

## INSTALLATION / OPERATING MANUAL

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# IR Speed PTZ Camera

- Before attempting to connect or operate this product, please read these instructions carefully and save this manual for future use.
- The design and specifications are subject to be changed without prior notice to improve product's quality.

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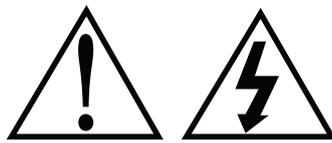
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# 1. PRECAUTIONS



## 1.1 Important Safety Instruction

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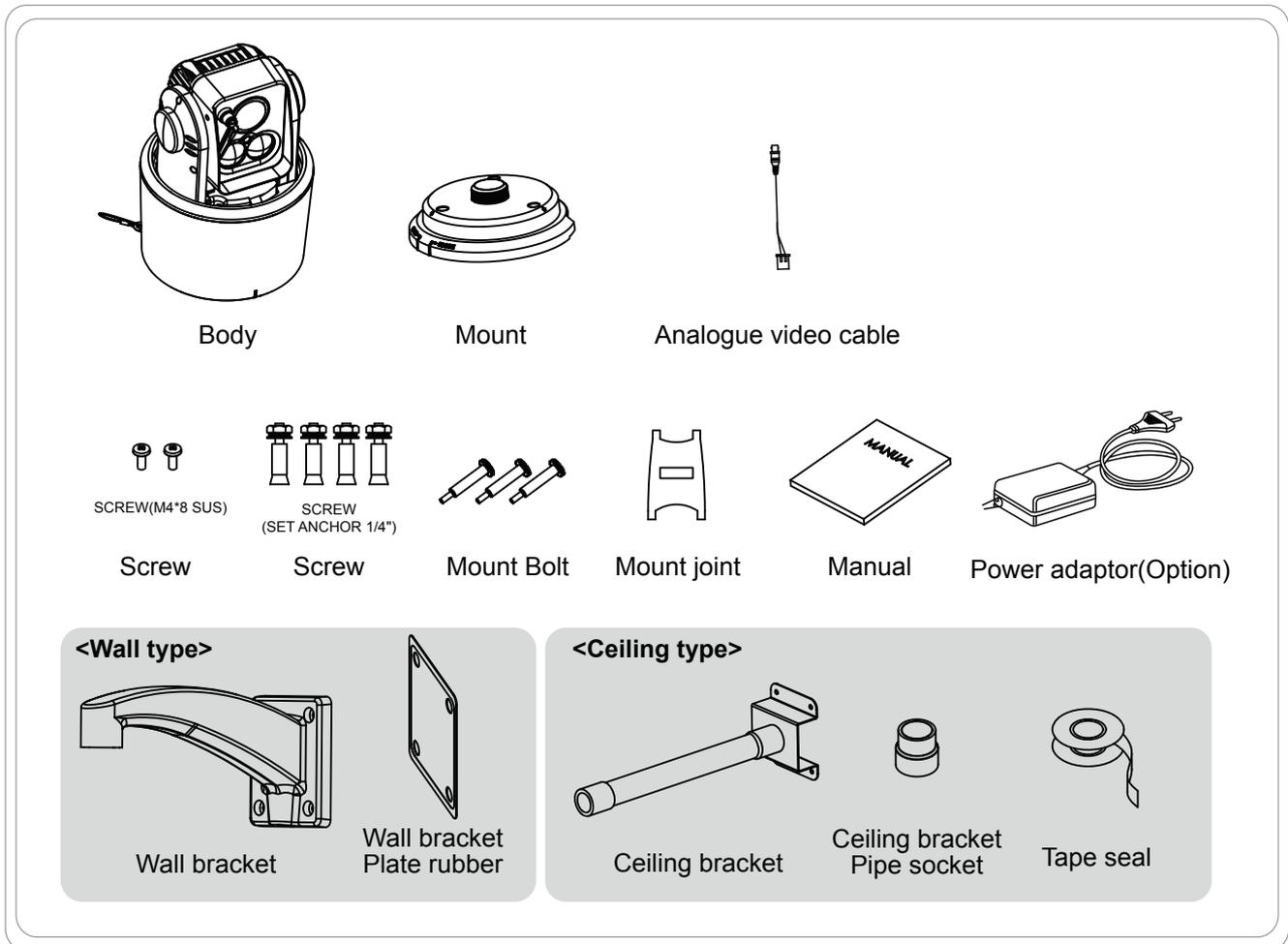
- Read these instructions.
- Pay attention on all the warnings.
- Follow all instructions.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not disassemble or insert foreign objects.
- Do not install near any heat sources such as radiation, heat registers, stoves, or other apparatus. (Including amplifiers) that produce heat.
- Do not aim the camera at the sun or any other strong light source.
- Do not install the camera in intermittent lighting environments.
- Only use attachments/accessories specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- Installation should be done only by qualified personnel and conform to all local codes.
- Installation should be done in a place strong enough to hold it.
- Use only installation methods and materials capable of supporting four times the maximum specified load.
- It is designed for indoor use only and it must not be installed where exposed to rain and moisture without additional outdoor housing and bracket.
- To prevent damage from water leakage when installing a mount outdoors on a roof or wall, apply sealant around the bolt holes between the mount and mounting surface.
- These instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.
- Only use replacement parts recommended by manufacturer and these instructions.

## 2. GETTING STARTED

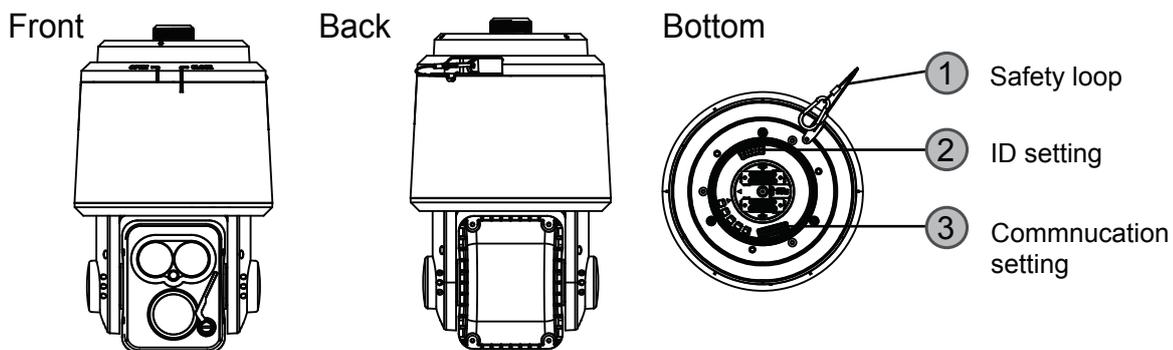
### 2.1 Unpacking

The following parts are supplied with the outdoor speed PTZ system.

< Figure 1. package Components >



### 2.2 Part name

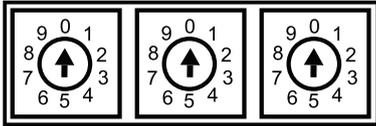


## 2.3 DIP Switch Setting

Before start up the camera, set the protocol and camera address and termination set with dip-switches and click-switches as shown in the below diagram.

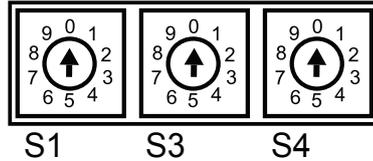
### 1. Set the camera address (ID)

Open the top cover of the product to set camera address.



Address switch

\* ID setting is 1~255 available



S1 : 1-digit number of address  
S3 : 10-digit number of address  
S4 : 100-digit number of address

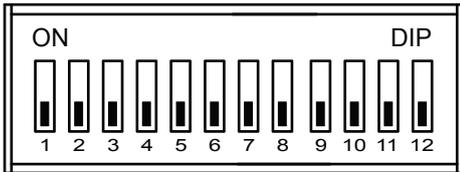
Ex) S4 = 1

S3 = 2

S1 = 8

The ID number is 128.

### 2. Protocol, Baudrate, Camera setting



1	2	3	PROTOCOL
OFF	OFF	OFF	PELCO-D
OFF	OFF	ON	PELCO-P
OFF	ON	OFF	WTX
OFF	ON	ON	EZP
ON	OFF	OFF	NC
ON	OFF	ON	NC
ON	ON	OFF	NC
ON	ON	ON	NC

4	5	6	BAUDRATE
OFF	OFF	OFF	2400
OFF	OFF	ON	4800
OFF	ON	OFF	9600
OFF	ON	ON	19200
ON	OFF	OFF	38400
ON	OFF	ON	57600
ON	ON	OFF	115200
ON	ON	ON	NC

7	RSMODE
OFF	RS-422
ON	RS-485

9	RS LOOP
OFF	OFF
ON	ON

11	IP SELECT
OFF	IP OFF
ON	IP ON

8	NTSC/PAL
OFF	NTSC
ON	PAL

10	NC
OFF	NC
ON	NC

12	BOOT0
OFF	OFF
ON	PROGRAM MODE

### 3. Set the termination On/Off



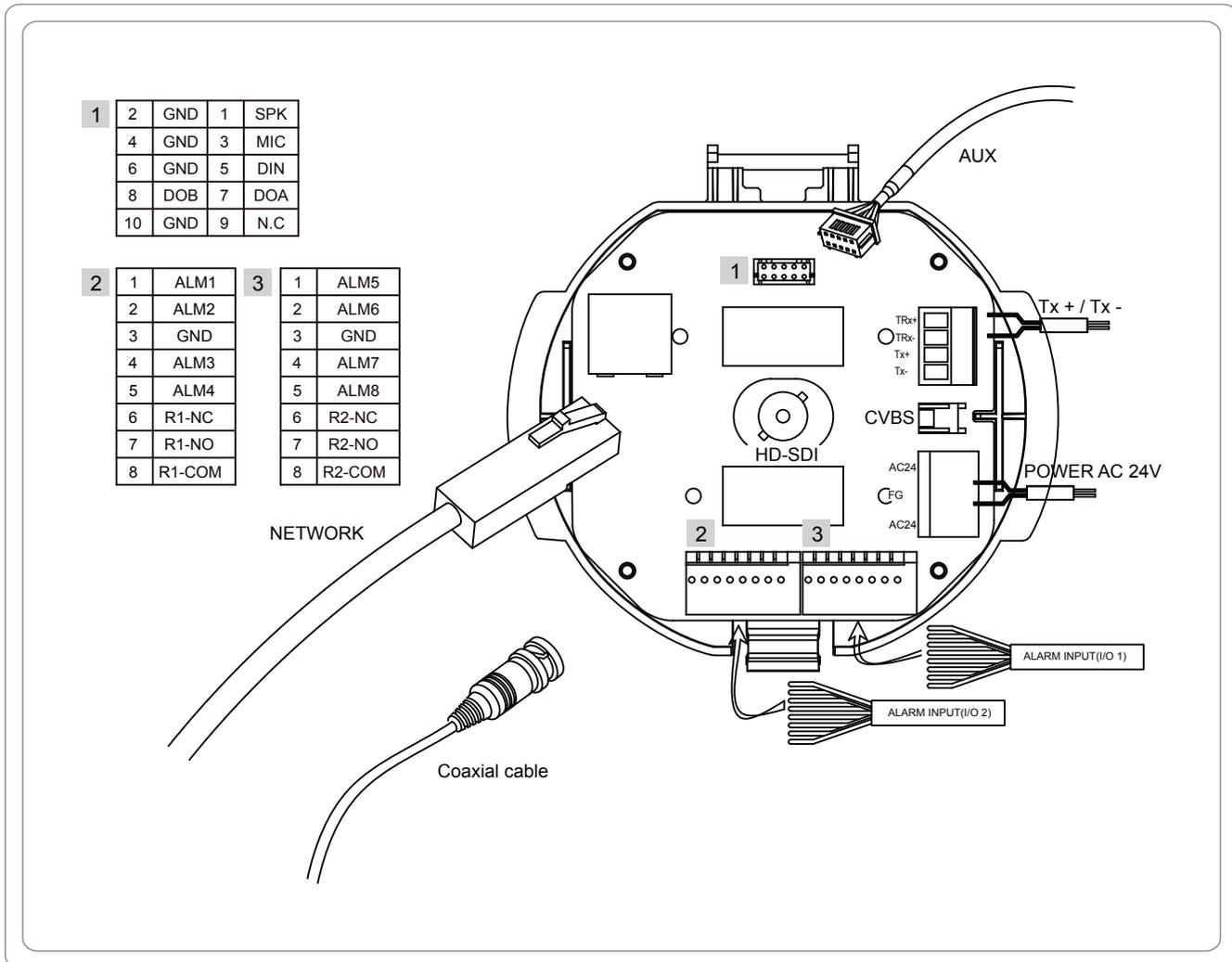
ON : Terminated  
OFF : Not terminated

The device which is connected at the end of the line must have the cable communication terminated. Without proper termination, there is potential for control signal errors.

The product have the cable communication terminated by setting the appropriate dip switch.

## 2.4 Cable connection

### 2.4.1 Power/Data communication cable connection



### 2.4.2 RS-485/RS-422 Connection

RS-422/485 connection

The PTZ can be remotely controlled by an external device or control system, such as a control keyboard or DVR, using RS-485 half-duplex, RS-422 duplex or simplex serial communication signals. Connect marked TRx+, TRx- to Tx+ and Tx- of the RS-485 control system.

If control system is RS-422, connect Tx+, Tx- of controller to Rx+ and Rx- of the PTZ Camera series. And also connect the Tx+, Tx- to Rx+, Rx- of the control device respectively. Total length of the cable for communication should not exceed 1.2Km.

### 2.4.3 HD-SDI Output connection

Connect the HD-SDI out (BNC) connector to the monitor or video input of DVR. Video cable and RS-485/422 communication cable are not provided in this product's package.



