Distributed by

# High Speed Dome 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.

# TABLE OF CONTENTS

# 1. PRECAUTIONS

## 1. 1   Important Safety Instruction

- 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 dissemble or insert foreign objects.

- Do not install near any heat sources such as radiation, beat 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 that contained in the operating instructions unless you are qualified to do so.

- Only use replacement parts recommended by manufacturer.ad these instructions.

# 2. GETTING STARTED

## 2. 1  Unpacking

The following parts are supplied with the outdoor speed PTZ dome system.
<Figure 1. package Components>
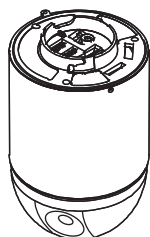
Camera

Plate Base

User's Guide

Plastic Anchors
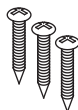
Screws(4x25)

Screws(3x8)
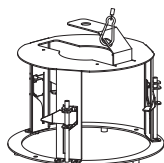
In-ceiling Mount

## 2. 2  Part name

1  SD CARD

2  ID setting

3  LAN PORT

4  I/O PORT
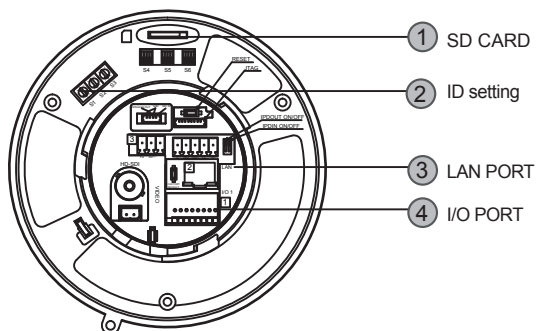
## 2. 3   DIP Switch Setting

Before start up the dome 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
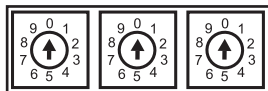
* ID setting is 1~255 available
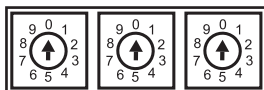
S1          S2          S3

S1 : 100-digit number of address
S2 : 10-digit number of address
S3 : 1-digit number of address
Ex)  S1 = 1
     S2 = 2
     S3 = 8
     The ID number is 128.

### 2. Protocol, Baudrate, Camera setting

SW 4

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

SW 5

| 1 | 2 | 3 | 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 |

| 4 | NTSC/PAL |
|---|----------|
| OFF | NTSC |
| ON | PAL |

SW 6

| 1 | RSMODE |
|---|--------|
| OFF | RS-422 |
| ON | RS-485 |

| 2 | RS LOOP |
|---|---------|
| OFF | OFF |
| ON | ON |

| 3 | IP SELECT |
|---|-----------|
| OFF | IP OFF |
| ON | IP ON |

### 3.Set the termination On/Off

ON  : Terminated
OFF : Not terminated

SW 6-2

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



| 1 | 1 | ALM1 |
|---|---|------|
|   | 2 | ALM2 |
|   | 3 | ALM3 |
|   | 4 | ALM4 |
|   | 5 | GND  |
|   | 6 | COM  |
|   | 7 | NC   |
|   | 8 | NO   |

**2** LAN CONN

| 3 | 1 | F.G |
|---|---|-----|
|   | 2 | AC~ |
|   | 3 | AC~ |

| 4 | 1 | GND  |
|---|---|------|
|   | 2 | TRX- |
|   | 3 | TRX+ |
|   | 4 | TX-  |
|   | 5 | TX+  |

MICRO SD SLOT

S4  S5  S6

RESET
JTAG

S1 S2 S3

SPEAKER OUT  GND  MIC

IPDOUT ON/OFF
IPDIN ON/OFF

3  4

FG  AC~

HD-SDI

VIDEO

FACTORY DEFAULT

2  LAN

I/O 1

1
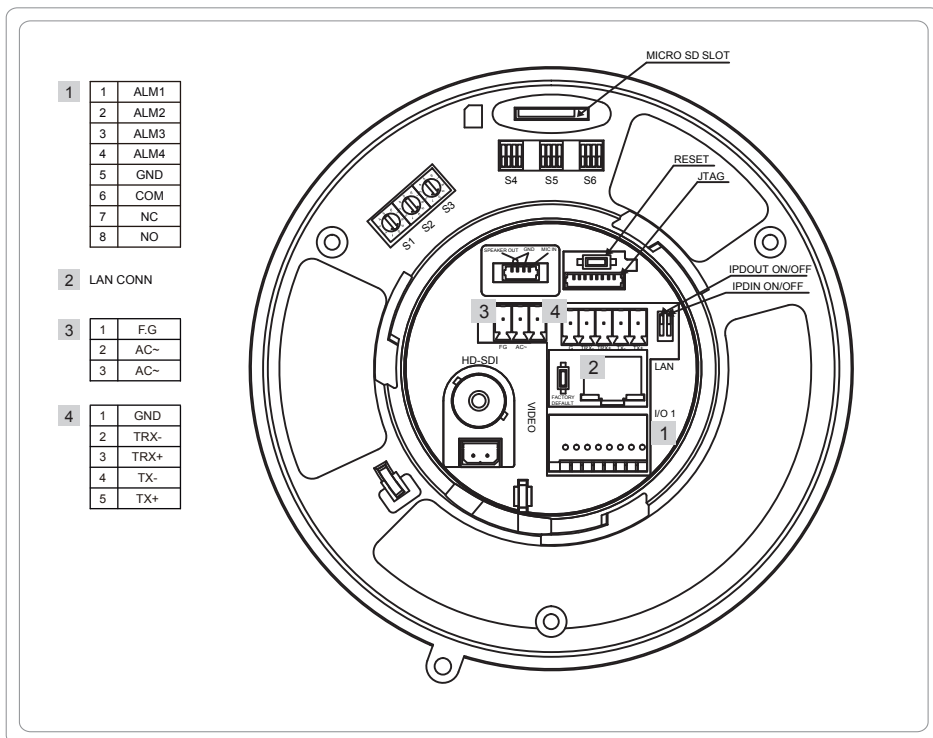
### 2. 4. 2 RS-485/RS-422 Connection

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: 3PIN
- Com Terminal: 5PIN

# 3.Installtion

- 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 dome 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  Installtion

### In-ceiling Mount
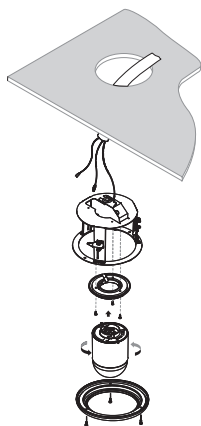
① Make a cabling hole to the proper position in the ceiling.

② Before installation, attach the bottom plate to the in-ceiling housing.

③ Install the In-ceiling housing and pull out the cables from the ceiling.

④ After the cabling, turn clockwise to connect the camera to the bottom plate.

⑤ Attach the deco-ring after connecting the camera system.

# 4. MAIN SETUP MENU

## 4. 1  Initialize

When the device is powered on, you can check the address, version, protocol and video setting values.

```
                    INITIALIZE
PTZ ID        : 001
VERSION       :
D-OUTPUT      : 1080p30/NTSC
COMM          : PELCO D
                IP NOT SUPPORT
                RS422 2400 N 1
CAMERA        :           .. OK
                VER :
  ▷ PAN INIT   . . . .      OK
  ▷ TILT INIT  . . . .      OK

  ▷NORMAL SETTING
```

## 4. 2  Motion Setting

### 4. 2. 1  Preset

```
            MAIN MENU


MOTION      ▶
DOME        ▷
CAMERA      ▷
CLEAR       ▷
FACTORY SET
PTZ RESET


   EXIT
< NEAR / RIGHT  ▷ MOTION >
```

```
            MOTION MENU

PRESET    ▶
TOUR      ▷
GROUP     ▷
SCAN      ▷
PATTERN   ▷
AREA      ▷
ALARM     ▷
PRIVACY   ▷
HOME POS ▷
 BACK              EXIT
< NEAR / RIGHT  ▷  PRESET >
```
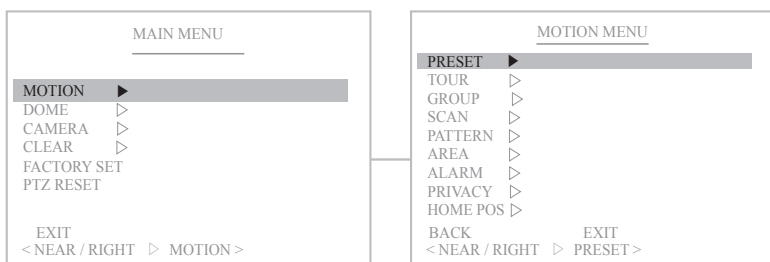
The preset function is that the camera memorizes positions of the pan/tilt and zoom.
This function is a representative function of the speed dome which can find memorized
preset positions just by selecting the preset No. A Maximum of 255 Preset positions are toured in order.

