

H.264 NETWORK CAMERA

ZN-PTZ550VP(N)E

OSD Menu Control Manual

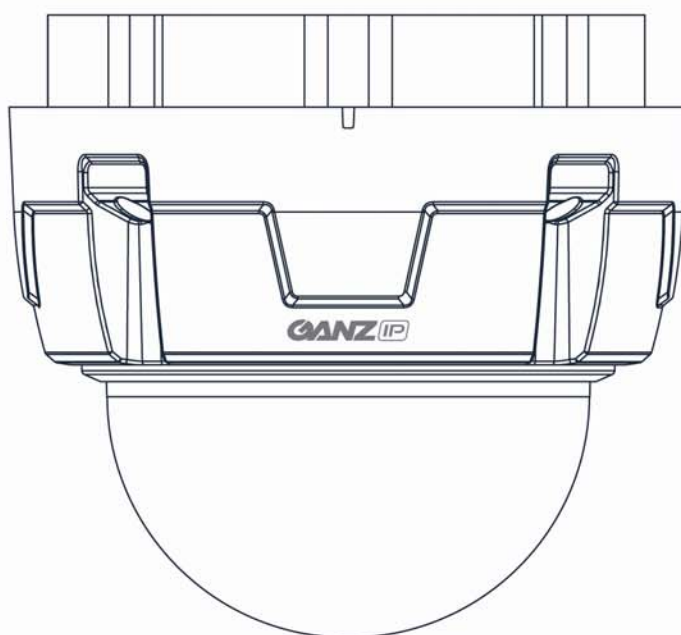
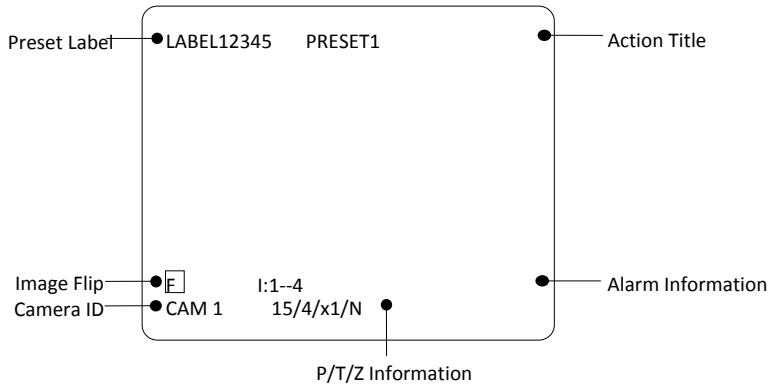


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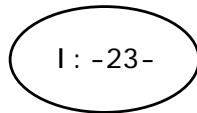
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1. OSD Display of Main Screen



- P/T/Z Information Current Pan/Tilt angle in degree, zoom magnification and a compass direction.
- Camera ID Current Camera ID(Address).
- Action Title Followings are possible Action Titles and their meaning.

| | |
|-------------------|--|
| "SET PRESET xxx" | When Preset xxx is stored |
| "PRESET xxx" | When camera reach to Preset xxx |
| "PATTERN x" | When Pattern x is in action |
| "SWGx/PRESET xxx" | When Swing x is in action |
| "UNDEFINED" | When undefined function is called to run |
- Preset Label The Label stored for specific Preset.
- Alarm Input This information shows current state of Alarm Input. If an Input point is **ON** state it will show a number corresponding to each point. If an Input point is **OFF** state, '-' will be displayed.
Ex) Point 2 & 3 of inputs are **ON**, OSD will show as below

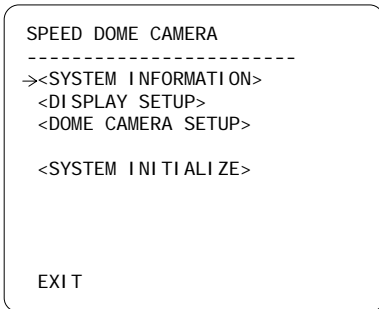


- Image Flip Shows that images are currently reversed by Auto Flip Function.

