

# User Manual


## H.264 D1 IP SPEEDOME



**WARNINGS**

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MISTURE.  
DO NOT INSERT ANY METALLIC OBJECT THROUGH VENTILATION GRILLS.

**CAUTION**

	<b>CAUTION</b> RISK OF ELECTRIC SHOCK DO NOT OPEN	
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK. DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.		

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THE TRADEMARKS MENTIONED IN THE MANUAL ARE LEGALLY REGISTERED TO THEIR RESPECTIVE COMPANIES.

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# 1

## INTRODUCTION

### 1.1 Package Contents

Outdoor



Software CD



Power Box (for Outdoor)



## 1.2 Features and Benefits

- **H.264 compression gives a high resolution image quality**  
The IP speed dome offers an optimal combination of network, digital, and optical technology. The IP Speed Dome adopts H.264 ASP compliant compression technology which compress video analog into video streaming while maintaining resolution up to full-D1, 30 fps. Building in with LAN/WAN ports, the IP Speed Dome applies QoS (Quality of Service) technology to fully utilize the network bandwidth. Meanwhile, IP Speed Dome also supports multicast video streaming technologies to fulfill almost unlimited on-line video requests.
- **Remote control from any place at any time**  
The IP Speed Dome Series adopts SoC base embedded system and web server which enables remote control of the camera. Through bundled AP, you can pan/tilt/zoom the camera, set up motion detection to a specified area, perform tour monitoring, set up different video resolutions, etc. In addition, features such as tour surveillance, alarm and further enhance the usefulness of IP Speed Dome Series to make your remote surveillance more flexible and more responsive to different situations or environments.
- **High quality and reliability in both optics and mechanism**  
With a cleverly designed pan/tilt mechanism and an industrial-grade slip ring, the IP speed dome accurate auto zoom system, and powerful zoom capability.

## 1.3 Safety precautions

1. Select a proper location and use safe hoist for installing speed dome cameras.
2. Confirm that the hoist is capable of lifting to the installation position.
3. Proper protective measures must be provided in the hoist, for protecting engineering staffs.
4. Confirm that power supply is 110V/220V. Ensure safety precautions for preventing electric shock.

## 1.4 Warning indications for use

1. Local electrical appliance regulations must be observed for using this product.
2. The outdoor model uses DC12V. For safety of use, do not use any power supply other than that specified.
3. For the safety of the engineering staffs, apply power only upon completion of installation.

## 1.5 Environmental requirements

1. **Environmental requirements for indoor type speed dome cameras:**
  - Environment temperature: -10°C to +40°C
  - Environment humidity: <90%
  - Power supply: DC12V, 2A, 50/60Hz
2. **Environmental requirements for outdoor type speed dome cameras:**
  - Environment temperature: -40°C to +50°C
  - Environment humidity: <90%
  - Power supply: DC12V, 2A, 50/60Hz

## 1.6 Precautions on installation

1. **Basic requirements for installation**
  - Follow local regulations about installation safety request.
  - Check out if accessories are complete. Optional accessories are required for different installation sites. Please contact your local distributors for proper installation accessories, so that the camera could be installed safely without causing danger.

- 2. Check if the installation location is of sufficient height.**
- 3. Check if the installation location is strong enough for supporting cameras. Make sure installation spots (ceiling or wall) is of sufficient strength to support the camera and bracket without immediate danger of falling.**
- 4. Setting of Camera Position Code**  
Setup your camera ID address and communication protocol prior to installation. In order to make a new setting valid, please shut down the power before re-setting.
- 5. Self Test of Camera**  
The camera is available with the following self test. Carry them out prior to installation. After connecting power, speed dome camera will turn 90 degrees down vertically, then start horizontal scanning. This will last for 20-30 seconds. Speed dome camera will then stop at the Preset Position 1. On completion of these, the speed dome camera is in normal condition.
- 6. Please keep the original packaging**  
After unpacking the camera, take good care of the original packaging. In case any problem occurred, it can be used to re-pack cameras for returning to the local distributor or manufacturer for repair.
- 7. This product is normally installed in an elevated position. Installation work should comply with local safe regulations.**
- 8. Proper safety precautions and protective measures shall be taken for installing the camera.**
- 9. For the personnel safety sake, carry out electrification and product test only after completion of installation work.**

### **Safety Pin**

After done setting the ID Address for the speed dome, please remove the Safety Pin (see below picture) before turning on the power. Failure to do so will result damaging the speed dome and causing unnecessary malfunction.



# 2

## H/W Installation Procedure

### 2.1 Outdoor connections



AC Power input

Power cable on housing.

#### Power input

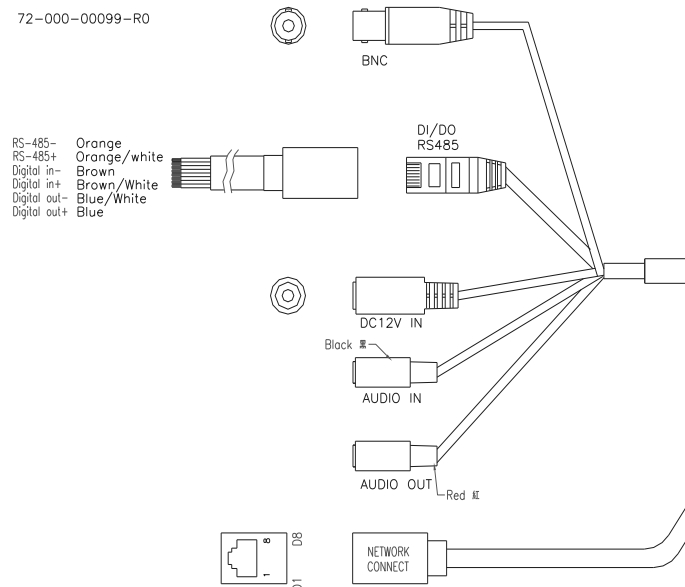
Connect this jack to the power supply of 100VAC ~ 240VAC according to the local voltage.

#### RS485, DI/O, & Audio in

Please refer to the table below

Function	Line color
Video Out	BNC Connector
Audio Out	Red Connector
RJ45	RS485+ / RS485- Digital In / Digital Out
DI/DO	
Audio In	Black Connector

72-000-00099-R0



DC Power connector	DC12V In
Network connector	Ethernet Cable

## 2.2 Speed dome set up

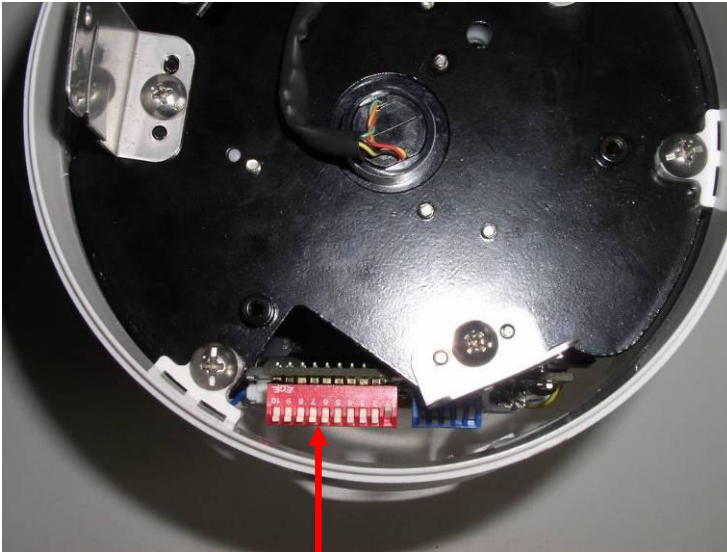
Follow the description below setup IP speed dome's hardware camera ID, baud rate and protocol.

Speed dome setup	Video platform setup	AP (NVR) setup
Camera ID, baud rate and protocol setting in these 3 item should be the same for PTZ control function to work.		

### 2.2.1 Setup camera ID, baud rate and protocol

Loosen the four screws and de-attached the dome cover from the housing. Follow the tables below to setup each respective parameter. A 10-position DIP SWITCH is furnished on the camera control board. SW1~ SW8 are for ID address setting and SW9/SW10 are for protocol setting. Respective setting is illustrated in the following table:

- **Camera ID address setting**

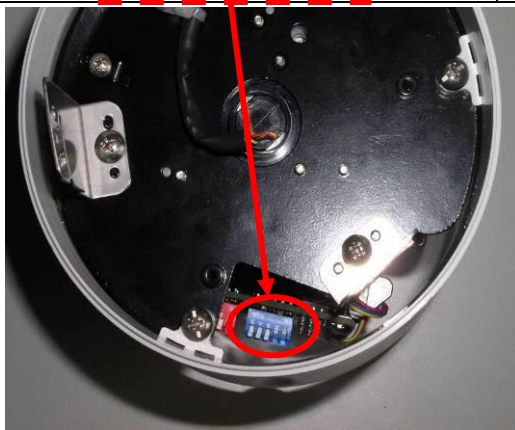


**Setting of camera ID Address**

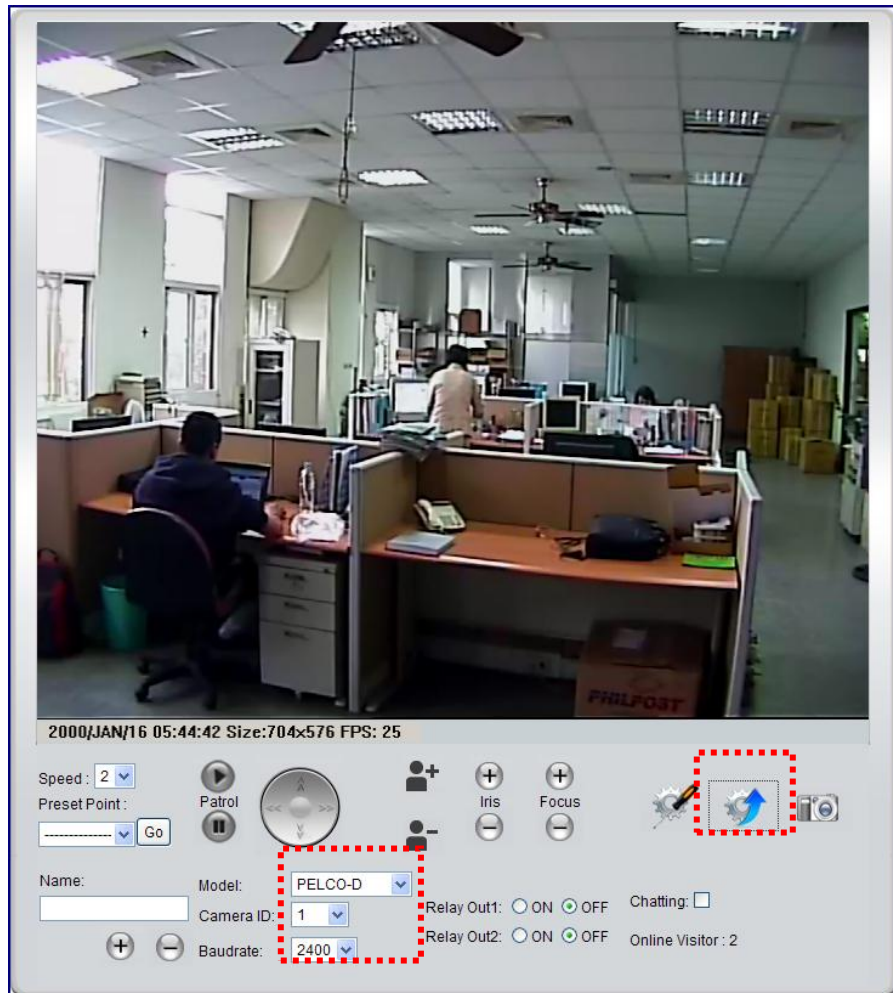
**Please refer to the Appendix. A “Camera hardware ID setup”**