(1) Select the  Preset number
     P001 : Defined Preset number / 001 : Undefined Preset number

     Move :   **JOYSTICK**      Select :   **NEAR**

```
            PRESET MENU


NUMBER    : 001
TITLE       :
FOCUS     : AUTO
POSITION SET ▶
EXIT TIME : DISABLE


   SAVE      CLR      BACK      EXIT
< NEAR / RIGHT  ▷  PRESETNUM >
```

```
            PRESET MENU
         PRESET SELECT : 001

P001 P002 P003 P004  P005
 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

<EXIT ▷FOCUS NEAR>
```
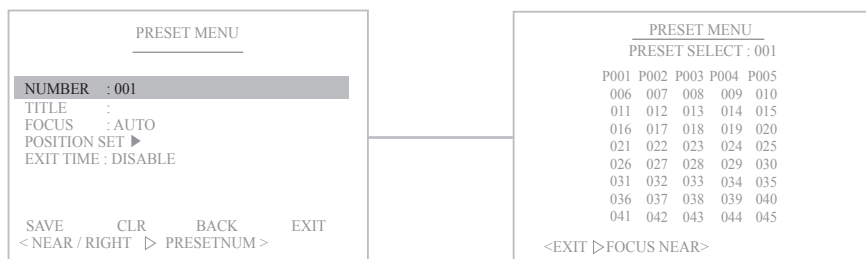
(2) Set the Preset TITLE

Move : **JOYSTICK**   Select : **TELE** or **JOYSTICK**   Delete : **WIDE** or **JOYSTICK**

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

```
             PRESET MENU
          ─────────────

 NUMBER    : 001
 TITLE         :
 FOCUS       : AUTO
 POSITION SET ▶
 EXIT TIME : DISABLE


   SAVE       CLR       BACK       EXIT
 < NEAR / RIGHT   ▷  TITLE >
```

```
          PRESET TITLE EDIT ( 01 )
       ─────────────────────────────────────
 TITLE :

          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     >
```
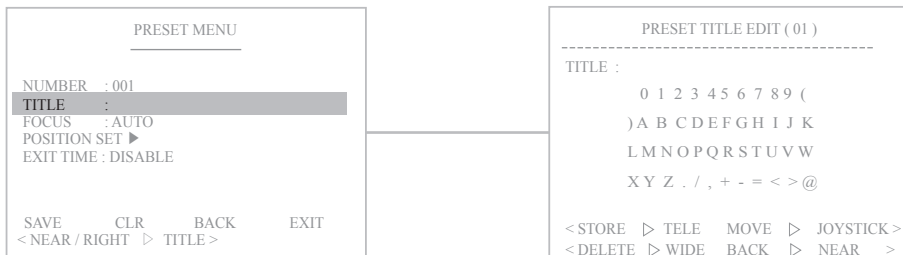
After the TITLE is set, push the NEAR button to exit.

(3) Select the focus mode for Preset

① Select the Focus menu

**NEAR** or **JOYSTICK**
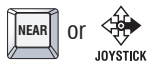
② Move and set the Focus Menu

**JOYSTICK**

```
             PRESET MENU
          ─────────────

 NUMBER    : 001
 TITLE         :
 FOCUS       : AUTO
 POSITION SET ▶
 EXIT TIME : DISABLE


   SAVE       CLR       BACK       EXIT
 < NEAR / RIGHT   ▷  PRESET FOCUS >
```
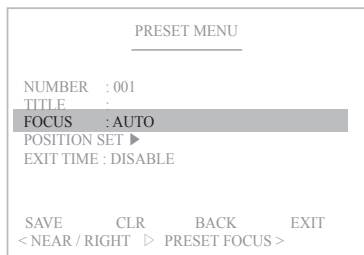
On focus menu, there are 3 modes :
AUTO, MANUAL, ONESHT. It allows detailed settings for the preset.

(4) Define the Preset position

① Select the Position menu        ② Move and set the position        ③ Set & Back

**NEAR** or **JOYSTICK**        **JOYSTICK**        **NEAR**

```
             PRESET MENU
          ─────────────

 NUMBER    : 001
 TITLE         :
 FOCUS       : AUTO
 POSITION SET ▶
 EXIT TIME : DISABLE


   SAVE       CLR       BACK       EXIT
 < NEAR / RIGHT   ▷  PRESET POSITION >
```

```
             PRESET POSITION
          ─────────────




 <EXIT  ▷ FOCUS  NEAR  >
          POSITION : 000. 0  000. 0
```

## (5) EXIT TIME
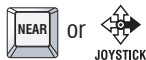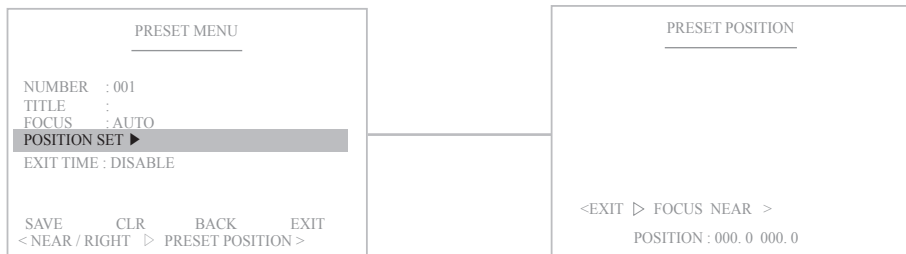
```
            PRESET MENU
         _____

 NUMBER    : 001
 TITLE     :
 FOCUS     : AUTO
 POSITION SET ▶
 EXIT TIME : DISABLE

  SAVE      CLR      BACK      EXIT
 < NEAR  ▷ EXIT TIME >
```
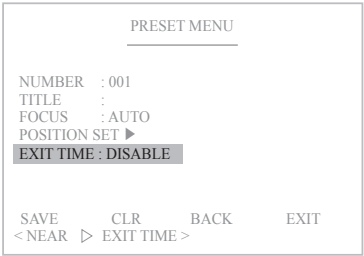
Setting the dwell time to exit Preset mode after completing Preset working.
(OFF / 5SEC / 10SEC / 20SEC / 30SEC / 1MIN / 5MIN / 10MIN / 30MIN) ※ Default : 10SEC

Select :  [JOYSTICK]  or  [NEAR]      Set ON :  [JOYSTICK]
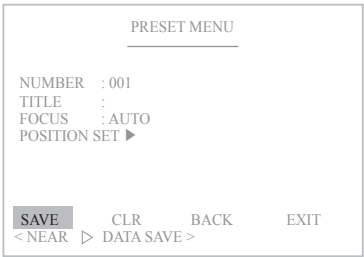
Set OFF :  [NEAR]

```
            PRESET MENU
         _____

 NUMBER    : 001
 TITLE     :
 FOCUS     : AUTO
 POSITION SET ▶



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

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

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

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

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

## 4. 2. 2  Tour

```
           MAIN MENU
        _____

 MOTION        ▶
 DOME          ▷
 CAMERA        ▷
 CLEAR         ▷
 FACTORY SET
 PTZ RESET


   EXIT
 < NEAR / RIGHT   ▷  MOTION >
```

```
              MOTION MENU
            _____

 PRESET        ▷
 TOUR          ▶
 GROUP         ▷
 SCAN          ▷
 PATTERN       ▷
 AREA          ▷
 ALARM         ▷
 PRIVACY       ▷
 HOME POS      ▷
 BACK               EXIT
 < NEAR / RIGHT   ▷  TOUR >
```

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

( ※ 1 Tour can be set for 16 presets.)

(1) Select the Tour number

T01 : Defined Tour number / 01 : Undefined Tour number

Move :  [JOYSTICK]    Select :  [NEAR]
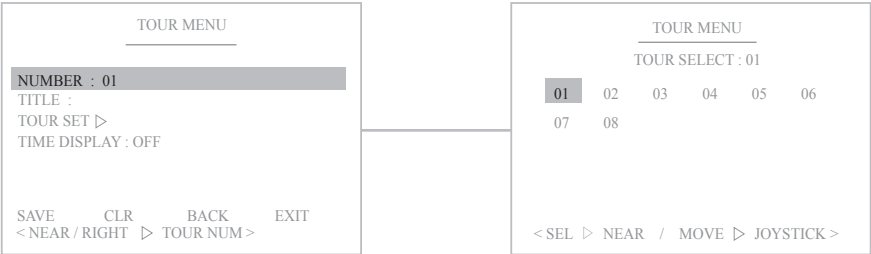
```
           TOUR MENU
        _____

 NUMBER  :  01
 TITLE  :
 TOUR SET ▷
 TIME DISPLAY : OFF



  SAVE      CLR       BACK       EXIT
 < NEAR / RIGHT   ▷  TOUR NUM >
```

```
              TOUR MENU
            _____
          TOUR SELECT : 01

  01     02     03     04     05     06
  07     08




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

(2) Set the Tour TITLE

Move :  [JOYSTICK]    Select :  [TELE] or [JOYSTICK]    Delete :  [WIDE] or [JOYSTICK]

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

```
           TOUR MENU
        _____

 NUMBER  :  01
 TITLE  :
 TOUR SET ▷
 TIME DISPLAY : OFF



  SAVE      CLR       BACK       EXIT
 < NEAR / RIGHT   ▷  TITLE >
```

```
         TOUR TITLE EDIT ( 01 )
 ----------------------------------------
 TITLE  :

       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     >
```
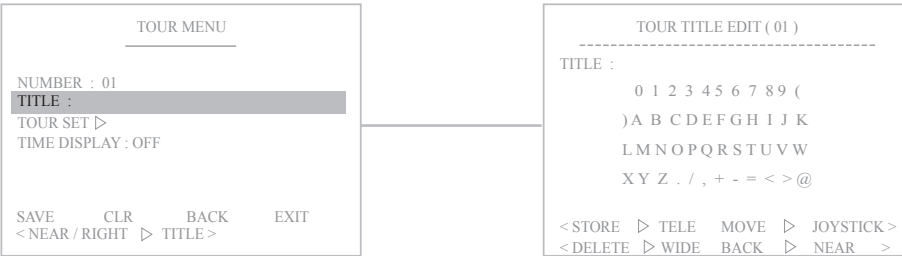
After the TITLE is set, push the NEAR button to exit.