Caution



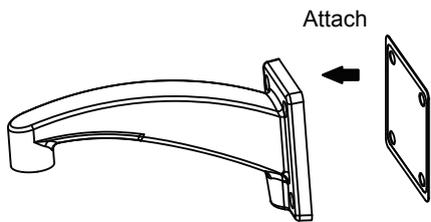
Do not connect the AC24V power terminal to the communication terminal.

- Power Terminal: 2PIN
- Com Terminal: 4PIN

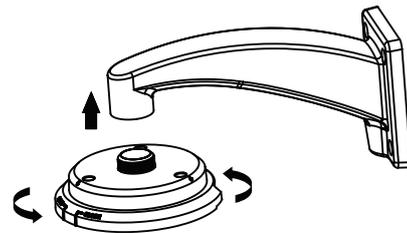
### 3. Installation

- The following steps of installation and connection work should be done by qualified service personnel or system installers and should conform to all local codes.
- Be sure to switch the camera off before installation is completed.
- Do not install the camera near the air outlet of an air conditioner.
- Before installation, set the system with Dip switch on the back side of the mechanism part, and assemble the mechanism and housing according to the below instruction

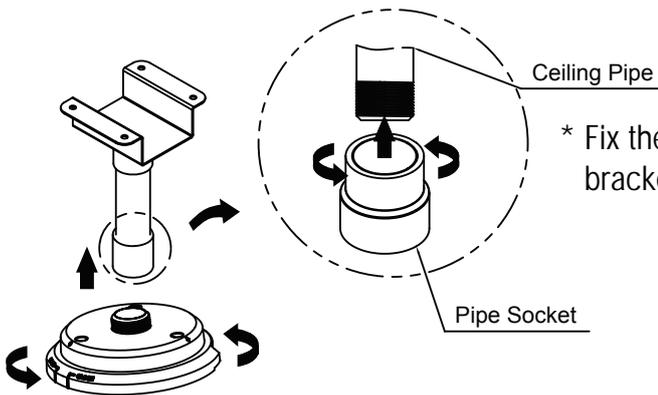
#### 3.1 Installation



Attach the provided wall bracket rubber to a wall bracket as shown in the below picture.

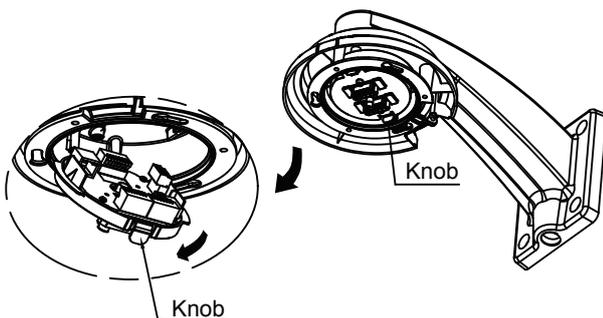


Set the mount to the wall bracket by turn it to clockwise.

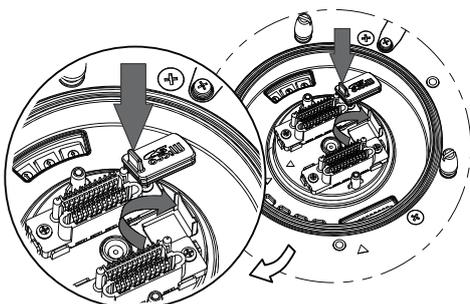


\* Fix the socket into the ceiling pipe when install the ceiling bracket. The socket is included in the accessory package.

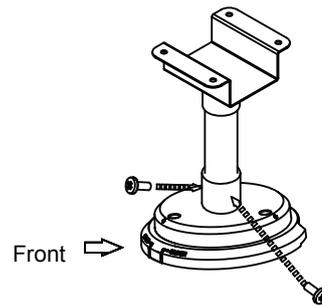
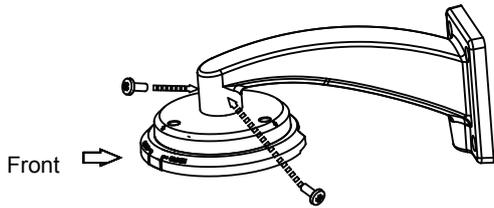
Set the mount to the ceiling bracket by turn it to clockwise.



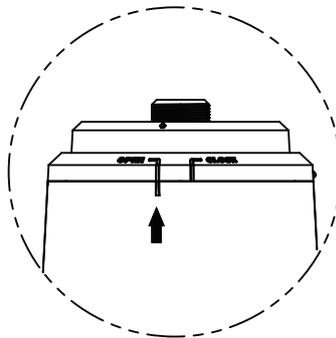
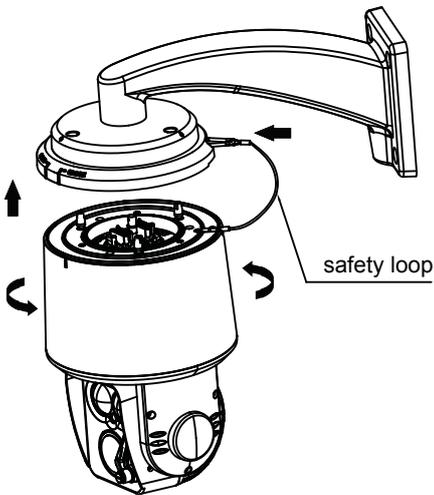
Push the knob of mount and pull down. Connect the cable. (See the page6)



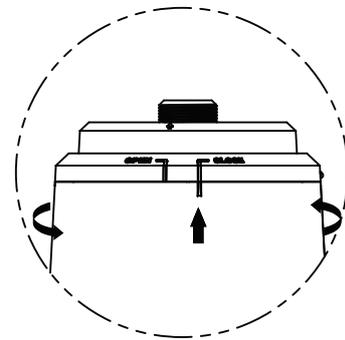
To insert or remove the SD card, open the protective cap and put up the slot cover of SD card. Cover the protective cap after insert the SD card to prevent foreign substance damage.



After connecting the cable, set the mount in the proper position and fix the 2 screws (M4\*8)



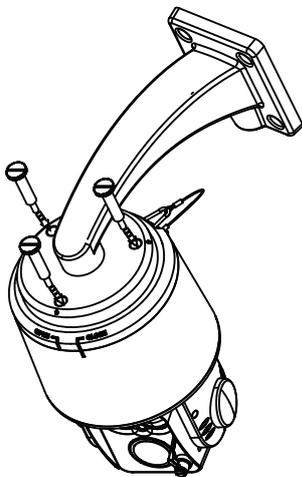
OPEN



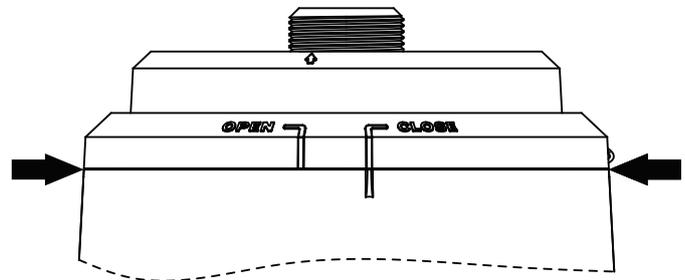
CLOSE

(Turn the body to clockwise)

1. Connect the safety loop on the body and mount back side.
  2. Align the arrow mark in the body and mount.
  3. Fix the body by turn it to clockwise.
- \* Please check the direction of connector in the camera body and mount.



Fix the provided mount screws to the PTZ camera tightly.



Fix the bolt tighten not to make a room between combinatorial parts to avoid any water-leakage from outside.

## 4. ON-SCREEN DISPLAY PROGRAM MENU

### INITIALIZE

```
PTZID       : 001
FIRMWARE    : X.XX
V-FORMAT    : 1080p30
CVBS        : NTSC
PROTOCOL    : PELCO D V1.0
BUADRATE    : 2400 ,N,1
CAMERA      : MMC
```

```
>>PAN OFFSET . . . . . PASS
>>TILT OFFSET . . . . . PASS
NORMAL SETTING . . . . . WAIT
```

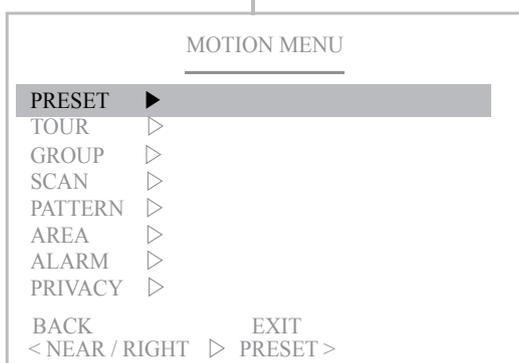
The initialize screen is shown up to check address, version, protocol and video when the power on.

※ You can not go into the menu in the IP mode.

### 4.1 Motion Setting

※ After label setting, set the motion function.

#### 4.1.1 Preset



#### Preset Quick Operating Guide

Set Preset : 1 ~ 255 +  3sec.

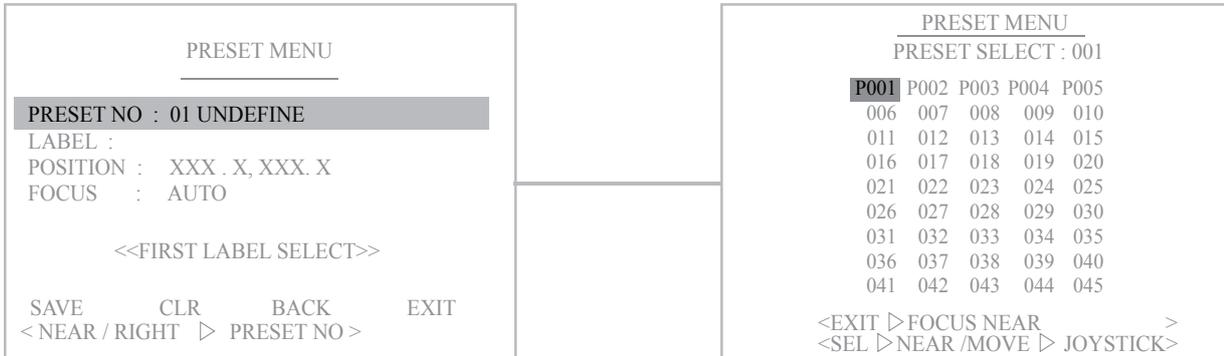
Go to Preset : 1 ~ 255 + 

The preset function is that the camera memorizes positions of the pan/tilt and zoom. This function is a representative function of the PTZ camera which can find memorized preset positions just by selecting the preset No. A Maximum of 255 Preset positions are toured in order.

(1) Select the Preset number

P01 : Defined Preset number / 01 : Undefined Preset number

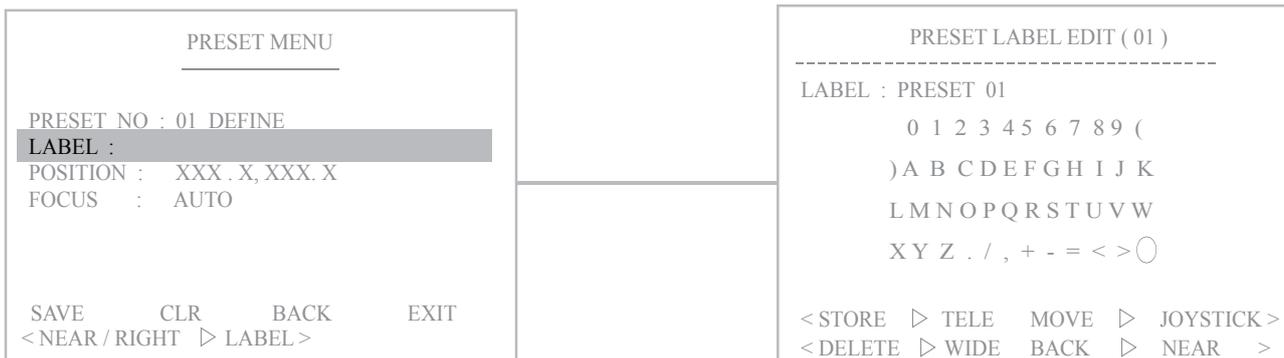
Move :  Select : 



(2) Set the Preset Label

Move :  Select :  or  Delete :  or 

It's available to set the desired label, displayed on the executing screen of Preset.



After the label is set, push the NEAR button to exit.

(3) Define the Preset position

① Select the Position menu

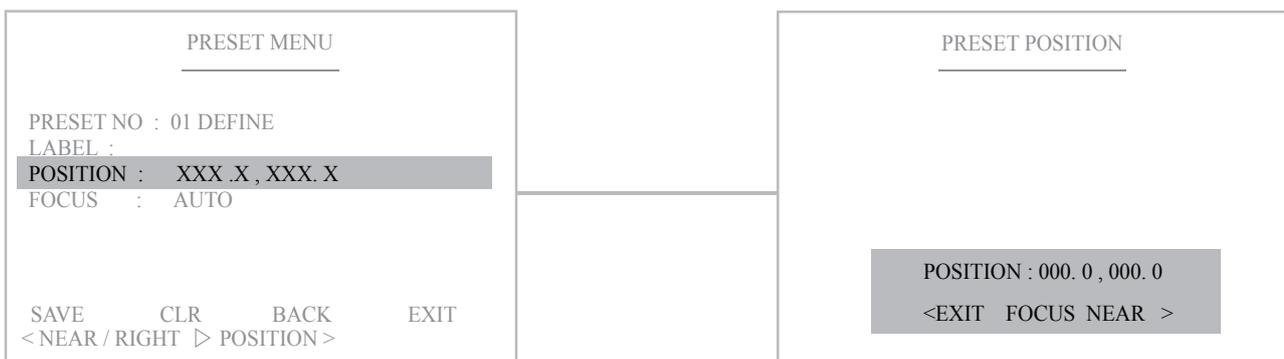
 or 

② Move and set the position



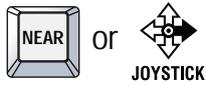
③ Set & Back



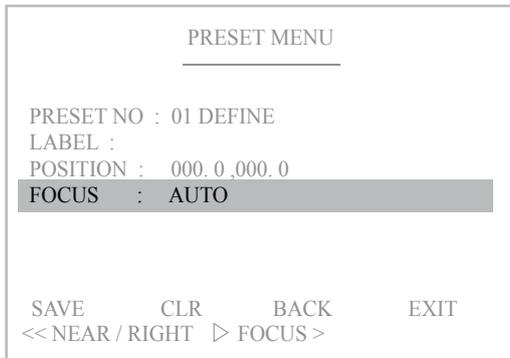


(4) Select the focus mode for Preset

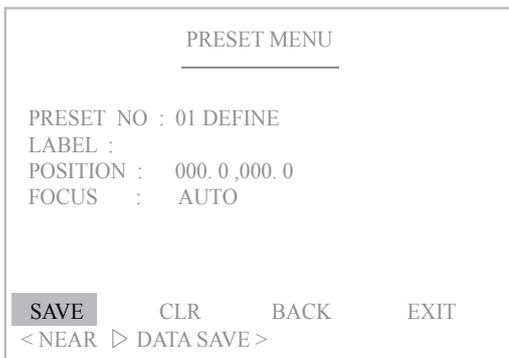
① Select the Focus menu



② Move and set the Focus Menu



On focus menu, there are 3 modes : Auto, Manual, Onepush. Focus will be adjusted once after preset moving.