**● Protocol and baud rate switch**

	DIP 1	DIP 2	DIP 3	DIP 4	DIP 5
PELCO P-9600	OFF	ON	OFF	OFF	X
PELCO P-4800	ON	OFF	OFF	OFF	X
PELCO D-2400(Default)	OFF	OFF	OFF	OFF	X



**● WEB User Interface**



**Notice: Please make sure that you have set the same protocol and id address settings with IP Speed dome in firmware, or you will be unable to control IPS through NVR.**

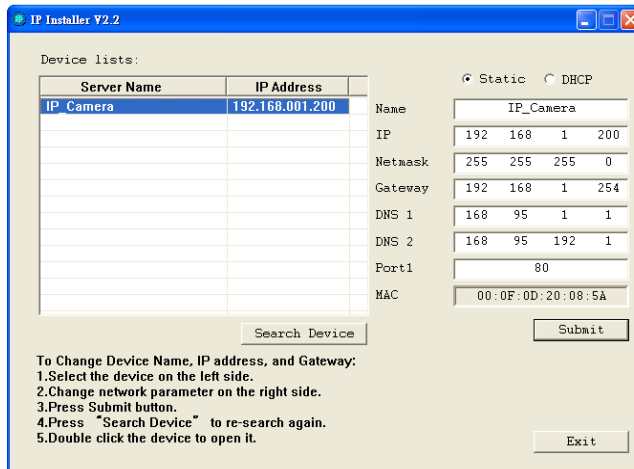
## 2.2.2 IP Assignment

- i. Use the software, "IP Installer" to assign the IP address of IP CAMERA. The software is in the attached software CD.
- ii. IP installer supports two languages
  - a. IPInstallerCht.exe : Chinese version
  - b. IPInstallerEng.exe : English version
- iii. There are 3 kinds of IP configuration.
  - a. Fixed IP (Public IP or Virtual IP)
  - b. DHCP (Dynamic IP)

- c. Dial-up (PPPoE)
- iv. Execute IP Installer
- v. For Windows XP SP2 user, it may popup the following message box. Please click “Unblock”.



- vi. IP Installer configuration:



- vii. IP Installer will search all IP Cameras connected on Lan. The user can click “Search Device” to search again.
- viii. Click one of the IP Camera listed on the left side. The network configuration of this IP camera will show on the right side. You may change the “name” of the IP Camera to your preference (eg: Office, warehouse). Change the parameter and click “Submit” then click “OK”. It will apply the change and reboot the Device.



- ix. Please make sure the subnet of PC IP address and IP CAM IP address are the same.

**The same Subnet:**

IP CAM IP address: 192.168.1.200

PC IP address: 192.168.1.100

**Different Subnets:**

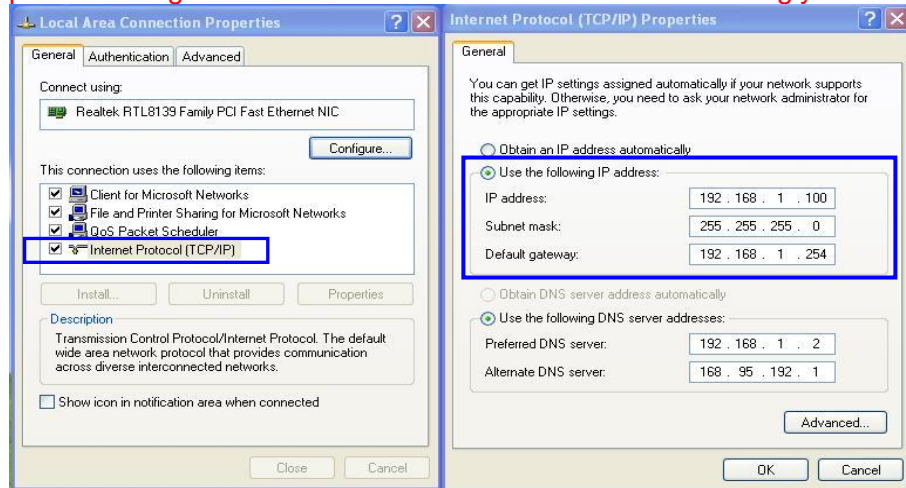
IP CAM IP address: 192.168.2.200

PC IP address: 192.168.1.100

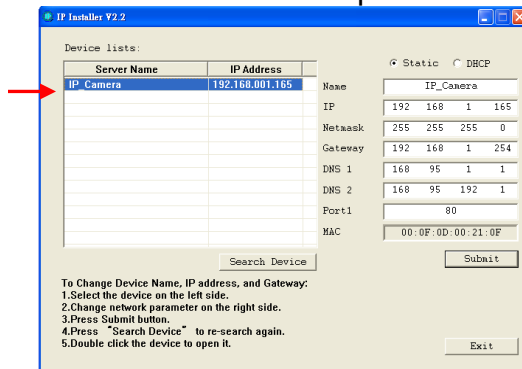
**To Change PC IP address:**

Control Panel→Network Connections→Local Area Connection Properties→Internet Protocol (TCP/IP) →Properties

Please make sure your IP Camera and PC have the same Subnet. If not, please change IP Camera subnet or PC IP subnet accordingly.



- x. A quick way to access remote monitoring is to left-click the mouse twice on a selected IP Camera listed on “Device list” of IP Installer. An IE browser will be opened.



- xi. Then, please key in the default “user name: admin” and “password: admin”.



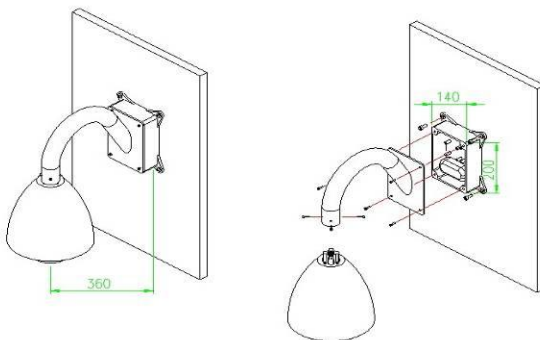
## 2.3 Outdoor H/W Installation Procedures

There are 4 kinds of outdoor application. And each of them requires two steps to install the outdoor IP speed dome. Please refer to the picture below to understand each application type. Then follow the procedure below to install it.

## 2.4 Understand Outdoor applications

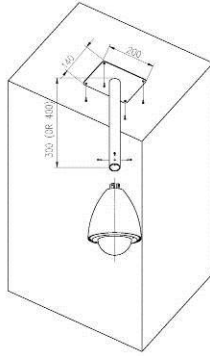
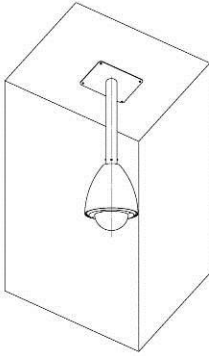
- **Outdoor Wall mount**

Outdoor Housing + outdoor Wall mount



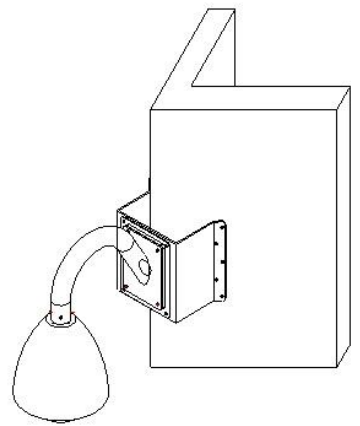
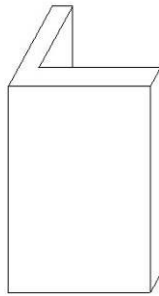
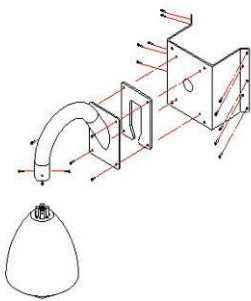
- **Outdoor Ceiling mount**

Outdoor Housing + outdoor Ceiling mount



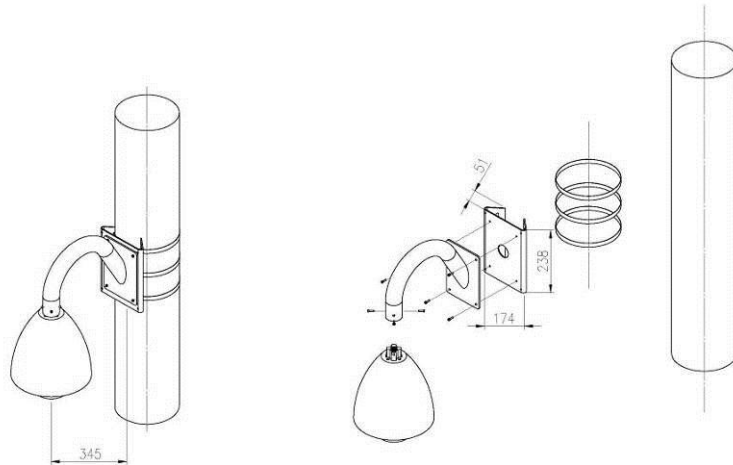
● **Outdoor Corner mount**

Outdoor Housing + outdoor Wall mount + outdoor Corner bracket



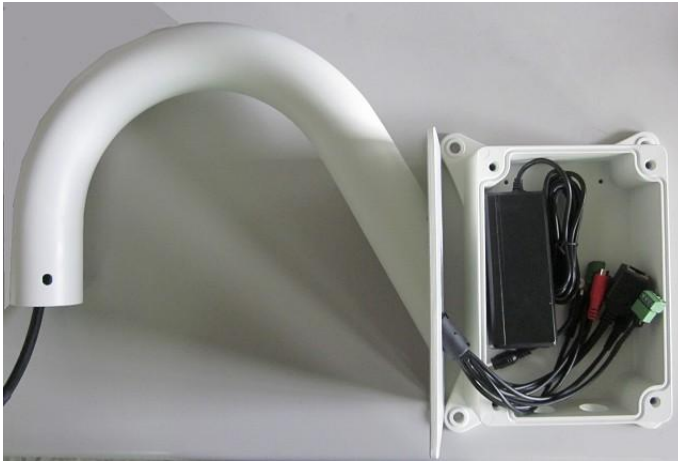
- **Outdoor Pole mount**

Outdoor Housing + outdoor Wall mount + outdoor Pole bracket



## 2.4.1 Connect the housing to the mount

- Insert the cable from the housing through the hole. There's some lubricating oil inside the tube, thus the cable would have some oil on it once inserted through the Tube.