(3) Define the Preset position

① Move to the set-up window    ② Move and set the position    ③ Set & Back
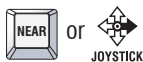
NEAR  or  JOYSTICK          JOYSTICK          NEAR

```
              TOUR MENU
           _____

NUMBER : 01
TITLE :
TOUR SET ▶
TIME DISPLAY : OFF


SAVE      CLR      BACK      EXIT
< NEAR / RIGHT  ▷ TOUR SET >
```

```
              TOUR EDIT (01)

NO     PRESET     SPEED     DWELL
01    ◀  01        63         01
02    ◁  02        63         01
03       XX        XX         XX
04       XX        XX         XX
05       XX        XX         XX
06       XX        XX         XX
07       XX        XX         XX
08       XX        XX         XX
< SEL  & NEAR          PRESET  &  LEFT >
< SEL  & NEAR          DELETE      WIDE >
```

```
                 TOUR MENU
              PRESET SELECT : 001

P001 P002 P003 P004  P005
 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

<EXIT  ▷ FOCUS NEAR >
```

(4) Time Display

```
              TOUR MENU
           _____

NUMBER : 01
TITLE :
TOUR SET ▷
TIME DISPLAY : OFF


SAVE      CLR      BACK      EXIT
< NEAR / RIGHT  ▷ TIME DISPLAY >
```

Display the remain time of each Preset dwell time during Tour operation.(OFF / ON) ※ Default : OFF

Select :  JOYSTICK  or  NEAR      Set ON :  JOYSTICK

Set OFF :  NEAR

```
              TOUR MENU
           _____

NUMBER : 01
TITLE :
TOUR SET ▷



SAVE      CLR      BACK      EXIT

< NEAR  ▷ DATA SAVE >
```

(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. 2. 3   Group

```
         MAIN MENU                          MOTION MENU
        _____                  PRESET    ▷
                                     TOUR      ▷
  MOTION      ▶                      GROUP     ▶
  DOME        ▷                      SCAN      ▷
  CAMERA      ▷                      PATTERN   ▷
  CLEAR       ▷                      AREA      ▷
  FACTORY SET                        ALARM     ▷
  PTZ RESET                          PRIVACY   ▷
                                     HOME POS ▷
     EXIT                            BACK              EXIT
  < NEAR / RIGHT   ▷  MOTION >       < NEAR / RIGHT   ▷  GROUP >
```
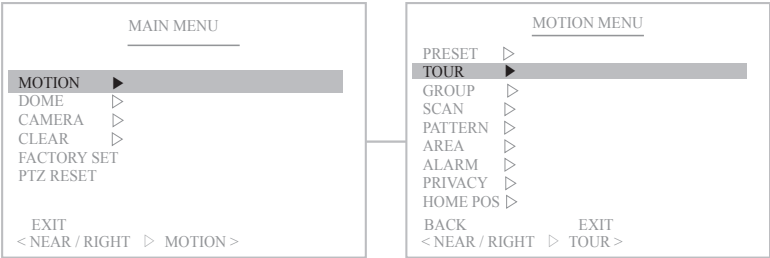
GROUP  : You can make Max. 6 groups and call the saved tour by turn.

(1) Select the Group number
    G01 : Defined Group number / 01 : Undefined Group number
    Set from 1to 6 groups.

Move :  [JOYSTICK]      Select :  [NEAR]

```
        GROUP MENU                           GROUP MENU
       _____                          _____
                                         GROUP SELECT : 01

  NUMBER  :  01                       G01    02    03    04    05    06
  TITLE  :
  GROUP SET ▷



   SAVE      CLR      BACK      EXIT
  < NEAR / RIGHT   ▷  GROUP NUM >       < SEL  ▷  NEAR   /   MOVE  ▷  JOYSTICK >
```

(2) Set the Group TITLE

Move :  [JOYSTICK]    Select :  [TELE] or [JOYSTICK]    Delete :  [WIDE] or [JOYSTICK]

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

```
        GROUP MENU                          GROUP TITLE EDIT
       _____                  ---------------------------------------
                                    TITLE  :
  NUMBER  :  01                           0  1  2  3  4  5  6  7  8 9 (
  TITLE  :                                )  A  B  C  D  E  F  G  H  I  J  K
  GROUP SET ▷                             L  M  N  O  P  Q  R  S  T  U  V  W
                                          X  Y  Z  .  /  ,  + - = < > @
   SAVE      CLR      BACK      EXIT    < STORE   ▷ TELE    MOVE   ▷   JOYSTICK >
  < NEAR / RIGHT   ▷  TITLE >           < DELETE  ▷ WIDE    BACK   ▷   NEAR    >
```
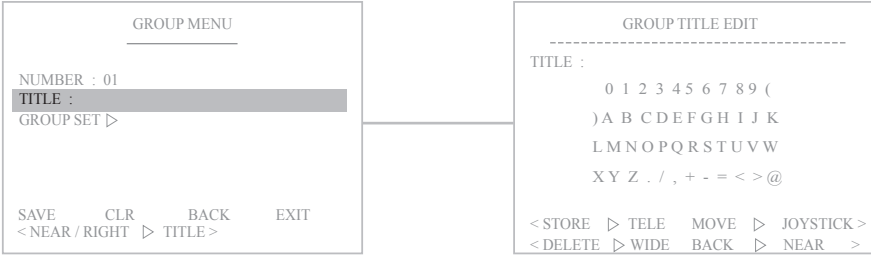
After the TITLE is set, push the NEAR button to exit.

## (3) GROUP SET

① Move to the set-up window    ② Move and set the position    ③ Set & Back

NEAR  or  JOYSTICK            JOYSTICK                        NEAR

```
        GROUP MENU                          GROUP EDIT (01)

                                    NO      TOUR
NUMBER : 01                         01      <001>
TITLE  :                            02      002
GROUP SET ▶                         03      XXX
                                    04      XXX
                                    05      XXX
                                    06      XXX

SAVE      CLR      BACK    EXIT    < SEL  & NEAR        PRESET  &  LEFT >
< NEAR / RIGHT  ▷ GROUP SET >     < SEL  & NEAR        DELETE     WIDE >
```
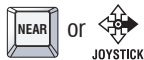
- GROUP EDIT : Set the tour from 1 to 6 of group.

```
        GROUP MENU


NUMBER : 01
TITLE  :
GROUP SET ▷


 SAVE      CLR      BACK      EXIT

< NEAR  ▷ DATA SAVE >
```
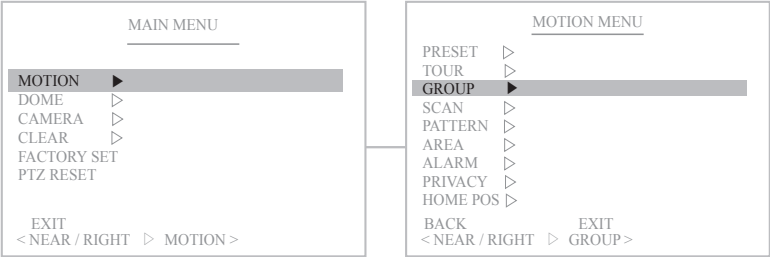
(4) "Save" above setting Pattern data to the memory.

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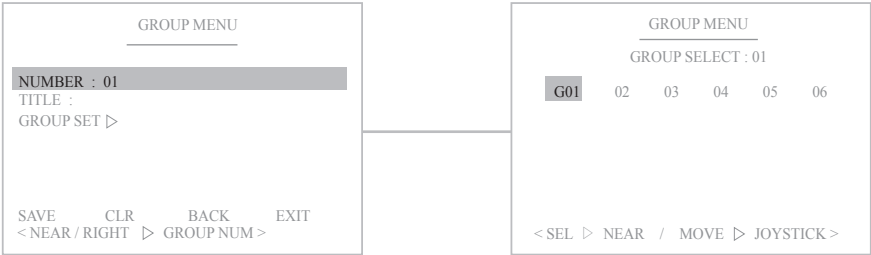
(7) "EXIT" means it goes out of MENU.

## 4. 2. 4   Scan

```
            MAIN MENU                              MOTION MENU

                                         PRESET    ▷
  MOTION      ▶                           TOUR     ▷
  DOME        ▷                           GROUP    ▷
  CAMERA      ▷                           SCAN     ▶
  CLEAR       ▷                           PATTERN  ▷
  FACTORY SET                             AREA     ▷
  PTZ RESET                               ALARM    ▷
                                          PRIVACY  ▷
                                          HOME POS ▷
  EXIT                                     BACK           EXIT
< NEAR / RIGHT   ▷   MOTION >             < NEAR / RIGHT   ▷   SCAN >
```
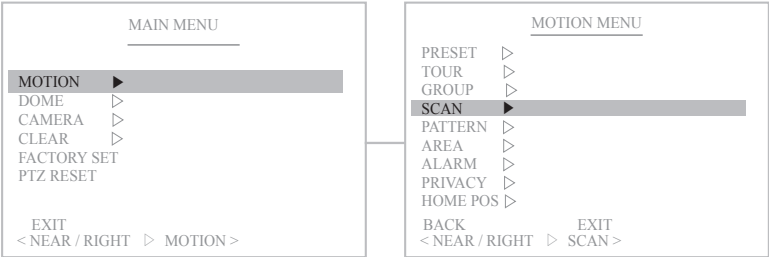
The Scan function means that the camera keeps panning between two programmed pan positions.
It is also adjusts the moving speed(1~63 step). Maximum 8 Scan functions are toured in order.