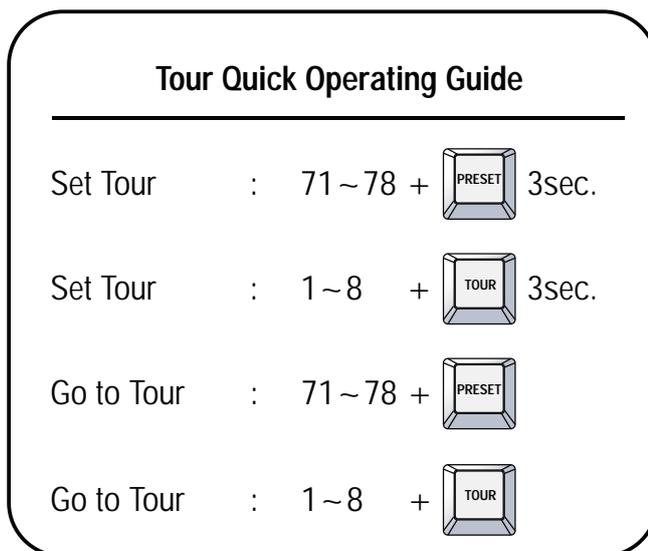
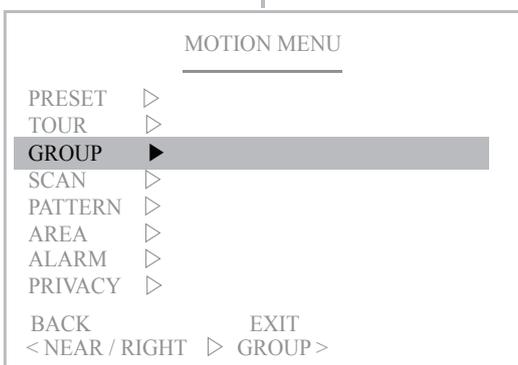
(5) "Save" above setting Pattern data to the memory.

(6) "CLR" means above setting Pattern data will not be saved and be cleared.

(7) "BACK" means it goes back to the previous menu :Motion.

(8) "EXIT" means it goes out of MENU.

## 4. 1. 2 Tour

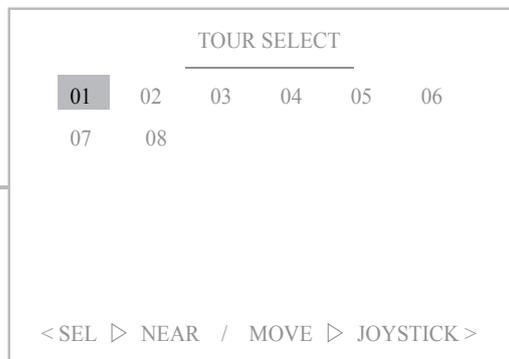
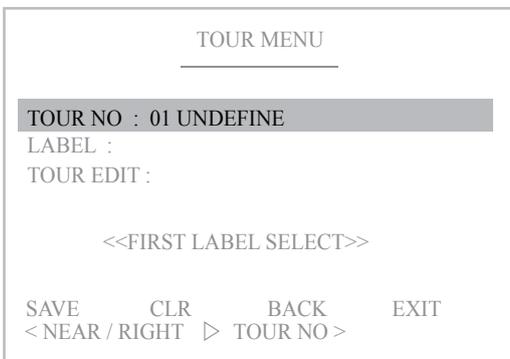


The Tour function consists of several presets run by turn. It is also adjusts the moving speed (0~63 step) and dwell time (1~99secs). Maximum of 8 Tour functions are toured in order. (※ 1 Tour can be set for 15 presets.)

### (1) Select the Tour number

T01 : Defined Tour number / 01 : Undefined Tour number

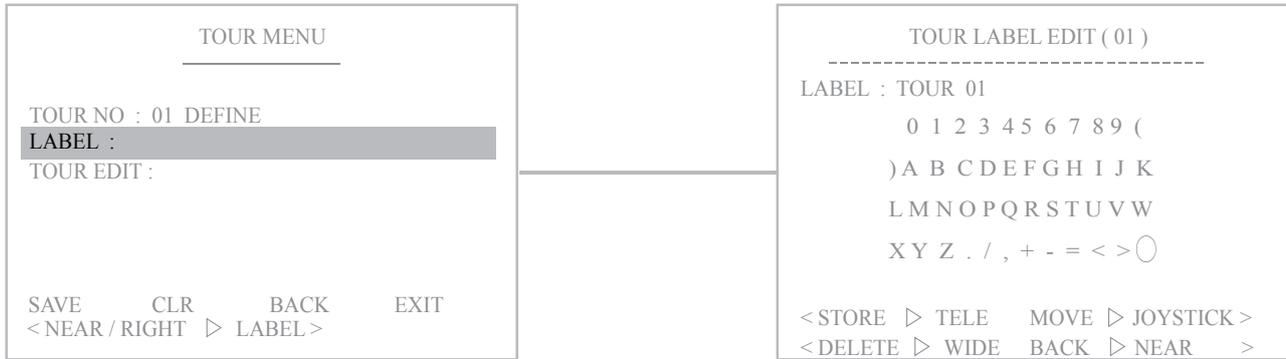
Move :      Select :



(2) Set the Tour Label

Move :  JOYSTICK    Select :  or  JOYSTICK    Delete :  or  JOYSTICK

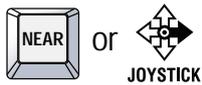
It's available to set the desired label, displayed on the executing screen of Tour.



After the label is set, push the NEAR button to exit.

(3) Define the Preset position

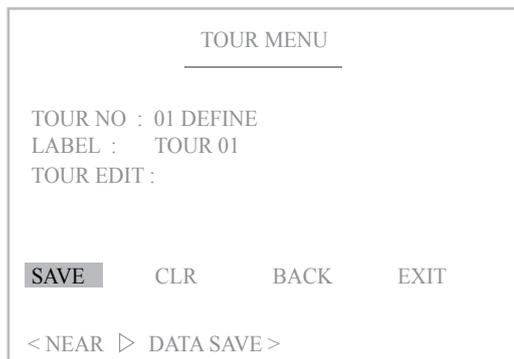
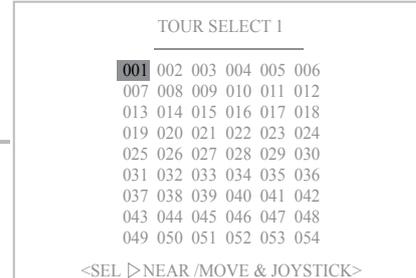
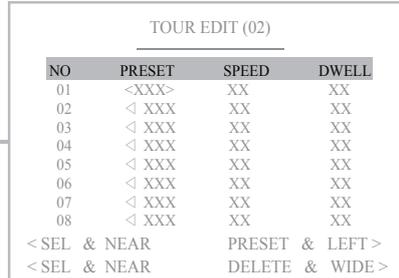
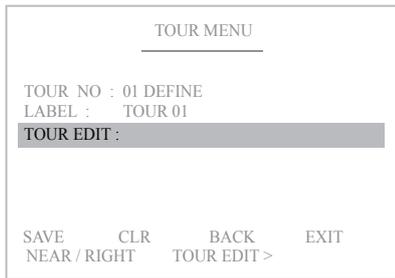
① Move to the set-up window



Move and Delete



Set & Back



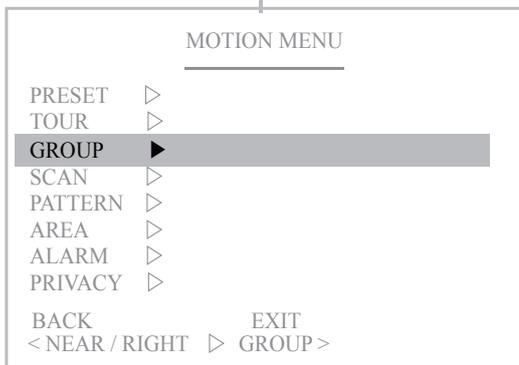
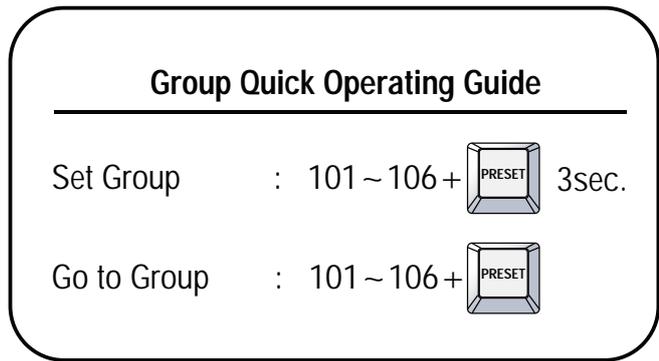
(4) "Save" above setting Pattern data to the memory.

(5) "CLR" means above setting Pattern data will not be saved and be cleared.

(6) "BACK" means it goes back to the previous menu :Motion.

(7) "EXIT" means it goes out of MENU.

### 4. 2. 3 Group



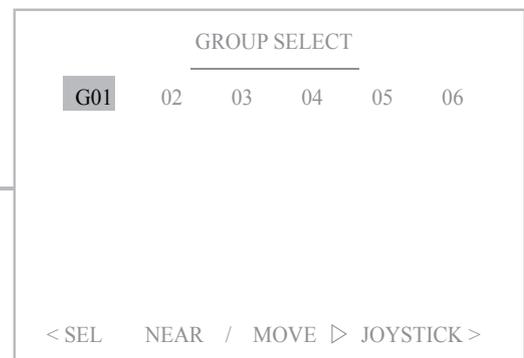
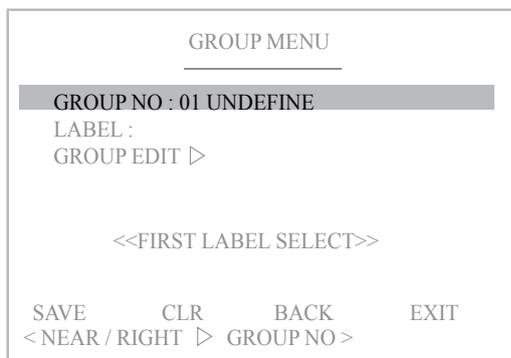
GROUP : You can make Max. 6 groups and call the saved tour by turn.

(1) Select the Group number

G01 : Defined Group number / 01 : Undefined Group number

Set from 1 to 6 groups.

Move :  Select : 



## (2) Set the Group Label

Move :  JOYSTICK    Select :  or  JOYSTICK    Delete :  or  JOYSTICK

It's available to set the desired label, displayed on the executing screen of Group.

GROUP MENU

---

GROUP NO : 01  
**LABEL :**  
 GROUP EDIT ▾

SAVE    CLR    BACK    EXIT  
 < NEAR / RIGHT ▾ LABEL >

GROUP LABEL EDIT

---

LABEL :

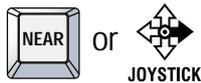
0 1 2 3 4 5 6 7 8 9 ( )  
 A B C D E F G H I J K  
 L M N O P Q R S T U V W  
 X Y Z . / , + - = < > ○

< STORE ▾ TELE    MOVE ▾ JOYSTICK >  
 < DELETE ▾ WIDE    BACK ▾ NEAR >

After the label is set, push the NEAR button to exit.

## (3) GROUP EDIT

① Move to the set-up window



Move and Delete



Set & Back



GROUP MENU

---

GROUP NO : 01  
 LABEL :  
**GROUP EDIT ▶**

SAVE    CLR    BACK    EXIT  
 < NEAR / RIGHT ▾ GROUP EDIT >

GROUP EDIT (01)

---

NO	TOUR
01	<001>
02	002
03	XXX
04	XXX
05	XXX
06	XXX

< SEL & NEAR    PRESET & LEFT >  
 < SEL & NEAR    DELETE & WIDE >

- GROUP EDIT : Set the tour from 1 to 6 of group.