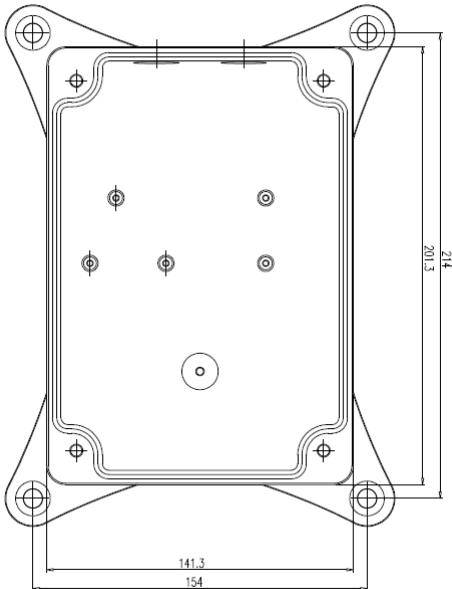
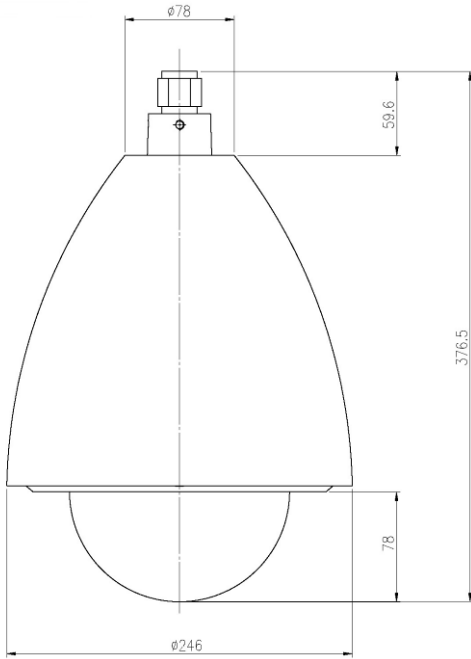
- Then take out M6 screws and hexagonal wrench provided within the package and fasten the 4 screws as picture below.



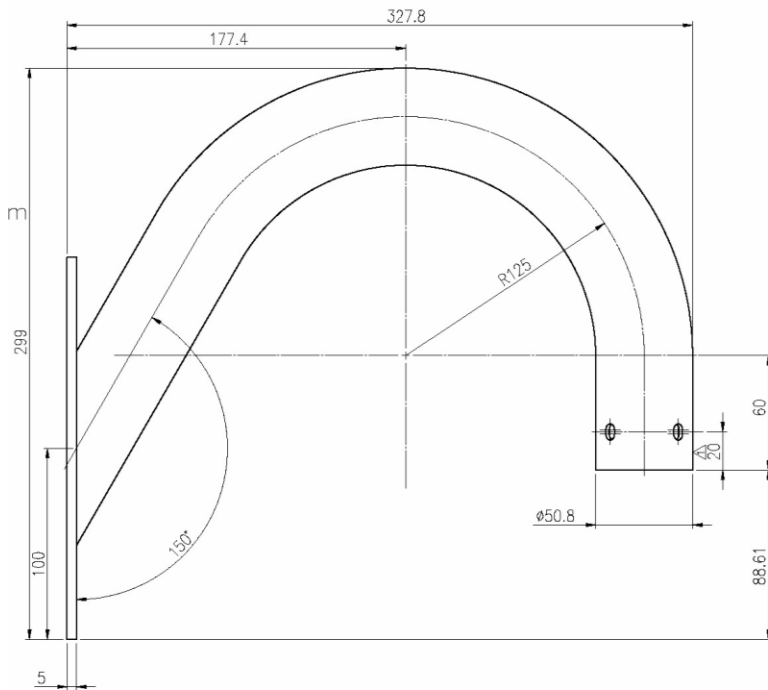
- Connect the housing cable to the board in the junction box
- Connect the junction box to respective apparatus. Please refer to Page 7 for how to connect.

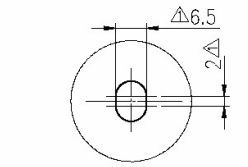
## 2.5 Detailed dimensions

### 2.5.1 Outdoor Housing

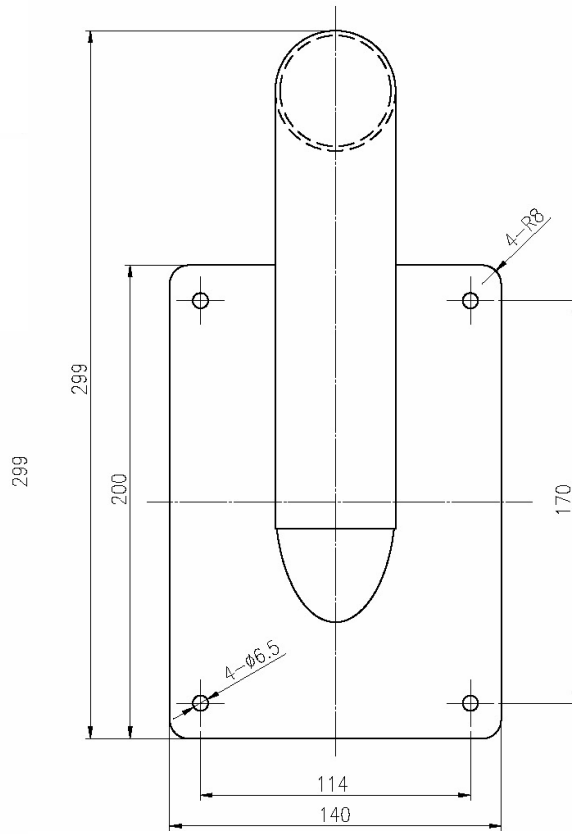
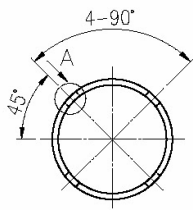