(1) Select the Scan number
   S01 : Defined Scan number / 01 : Undefined Scan number

   Move :  JOYSTICK      Select :  NEAR

```
            SCAN MENU                              SCAN MENU
                                                SCAN SELECT : 01
  NUMBER    : 01
  TITLE       : NONE                    01    02    03    04    05    06
  SPEED       : NONE
  DWELL       : NONE                    07    08
  MOTION TYPE  : NONE
  DIRECTION    : NONE
  START POS    ▷
  END  POS     ▷
  SAVE       CLR      BACK      EXIT
< NEAR / RIGHT   ▷   SCAN NUM >         < SEL  ▷  NEAR   /   MOVE & JOYSTICK >
```

(2) Set the Scan TITLE

   Move :  JOYSTICK    Select :  TELE  or  JOYSTICK    Delete :  WIDE  or  JOYSTICK

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

```
            SCAN MENU                         SCAN  TITLE EDIT ( 01 )
                                        ------------------------------------
                                        TITLE :
  NUMBER    : 01
  TITLE       :                                 0  1  2 3 4 5 6 7 89 (
  SPEED       : NONE
  DWELL       : NONE                            ) A  B  C D E F G H  I  J  K
  MOTION TYPE  : NONE
  DIRECTION    : NONE                           L M N O P Q R S T U V W
  START POS    ▷
  END  POS     ▷                                X Y Z . / , + - = < > @
  SAVE       CLR      BACK      EXIT
< NEAR / RIGHT   ▷   TITLE >             < STORE   ▷  TELE    MOVE   ▷   JOYSTICK >
                                         < DELETE  ▷ WIDE    BACK   ▷   NEAR     >
```

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

(3) Set the Scan speed

Increase :  [TELE]  or  ⟳ **JOYSTICK**

Decrease :  [WIDE]  or  ⟲ **JOYSTICK**

It adjusts the moving speed from 1~63 steps.

```
                  SCAN MENU
                  _____

NUMBER      : 01
TITLE       :
SPEED       : NONE
DWELL       : NONE
MOTION TYPE : NONE
DIRECTION     : NONE
START POS       ▷
END  POS        ▷
SAVE        CLR      BACK        EXIT
< NEAR / RIGHT  ▷  MOVE SPEED>
```
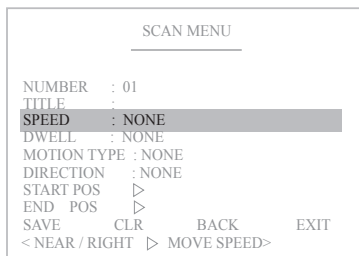
(4) Set the Dwell Time

Increase :  [TELE]  or  ⟳ **JOYSTICK**

Decrease :  [WIDE]  or  ⟲ **JOYSTICK**

Dwell time means the time that the camera stay at the start & end pan positions.
It's adjustable from 00~59 seconds.

```
                  SCAN MENU
                  _____

NUMBER      : 01
TITLE       :
SPEED       : NONE
DWELL       : NONE
MOTION TYPE : NONE
DIRECTION     : NONE
START POS       ▷
END  POS        ▷
SAVE        CLR      BACK        EXIT
< NEAR / RIGHT  ▷  DWELL>
```
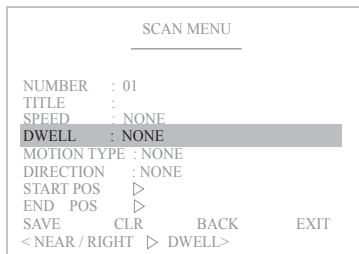
(5) Set the Motion Type

Set PAN/TILT direction
When PAN is set,PAN SCAN is proceeded with the specified coordinate value.
When TILT is set,TILT SCAN is proceeded with the specified coordinate value.

Select : ⬌ **JOYSTICK**  or  [NEAR]    Set ON : ⬍ **JOYSTICK**

Set OFF :  [NEAR]

```
                  SCAN MENU
                  _____

NUMBER      : 01
TITLE       :
SPEED       : NONE
DWELL       : NONE
MOTION TYPE : NONE
DIRECTION     : NONE
START POS       ▷
END  POS        ▷
SAVE        CLR      BACK        EXIT
< NEAR / RIGHT  ▷ MOTION TYPE>
```
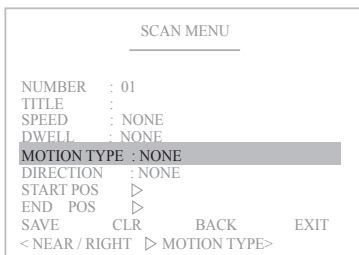
(6) Set the Direction

PAN : Select Clock Wise or C_Clock Wise direction

   When select C_Clock WISE, counterclockwise progression

   When select Clock WISE, clockwise progression

TILT : Set the UP & DOWN.

Select : [JOYSTICK] or [NEAR]    Set ON : [JOYSTICK]

Set OFF : [NEAR]

```
                SCAN MENU
            ─────────────

NUMBER       : 01
TITLE        :
SPEED        : NONE
DWELL        : NONE
MOTION TYPE  : NONE
DIRECTION    : NONE
START POS        ▷
END   POS        ▷
SAVE      CLR      BACK        EXIT
< NEAR / RIGHT   ▷ DIRECTION>
```

(7) Define the Start position

① Select Start Pos menu    ② Move and set the position    ③ Go back
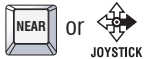
[NEAR] or [JOYSTICK]    [JOYSTICK]    [NEAR]

```
                SCAN MENU
            ─────────────

NUMBER       : 01
TITLE        :
SPEED        : NONE
DWELL        : NONE
MOTION TYPE  : NONE
DIRECTION    : NONE
START POS        ▶
END   POS        ▷
SAVE      CLR      BACK        EXIT
< NEAR / RIGHT   ▷ START POS >
```

```
            STRAT POSITION
        ─────────────




< EXIT   ▷ FOCUS NEAR >

       POSITION : 000. 0  000. 0
```

(8) Define the End position

① Select End Pos menu    ② Move and set the position    ③ Go back
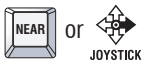
[NEAR] or [JOYSTICK]    [JOYSTICK]    [NEAR]

```
                SCAN MENU
            ─────────────

NUMBER       : 01
TITLE        :
SPEED        : NONE
DWELL        : NONE
MOTION TYPE  : NONE
DIRECTION    : NONE
START POS        ▶
END   POS        ▶
SAVE      CLR      BACK        EXIT
< NEAR / RIGHT   ▷ END POS >
```

```
         SCAN END POSITION
     ─────────────────




< EXIT   ▷ FOCUS NEAR >

       POSITION : 000. 0  000. 0
```

- When Motion type is PAN, Pan is available.
- When Motion type is TILT, TILT is available.

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

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

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

(12) "EXIT" means it goes out of MENU.
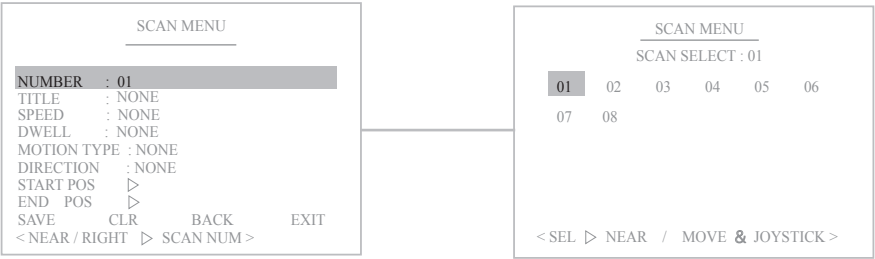
```
                    SCAN MENU
                  _____

NUMBER       : 01
TITLE        : NONE
SPEED        : NONE
DWELL        : NONE
MOTION TYPE  : NONE
DIRECTION    : NONE
START POS        ▶
END   POS        ▶

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

## 4. 2. 5　Pattern

```
            MAIN MENU
         ―――――――――

MOTION      ▶
DOME        ▷
CAMERA      ▷
CLEAR       ▷
FACTORY SET
PTZ RESET


  EXIT
< NEAR / RIGHT   ▷  MOTION >
```

```
            MOTION MENU
         ―――――――――
PRESET     ▷
TOUR       ▷
GROUP      ▷
SCAN       ▷
PATTERN    ▶
AREA       ▷
ALARM      ▷
PRIVACY    ▷
HOME POS  ▷
 BACK                EXIT
< NEAR / RIGHT   ▷   PATTERN >
```
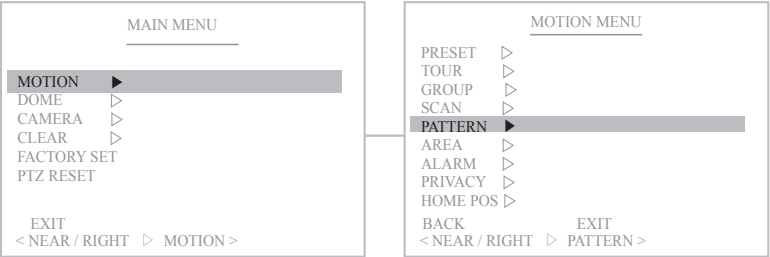
The Pattern function memorizes User's random moving path and zoom ratio. Total recording time limit is 65secs and maximum 4 Pattern functions are toured in order.

(1) Select the Pattern number
P01 : Defined Pattern number / 01 : Undefined Pattern number

Move :　[JOYSTICK]　　Select :　[NEAR]