GROUP MENU

---

GROUP NO : 01  
 LABEL :  
 GROUP EDIT ▾

**SAVE**    CLR    BACK    EXIT

< NEAR ▾ DATA SAVE >

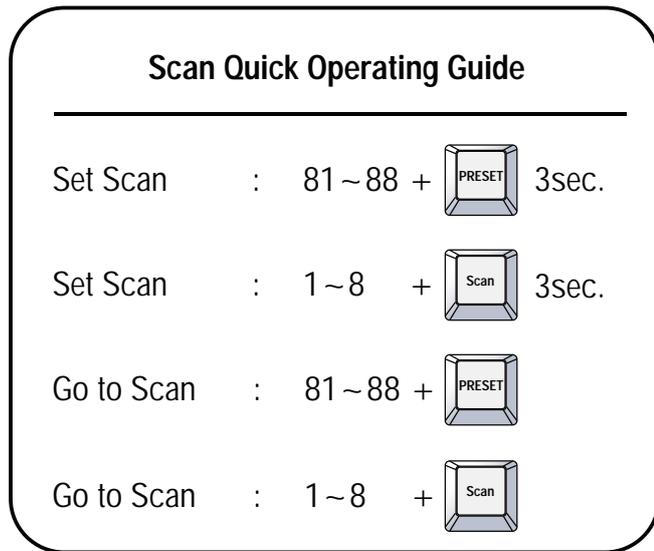
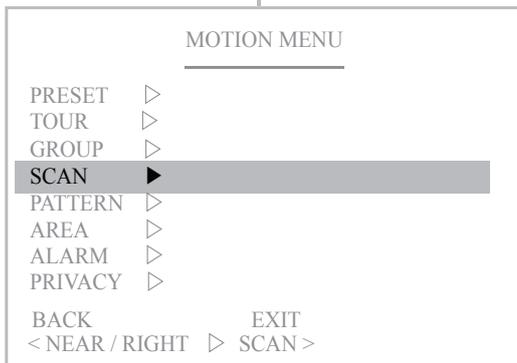
(4) "Save" above setting Pattern data to the memory.

(5) "CLR" means above setting Pattern data will not be saved and be cleared.

(6) "BACK" means it goes back to the previous menu : Motion.

(7) "EXIT" means it goes out of MENU.

## 4.1.4 Scan

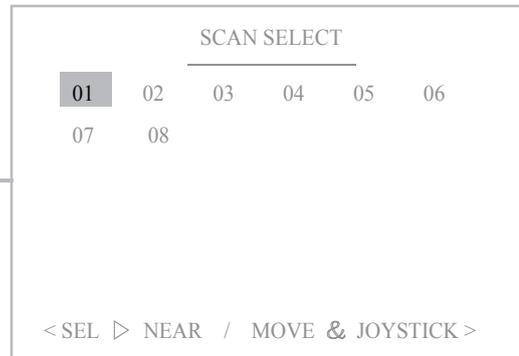
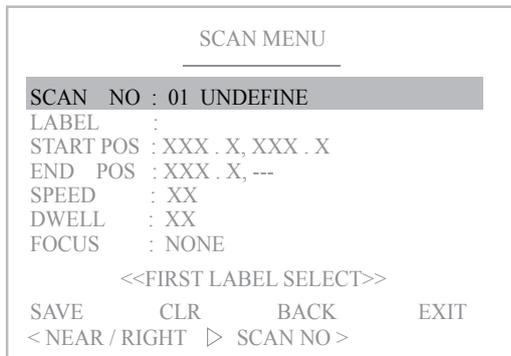


The Scan function means that the camera keeps panning between two programmed pan positions. It is also adjusts the moving speed(1 ~ 63 step). Maximum 8 Scan functions are toured in order.

### (1) Select the Scan number

S01 : Defined Scan number / 01 : Undefined Scan number

Move : Select :



## (2) Set the Scan Label

Move :  Select :  or  Delete :  or 

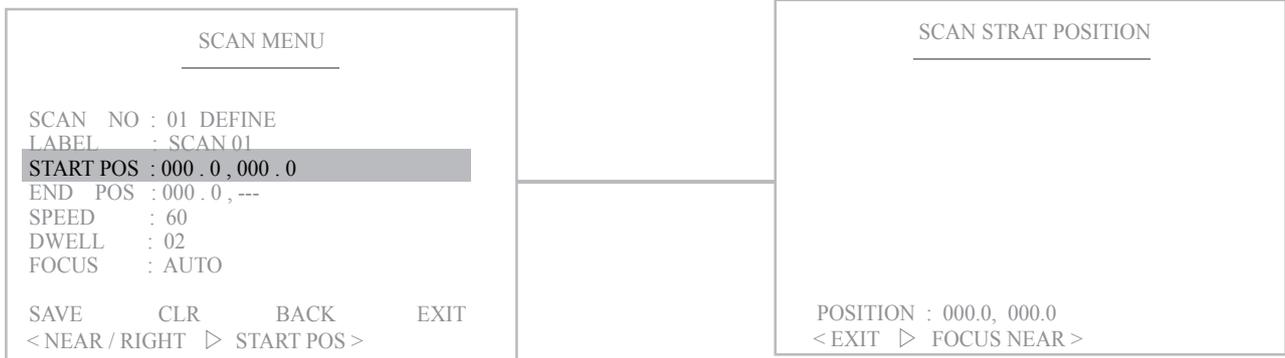
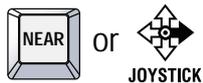
It's available to set the desired label, displayed on the executing screen of Scan.



After the label is set, push NEAR button to go out.

## (3) Define the Start pan position

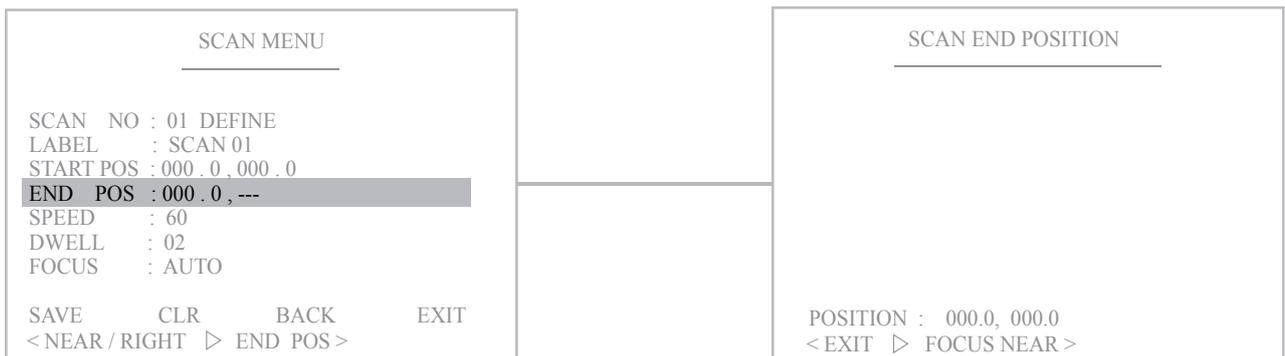
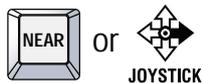
- ① Select Start Pos menu
- ② Move and set the position
- ③ Go back



※ Save the zoom, Tilt and position.

## (4) Define the End pan position

- ① Select End Pos menu
- ② Move and set the position
- ③ Go back



(5) Set the Scan speed

Increase :  or  JOYSTICK

Decrease :  or  JOYSTICK

It adjusts the moving speed from 1 ~ 63 steps.

(6) Set the Dwell Time

Increase :  or  JOYSTICK

Decrease :  or  JOYSTICK

Dwell time means the time that the camera stay at the start & end pan positions.

It's adjustable from 00 ~ 59seconds.

(7) Set the Focus

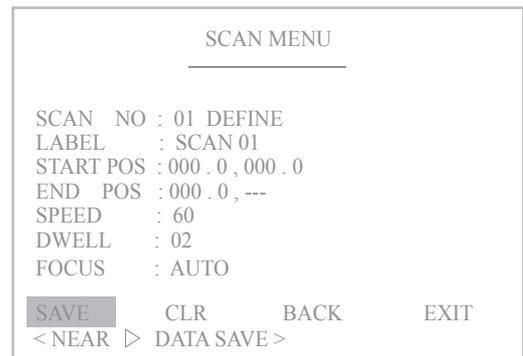
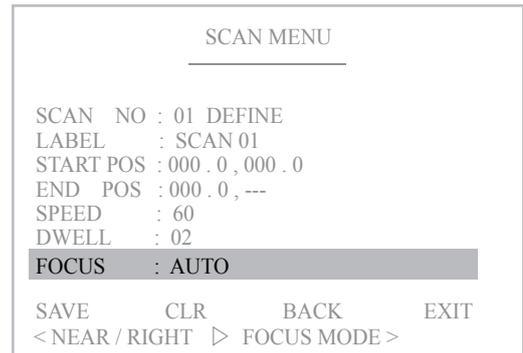
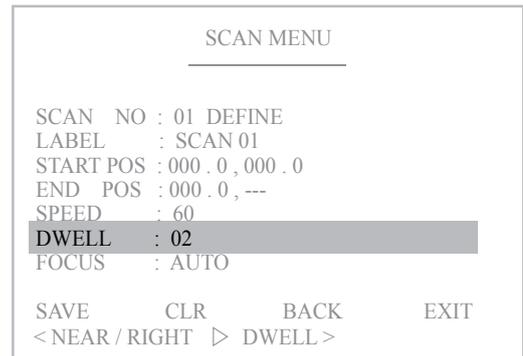
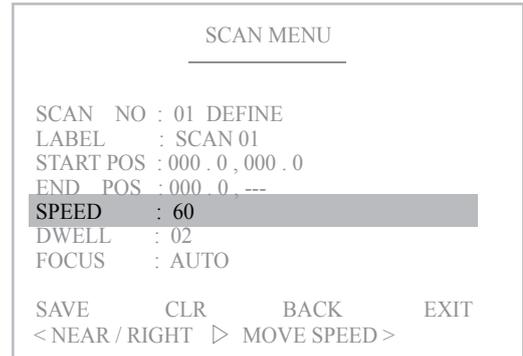
Focus can be set Auto or Manual.

(8) Save above Scan data setting to the memory.

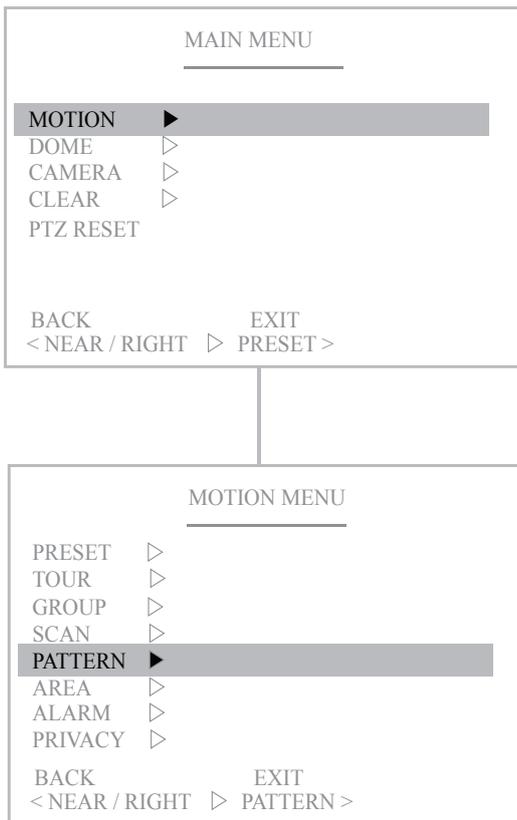
(9) "CLR" means above setting Scan data will not be saved and be cleared.

(10) "BACK" means it goes back to the previous menu :Motion.

(11) "EXIT" means it goes out to MENU



## 4. 1. 5 Pattern



### Pattern Quick Operating Guide

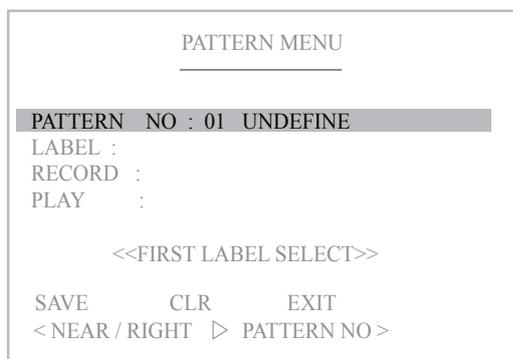
- Set Pattern : 91 ~ 94 + 3sec.
- Set Pattern : 1 ~ 4 + 3sec.
- Go to Pattern : 91 ~ 94 +
- Go to Pattern : 1 ~ 4 +

The Pattern function memorizes User's random moving path and zoom ratio. Total recording time limit is 90secs and maximum 4 Pattern functions are toured in order.

### (1) Select the Pattern number

PAT01 : Defined Pattern number / 01 : Undefined Pattern number

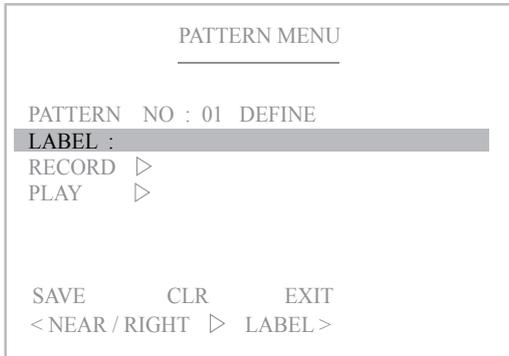
Move : Select :



(2) Set the Pattern Label

Move :  JOYSTICK    Select :  or  JOYSTICK    Delete :  or  JOYSTICK

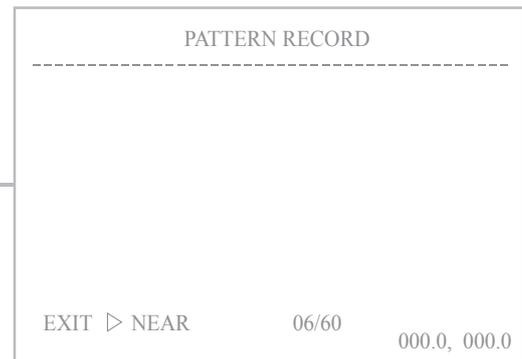
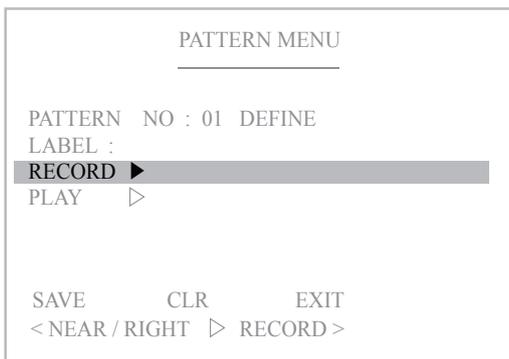
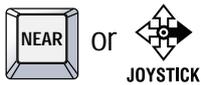
It's available to set the desired label, displayed on the executing screen of Pattern.