2. General Rules of Key Operation

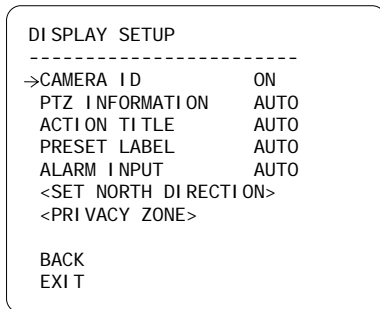
- The menu items surrounded with () always has its sub menu.
- For all menu level, to go into sub menu, press NEAR key.
- To go to up-one-level menu, press FAR key.
- To move from items to item in the menu, use joystick in the Up/Down or Left/Right.
- To change a value of an item, use Up/Down of the joystick in the controller.
- Press NEAR key to save values and Press FAR key to cancel values.

3. Main Menu



- System Information Displays system information and configuration.
- Display Setup Enable/Disable of OSD display on Main Screen.
- Dome Camera Setup Configure various functions of this camera.
- System Initialize Initializes system configuration and sets all data to factory default configuration.

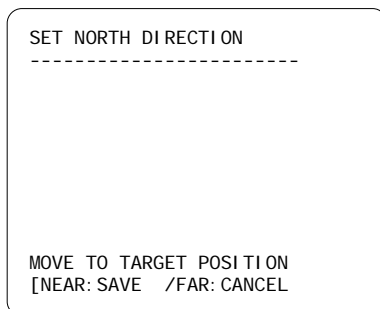
4. Display Setup



This menu defines Enable/Disable of OSD display on Main Screen. If an item is set to be AUTO, the item is displayed only when the value of it is changed.

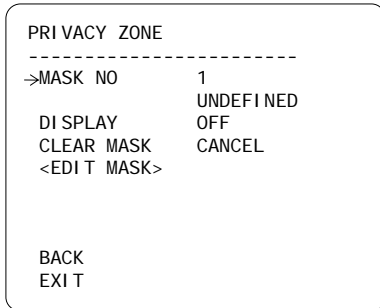
- Camera ID [ON/OFF]
- PTZ Information [ON/OFF/AUTO]
- Action Title [ON/OFF/AUTO]
- Preset Label [ON/OFF/AUTO]
- Alarm Input [ON/OFF/AUTO]

Compass Direction Setup



Set North to assign compass direction as criteria. Move camera and press **NEAR** button to save.

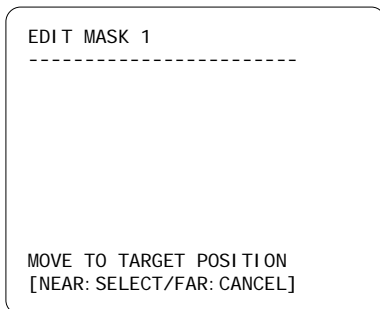
5. Privacy Zone Mask Setup



Select area in image to mask.

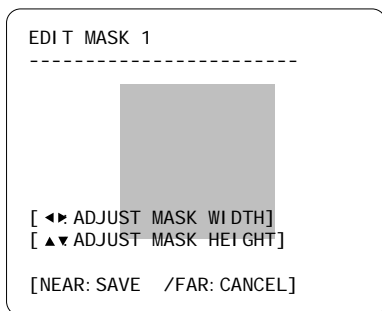
- Mask No [1~4]
Select Mask number. If the selected mask has already data, camera moves as it was set. Otherwise, "UNDEFINED" will be displayed under "Mask NO".
- Display [ON/OFF]
Sets if camera makes mask shows or not on images.
- Clear Mask [CANCEL/OK]
Deletes data in the selected mask NO.

Privacy Zone Area Setup



Move camera to area to mask. Then the menu to adjust mask size will be displayed.