## 2.5.2 Outdoor Wall mount

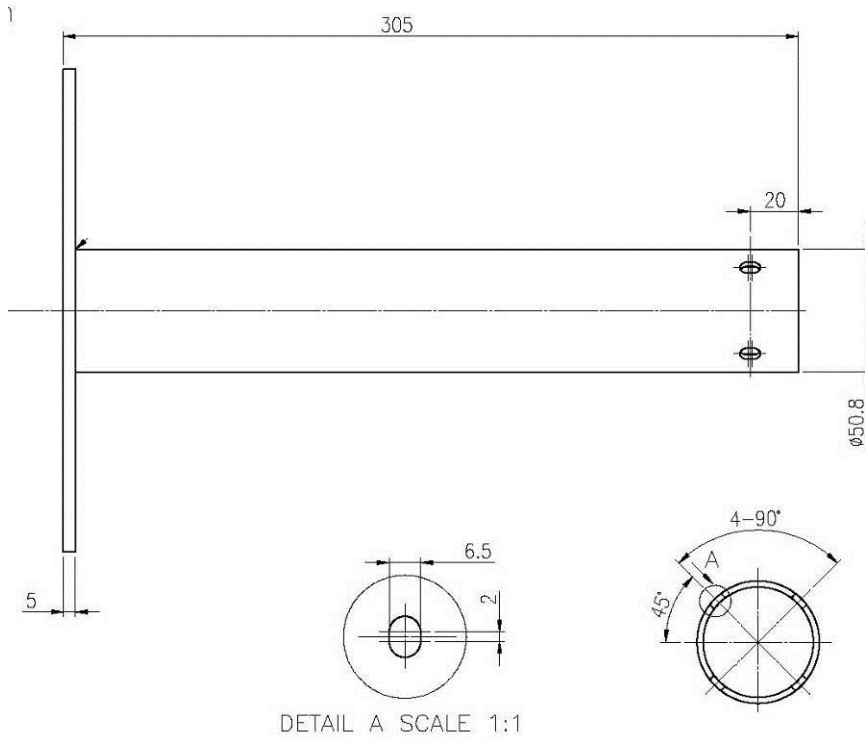


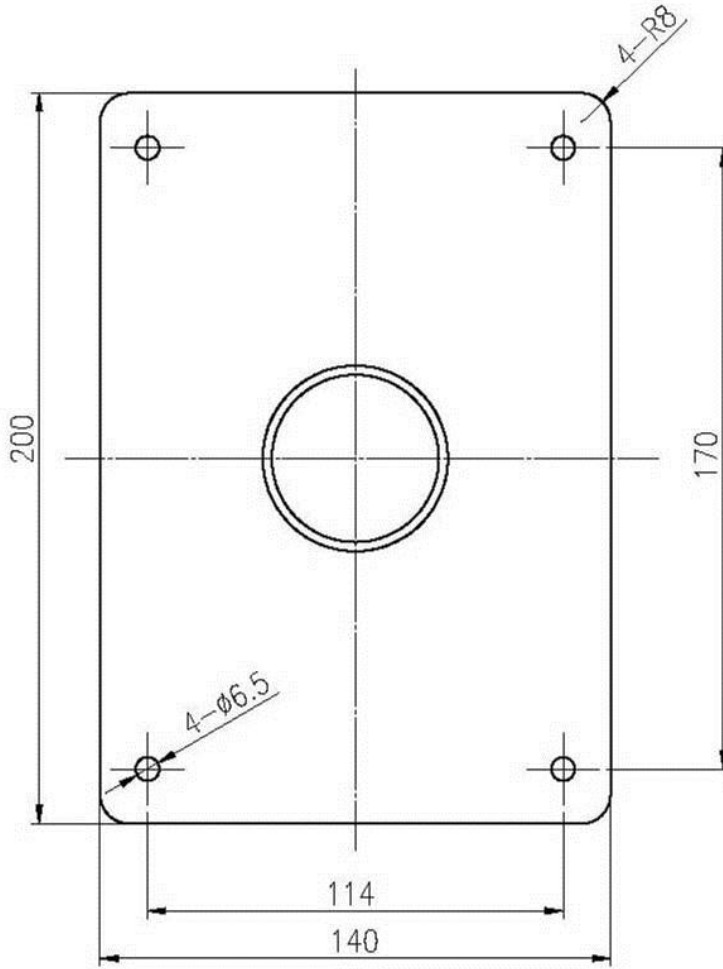


DETAIL A SCALE 1:1

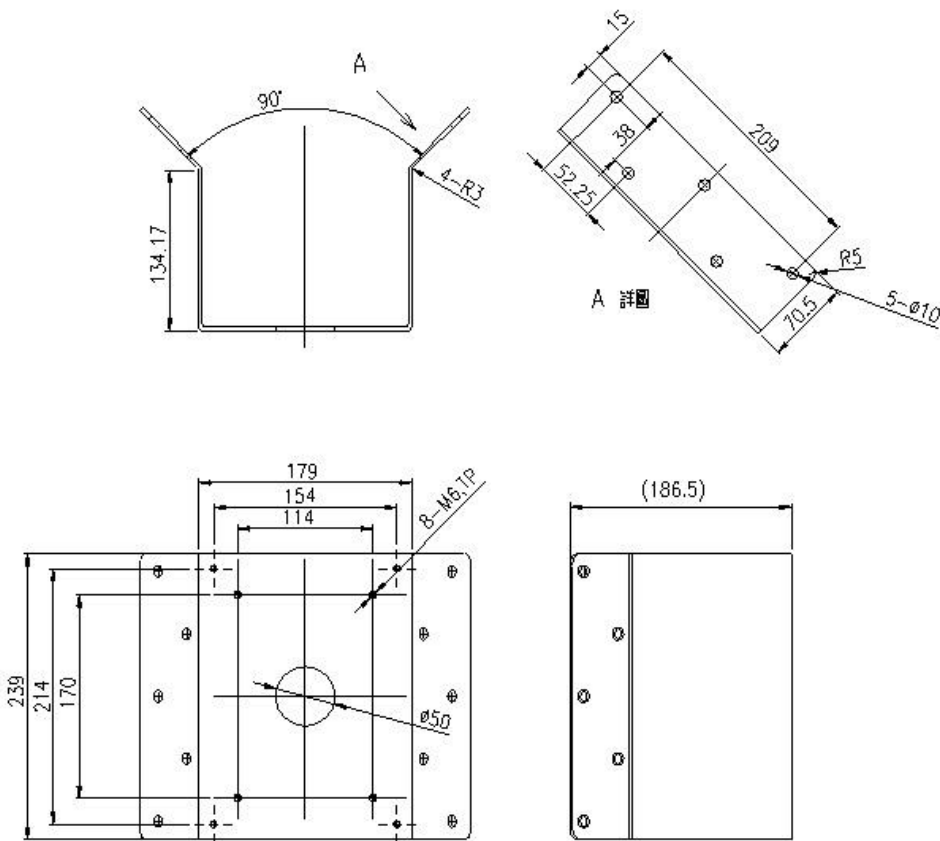


## 2.5.3 Outdoor Ceiling mount



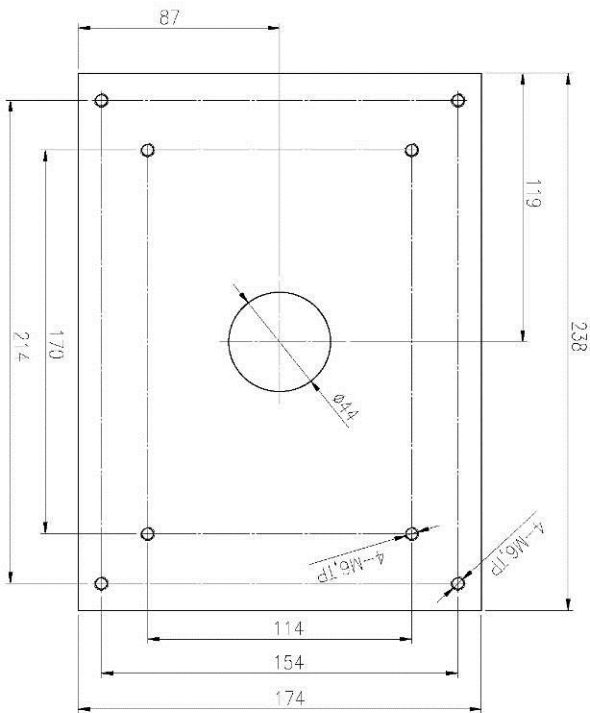
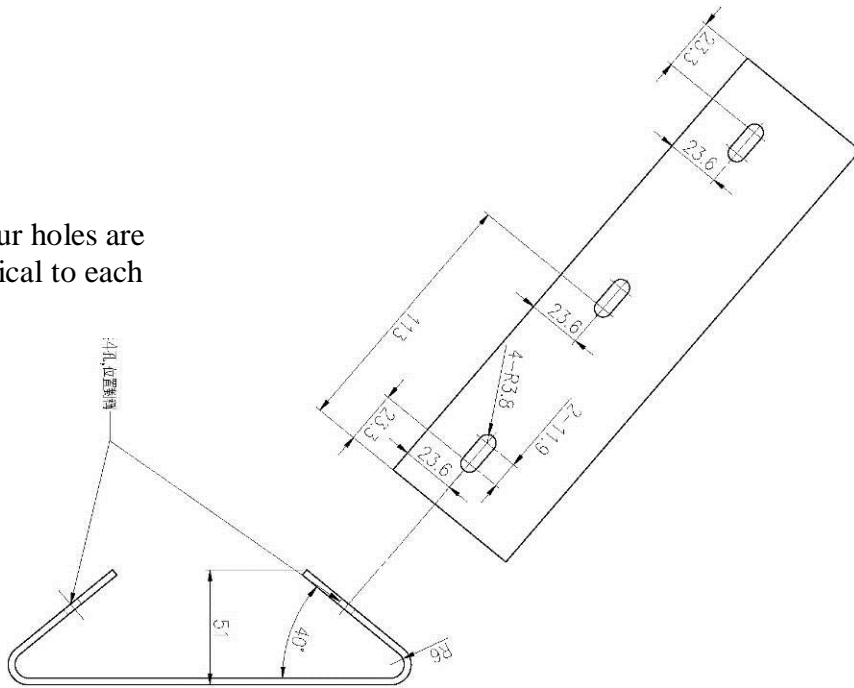


## 2.5.4 Outdoor Corner mount



## 2.5.5 Outdoor Pole mount

These four holes are symmetrical to each other



# 3

## Appendix

### 3.1 Camera ID Sep up

Symbol “○” in the following tables denote setting “ON”

	1	2	3	4	5	6	7	8
1	○							
2		○						
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4			○					
5	○		○					
6		○	○					
7	○	○	○					
8				○				
9	○			○				
10		○		○				
11	○	○		○				
12			○	○				
13	○		○	○				
14		○	○	○				
15	○	○	○	○				
16					○			
17	○				○			
18		○			○			
19	○	○			○			
20			○		○			
21	○		○		○			
22		○	○		○			
23	○	○	○		○			
24				○	○			
25	○			○	○			

	1	2	3	4	5	6	7	8
26		○		○	○			
27	○	○		○	○			
28			○	○	○			
29	○		○	○	○			
30		○	○	○	○			
31	○	○	○	○	○			
32						○		
33	○					○		
34		○				○		
35	○	○				○		
36			○			○		
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38		○	○			○		
39	○	○	○			○		
40				○		○		
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42		○		○		○		
43	○	○		○		○		
44			○	○		○		
45	○		○	○		○		
46		○	○	○		○		
47	○	○	○	○		○		
48					○	○		
49	○				○	○		
50		○			○	○		

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51	○	○			○	○		
52			○		○	○		
53	○		○		○	○		
54		○	○		○	○		
55	○	○	○		○	○		
56				○	○	○		
57	○			○	○	○		
58		○		○	○	○		
59	○	○		○	○	○		
60			○	○	○	○		
61	○		○	○	○	○		
62		○	○	○	○	○		
63	○	○	○	○	○	○		
64							○	
65	○						○	
66		○					○	
67	○	○					○	
68			○				○	
69	○		○				○	
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72				○			○	
73	○			○			○	
74		○		○			○	
75	○	○		○			○	

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76			○	○			○	
77	○		○	○			○	
78		○	○	○			○	
79	○	○	○	○				
80					○		○	
81	○				○		○	
82		○			○		○	
83	○	○			○		○	
84			○		○		○	
85	○		○		○		○	
86		○	○		○		○	
87	○	○	○		○		○	
88				○	○		○	
89	○			○	○		○	
90		○		○	○		○	
91	○	○		○	○		○	
92			○	○	○		○	
93	○		○	○	○		○	
94		○	○	○	○		○	
95	○	○	○	○	○		○	
96						○	○	
97	○					○	○	
98		○				○	○	
99	○	○				○	○	
100			○			○	○	

	1	2	3	4	5	6	7	8
101	○		○			○	○	
102		○	○			○	○	
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105	○			○		○	○	
106		○		○		○	○	
107	○	○		○		○	○	
108			○	○		○	○	
109	○		○	○		○	○	
110		○	○	○		○	○	
111	○	○	○	○		○	○	
112					○	○	○	
113	○				○	○	○	
114		○			○	○	○	
115	○	○			○	○	○	
116			○		○	○	○	
117	○		○		○	○	○	
118		○	○		○	○	○	
119	○	○	○		○	○	○	
120				○	○	○	○	
121	○			○	○	○	○	
122		○		○	○	○	○	
123	○	○		○	○	○	○	
124			○	○	○	○	○	
125	○		○	○	○	○	○	

	1	2	3	4	5	6	7	8
126		○	○	○	○	○	○	
127	○	○	○	○	○	○	○	
128								○
129	○							○
130		○						○
131	○	○						○
132			○					○
133	○		○					○
134		○	○					○
135	○	○	○					○
136				○				○
137	○			○				○
138		○		○				○
139	○	○		○				○
140			○	○				○
141	○		○	○				○
142		○	○	○				○
143	○	○	○	○				○
144					○			○
145	○				○			○
146		○			○			○
147	○	○			○			○
148			○		○			○
149	○		○		○			○
150		○	○		○			○

	1	2	3	4	5	6	7	8
151	○	○	○		○			○
152				○	○			○
153	○			○	○			○
154		○		○	○			○
155	○	○		○	○			○
156			○	○	○			○
157	○		○	○	○			○
158		○	○	○	○			○
159	○	○	○	○	○			○
160						○		○
161	○					○		○
162		○				○		○
163	○	○				○		○
164			○			○		○
165	○		○			○		○
166		○	○			○		○
167	○	○	○			○		○
168				○		○		○
169	○			○		○		○
170		○		○		○		○
171	○	○		○		○		○
172			○	○		○		○
173	○		○	○		○		○
174		○	○	○		○		○
175	○	○	○	○		○		○