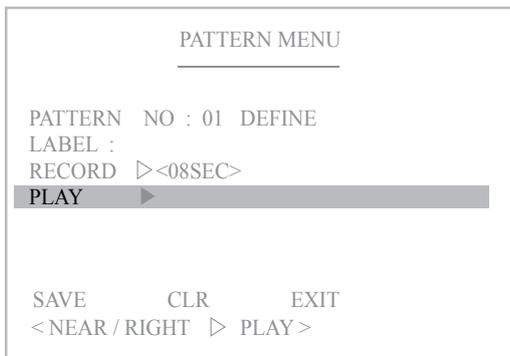
After the label set, push NEAR button to go out.

(3) Record and Save the User's random Pattern data

- ① Select the "Record" Menu      ② Move and record the pattern      ③ Set & Back



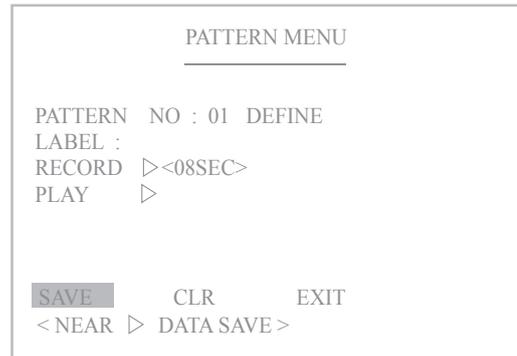
(4) Play back the recorded Pattern data



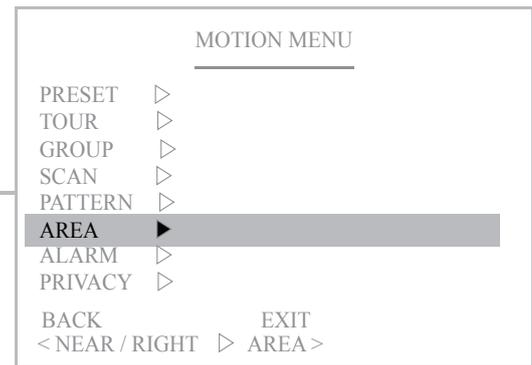
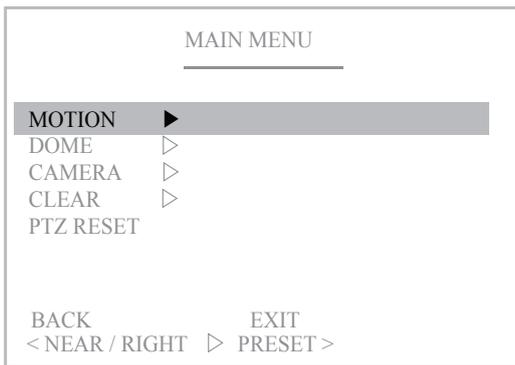
(5) "Save" above setting Pattern data to the memory.

(6) "CLR" means above setting Pattern data will not be saved and be cleared.

(7) "EXIT" means it goes out of MENU.



## 4. 1. 6 Area

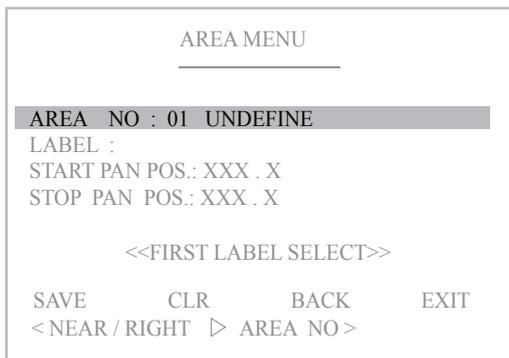


The Area function means that it displays the Area name between two programmed pan positions. Maximum 16 Area functions are toured in order.

### (1) Select the Area number

AR 01 : Defined Area number / 01 : Undefined Area number

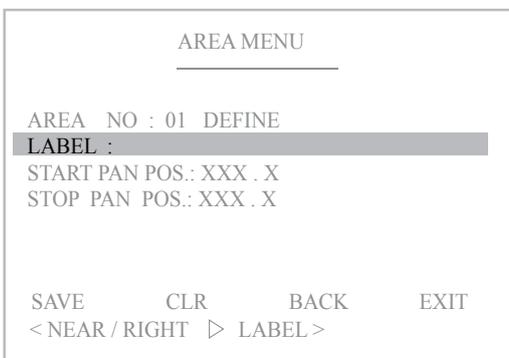
Move :  Select : 



### (2) Set the Area Label

Move :  Select :  or  Delete :  or 

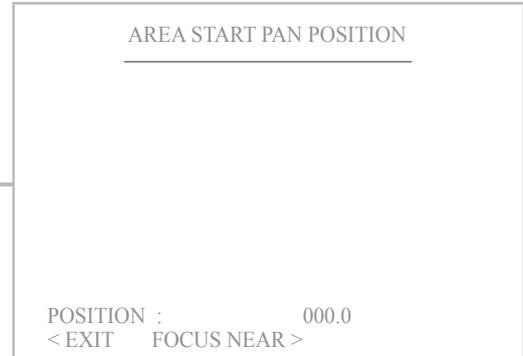
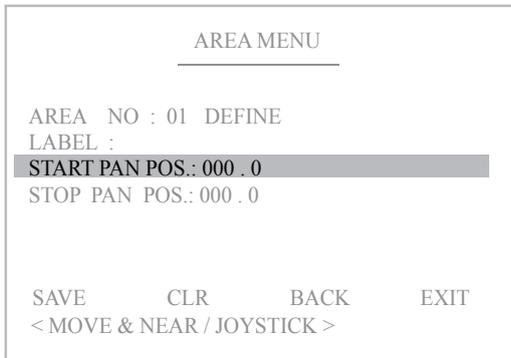
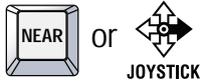
It's available to set the desired label, displayed on the executing screen of Area.



After the label set, push NEAR button to go out.

(3) Define the Start pan position

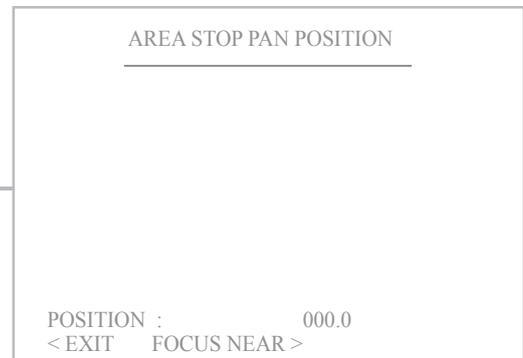
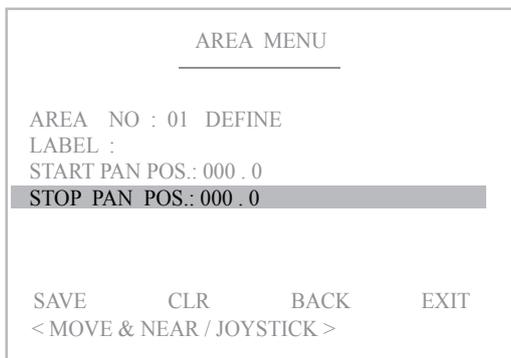
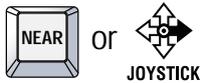
- ① Select the "Start Pan Pos" menu    ② Move and set the position    ③ Set & Back



※ Camera will move to clockwise direction only when START setting.

(4) Define the Stop pan position

- ① Select the "Start Pan Pos" Menu    ② Move and set the position    ③ Set & Back



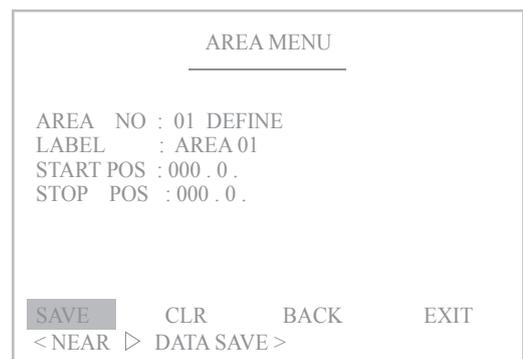
\*\* Only pan position is adjustable, because tilt position is fixed when "Start Pan Position" is set.

(5) "Save" above setting Area data to the memory.

(6) "CLR" means above setting Area data will not be saved and be cleared.

(7) "BACK" means it goes back to the previous menu :Motion.

(8) "EXIT" means it goes out of MENU



## 4. 1. 7 Alarm

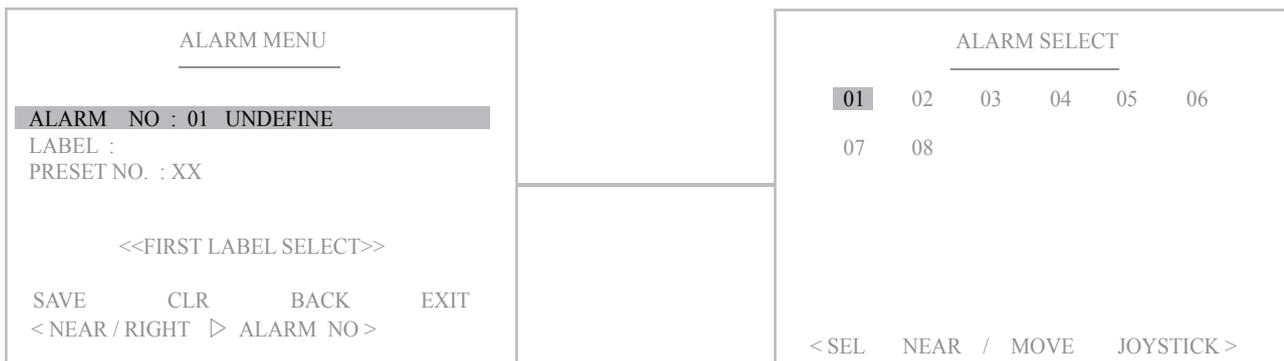


The Alarm function means that the camera moves to the programmed Preset position by the Alarm trigger. Maximum 8 Alarm functions are toured in order.

### (1) Select the Alarm number

Alarm 01 : Defined Alarm number / 01 : Undefined Alarm number

Move :  Select : 



### (2) Set the Alarm Label

Move :  Select :  or  Delete :  or 

It's available to set the desired label, displayed on the executing screen of Alarm.



After the label is set, push the NEAR button to exit.

(3) Define the Preset position with Alarm trigger

① Select the "Preset No"

② Move and set the position

③ Set & Back



or



JOYSTICK



JOYSTICK



```

ALARM MENU
-----
ALARM NO : 01 DEFINE
LABEL :
PRESET NO. : 01

SAVE      CLR      BACK      EXIT
< NEAR / RIGHT > SELECT PRESET >
    
```

```

PRESET SELECT
-----
001 002 003 004 005 006
007 008 009 010 011 012
013 014 015 016 017 018
019 020 021 022 023 024
025 026 027 028 029 030
031 032 033 034 035 036
037 038 039 040 041 042
043 044 045 046 047 048
049 050 051 052 053 054

<SEL > NEAR / MOVE & JOYSTICK >
    
```

(4) "Save" above setting Alarm data to the memory.

(5) "CLR" means above setting Alarm data will not be saved and be cleared.

(6) "BACK" means it goes back to the previous menu :Motion.

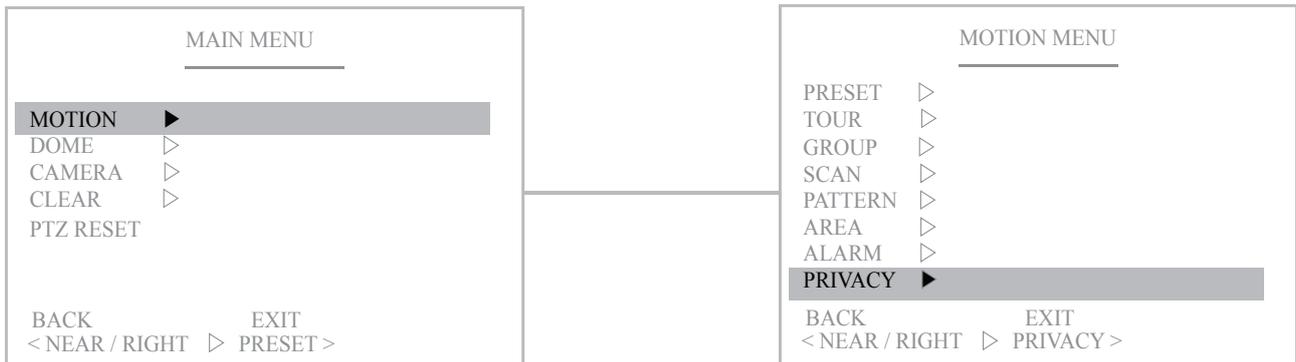
(7) "EXIT" means it goes out of MENU

```

ALARM MENU
-----
ALARM NO : 01 DEFINE
LABEL :
PRESET NO. : 01

SAVE      CLR      BACK      EXIT
< NEAR > DATA SAVE >
    
```

## 4. 1. 8 Privacy Zone Masking



The Privacy Zone Masking function means that it sets the blocking territories to prevent camera functions for the privacy of personal reasons. Maximum of 8 Privacy Zone Masking functions are toured in order.