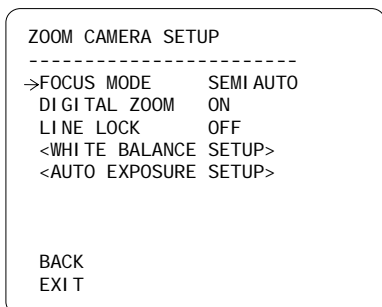
Privacy Zone Size Adjustment



Adjust mask size. Use joystick or arrow buttons to adjust mask size.

- ◀ ▶ (Left/Right) Adjusts mask width.
- ▲ ▼ (Up/Down) Adjusts mask height.

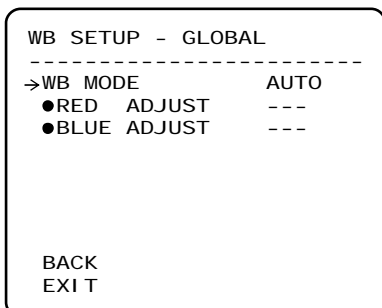
6. Camera Setup



Setup the general functions of zoom camera module.

- Focus Mode [AUTO/MANUAL/SEMIAUTO]
Sets camera focus mode.
○ SEMIAUTO Mode
This mode exchanges focus mode automatically between Manual Focus mode and Auto Focus mode. Manual Focus mode activates in preset operation and Auto Focus mode activates when jog operation starts. With Manual mode at presets, Focus data is memorized in each preset in advance and camera calls focus data in correspondence with presets as soon as camera arrives at a preset.
- Digital Zoom [ON/OFF]
Sets digital zoom function to ON/OFF. If this is set to OFF, optical zoom function runs but zoom function stops at the end of optical zoom magnification.
- Line Lock [ON/OFF]
If Line lock sync is ON, video signal is synchronized with AC power. Video can be fluctuated after setting is changed.

White Balance Setup



[AUTO/MANUAL]

- WB Mode In Manual mode, Red and Blue level can be set up manually
- Red Adjust [10~60]
- Blue Adjust [10~60]

Auto Exposure Setup

```

AE SETUP - GLOBAL
-----
->BACKLI GHT            OFF
DAY/NI GHT             AUTO1
BRI GHTNESS            25
I R I S                  AUTO
SHUTTER                ESC
AGC                     NORMAL
SSNR                    MI DDLE
SENS-UP                <AUTO>
BACK
EXIT
    
```

- Backlight [ON/OFF]
Sets Backlight Compensation
- Day/Night [AUTO1/AUTO2/DAY/NIGHT]
AUTO1 exchanges Day/Night mode faster than AUTO2.
- Brightness [0~100]
Adjusts brightness of images. Iris, Shutter Speed and Gain are adjusted automatically in correspondence with this value.
- IRIS [AUTO/MANUAL(0~100)]
If Iris is set to Auto, Iris should have highest priority in adjusting AE and Shutter Speed should be fixed.
If Iris is set to Manual, Iris should be fixed and Iris has lower priority in adjusting AE, in comparison with others.
- Shutter Speed [ESC/A.Flicker/Manual(×128~1/120000 sec)]
If Iris is set to Manual and Shutter Speed is set to ESC, Shutter Speed should have highest priority. If Shutter Speed is set to A.Flicker, to remove Flicker, Shutter Speed should be set to 1/100 sec. for NTSC and 1/120 for PAL.
- AGC [OFF/NORMAL/HIGH]
Enhances image brightness automatically in case that luminance level of image signal is too low.
- SSNR [OFF/LOW/MIDDLE/HIGH]
Enhances images by deducting noises when gain level of images is too high.
- SENS-UP [AUTO(2~128)/OFF]
Activates Slow Shutter function when luminance of image (signal) is too dark.
It is possible to set up the maximum number of frames piled up one on another by Slow Shutter function.