	1	2	3	4	5	6	7	8
176					○	○		○
177	○				○	○		○
178		○			○	○		○
179	○	○			○	○		○
180			○		○	○		○
181	○		○		○	○		○
182		○	○		○	○		○
183	○	○	○		○	○		○
184				○	○	○		○
185	○			○	○	○		○
186		○		○	○	○		○
187	○	○		○	○	○		○
188			○	○	○	○		○
189	○		○	○	○	○		○
190		○	○	○	○	○		○
191	○	○	○	○	○	○		○
192							○	○
193	○						○	○
194		○					○	○
195	○	○					○	○
196			○				○	○
197	○		○				○	○
198		○	○				○	○
199	○	○	○				○	○
200				○			○	○



## Extend Command

N Value No.	Control Object	Keyboard Operation Definition	
		[SET]+N+[ENTER]	[PRESET]+N+[ENTER]
85	Home	OFF	ON
86	Auto slow shutter	OFF	ON
87	IR Filter AUTO		ON
88	IR Filter IN (color mode)		ON
89	IR Filter OUT (black-white mode)		ON
90	Back light	OFF	ON/AUTO
91	Digit ZOOM	OFF	ON
92	Horizontal Scan Setting		Start point
93			End point
92	Vertical Scan Setting	Start point	
93		End point	
94	Zoom/Pan speed limit	OFF	ON
95	Camera Manual setting	OFF	ON
97	Preset Tour(preset 1~16 point)	OFF	ON
98	OSD Display	OFF	ON
99	Auto PAN Scan (Horizontal)	OFF	ON
99	Auto PAN Scan (Vertical)	ON	OFF
100	Reset		ON

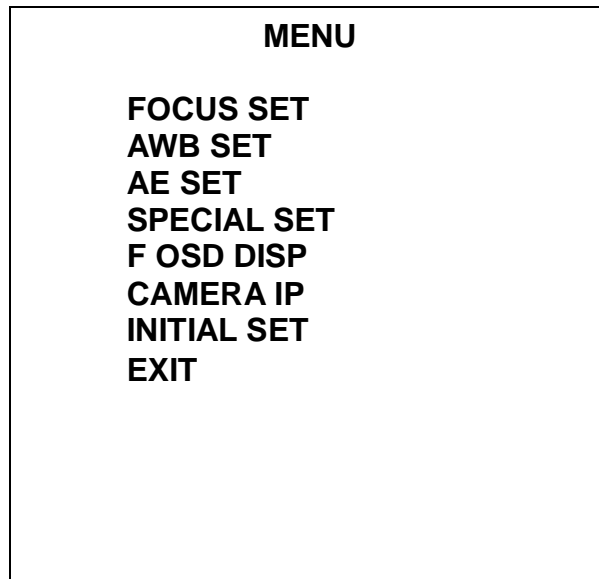
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## OPERATION SETUP INFO

This speed dome camera offer OSD function. You could set up different setting base on site environment. By doing so, speed dome camera will have better image quality. Please refer to following operation mode.

### 22x Camera Manual setting

#### MAIN MENU



#### Set Up the Menu

a) In order to display MENU on the screen, enter the Menu command (Preset + 95 + Enter) or press Menu button.

b) For selecting each item, press ZOOM **TELE** and **WIDE** buttons or use ZOOM commands in web UI for moving up and down.

To change the data or set, press Focus **FAR** and **NEAR** buttons or use FOCUS commands in web UI for modifying settings.

**FOCUS SET:****FOCUS**

**FOCUS MODE  
FOCUS DIST  
ZOOM START  
ZOOM END  
ZOOM SPEED  
ZOOM TRACK  
INITIALSET  
RETURN**

**AWB SET:****AWB**

**WB MODE  
HUE CONTROL  
RED GAIN  
BLUE GAIN  
PUSH AUTO  
INITIAL SET  
RETURN**

**AE SET:****AE**

**AE MODE  
IRIS ADJUST  
AGC MAXIMUM  
BRIGHTNESS  
BACKLIGHT  
BLC LEVEL  
BLC AREA  
FLICKERLESS  
SHUTTER  
INITIAL SET  
RETRUN**

**SPECIAL SET:****SPECIAL**

**USER TITLE  
SHARPNESS  
MIRROR  
COLOR  
NEGATIVE  
WIDE BURST  
DAY / NIGHT  
INITIAL SET  
RETURN**

F OSD DISP:

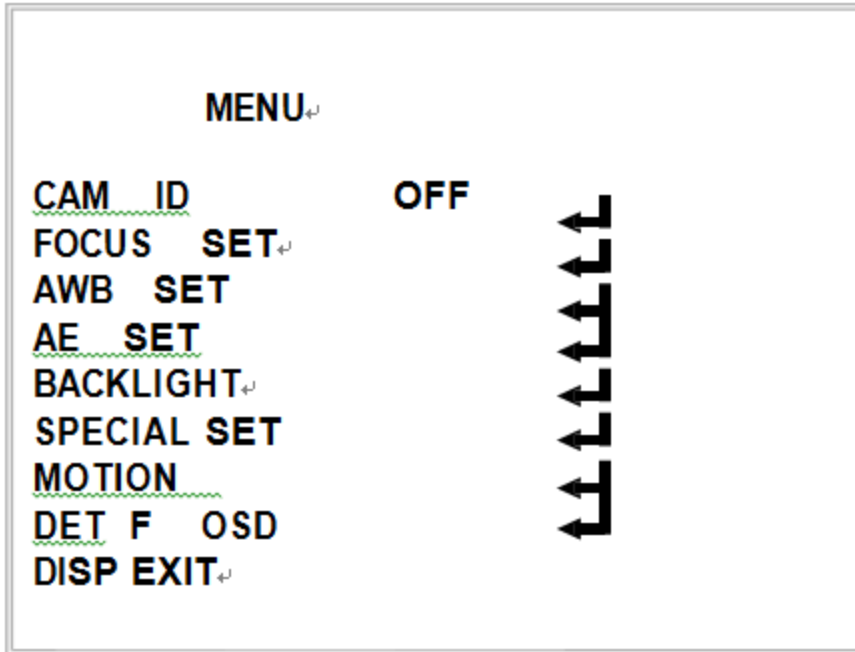
**F OSD**

**FUNCTION  
CAMERA ID  
ZOOM MAG  
USER TITLE  
INIT TITLE  
INITIAL SET  
RETURN**

CAMERA ID    ON / OFF  
INITIAL SET    ON / OFF  
EXIT

MENU DESCRIPTIONS

1) MAIN MENU



<Fig2. MAIN MENU FORMAT>

2) Setup the Menu

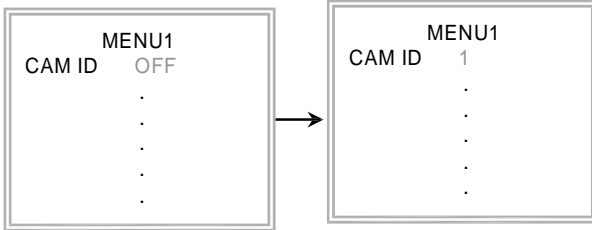
a) In order to display the MENU on the screen, Set the Menu commend or use Menu mode in Demo program.

b) To select each item, Zoom **TELE** and **WIDE** commend or key panel is used for UP and DOWN.

To change the data or set to ENTER, Focus **FAR** and **NEAR** commend or key panel is used.

### 3) SUB MENU DESCRIPTIONS

#### (1) CAM ID



**CAM ID:** To connect a large number of cameras. It can be assigned to identification number to each camera for camera control easily (000 ~ 255: total numbers of ID are 256.)

\* It only can be set this function using ID commend.

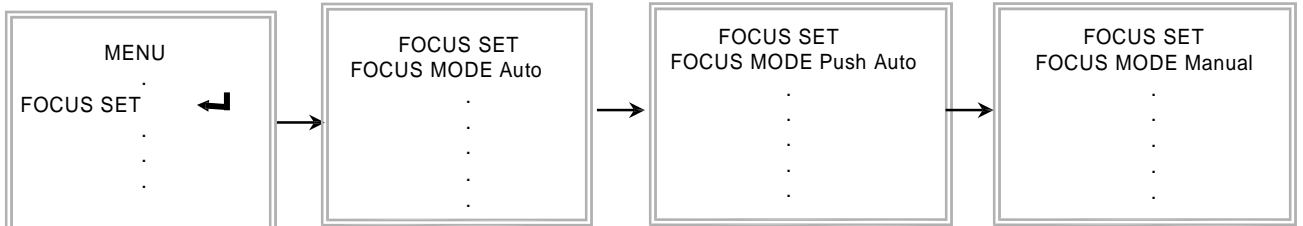
To transfer ID Code of camera, In first byte at PC control.

Set the ID number of camera, And then the ID number display continuously.

#### (2) FOCUS SET

##### 2.1 Focus Mode Set:

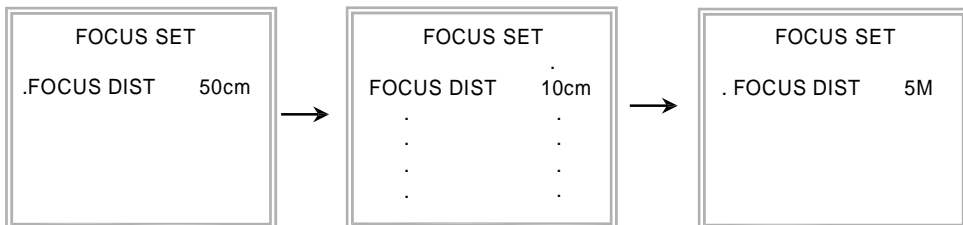
This function is for focus mode setting



A) Set up "FOCUS SET" in main menu using Protocol command or Demo Software. Select the "FOCUS MODE" in submenu. Using Tele/wide Command, and then set the mode "auto, push auto, manual."

##### 2.2 Focus Distance Set:

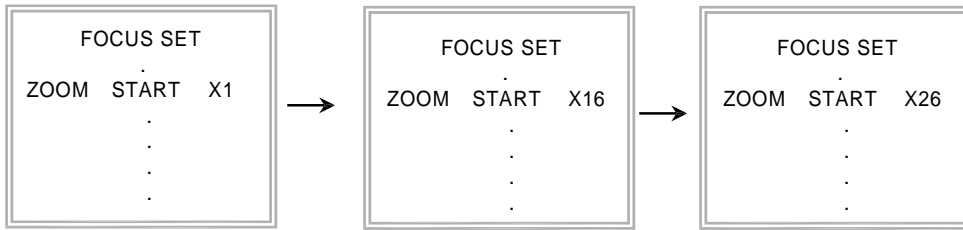
This function is for selection of minimum shooting distance.