### (1) Select the Privacy Zone number

Privacy 01 : Defined Alarm number / 01 : Undefined Alarm number

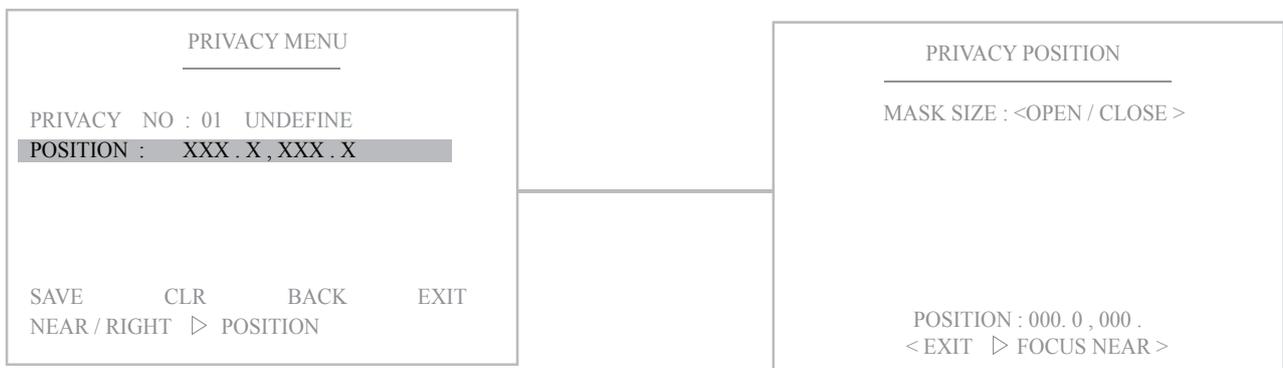
Move :  Select : 



### (2) Set the Privacy Zone Position

Move :  Select :  or  Delete :  or 

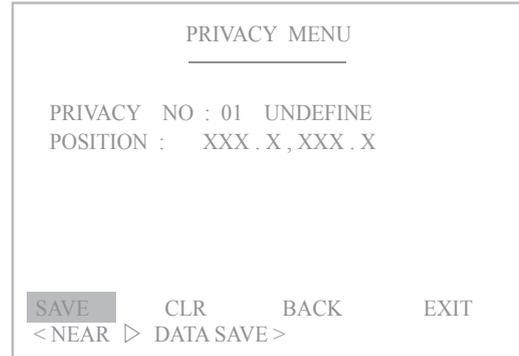
It's available to set the desired position and size of the blocking territories freely.



Adjust the MASK SIZE : OPEN (Lager), CLOSE (smaller)

After the Privacy Zone is set, push the NEAR button to go out.

- (3) "Save" above settings of Privacy Zone data to the memory.
- (4) "CLR" means above setting of Privacy Zone data will not be saved and be cleared.
- (5) "BACK" means it goes back to the previous menu :Motion.
- (6) "EXIT" means it goes out of MENU.



## 4. 2 Dome Setting



Pan, Tilt, Zoom motion is adjustable in the “Dome Setting” Menu.

### 4. 2. 1 Set the Dome camera title



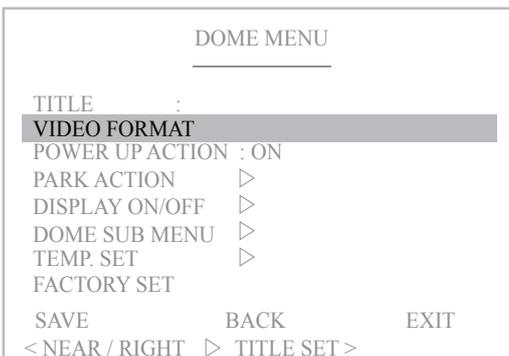
It's available to set the desired camera title.



After the label is set, push NEAR button to exit.

### 4. 2. 2 VIDEO FORMAT

- 1080p/30(25)fps / 720p/60(50)fps
- 1080p/30(25)fps / 1080p/60(50)fps / 720p/30(25)fps / 720p/60(50)fps

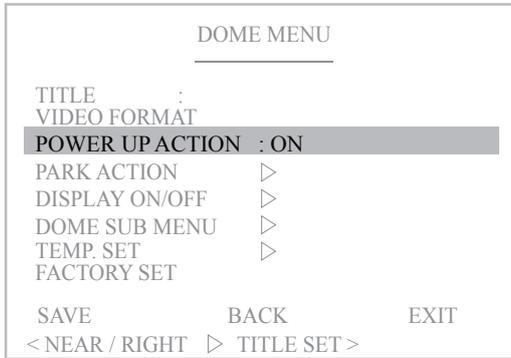


- \* Video format setting depends upon the models.
- \* Video format is not applied for analogue models.

### 4. 2. 3 Set the Power Up Action

When this function is ON, the camera memorizes the latest action and restores, it from sudden power failure.

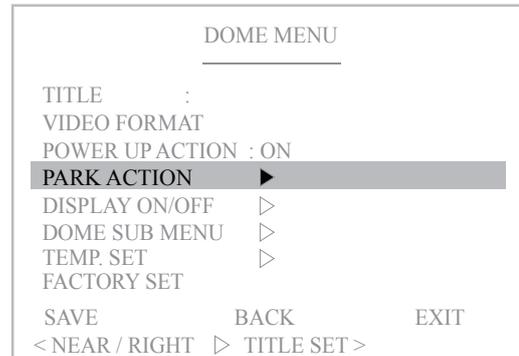
Select :  or  Set ON :  Set OFF : 



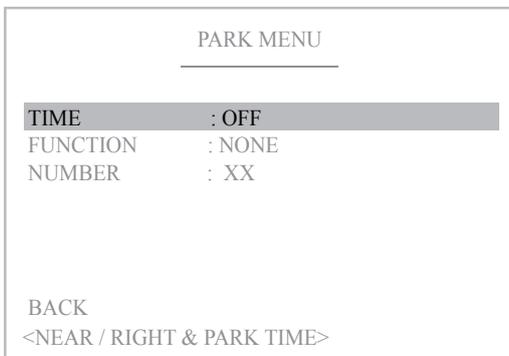
### 4. 2. 4 PARK ACTION

This function enables to locate the camera to specific position automatically if operator doesn't operate the controller for a while.

 or   
JOYSTICK



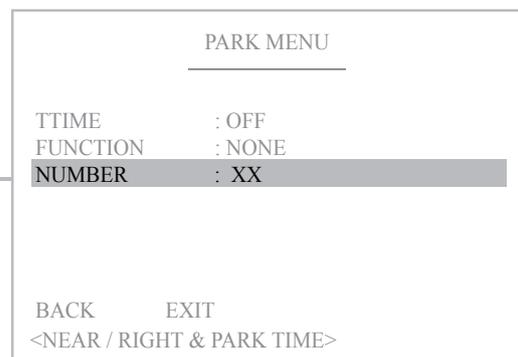
(1) Set the park Time (OFF, 10sec ~ 1 hour)



(2) Select the function which will be back after the above set time.



(3) Select the appointed function's Number



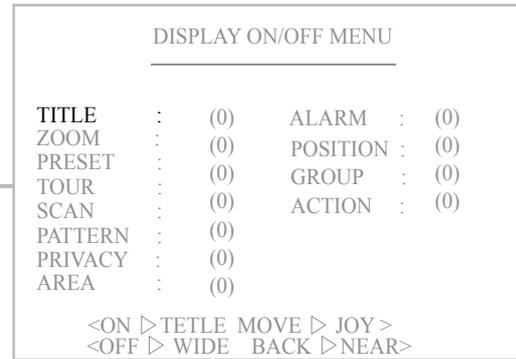
(4) "BACK" means it goes back to the previous menu.



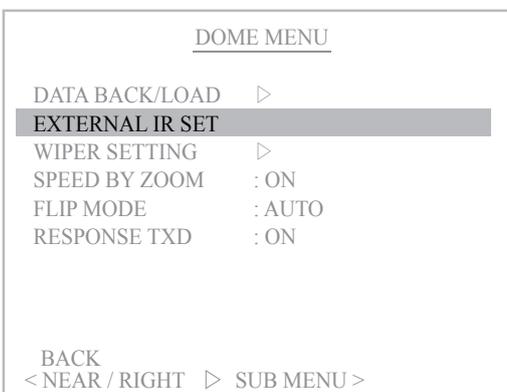
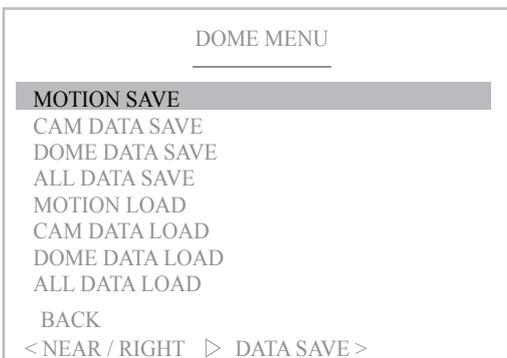
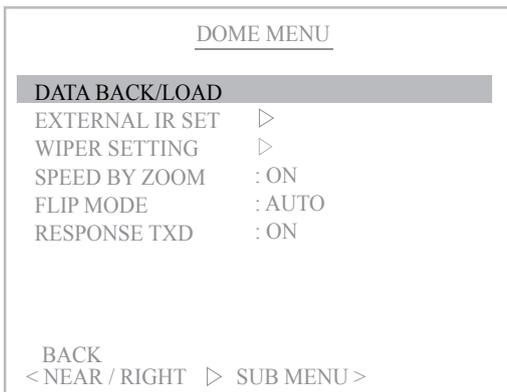
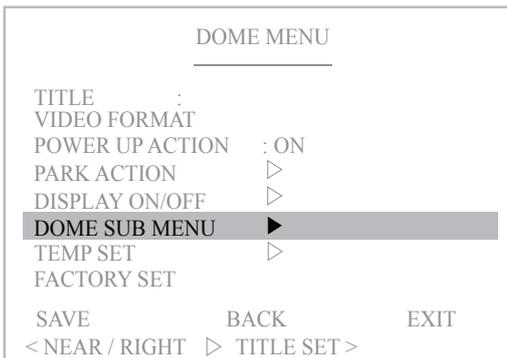
#### 4. 2. 5 Display ON/OFF Set

You can select the OSD ON to shown on the screen or clear by selecting OFF in this function.

Select :  or  Set ON :  Set OFF : 



## 4. 2. 6 DOME SUB MENU



### (1) DATA BACK/LOAD

Backup or load the Motion, Camera and PTZ Setting Data

Select :  or 

### - DATA BACK/LOAD Sub Menu Tree

- MOTION SAVE : Save the current Motion Data
- CAM DATA SAVE : Save the current Camera Data
- DOME DATA SAVE : Save the current PTZ Data
- ALL DATA SAVE : Save above all 3 Datas.
- MOTION LOAD : Apply the saved Motion Data
- CAM DATA LOAD : Apply the saved Camera Data
- DOME DATA LOAD : Apply the saved PTZ Set Data
- ALL DATA LOAD : Apply the saved above all 3 Datas.

### (2) EXTERNAL IR SET

Set the IR function.

DOME MENU	
IR SYNC MODE	: ALS SYNC
IR ILLUMINATE	: HIGHEST
ICR CHG LUX	: 2 LUX
IR CONT. TYPE	: AUTO
IR OFFSET	: 0
BACK < NEAR / RIGHT > SYNC SET >	

### - IR SYNC MODE

ALS SYNC : Synchronized in visible light.

ALL ON : IR always on.

ALL OFF : IR always off.

ICR SYNC : Operate External IR connected Camera ICR

※ Factory default is ALS SYNC .

Select :  or  Set ON : 

Set OFF : 

DOME MENU	
IR SYNC MODE	: ALS SYNC
IR ILLUMINATE	: HIGHEST
ICR CHG LUX	: 2 LUX
IR CONT. TYPE	: AUTO
IR OFFSET	: 0
BACK < NEAR / RIGHT > ILLUMINATE >	

### - IR ILLUMINATE

HIGHEST : Output the Max.IR light

HIGH : Output the high level of IR light

LOWEST : Output the Min. IR light

LOW : Output the low level of IR light

※ Factory default is HIGHEST.

Select :  or  Set ON : 

Set OFF : 

DOME MENU	
IR SYNC MODE	: ALS SYNC
IR ILLUMINATE	: HIGHEST
ICR CHG LUX	: 2 LUX
IR CONT. TYPE	: AUTO
IR OFFSET	: 0
BACK < NEAR / RIGHT > ICR LUX >	

### - ICR CHG LUX

Set the Day / Night ICR illumination. (0.5 ~ 10)

※ Factory default is 2 LUX.

Select :  or  Set ON : 

Set OFF : 

DOME MENU	
IR SYNC MODE	: ALS SYNC
IR ILLUMINATE	: HIGHEST
ICR CHG LUX	: 2 LUX
IR CONT. TYPE	: AUTO
IR OFFSET	: 0
BACK < NEAR / RIGHT > IR CONT. TYPE >	

### - IR CONT. TYPE

Select AUTO or MANUAL mode in IR Zoom function.

※ factory default is AUTO.

Select :  or  Set ON : 

Set OFF : 

DOME MENU	
IR SYNC MODE	: ALS SYNC
IR ILLUMINATE	: HIGHEST
ICR CHG LUX	: 2 LUX
IR CONT. TYPE	: AUTO
<b>IR OFFSET</b>	<b>: 0</b>
BACK < NEAR / RIGHT > IR OFFSET >	

### - IR OFFSET

Set the IR sensitivity. (-4 ~ 4)

※ Factory default is 0

Select :  or  Set ON : 

Set OFF : 

DOME MENU	
DATA BACK/LOAD	▷
EXTERNAL IR SET	▷
<b>WIPER SETTING</b>	
SPEED BY ZOOM	: ON
FLIP MODE	: AUTO
RESPONSE TXD	: ON
BACK < NEAR / RIGHT > SUB MENU >	

### (3) WIPER SETTING

Set the wiper function.