7. Motion Setup

```
MOTION SETUP
-----
->MOTION LOCK      OFF
PWR UP ACTION     ON
AUTO FLIP         ON
JOG MAX SPEED     120/SEC
JOG DIRECTION     INVERSE
FRZ IN PRESET     OFF
<PARKING ACTION SETUP>
<ALARM INPUT SETUP>
BACK
EXIT
```

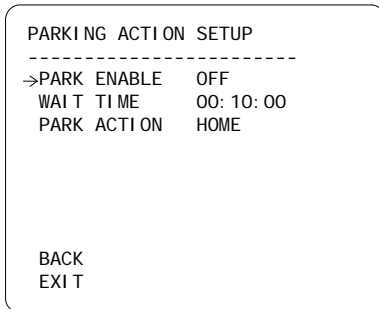
Setup the general functions of Pan/Tilt motions.

- Motion Lock [ON/OFF]
If Motion Lock is set to ON, it is impossible to set up and delete Preset, Swing, Pattern and Group. It is possible only to run those functions. To set up and delete those functions, enter into OSD menu.
- Power Up Action [ON/OFF]
Refer to "Other Functions" section.
- Auto Flip [ON/OFF]
Refer to "Other Functions" section.
- Jog Max Speed [1°/sec ~360°/sec]
Sets maximum jog speed. Jog speed is inversely proportional to zoom magnification. As zoom magnification goes up, pan/tilt speed goes down.
- Jog Direction [INVERSE/NORMAL]
If you set this to 'Inverse', the view in the screen is moving same direction with jog tilting. If 'Normal' is selected, the view in the screen is moving reversely.

- Freeze in Preset [ON/OFF]

At start point of preset movement, camera starts freezing the image of start point. Camera keeps displaying the image of start point during preset movement and does not display the images which camera gets during preset movement. As soon as camera stops at preset end point, camera starts displaying live images which it gets at preset end point. This function availability should be different by models.

Parking Action Setup



If Park Enable is set to ON, camera runs assigned function automatically if there is no PTZ command during assigned "Wait Time".

- Park Enable [ON/OFF]
- Wait Time [1 minute ~ 4 hour]

The time is displayed with "hh:mm:ss" format and you can change this by 1 min unit.
- Park Action [HOME/PRESET/PATTERN/SWING/GROUP]

○ HOME

Camera moves to home position if there is no PTZ command during assigned "Wait Time".

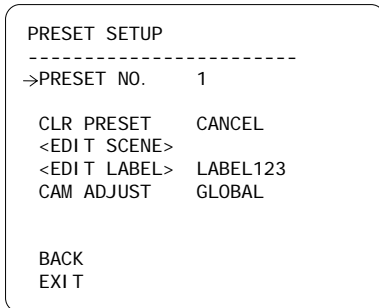
Alarm Input Setup

| ALARM INPUT SETUP | | |
|-------------------|------|----------|
| ----- | | |
| ->ALARM1 | TYPE | N. OPEN |
| ALARM2 | TYPE | N. OPEN |
| ALARM3 | TYPE | N. OPEN |
| ALARM4 | TYPE | N. OPEN |
| ALARM1 | ACT | NOT USED |
| ALARM2 | ACT | NOT USED |
| ALARM3 | ACT | NOT USED |
| ALARM4 | ACT | NOT USED |
| BACK | | |
| EXIT | | |

Match the Alarm sensor input to one of Preset positions. If an external sensor is activated, camera will move to corresponding preset position when this item is predefined.

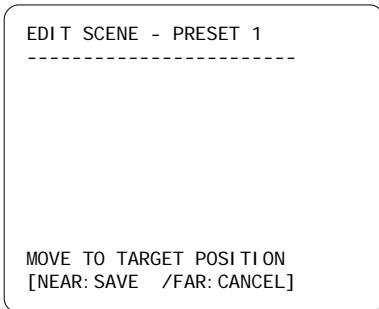
- Alarm × Type [Normal OPEN/Normal CLOSE]
Sets sensor input type.
- Alarm × Action [NOT USED/PRESET 1~128]
Assign counteraction Preset position to each Alarm input.