A) Select the "FOCUS DIST" in submenu. Using Tele/wide Command,  
 B) Set the focus distance mode from 1cm to 5M.

### 2.3 ZOOM START Set:

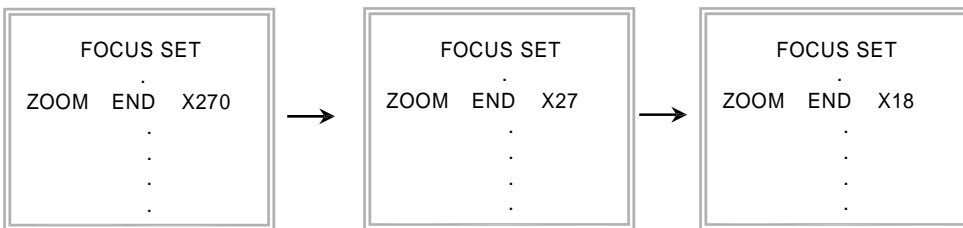
This function is for selection of zoom start position.



- A) Select the “ZOOM START” in submenu. Using Tele/wide Command,
- B) Set the Zoom start mode from x1 to x26.

### 2.4 ZOOM END Set:

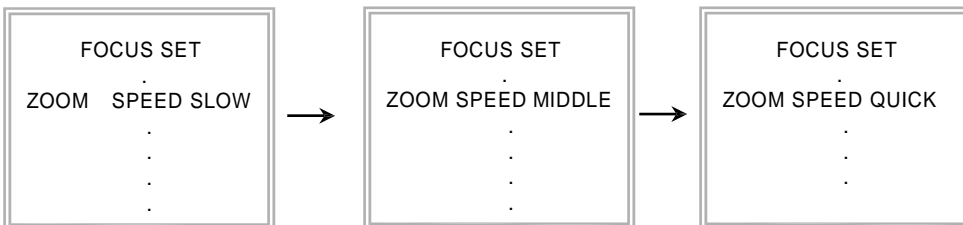
This function is for selection of zoom end position.



- A) Select the “ZOOM END” in submenu. Using Tele/wide Command,
  - B) Set the Zoom end mode from x2 to x270.
- Caution 1) This value must be always larger than “ZOOM START”.  
 Caution 2) The Maximum value of this is changed according to Max Digital Zoom Power.

### 2.5 ZOOM SPEED Set:

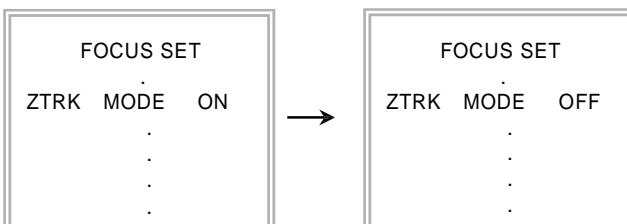
This function is for selection of zoom speed.



- A) Select the “ZOOM SPEED” in submenu. Using Tele/wide Command,
- B) Set the Zoom speed, slow, middle, quick.

### 2.6 ZOOM TRACKING MODE Set:

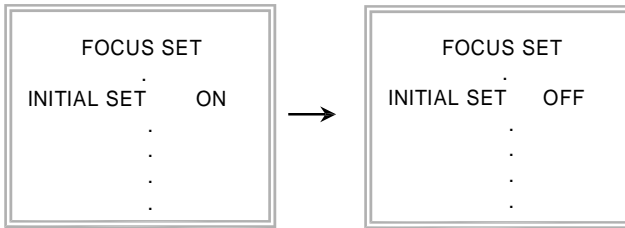
This function is for selection of zoom tracking mode and available for Manual Focus or Push-Auto Mode.



- A) Select the “ZTRK” in submenu. Using Tele/wide Command,
  - B) Set the Zoom tracking mode to ON or OFF.
- \*Zoom tracking means focused zooming state.

## 2.7 INITIAL SET:

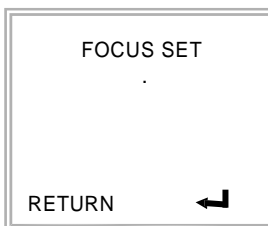
If initial mode set to ON, All focus function is changed to the factory setting.



- A) Select the "INITIAL SET" in submenu. Using Tele/wide Command,
- B) Set the initial set mode to ON using Near/Far Command.

## 2.8 RETURN TO MAIN MENU:

This function is exit to main menu.

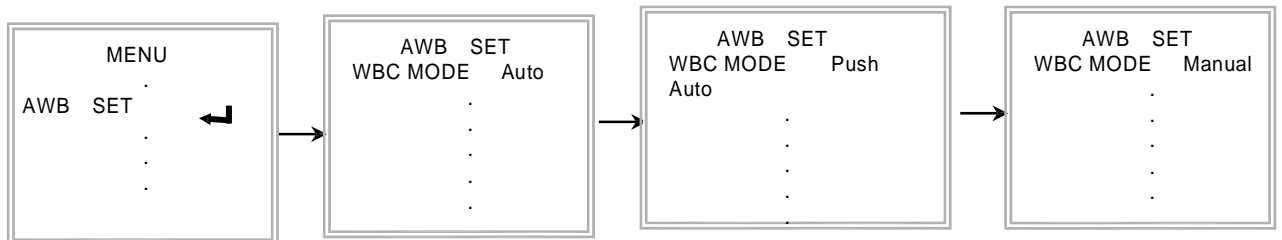


- A) Select the "RETURN" in submenu using Tele/wide Command.
- B) Set the return mode using Near/Far Command

## (3) AWB SET

### 3.1 WB Mode Set:

This function is for changing the WB mode.



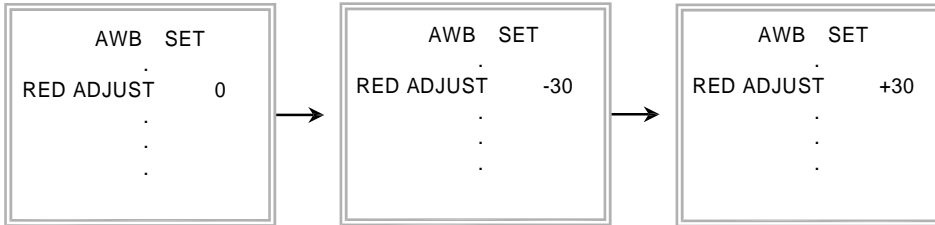
- A) Set up "AWB SET" in main menu using Protocol command or Demo Software.
- B) Select the "WB MODE" in submenu. Using Tele/wide Command,
- C) Set the mode auto, push auto, manual outdoor, indoor, special or auto using Near/Far Command.

\*WBC MODE: Use for changing White Balance Mode.

- 1) AUTO; WB Range 2800. K ~ 8000. K.
- 2) PUSH AUTO; Set the AWB mode to Push Auto, then WB Mode is auto.
- ③ SWB(Special WB); Under the special WB condition (Differ from curve of the control color temperature.) Adjust Red and Blue to perform a desired Auto White Balance.

### 3.2 RED ADJUST Set:

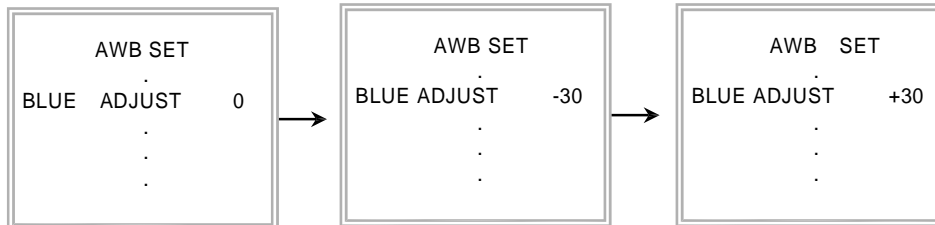
This function is available for Special WB, Push Auto and Manual mode. This mode is the adjustment of user option for special color.



- A) Select the “RED ADJUST” in submenu. Using Tele/wide Command,
- B) Adjust the level from -30 to 30. The initial level is zero.

### 3.2 BLUE ADJUST Set:

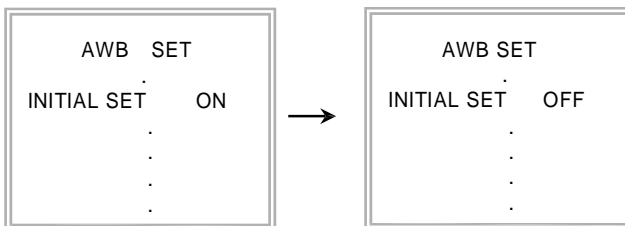
This function is available for Special WB, Push Auto and Manual mode. This mode is the adjustment of user option for special color.



- A) Select the “BLUE ADJUST” in submenu using Tele/wide Command.
- B) Adjust the level from -30 to 30. The initial level is zero.

### 3.3 INITIAL SET:

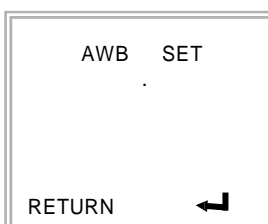
If initial mode set to ON, all AWB function is changed to the factory setting



- A) Select the “ININTIAL SET” in submenu using Tele/wide Command.
- B) Set the initial set mode to ON or OFF Using Near/Far Command.

### 3.4 RETURN TO MAIN MENU:

This function is exit to main menu.

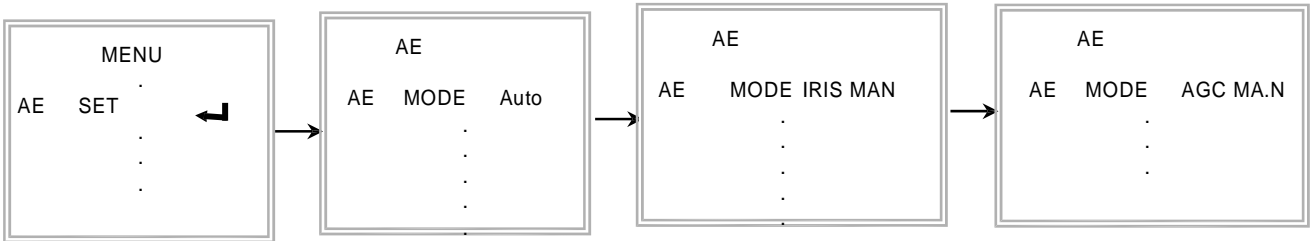


- A) Select the “RETURN” in submenu using Tele/wide Command.
- B) Set the return mode using Near/Far Command.