DOME MENU	
<b>WIPER MODE</b>	<b>: OFF</b>
WIPER POS.	: BOTTOM
WIPER TIME	: XXXX
BACK < NEAR / RIGHT > WIPER MODE >	

### - WIPER INTERVAL MODE

Select ON/OFF/INTERVAL to use the wiper function.

Wiper operates once at regular interval which is set in this menu.

Select :  or  Set ON : 

Set OFF : 

DOME MENU	
WIPER MODE	: OFF
<b>WIPER POS.</b>	<b>: BOTTOM</b>
WIPER TIME	: XXXX
BACK < NEAR / RIGHT > WIPER POS >	

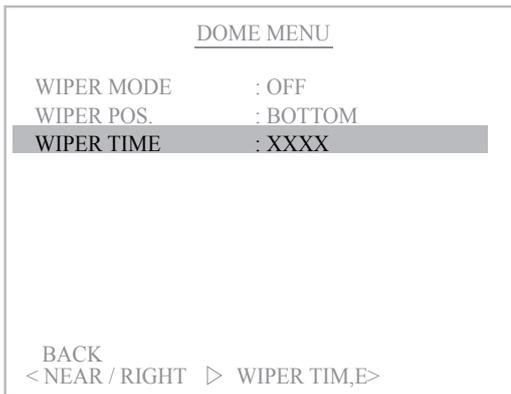
### - WIPER POS.

Set wiper position function.

RIGHT / BOTTOM (Default : BOTTOM)

Select :  or  Set ON : 

Set OFF : 



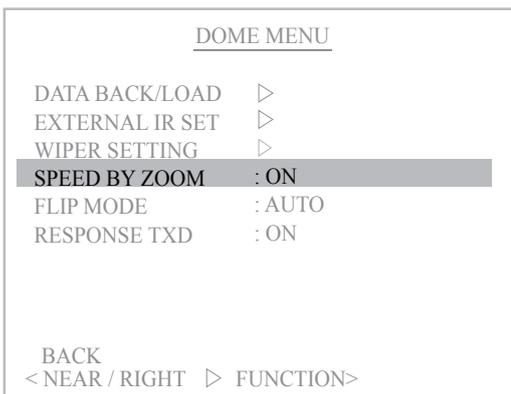
#### - WIPER INTERVAL TIME

1 MIN / 2 MIN / 4 MIN / 6 MIN / 8 MIN / 10 MIN

When WIPER MODE is INTERVAL, WIPER TIME function is available.

Select :  or  Set ON : 

Set OFF : 

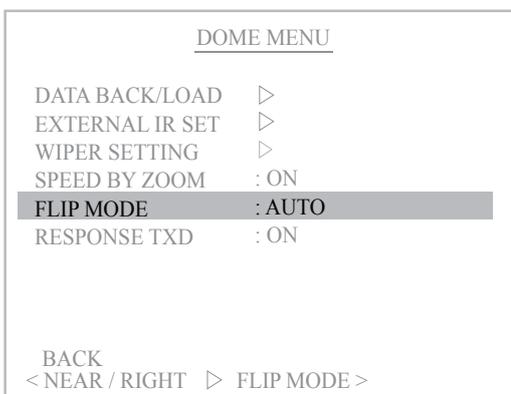


#### (4) SPEED BY ZOOM

Pan and Tilt speed can be changed depending on zoom magnification.

Select :  or  Set ON : 

Set OFF : 

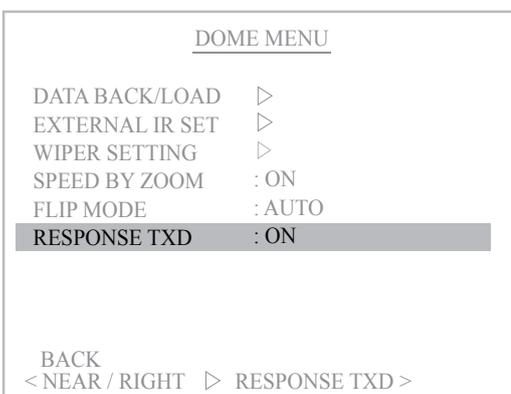


#### (5) FLIP MODE

- OFF: TILT movement ranges from -8 (352) ~ 90°
- AUTO: When TILT move to 90°, PAN 180° automatically reversed moved
- DIGITAL : Reversed Image without Tilt Flip

Select :  or  Set ON : 

Set OFF : 



#### (6) RESPONSE TXD

Tx communication line to transfer the unique value of protocol response.

(Use this function when the protocol is pelco-D 5.0)

※ Factory default is OFF.

Select :  or  Set ON : 

Set OFF : 

## 4. 2. 7 TEMP. SET

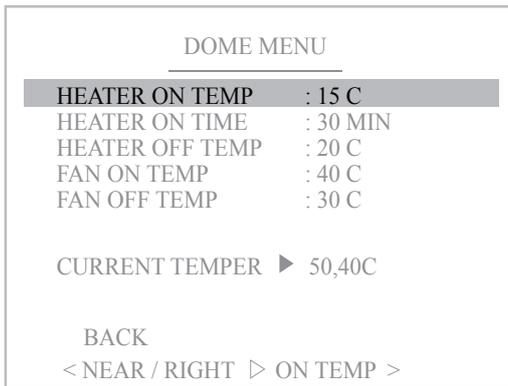


Setting inside of PTZ

Current Temp: Check Temp of inside of PTZ.

See the below in detail.

Default is keep optimized temp

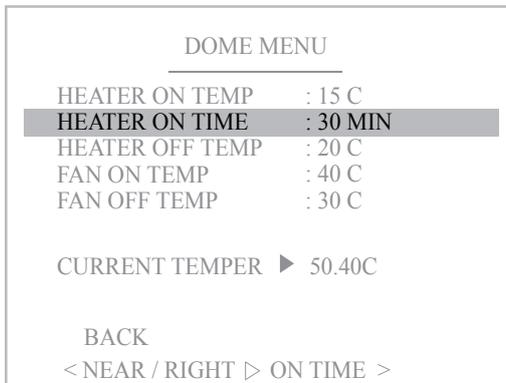


### (1) HEATER ON TEMP

Set the operating temperature of the heater.(0~70℃)

Select :  or  Set ON : 

Set OFF : 



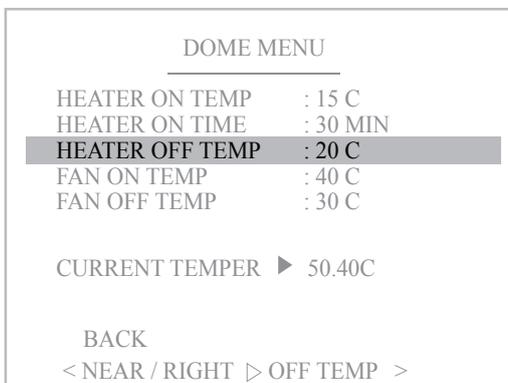
### (2) HEATER ON TIME

Set the operating time of the heater.

- By 10min. (10~60 min.)

Select :  or  Set ON : 

Set OFF : 

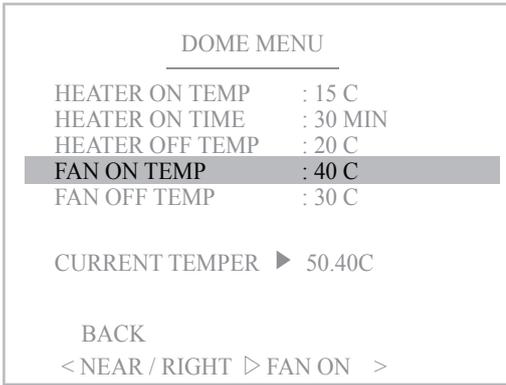


### (3) HEATER OFF TEMP

Set the temperature of heater OFF. (0~70℃)

Select :  or  Set ON : 

Set OFF : 

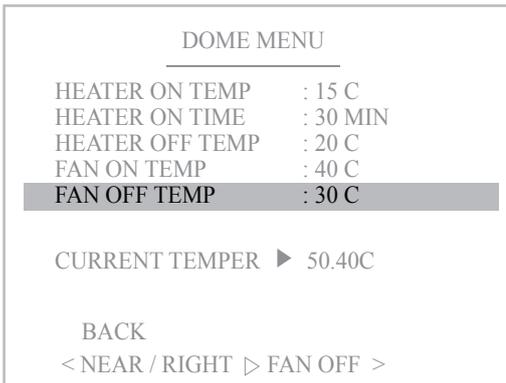


#### (4) FAN ON TEMP

Set the operating temperature of the Fan. (0~70°C)

Select :  or  Set ON : 

Set OFF : 



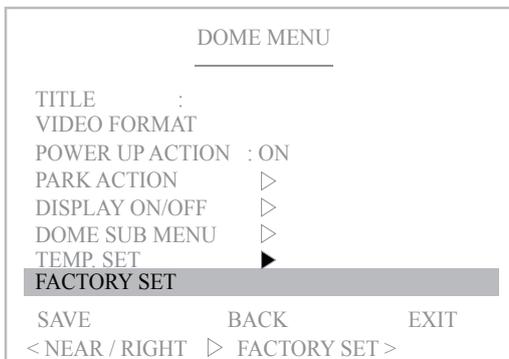
#### (5) FAN OFF TEMP

Set the temperature of Fan OFF. (0~70°C)

Select :  or  Set ON : 

Set OFF : 

### 4. 2. 8 FACTORY SET



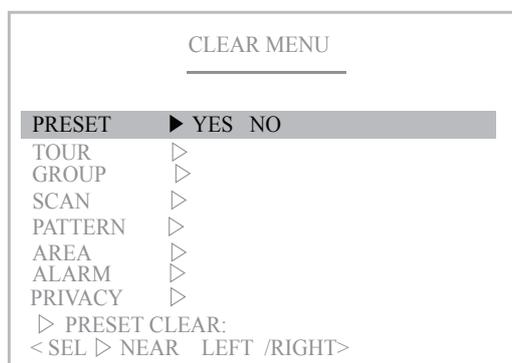
 Restore setting values to the factory default.  
 All existing setting value will be erased.

Select :  or  Set ON : 

Set OFF : 

## 4.3 Clear Setting

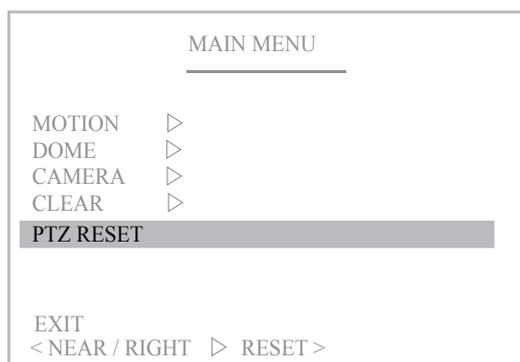
Clears the PTZ position and function value.



Select :  or  Set ON :  Set OFF : 

## 4.4 PTZ Reset

It is a reset function



## 4.5 Other Quick Operating Guide

- ICR AUTO ( ON ) = 240 + F1 Long Preset
- ICR DAY ( ON ) = 241 + F1 Long Preset
- ICR NIGHT ( ON ) = 242 + F1 Long Preset
- WIPER INTERVAL ( ON / OFF ) = 243 + F1 Long Preset (10 minutes)
- WIPER ( ON / OFF ) = 244 + F1 Long Preset
- HEATER ( ON / OFF ) = 245 + F1 Long Preset
- IR ZOOM ( AUTO / MANUAL ) = 248 + F1 Long Preset
- LIGHT ( ON / OFF ) = 252 + F1 Long Preset
- INFO ( ON / OFF ) = 255 + F1 Long Preset

\* The keyboard shortcut of IR ZOOM  
( DOME SUB MENU -> 1) IR CONT. TYPE->MANUAL 2) ICR NIGHT->ON )

Select :  

# 5. SPECIFICATION

## 5.1 Mechanism Specification

### 5.1.1 MECHANICAL

- Pan : 360°Continuous Pan, 0.1° to 120°/sec (proportional to zoom)
- Pan Preset Speed : 250°/sec, ± 0.1° Accuracy
- Tilt : -8°(352°) to 188° movement, 0.8° ~ 80°/sec (proportional to zoom)
- Tilt Preset Speed : 250°/sec, ± 0.05° Accuracy
- Weight : 6.4 Kg(MECHANICAL)
- Dimensions Set : 231(Ø) x 385(mm)

### 5.1.2 ENVIRONMENTAL

- Construction : Aluminum
- Ingress Protection : IP66 (Outdoor Housing)
- Operating Temp : Outdoor : -40°C to 60°C (-40° F to 140° F)/ with 30W Heater
- Humidity : 0% to 90% (non-condensing)
- Fan operate : 50°C on , 40°C off
- Heater operate : 5°C on , 15°C off

### 5.1.3 FUNCTIONS

- Preset : 255 points, less than 0.1° accuracy
- Tour : 8 programmable
- Group : 6 group(Max.6 Tours are programmable in each Group)
- Scan : 8 (programmable speed and diagonal scan)
- Pattern : 4 patterns for 60 second.
- Area : 16 Area
- Alarm : 8 alarm
- Privacy Zone : 8 block with title (Mask)
- ID Address : Up to 255 selectable ID (Rotary switch)
- Data Communication Control : RS-485 / RS-422
- Protocol : Multiple protocol (PELCO D/P, WTX)
- Baud rate : 2400, 4800, 9600, 19200, 38400, 57600, 115200 bps selectable