```
            PATTERN MENU
         ―――――――――

NUMBER : 01
 TITLE    :
 RECORD  ▷
 PLAY     ▷



  SAVE       CLR       BACK       EXIT
< NEAR / RIGHT   ▷  NUMBER >
```

```
            PATTERN MENU
         ―――――――――
         PATTERN SELECT:01
     01      02       03       04



< SEL ▷  NEAR   /   MOVE  &  JOYSTICK >
< EXIT ▷  FOCUS NEAR >
```
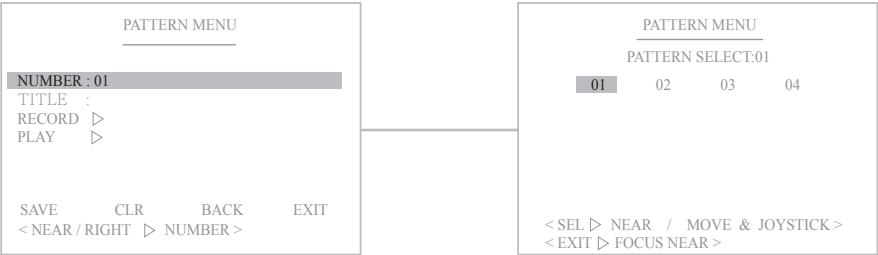
(2) Set the Pattern TITLE

Move :　[JOYSTICK]　　Select :　[TELE] or [JOYSTICK]　　Delete :　[WIDE] or [JOYSTICK]

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

```
            PATTERN MENU
         ―――――――――

 NUMBER : 01
 TITLE    :
 RECORD  ▷
 PLAY     ▷



  SAVE       CLR       BACK       EXIT
< NEAR / RIGHT   ▷  TITLE >
```

```
         PATTERN TITLE EDIT ( 01 )
-------------------------------------
TITLE  :

        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 TITLE 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　NEAR -> EXIT

　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　FAR -> RECORD ON

[NEAR] or JOYSTICK　　　　　　　　JOYSTICK

```
        PATTERN MENU
        _____

NUMBER : 01
TITLE    :
RECORD   ▶
PLAY      ▷


  SAVE      CLR      BACK      EXIT
< NEAR / RIGHT  ▷  RECORD >
```

```
        PATTERN RECORD
- - - - - - - - - - - - - - - - - - - - - - - - -




 <NEAR ▷ EXIT>

 <FAR  ▷ ON  >
 POSITION : 000.0,  000.0
```

(4) Play back the recorded Pattern data

```
        PATTERN MENU
        _____

NUMBER : 01
TITLE    :
RECORD   ▷<08SEC>
PLAY      ▶


  SAVE      CLR      BACK      EXIT
< NEAR / RIGHT  ▷  PLAY >
```

(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.

```
        PATTERN MENU
        _____

NUMBER : 01
TITLE    :
RECORD   ▷<08SEC>
PLAY      ▷


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

## 4. 2. 6  Area

```
            MAIN MENU                                    MOTION MENU

                                          PRESET      ▷
                                          TOUR        ▷
  MOTION       ▶                          GROUP       ▷
  DOME         ▷                          SCAN        ▷
  CAMERA       ▷                          PATTERN     ▷
  CLEAR        ▷                          AREA        ▶
  FACTORY SET                             ALARM       ▷
  PTZ RESET                               PRIVACY     ▷
                                          HOME POS ▷
    EXIT                                   BACK                EXIT
  < NEAR / RIGHT   ▷  MOTION >            < NEAR / RIGHT   ▷  AREA >
```

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

(1) Select the Area number

A01 : Defined Area number / 01 : Undefined Area number

Move :  **JOYSTICK**      Select :  **NEAR**

```
            AREA MENU                                    AREA MENU
                                                      AREA SELECT : 01

  NUMBER  : 01                              01      02      03      04      05
  TITLE      :
  DIRECTION  : NONE                         06      07      08      09      10
  S PAN POS.  ▷
  E PAN  POS.  ▷                            11      12      13      14      15

                                            16
    SAVE        CLR        BACK       EXIT
  < NEAR / RIGHT   ▷  AREA  NO >            <SEL & MEAR / MOVE & JOYSTICK>
```

(2) Set the Area TITLE

Move :  **JOYSTICK**   Select :  **TELE** or **JOYSTICK**   Delete :  **WIDE** or **JOYSTICK**

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

```
            AREA MENU                              AREA  TITLE EDIT
                                           --------------------------------------
                                           TITLE :
  NUMBER  : 01
  TITLE      :                                     0 1 2 3 4 5 6 7 8 9 (
  DIRECTION  : NONE
  S PAN POS.  ▷                                    ) A  B  C D E F G H  I  J  K
  E PAN  POS.  ▷
                                                   L M N O P Q R S T U V W
    SAVE        CLR        BACK       EXIT          X Y  Z  .  /  ,  + - = < > @
  < NEAR / RIGHT   ▷  TITLE >                < STORE   ▷  TELE    MOVE   ▷  JOYSTICK >
                                           < DELETE  ▷ WIDE    BACK    ▷   NEAR      >
```

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

(3) Set the Direction

Select :  [JOYSTICK]  or  [NEAR]   Set ON :  [JOYSTICK]   Set OFF :  [NEAR]

C_Clock WISE is counterclockwise mark, Clock WISE is clockwise mark.

```
                AREA MENU
                _____

   NUMBER  : 01
   TITLE      :
   DIRECTION  : <C_CLOCK WISE>
   S PAN POS.   ▷
   E PAN  POS.  ▷


    SAVE        CLR        BACK        EXIT
   < NEAR / RIGHT   ▷   DIRECTION >
```

(4) Define the Start pan position

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

[NEAR] or [JOYSTICK]                         [JOYSTICK]                         [NEAR]
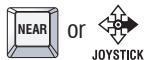
```
                AREA MENU
                _____

   NUMBER  : 01
   TITLE      :
   DIRECTION  : NONE
    S PAN POS.    ▶
    E PAN  POS.  ▷


   SAVE        CLR        BACK        EXIT
   < MOVE & NEAR / START POS >
```

```
          AREA START PAN POSITION
          _____







   < EXIT   ▷ FOCUS NEAR >

          POSITION : 000. 0  000. 0
```

(5) Define the END pan position

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

[NEAR] or [JOYSTICK]                         [JOYSTICK]                         [NEAR]
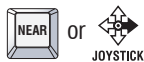
```
                AREA MENU
                _____

   NUMBER  : 01
   TITLE      :
   DIRECTION  : NONE
   S PAN POS.   ▷
    E PAN  POS.  ▶


   SAVE        CLR        BACK        EXIT
   < MOVE & NEAR / END POS >
```

```
          AREA STOP PAN POSITION
          _____







   < EXIT   ▷ FOCUS NEAR >

          POSITION : 000. 0  000. 0
```

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

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

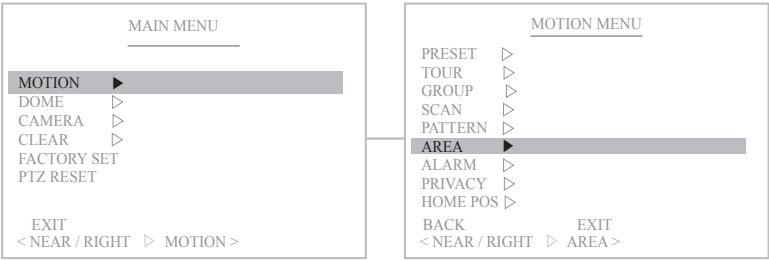(8) "BACK" means it goes back to the previous menu :Motion.

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

AREA MENU

NUMBER  : 01
TITLE      :
DIRECTION  : NONE
S PAN POS.  ▷
E PAN  POS.  ▷

SAVE          CLR          BACK          EXIT
< NEAR  ▷  DATA SAVE >
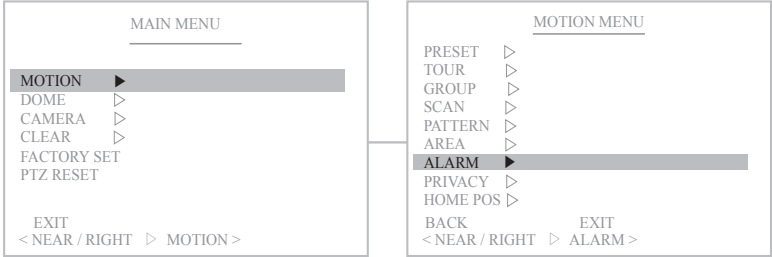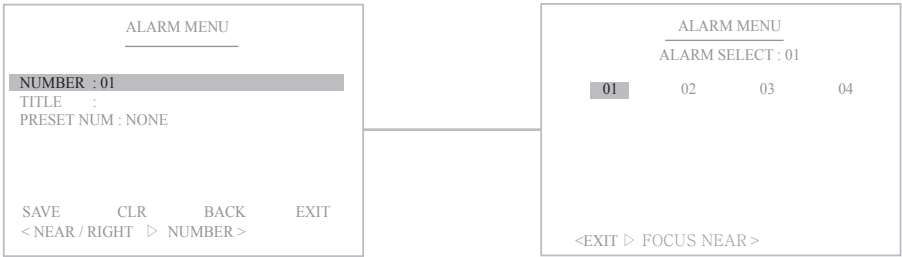
## 4. 2. 7   Alarm

```
            MAIN MENU                                    MOTION MENU
                                            PRESET    ▷
                                            TOUR      ▷
  MOTION      ▶                             GROUP     ▷
  DOME      ▷                               SCAN      ▷
  CAMERA    ▷                               PATTERN   ▷
  CLEAR     ▷                               AREA      ▷
  FACTORY SET                               ALARM     ▶
  PTZ RESET                                 PRIVACY   ▷
                                            HOME POS  ▷
   EXIT                                      BACK            EXIT
 < NEAR / RIGHT   ▷  MOTION >               < NEAR / RIGHT   ▷  ALARM >
```

The Alarm function means that the camera moves to the programmed Preset position by the Alarm trigger.
Maximum 4 Alarm functions are toured in order.

(1) Select the Alarm number
    E01 : Defined Alarm number / 01 : Undefined Alarm number

    Move :   JOYSTICK      Select :   NEAR