#### (4) AE SET

##### 4.1 AE Mode Set:

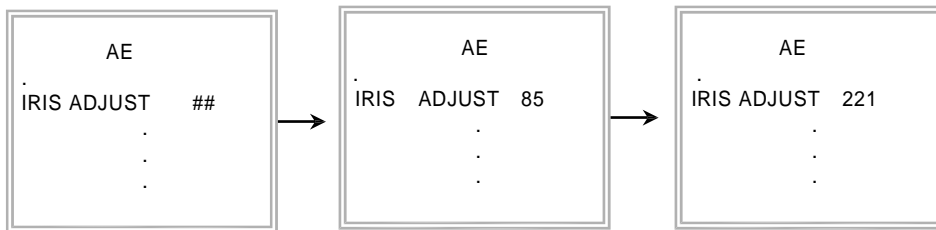
This function is for changing to AE mode.



- A) Set up "AE SET" in main menu using Protocol command or Demo Software.
- B) Select the "AE MODE" in submenu. Using Tele/wide Command,
- C) Set the mode AUTO, SHUTTER MAN, IRIS MAN, AGC MAN, MANUAL using Near/Far Command.

##### 4.2 IRIS ADJUST Set:

This function is available for IRIS MAN mode.

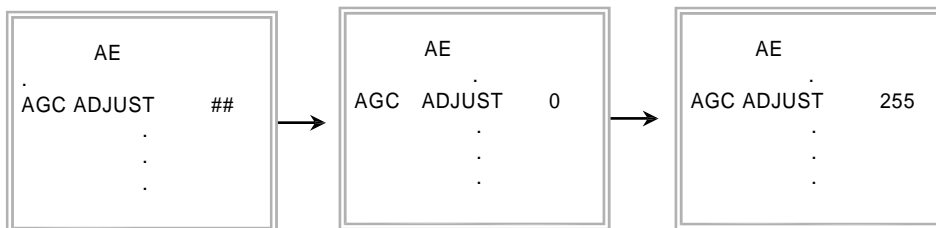


- A) Select the "IRIS ADJUST" in submenu. Using Tele/wide Command,
- B) Adjust the level from 85(MIN) to 221(MAX).

\* ##: Current level at Auto mode.

##### 4.3 AGC ADJUST Set:

This function is available for AGC MAN mode.

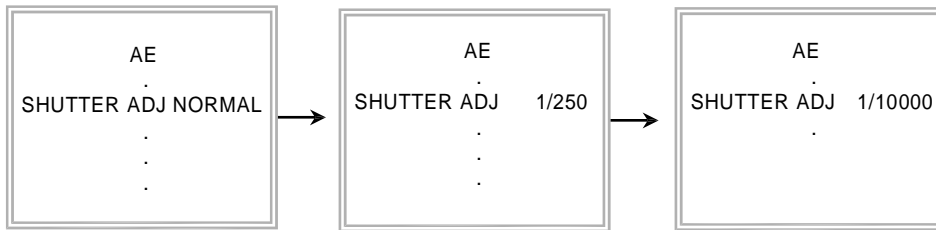


- A) Select the "IRIS ADJUST" in submenu. Using Tele/wide Command,
- B) Adjust the level from 0(MIN) to 255(MAX).

\* ##: Current level at Auto mode.

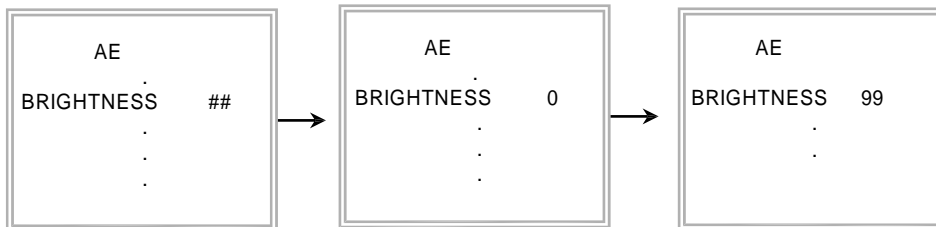
#### 4.4 SHUTTER ADJUST Set:

This function is available for SHUTTER MAN mode.



- A) Select the "SHUTTER" in submenu. Using Tele/wide Command,
- B) Set the mode NORMAL, 1/125 ~ 1/10000 using Near/Far Command.

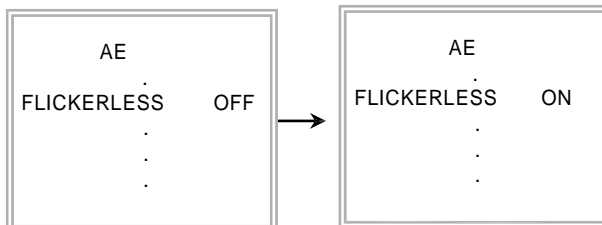
#### 4.5 BRIGHTNESS ADJUSTMENT Set:



- A) Select the "BRIGHTNESS" in submenu. Using Tele/wide Command,
- B) Adjust the level from 0(MIN) to 99(MAX).

\* ## : Current level at Auto mode.

#### 4.6 FLICKERLESS Set:

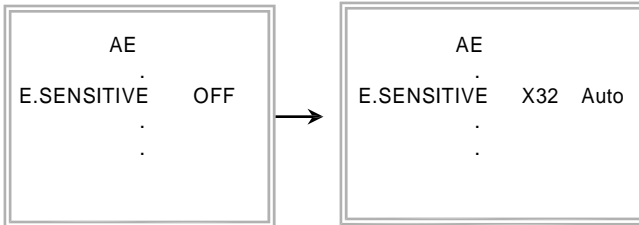


- A) Select the "FLICKERLESS" in submenu using Tele/wide Command.
- B) Set the mode OFF, ON using Near/Far Command.

\* FLICKERLESS: For removing the flicker of picture.

ON: Remove the flicker. In the case of NTSC System Shutter Speed is 1/100 sec. In the case of PAL System; Shutter Speed is 1/120 sec.

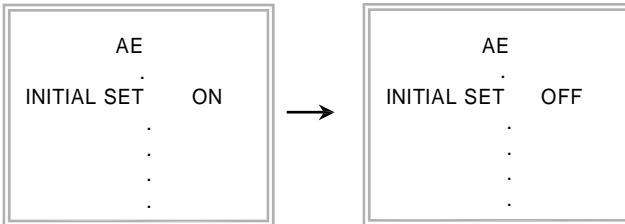
4.7 E. SENSITIVITY SET:



- A) Select the "E.SENSITIVITY" in submenu using Tele/wide Command.
- B) Select the sensitivity mode what you want in submenu. Using Near/Far Command
  - \* Mode sequence: OFF-X2 AUTO-X4 AUTO-X8 AUTO-X10AUTO-X16 AUTO- X32 AUTO -OFF- X2 FIX-X4 FIX -X8 FIX -X10 FIX -X16 FIX - X32 FIX-OFF

4.8 INITIAL SET:

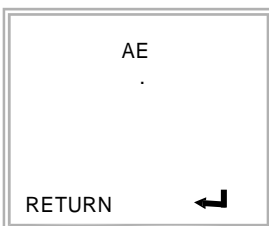
If initial mode set to ON, all AE function is changed to the factory setting



- A) Select the "ININTIAL SET" in submenu. Using Tele/wide Command.
- B) Set the initial set mode to ON Using Near/Far Command

4.9 RETURN TO MAIN MENU:

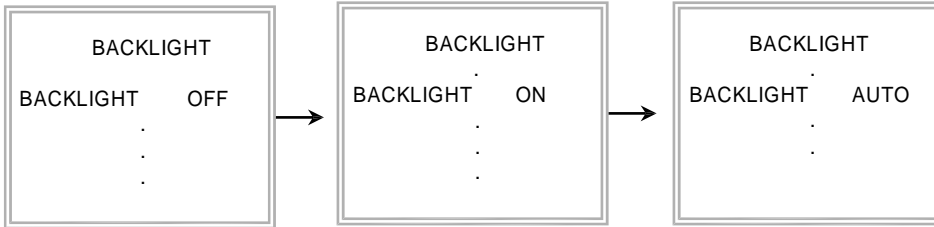
This function is exit to main menu.



- A) Select the "RETURN" in submenu using Tele/wide Command.
- B) Set the return mode using Near/Far Command.

## (5) BACKLIGHT

### 5.1 BACKLIGHT Set:



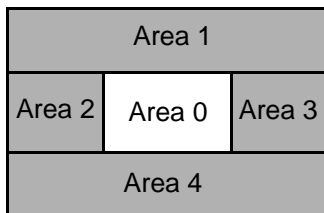
- Select the "BACKLIGHT" in submenu. Using Tele/wide Command,
- Set the mode OFF, ON, or AUTO using Near/Far Command.

#### \* Auto BLC (Auto back light compensation)

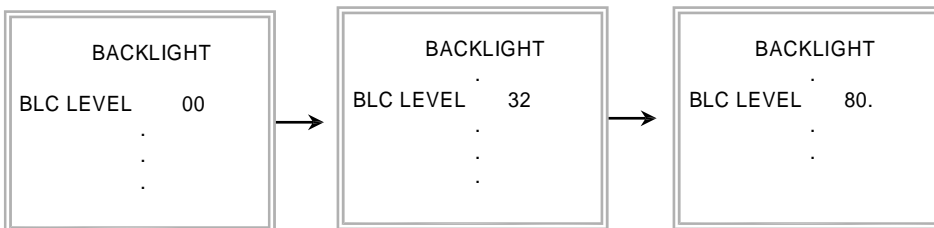
When a backlight condition occurs in area1, area2, area3, or area4, the back light compensation is enable automatically.

When the back light condition disappears in that area,

BLC is disabled automatically. If you do not want this mode, please set to OFF.

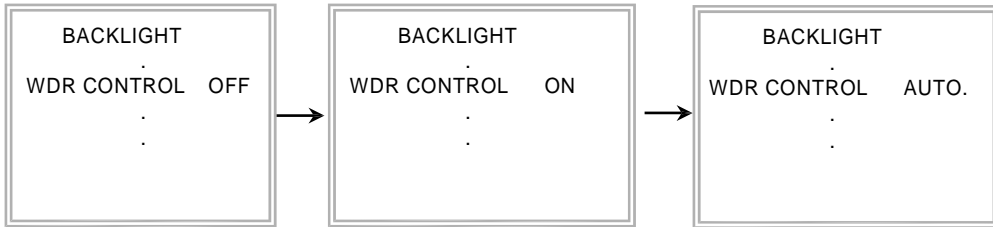


### 5.2 BACKLIGHT LEVEL Set:



- Select the "BLC LEVEL" in submenu using Tele/wide Command.
- Adjust the level from 0 to 80 using Near/Far Command.