### 5.1.4 ELECTRICAL

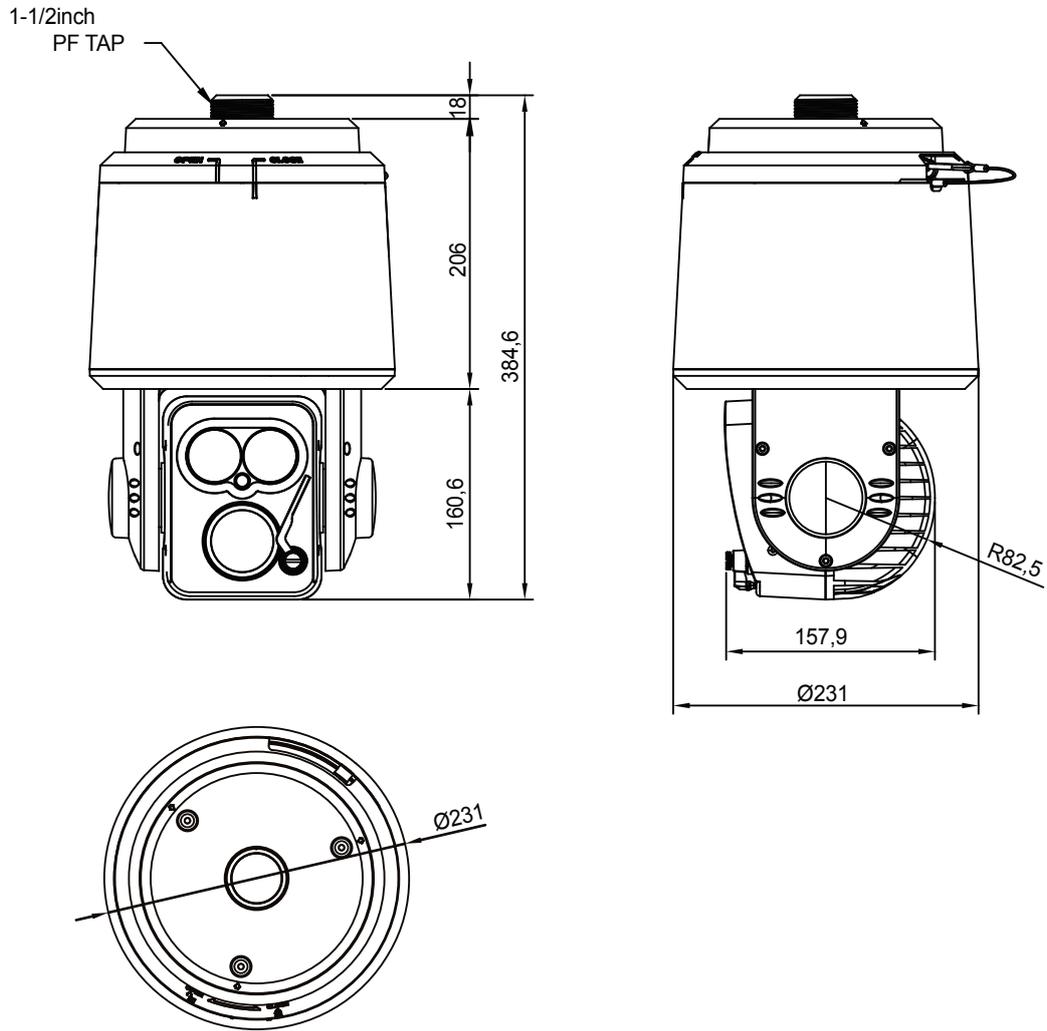
- Power : AC21 ~ 26V 60Hz / 50Hz(Power adaptor not included)
- Consumption : Operation(5A) / MAX 6A
- Fan & Heater : 10 W / 45 W

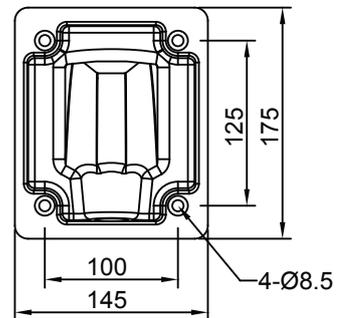
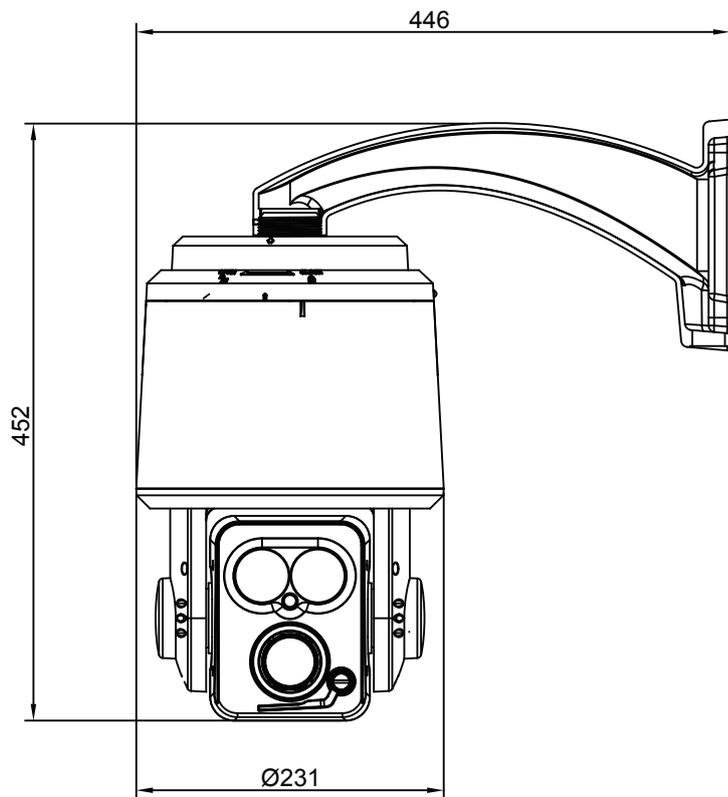
### 5.1.5 USER CONNECTIONS

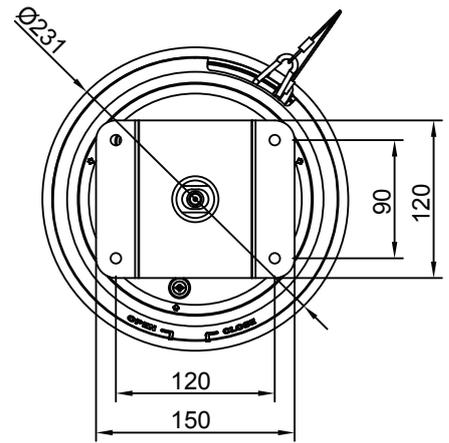
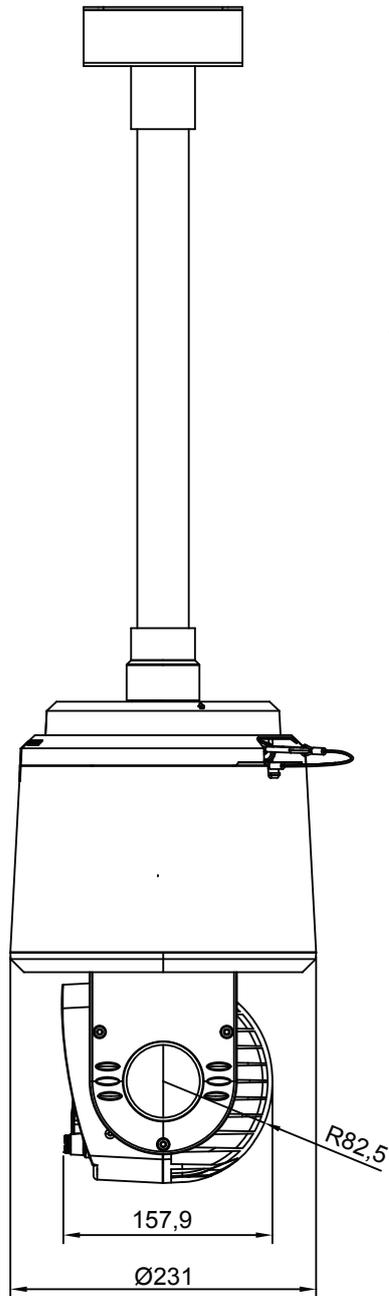
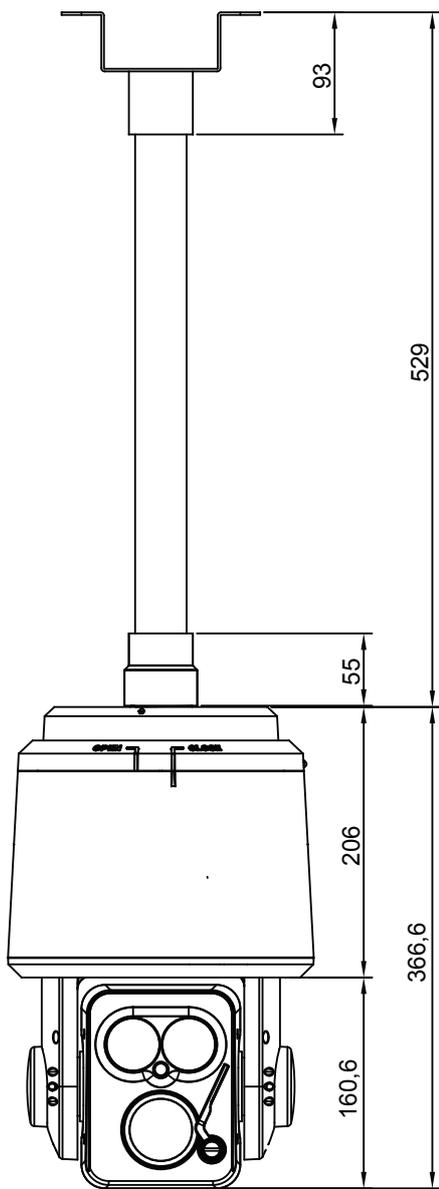
- Data communication connection : RS-422, 485 + / - Optional Control Data
- HD-SDI connection : BNC
- Alarm Inputs : 8 Programmable
- Relay : 2 Dry Contact Output Rating: 2A @30VAC

# 6. DIMENSION

## 6.1 DIMENSION

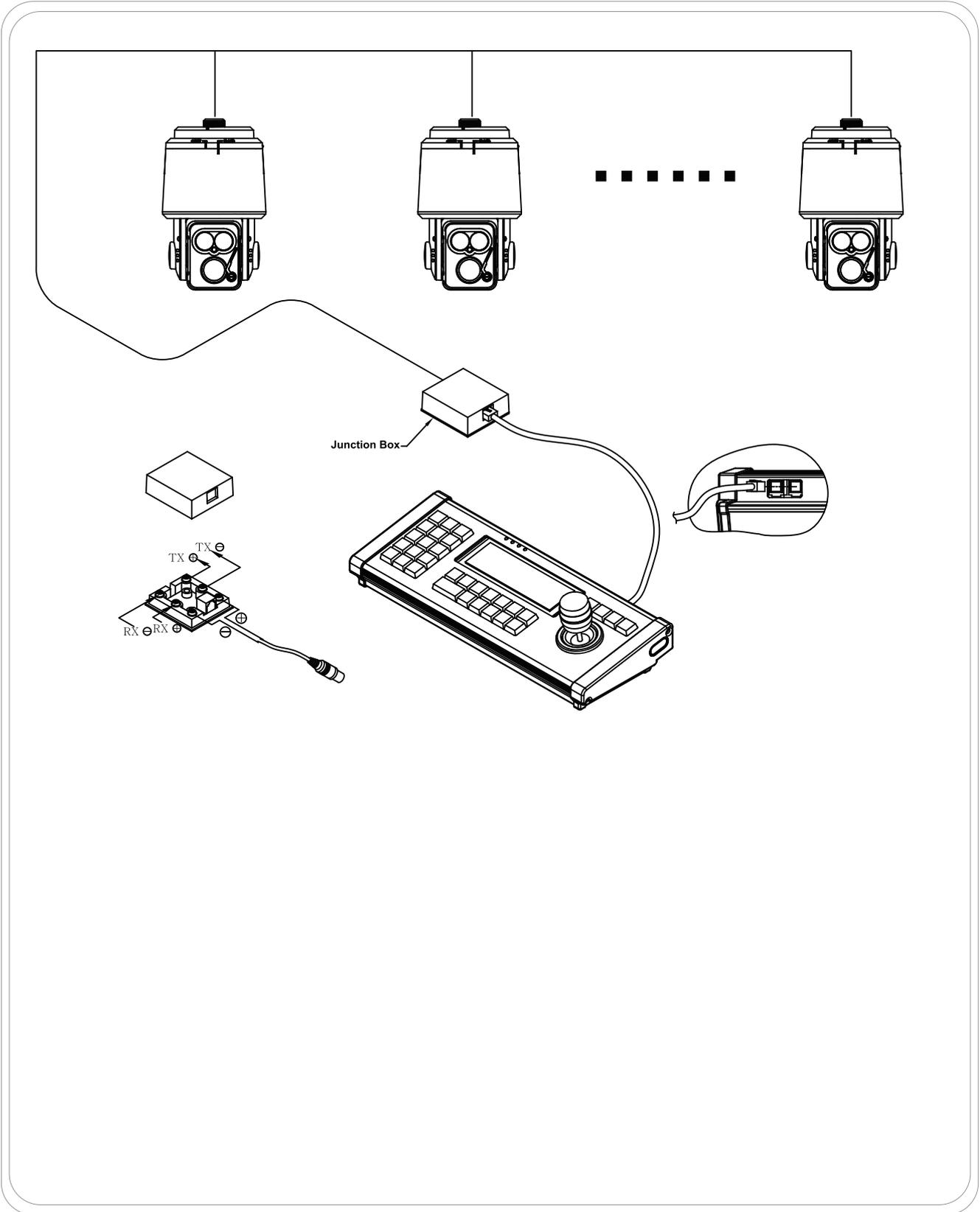






# 7. CONFIGURATION

## 7.1 Connecting to Keyboard with DVR



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