```
            ALARM MENU                                  ALARM MENU
                                                     ALARM SELECT : 01

  NUMBER  : 01                               01       02        03        04
  TITLE     :
  PRESET NUM : NONE




   SAVE       CLR      BACK      EXIT
 < NEAR / RIGHT   ▷  NUMBER >               <EXIT ▷ FOCUS NEAR >
```

(2) Set the Alarm TITLE

    Move :   JOYSTICK    Select :  TELE  or  JOYSTICK    Delete :  WIDE  or  JOYSTICK

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

```
            ALARM MENU                          ALARM  TITLE EDIT ( 01 )
                                          --------------------------------------
                                          TITLE  :
  NUMBER  : 01                                   0 1 2 3 4 5 6 7 8 9 (
  TITLE     :
  PRESET NUM : NONE                             ) 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  . / , + - = < > @
   SAVE       CLR      BACK      EXIT       < STORE   ▷  TELE    MOVE   ▷   JOYSTICK >
 < NEAR / RIGHT   ▷  TITLE >                < DELETE  ▷ WIDE    BACK   ▷    NEAR     >
```
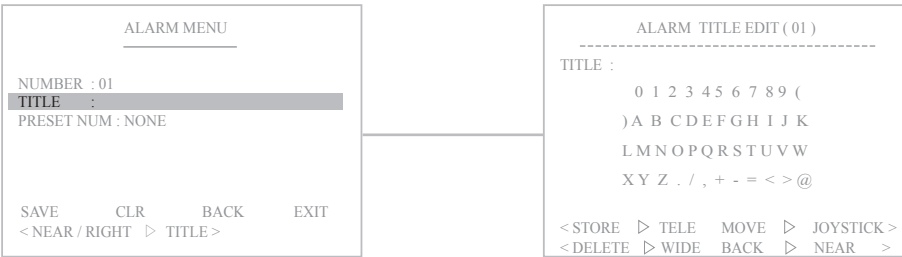
After the TITLE is set, push the NEAR button to exit.

(3) Define the Preset position with Alarm trigger

    ① Select the "Preset Num"      ② Move and set the position    ③ Set & Back

| NEAR | or | JOYSTICK | | JOYSTICK | | NEAR |

```
        ALARM MENU
        _____

NUMBER  : 01
TITLE      :
PRESET NUM : NONE




SAVE       CLR       BACK       EXIT
< NEAR / RIGHT   ▷ JOYSTICK >
```

```
            ALARM MENU
          PRESET SELECT : 001

       P001  P002  P003  P004  P005
        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
<EXIT ▷FOCUS NEAR >
<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.

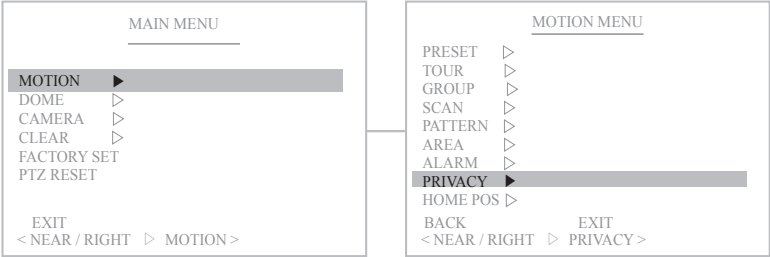(7) "EXIT" means it goes out of MENU

```
            ALARM MENU
            _____

NUMBER  : 01
TITLE      :
PRESET NUM : NONE




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

## 4. 2. 8   Privacy Zone Masking

```
            MAIN MENU                              MOTION MENU

                                        PRESET     ▷
 MOTION       ▶                         TOUR       ▷
 DOME         ▷                         GROUP      ▷
 CAMERA       ▷                         SCAN       ▷
 CLEAR        ▷                         PATTERN    ▷
 FACTORY SET                            AREA       ▷
 PTZ RESET                              ALARM      ▷
                                        PRIVACY    ▶
                                        HOME POS ▷
   EXIT                                  BACK              EXIT
 < NEAR / RIGHT   ▷  MOTION >           < NEAR / RIGHT   ▷  PRIVACY >
```

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

R01 : Defined Alarm number / 01 : Undefined Alarm number
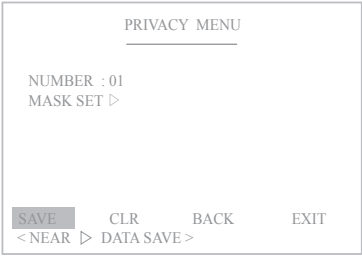
Move :  [JOYSTICK]    Select :  [NEAR]

```
         PRIVACY MENU                              PRIVACY MENU
                                                PRIVACY SELECT : 01
 NUMBER  : 01                             01      02      03      04      05
 MASK SET ▷                               06      07      08



 SAVE      CLR      BACK      EXIT
 < NEAR / RIGHT   ▷  NUMBER >             < SEL  ▷  NEAR   /   MOVE  ▷  JOYSTICK >
```

(2) Mask set

Move :  [JOYSTICK]    Select :  [TELE] or [JOYSTICK]    Delete :  [WIDE] or [JOYSTICK]

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

```
         PRIVACY MENU                              PRIVACY MASK SET

 NUMBER  : 01
 MASK SET ▷


                                        < EXIT  ▷ FOCUS NEAR >
 SAVE      CLR      BACK      EXIT          MASK SIZE : <OPEN / CLOSE >
 < NEAR / RIGHT   ▷  MASK SET >                 POSITION : 000. 0  000. 0
```
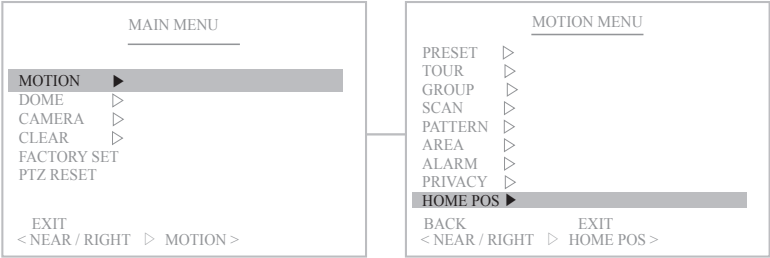
After the Privacy Zone is set, push the NEAR button to go out.

(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.

```
                PRIVACY  MENU
                _____

     NUMBER  : 01
     MASK SET ▷




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

## 4. 2. 9  Home Position

```
            MAIN MENU                              MOTION MENU
            ─────────                              ──────────
                                      PRESET    ▷
MOTION        ▶                       TOUR      ▷
DOME          ▷                       GROUP     ▷
CAMERA        ▷                       SCAN      ▷
CLEAR         ▷                       PATTERN   ▷
FACTORY SET                           AREA      ▷
PTZ RESET                             ALARM     ▷
                                      PRIVACY   ▷
                                      HOME POS ▶
  EXIT                                 BACK              EXIT
< NEAR / RIGHT   ▷  MOTION >          < NEAR / RIGHT   ▷   HOME POS >
```

Home Postion : Move to selected home position.(255＋Go To Preset)

(1) Home Position ON/OFF setting

Move :  **JOYSTICK**    Select :  **NEAR**

```
            HOME POS MENU
            ─────────────

ON/OFF  : OFF
POSITION SET ▷




SAVE        CLR        BACK        EXIT
< NEAR / RIGHT   &  ON/OFF >
```

(2) Home Position SET

Move :  **JOYSTICK**    Select :  **NEAR**

```
        HOME POS MENU                          HOME POSITION
        ─────────────                          ─────────────

ON/OFF  : OFF
POSITION SET ▷



SAVE      CLR      BACK      EXIT       < EXIT   ▷ FOCUS NEAR >
< NEAR / RIGHT ▷ POSITION SET >                POSITION : 000. 0  000. 0
```

# 4. 3   Dome Setting

```
                MAIN MENU
                _____

   MOTION      ▷
   DOME        ▶
   CAMERA      ▷
   CLEAR       ▷
   FACTORY SET
   PTZ RESET


   EXIT
  < NEAR / RIGHT   ▷  DOME >
```

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

## 4. 3. 1   Set the Dome camera title

Move :  [JOYSTICK]    Select :  [TELE] or [JOYSTICK]    Delete :  [WIDE] or [JOYSTICK]

It's available to set the desired camera title.

```
          DOME MENU                                TITLE SET
          _____                    --------------------------------------
                                       TITLE  :
   TITLE         :
   OSD ON/OFF    ▷                         0  1  2  3  4 5 6 7 8 9 (
   PARK MODE     ▷                        )A  B  C D E F G H  I  J  K
   SPECIAL       ▷
   ZERO POS      ▷                        L M N O P Q R S T U V W
   DOME RESET                             X Y  Z  .  /  ,  + - = < > @

   SAVE         BACK        EXIT      < STORE   ▷ TELE    MOVE  ▷   JOYSTICK >
  < NEAR / RIGHT  ▷ TITLE SET >       < DELETE  ▷ WIDE    BACK  ▷   NEAR     >
```
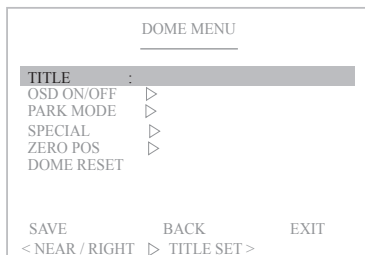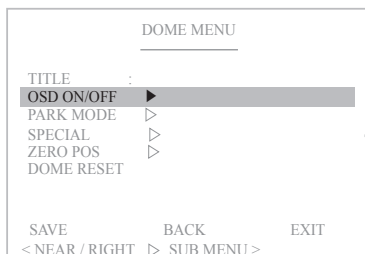
After the TITLE is set, push NEAR button to exit.