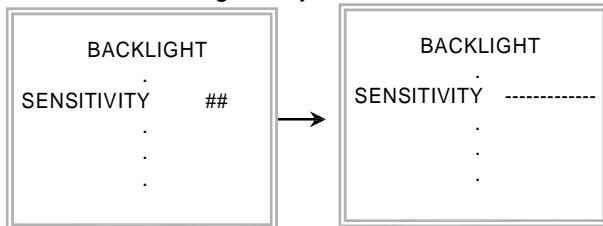
### 5.3 WDR SET:



- Select the "WDR CONTROL" in submenu using Tele/wide Command.
- Select the WDR mode what you want in submenu. Using Near/Far Command
  - \* Mode sequence: OFF-- ON -- AUTO
  - \* WDR Auto mode is working at the condition of high light back light.

### 5.4 WDR LEVEL ADJUST Set:

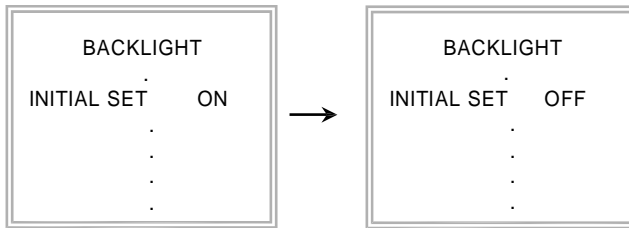
This function is the gain adjustment of WDR



- Select the "SENSITIVITY" in submenu using Tele/wide Command.
- Adjust the level to some sensitivity using Near/Far Command.
  - \* ##: Current value of SENSITIVITY is before setting value.

### 5.5 INITIAL SET:

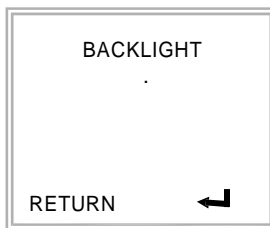
If initial mode set to ON, all BACKLIGHT function is changed to the factory setting



- A) Select the "INITIAL SET" in submenu using Tele/wide Command.
- B) Set the initial set mode to ON using Near/Far Command.

### 5.6 RETURN TO MAIN MENU:

This function is exit to main menu.

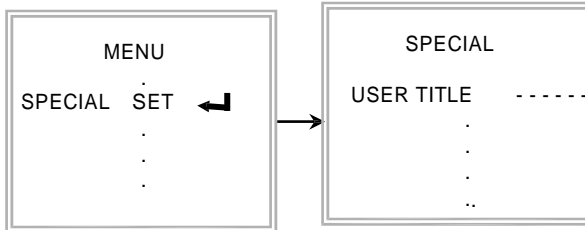


- A) Select the "RETURN" in submenu using Tele/wide Command.
- B) Set the return mode using Near/Far Command.

## (6) SPECIAL SET

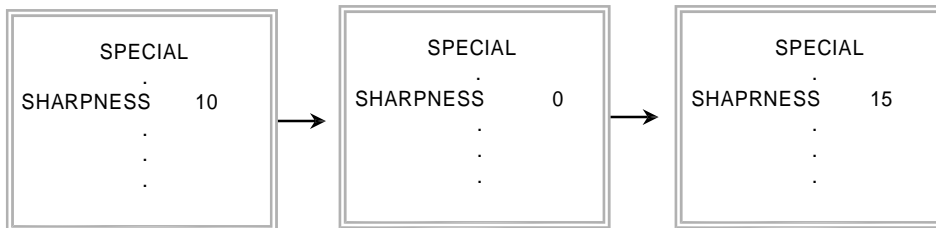
### 6.1 User Title Set:

This function is for custom title on screen display.



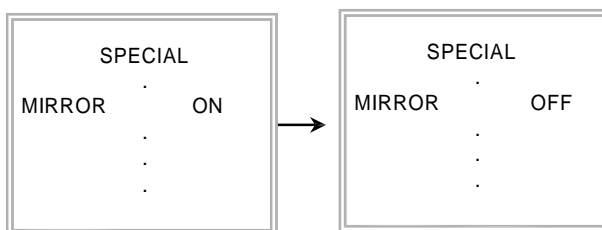
- A) Set "SPECIAL SET" in main menu using Protocol command or Demo Software.
- B) Select the "USER TITLE" in submenu using Tele/wide Command.
- C) Set the position of title and set data using Tele / Wide, Near/Far Command.

### 6.2 SHARPNESS ADJUST Set:



- A) Select the "SHARPNESS" in submenu using Tele/wide Command.
- B) Adjust the level from 0 to 5.

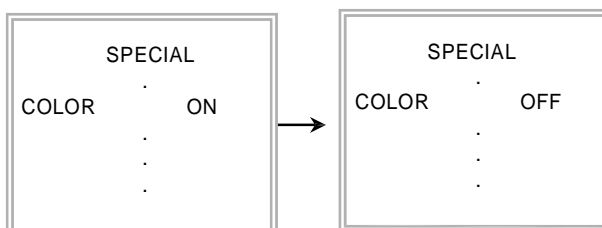
### 6.3 MIRROR Set:



- A) Select the "MIRROR" in submenu using Tele/wide Command.
- B) Select the mode ON, OFF using Near/Far command.

### 6.4 COLOR Set:

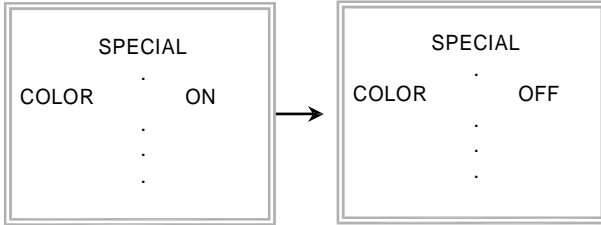
This mode is for B/W mode.



- A) Select the "COLOR" in submenu using Tele/wide Command.
- B) Select the mode ON, OFF using Near/Far command.

### 6.5 NEGATIVE Set:

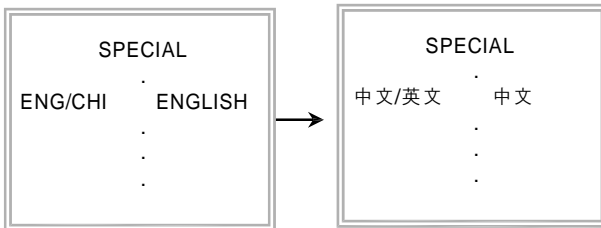
This mode is to change color and luminance to negative.



- A) Select the "COLOR" in submenu using Tele/wide Command.
- B) Select the mode ON, OFF using Near/Far command.

### 6.6 LANGUAGE Set:

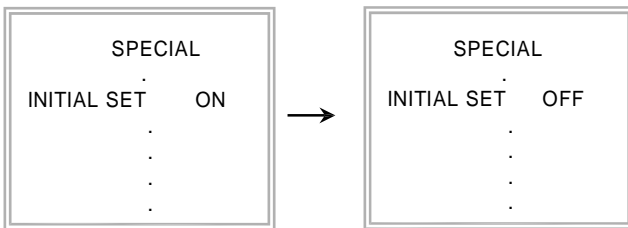
This mode is to change the OSD language of the Camera.



- A) Select the "ENG/CHI (中文/英文)" in submenu using Tele/wide Command.
- B) Change the language of the camera using Near/Far Key.
- Caution) This value is not changed when INITIAL SET is ON.

### 6.7 INITIAL SET:

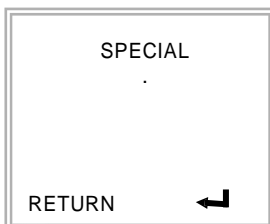
If initial mode set to ON, all SPECIAL functions are changed to the factory setting.



- A) Select the "INITIAL SET" in submenu using Tele/wide Command.
- B) Set the initial set mode to ON or OFF Using Near/Far Command.

### 6.8 RETURN TO MAIN MENU:

This function is exit to main menu.

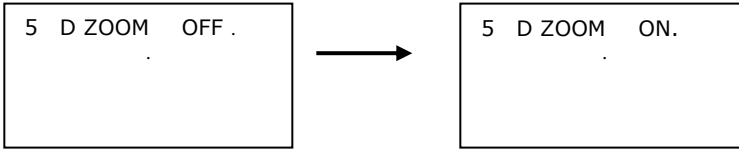


- A) Select the "RETURN" in submenu using Tele/wide Command.
- B) Set the return mode using Near/Far Command.

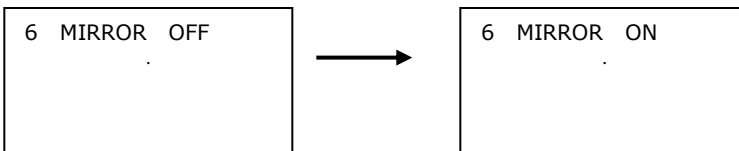




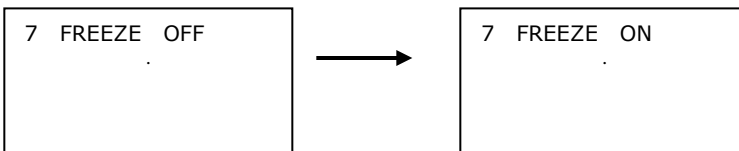
**DIGITAL ZOOM SET :** This function is for changing the Optic Zoom and Digital Zoom mode. Set the mode to OFF, ON



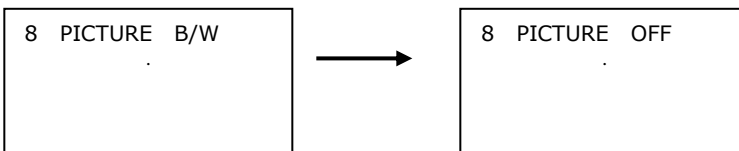
**MIRROR SET :** MIRROR ADJUST SET: This function is available for MIRROR ON/OFF mode.



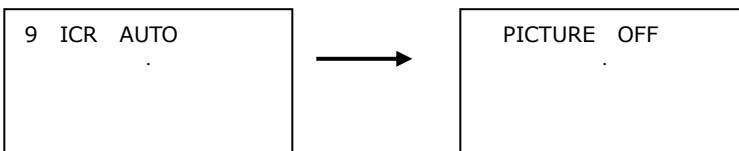
**FREEZE SET :** FREEZE ADJUST SET: This function is available for FREEZE ON/OFF mode.



**PICTURE SET :** PICTURE ADJUST SET: This function is available for PICTURE ON/OFF mode.



**ICR SET :** IR Cut ADJUST SET: This function is available for ICR AUTO/OFF mode.



**OSD DISP SET :** OSD DISP ADJUST SET: This function is available for OSD DISP ON/OFF mode.

