF	ON	OFF	OFF	OFF
96	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
97	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
98	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
99	ON	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
100	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
101	ON	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
102	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
103	ON	ON	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
104	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
105	ON	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
106	OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
107	ON	ON	OFF	ON	OFF	ON	ON	OFF	OFF	OFF

ID No.	SWITCH SETTING									
	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-7	SW-8	SW-9	SW-10
108	OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF
109	ON	OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF
110	OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF	OFF
111	ON	ON	ON	ON	OFF	ON	ON	OFF	OFF	OFF
112	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
113	ON	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
114	OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
115	ON	ON	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
116	OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF
117	ON	OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF
118	OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF	OFF
119	ON	ON	ON	OFF	ON	ON	ON	OFF	OFF	OFF
120	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF
121	ON	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF
122	OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF	OFF
123	ON	ON	OFF	ON	ON	ON	ON	OFF	OFF	OFF
124	OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF
125	ON	OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF
126	OFF	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF
127	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF
128	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
129	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
130	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
131	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
132	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
133	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
134	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
135	ON	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
136	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
137	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
138	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
139	ON	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
140	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
141	ON	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
142	OFF	ON	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
143	ON	ON	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
144	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
145	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF

ID No.	SWITCH SETTING									
	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-7	SW-8	SW-9	SW-10
146	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
147	ON	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
148	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
149	ON	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
150	OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
151	ON	ON	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
152	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
153	ON	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
154	OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
155	ON	ON	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
156	OFF	OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF
157	ON	OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF
158	OFF	ON	ON	ON	ON	OFF	OFF	ON	OFF	OFF
159	ON	ON	ON	ON	ON	OFF	OFF	ON	OFF	OFF
160	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
161	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
162	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
163	ON	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
164	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
165	ON	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
166	OFF	ON	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
167	ON	ON	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
168	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
169	ON	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
170	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
171	ON	ON	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
172	OFF	OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF
173	ON	OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF
174	OFF	ON	ON	ON	OFF	ON	OFF	ON	OFF	OFF
175	ON	ON	ON	ON	OFF	ON	OFF	ON	OFF	OFF
176	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
177	ON	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
178	OFF	ON	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
179	ON	ON	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
180	OFF	OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF
181	ON	OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF
182	OFF	ON	ON	OFF	ON	ON	OFF	ON	OFF	OFF
183	ON	ON	ON	OFF	ON	ON	OFF	ON	OFF	OFF

ID No.	SWITCH SETTING									
	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-7	SW-8	SW-9	SW-10
184	OFF	OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF
185	ON	OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF
186	OFF	ON	OFF	ON	ON	ON	OFF	ON	OFF	OFF
187	ON	ON	OFF	ON	ON	ON	OFF	ON	OFF	OFF
188	OFF	OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF
189	ON	OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF
190	OFF	ON	ON	ON	ON	ON	OFF	ON	OFF	OFF
191	ON	ON	ON	ON	ON	ON	OFF	ON	OFF	OFF
192	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
193	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
194	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
195	ON	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
196	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
197	ON	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
198	OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
199	ON	ON	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
200	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
201	ON	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
202	OFF	ON	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
203	ON	ON	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
204	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF
205	ON	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF
206	OFF	ON	ON	ON	OFF	OFF	ON	ON	OFF	OFF
207	ON	ON	ON	ON	OFF	OFF	ON	ON	OFF	OFF
208	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
209	ON	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
210	OFF	ON	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
211	ON	ON	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
212	OFF	OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF
213	ON	OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF
214	OFF	ON	ON	OFF	ON	OFF	ON	ON	OFF	OFF
215	ON	ON	ON	OFF	ON	OFF	ON	ON	OFF	OFF
216	OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF
217	ON	OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF
218	OFF	ON	OFF	ON	ON	OFF	ON	ON	OFF	OFF
219	ON	ON	OFF	ON	ON	OFF	ON	ON	OFF	OFF
220	OFF	OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF
221	ON	OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF

ID No.	SWITCH SETTING									
	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-7	SW-8	SW-9	SW-10
222	OFF	ON	ON	ON	ON	OFF	ON	ON	OFF	OFF
223	ON	ON	ON	ON	ON	OFF	ON	ON	OFF	OFF
224	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
225	ON	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
226	OFF	ON	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
227	ON	ON	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
228	OFF	OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF
229	ON	OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF
230	OFF	ON	ON	OFF	OFF	ON	ON	ON	OFF	OFF
231	ON	ON	ON	OFF	OFF	ON	ON	ON	OFF	OFF
232	OFF	OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF
233	ON	OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF
234	OFF	ON	OFF	ON	OFF	ON	ON	ON	OFF	OFF
235	ON	ON	OFF	ON	OFF	ON	ON	ON	OFF	OFF
236	OFF	OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF
237	ON	OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF
238	OFF	ON	ON	ON	OFF	ON	ON	ON	OFF	OFF
239	ON	ON	ON	ON	OFF	ON	ON	ON	OFF	OFF
240	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF
241	ON	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF
242	OFF	ON	OFF	OFF	ON	ON	ON	ON	OFF	OFF
243	ON	ON	OFF	OFF	ON	ON	ON	ON	OFF	OFF
244	OFF	OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF
245	ON	OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF
246	OFF	ON	ON	OFF	ON	ON	ON	ON	OFF	OFF
247	ON	ON	ON	OFF	ON	ON	ON	ON	OFF	OFF
248	OFF	OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF
249	ON	OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF
250	OFF	ON	OFF	ON	ON	ON	ON	ON	OFF	OFF
251	ON	ON	OFF	ON	ON	ON	ON	ON	OFF	OFF
252	OFF	OFF	ON	ON	ON	ON	ON	ON	OFF	OFF
253	ON	OFF	ON	ON	ON	ON	ON	ON	OFF	OFF
254	OFF	ON	ON	ON	ON	ON	ON	ON	OFF	OFF
255	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF

Specifications GCH-K0274P

Image Sensor	1/2.8" Progressive Scan CMOS, 3 Megapixels
Pixels - Total	2144(H) x 1588(V), 3.40M pixels
Pixels - Effective	2080(H) x 1553(V), 3.23M pixels
Scanning System	Progressive
Image Size	1920x1080, 1280x720
Frame Rate	25 fps (1920 x 1080), 50 fps (1280 x 720)
Sensitivity Colour	0.3 Lux@F1.6 (IRE30)
Sensitivity B&W	0.04 Lux@ F1.6 (IRE30)
Col/B&W	On/Off/Auto
High Speed Shutter	1/30 ~ 1/10.000 sec
Focal Length	4.7 ~ 84.6 mm
Zoom Ratio	x 18
Focus Operation	Auto, Manual
Iris Operation	Auto, Manual
Pan Range	360° (Endless)
Tilt Range	-10° ~ 190°
Pan Speed	Manual: 0.5°/s ~ 90°/s, Preset: 400°/s (max.)
Tilt Speed	Manual: 0.5°/s ~ 90°/s, Preset: 400°/s (max.)
Range Panning	360° endless
Presets	256
PTZ Control	Pan & Tilt speed proportional to Zoom ratio (On/Off)
Protocol	Pelco D, Pelco P, ...
Serial Interface(s)	RS-485
PTZ Control	Auto PAN, Preset,Sequence and Cruise Function Support
Alarm Inputs	4
Alarm Outputs	2
OSD	Yes
Number of Privacy Zones	16
BLC	On/Off
AGC	Auto, Manual
Digital Noise Reduction (DNR)	On/Off
White Balance	Auto, Manual, Indoor, Outdoor, ATW
Protection Rating	IP66
Operating Temperature	-40°C ~ +50°C
Humidity	10 ~ 90% no condensation
Supply Voltage	24 VAC
Power Consumption	65 W
Weight	2.4 kg
Dimensions (wxhxd)	Ø 193.36 x 282.41 mm

EC Declaration of Conformity

GCH-K0274P 2 Megapixel Full HD Outdoor Motorised Dome SDI-Camera 18x Zoom ICR WDR

It is hereby certified that the products meet the standards in the following relevant provisions:

EC EMC Directive 2004/108/EC
Low Voltage Directive 2006/95/EC

Applied harmonised standards and technical specifications:

EN 55022: 2006/A1: 2007 (Class A),
IEC/EN 61000-3-2: 2006/A2: 2009,
IEC/EN 61000-3-3: 2008
AS/ NZS CISPR22: 2009 (Class A)
EN 50130-4: 1995 /A1: 1998/ A2: 2003,
IEC 61000-4-2: 2008
IEC 61000-4-3: 2010
IEC 61000-4-4: 2010
IEC 61000-4-5: 2005
IEC 61000-4-6: 2008
IEC 61000-4-11: 2004
Mains Supply Voltage Variations

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Remscheid, 13.03.2012

Ludwig Bergschneider
CEO