## 4. 3. 2  OSD ON/OFF Set

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

Select :  [JOYSTICK] or [NEAR]    Set ON :  [JOYSTICK]    Set OFF :  [NEAR]

```
          DOME MENU                              OSD ON/OFF
          _____                              _____

   TITLE         :                 TITLE   : <O>         PATTERN   : O
   OSD ON/OFF    ▶                 ZOOM    : O           PRIVACY   : O
   PARK MODE     ▷                 PRESET  : O           AREA      : O
   SPECIAL       ▷                 TOUR    : O           ALARM     : O
   ZERO POS      ▷                 GROUP   : O           POSITION  : X
   DOME RESET                      SCAN    : O           ACTION    : X

   SAVE         BACK        EXIT
  < NEAR / RIGHT  ▷ SUB MENU >     < ON ▷ TETLE   MOVE ▷ JOY >
                                   <OFF ▷ WIDE    BACK ▷NEAR>
```
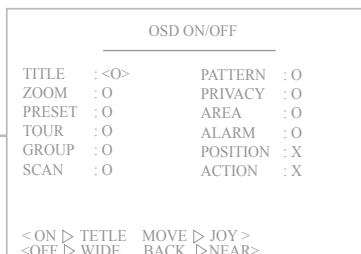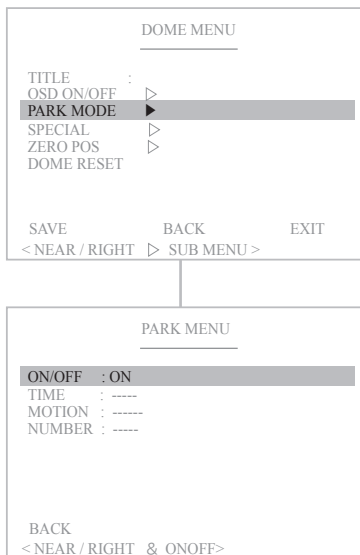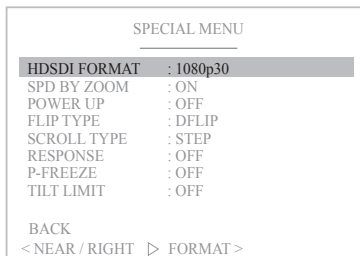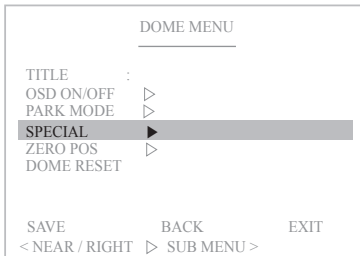
## 4. 3. 3  PARK MODE

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

  or  NEAR

- ON/OFF : Select ON/OFF
- TIME : Select 10 sec~1 HOUR
- MOTION : Set PRESET / TOUR / GROUP / SCAN / PATTERN
- NUMBER
  PRESET : 1~255
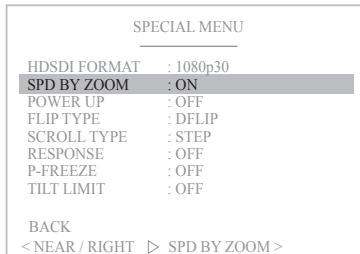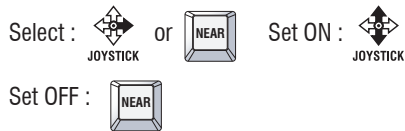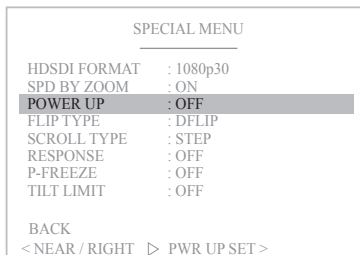  TOUR : 1~8
  GROUP : 1~6
  SCAN : 1~8
  PATTERN : 1~4

```
              DOME MENU
              ─────────

TITLE         :
OSD ON/OFF      ▷
PARK MODE       ▶
SPECIAL         ▷
ZERO POS        ▷
DOME RESET


  SAVE            BACK          EXIT
< NEAR / RIGHT   ▷  SUB MENU >
```

```
              PARK MENU
              ─────────

 ON/OFF    : ON
 TIME      : -----
 MOTION    : ------
 NUMBER    : -----




 BACK
< NEAR / RIGHT   &  ONOFF>
```

## 4. 3. 4   Special

```
              DOME MENU
              _____

TITLE          :
OSD ON/OFF      ▷
PARK MODE       ▷
SPECIAL         ▶
ZERO POS        ▷
DOME RESET


 SAVE          BACK          EXIT
< NEAR / RIGHT  ▷  SUB MENU >
```

```
            SPECIAL MENU
            _____

HDSDI FORMAT      : 1080p30
SPD BY ZOOM       : ON
POWER UP          : OFF
FLIP TYPE         : DFLIP
SCROLL TYPE       : STEP
RESPONSE          : OFF
P-FREEZE          : OFF
TILT LIMIT        : OFF

 BACK
< NEAR / RIGHT  ▷  FORMAT >
```

**(1) HDSDI FORMAT**

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

Select :  [JOYSTICK]  or  [NEAR]   Set ON : [JOYSTICK]

Set OFF :  [NEAR]

```
            SPECIAL MENU
            _____

HDSDI FORMAT      : 1080p30
SPD BY ZOOM       : ON
POWER UP          : OFF
FLIP TYPE         : DFLIP
SCROLL TYPE       : STEP
RESPONSE          : OFF
P-FREEZE          : OFF
TILT LIMIT        : OFF

 BACK
< NEAR / RIGHT  ▷  SPD BY ZOOM >
```

**(2) SPEED BY ZOOM**

Adjust PAN/Tilt Speed by Zoom ration.
(Available to check with max zoom rate.)

Select :  [JOYSTICK]  or  [NEAR]   Set ON : [JOYSTICK]

Set OFF :  [NEAR]

```
            SPECIAL MENU
            _____

HDSDI FORMAT      : 1080p30
SPD BY ZOOM       : ON
POWER UP          : OFF
FLIP TYPE         : DFLIP
SCROLL TYPE       : STEP
RESPONSE          : OFF
P-FREEZE          : OFF
TILT LIMIT        : OFF

 BACK
< NEAR / RIGHT  ▷  PWR UP SET >
```
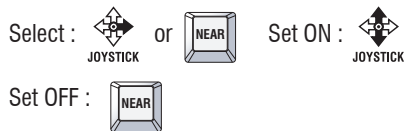
**(3) POWER UP**

When this function is ON, the camera memorizes
the latest action and restores, it from sudden power
failure.
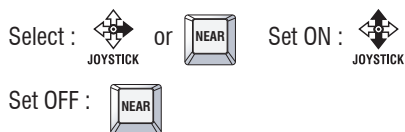
Select :  [JOYSTICK]  or  [NEAR]   Set ON : [JOYSTICK]

Set OFF :  [NEAR]

```
              SPECIAL MENU
              ――――――――
HDSDI FORMAT      : 1080p30
SPD BY ZOOM       : ON
POWER UP          : OFF
FLIP TYPE         : DFLIP
SCROLL TYPE       : STEP
RESPONSE          : OFF
P-FREEZE          : OFF
TILT LIMIT        : OFF

 BACK
< NEAR / RIGHT   ▷  FLIP TYPE >
```

**(4) FLIP TYPE**

   - OFF: TILT movement ranges from 0 ~90°
   - FLIP: When TILT move to 90°, PAN 180° automatically
     reversed moved
   - DFLIP: TILT movement ranges from 0 ~ 180°
     (Reversal of Image with 90° degree angle.)

   Select :  [JOYSTICK]  or  [NEAR]    Set ON :  [JOYSTICK]

   Set OFF :  [NEAR]

```
              SPECIAL MENU
              ――――――――
HDSDI FORMAT      : 1080p30
SPD BY ZOOM       : ON
POWER UP          : OFF
FLIP TYPE         : DFLIP
SCROLL TYPE       : STEP
RESPONSE          : OFF
P-FREEZE          : OFF
TILT LIMIT        : OFF

 BACK
< NEAR / RIGHT   ▷  TYPE >
```

**(5) SCROLL TYPE**

   Set the cursor progress
   STEP : by 1 STEP
   AUTO : Continuous scroll

   Select :  [JOYSTICK]  or  [NEAR]    Set ON :  [JOYSTICK]

   Set OFF :  [NEAR]

```
              SPECIAL MENU
              ――――――――
HDSDI FORMAT      : 1080p30
SPD BY ZOOM       : ON
POWER UP          : OFF
FLIP TYPE         : DFLIP
SCROLL TYPE       : STEP
RESPONSE          : OFF
P-FREEZE          : OFF
TILT LIMIT        : OFF

 BACK
< NEAR / RIGHT   ▷  ON/OFF >
```

**(6) RESPONSE TXD**

   Tx communication line to transfer the unique value of
   protocal response.
   (Use this function when the protocol is pelco-D 5.0 EZ.)

   Select :  [JOYSTICK]  or  [NEAR]    Set ON :  [JOYSTICK]

   Set OFF :  [NEAR]

```
              SPECIAL MENU
              ――――――――
HDSDI FORMAT      : 1080p30
SPD BY ZOOM       : ON
POWER UP          : OFF
FLIP TYPE         : DFLIP
SCROLL TYPE       : STEP
RESPONSE          : OFF
P-FREEZE          : OFF
TILT LIMIT        : OFF

 BACK
< NEAR / RIGHT   ▷  ON/OFF >
```

**(7) P-FREEZE**

   The screen is stopped while the camera is operating
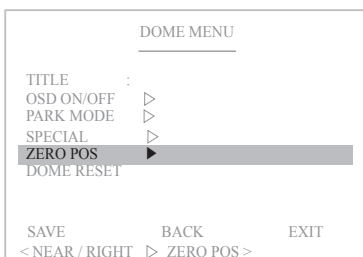   presetfuntion.

   Select :  [JOYSTICK]  or  [NEAR]    Set ON :  [JOYSTICK]

   Set OFF :  [NEAR]

```
          SPECIAL MENU
      ──────────────
HDSDI FORMAT    : 1080p30
SPD BY ZOOM     : ON
POWER UP        : OFF
FLIP TYPE       : DFLIP
SCROLL TYPE     : STEP
RESPONSE        : OFF
P-FREEZE        : OFF
TILT LIMIT      : OFF

 BACK
< NEAR / RIGHT  ▷ TILT LIMIT >
```
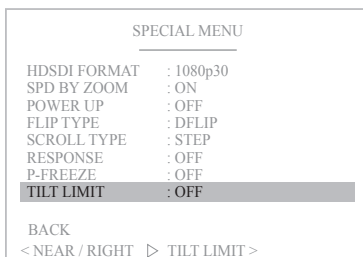
(8) TILT LIMIT

Set tilt stop angle. : off ~15°

Select : JOYSTICK  or  NEAR     Set ON : JOYSTICK

Set OFF : NEAR

## 4. 3. 5  ZERO POSITION

```
          DOME MENU
      ──────────────
TITLE        :
OSD ON/OFF    ▷
PARK MODE     ▷
SPECIAL       ▷
ZERO POS      ▶
DOME RESET

 SAVE          BACK         EXIT
< NEAR / RIGHT  ▷ ZERO POS >
```

```
        ZERO POS MENU
      ──────────────
ON/OFF       : OFF
POSITION SET  ▷




 BACK
< NEAR / RIGHT  ▷ ZERO POS >
```
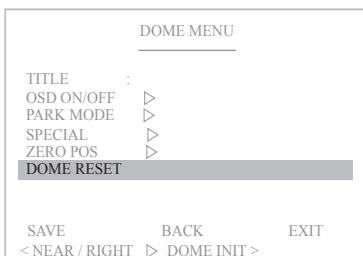
When select ON, the zero position is changeable.
POSITION change  ZERO POSITION(000.0 / 000.0) value.

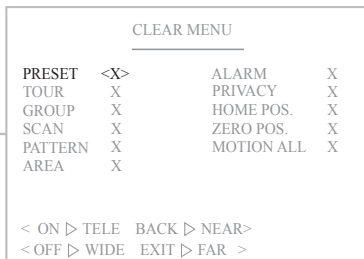Select : JOYSTICK  or  NEAR     Set ON : JOYSTICK

Set OFF : NEAR

## 4. 3. 6  DOME RESET

```
          DOME MENU
      ──────────────
TITLE        :
OSD ON/OFF    ▷
PARK MODE     ▷
SPECIAL       ▷
ZERO POS      ▷
DOME RESET

 SAVE          BACK         EXIT
< NEAR / RIGHT  ▷ DOME INIT >
```

DOME MENU initialization function.

## 4. 4   Clear Setting

Clears the PTZ position and function value.

```
            MAIN MENU                              CLEAR MENU
         ───────────                            ───────────

  MOTION      ▷                    PRESET   <X>        ALARM         X
  DOME        ▷                    TOUR      X         PRIVACY       X
  CAMERA      ▷                    GROUP     X         HOME POS.     X
  CLEAR       ▶                    SCAN      X         ZERO POS.     X
  FACTORY SET                      PATTERN   X         MOTION ALL    X
  PTZ RESET                        AREA      X


    EXIT                           <  ON ▷ TELE   BACK ▷ NEAR>
  < NEAR / RIGHT   ▷  CLEAR>       < OFF ▷ WIDE   EXIT ▷ FAR  >
```

Select :  JOYSTICK  or  NEAR     Set ON :  JOYSTICK     Set OFF :  NEAR

## 4. 5   Factory set

```
            MAIN MENU
         ───────────

  MOTION      ▷
  DOME        ▷
  CAMERA      ▷
  CLEAR       ▷
  FACTORY SET
  PTZ RESET


    EXIT
  < NEAR / RIGHT   ▷  FACTORY SET>
```
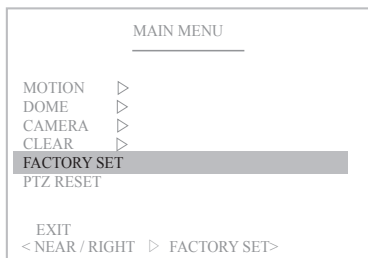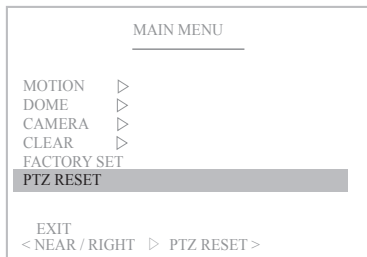
Clear the DOME, CAMERA and MOTION setting value.

⚠

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

## 4. 6   PTZ Reset

```
            MAIN MENU
         ───────────

  MOTION      ▷
  DOME        ▷
  CAMERA      ▷
  CLEAR       ▷
  FACTORY SET
  PTZ RESET


    EXIT
  < NEAR / RIGHT   ▷  PTZ RESET >
```

It is a reset function.

# 5. SPECIFICATION

## 5. 1   Mechanism Specification

### 5. 1. 1   MECHANICAL

- Pan                       : 360° Continuous Pan, 0.1º to 120º/sec.
- Pan Preset Speed          : 360°/sec, ± 0.1° Accuracy
- Tilt                      : 0.1º to 120º/sec.
- Tilt Preset Speed         : 250°/sec, ± 0.05° Accuracy
- Weight                    : Approximately 1.5Kg
- Dimensions Set            : 125(Ø)x193.7H(mm)

### 5. 1. 2   ENVIRONMENTAL

- Construction              : Aluminum
- Color                     : Cool gray
- Operating Temp            : Indoor -10°C to 50°C
- Humidity                  : 0% to 90%(non-condensing)
- Fan operate               : 50°C on, 40°C off

### 5. 1. 3   FUNCTIONS

- Preset                    : 255 points, less than 0.1° accuracy
- Tour                      : 8 programmable
- Pattern                   : 4 patterns for 60 second.
- Group                     : 6 group(Max.6 Tours are programmable in each Group)
- Scan                      : 8 (programmable speed and diagonal scan)
- 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, EZP)
- Baud rate                 : 2400, 4800, 9600, 19200, 38400, 57600, 115200 bps selectable
- Alarm                     : 4 alarm
- Display                   : 16 Area title
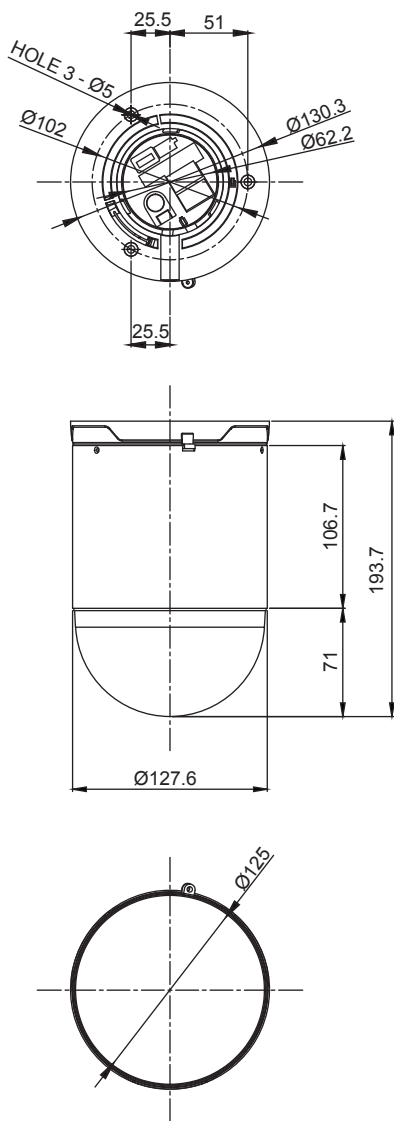- Auto Flip                 : Off / AUTO / DIGITAL

### 5. 1. 4   ELECTRICAL

- Power                     : AC24 /DC 15~26V
- Power Consumption         : 8W / Max 11W(FAN&IP ON)
- RS-422, 485               : Dip Switch setting

### 5. 1. 5   USER CONNECTIONS

- Data communication connection : RS-422, 485    + / - Optional Control Data
- HD-SDI connection         : BNC
- Alarm Inputs              : 4 Programmable
- Relay                     : 2 Dry Contact Output Rating: 2A @30VAC

# 6. DIMENSION

## 6. 1   DIMENSION

25.5   51

HOLE 3 - Ø5

Ø102

Ø130.3
Ø62.2

25.5

106.7

193.7

71

Ø127.6

Ø125

# 7. CONFIGURATION

## 7. 1　Connecting to Keyboard with DVR



RS-485 INPUT

WMC-100 (Multi-Converter)

RS-232

RS-485 OUTPUT

DVR

Monitor

TX ⊖

TX ⊕

⊕

Adapter (DC 12V / 500mA)

RX ⊕ ⊖

RX ⊖

Junction Box

Main Keyboard　　Junction Box　　Slave Keyboard