8. Preset Setup



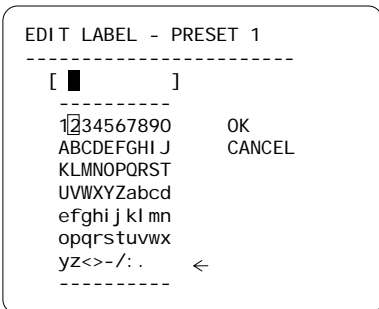
- Preset Number [1~128]
If a selected preset is already defined, camera moves to pre-defined position and preset characteristics such as Label and Relay Outputs show on monitor. If a selected preset is not defined, "UNDEFINED" shows on monitor.
- Clear Preset [CANCEL/OK]
Delete current Preset data
- Edit Preset Scene Redefine current Preset scene position (i.e. PTZ).
- Edit Preset Label Edits Label to show on monitor when preset runs. MAX. 10 alphabets are allowed.
- CAM Adjust [GLOBAL/LOCAL]
WB(White Balance) and AE(Auto Exposure) can be set up independently for each preset. There are 2 modes, "Global" mode & "Local" mode. The Global mode means that WB or AE can be set up totally and simultaneously for all presets in "ZOOM CAMERA SETUP" menu.
The Local mode means that WB or AE can be set up independently or separately for each preset in each preset setup menu. Each Local WB/AE value should activate correspondingly when camera arrives at each preset location. During jog operation, Global WB/AE value should be applied.
All Local WB/AE value should not change although Global WB/AE value changes. If "Local" is selected, Menu to set WB/AE shows on monitor.

Edit Preset Scene

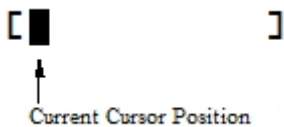


- (1) Using Joystick, move camera to desired position.
- (2) By pressing **NEAR** key, save current PTZ data.
- (3) Press **FAR** key to cancel.

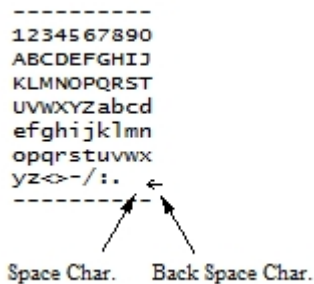
Edit Preset Label



- (1) Edits label to show on monitor when camera arrives at presets. In Edit Label menu, a reverse rectangular is cursor. As soon as finishing selecting alphabet, cursor moves to the next digit.



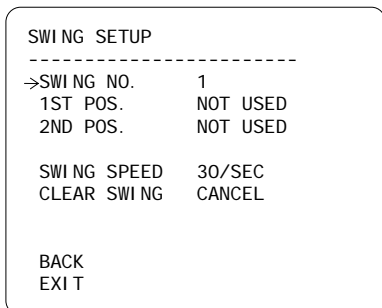
- (2) Using **Left/Right/Up/Down** of joystick, move to an appropriate character from the Character set. To choose that character, press the **NEAR** key.



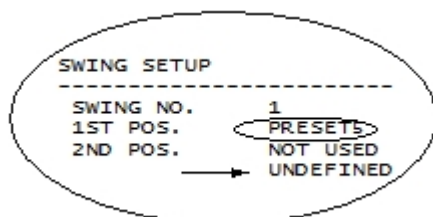
If you want to use blank, choose Space character (" "). If you want to delete a character before, use back space character (" ←").

- (3) If you complete the Label editing, move cursor to "OK" and press **NEAR** key to save completed label. To abort current change, move cursor to "Cancel" and press **NEAR** key

9. Swing Setup



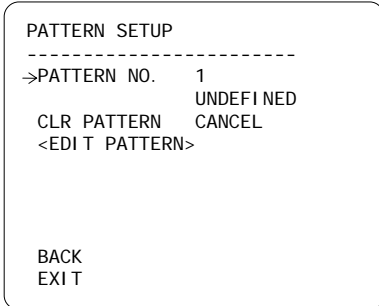
- **Swing Number** [1~8]
Selects Swing number to edit. If a selected Swing has not defined, "NOT USED" is displayed in 1st Position and 2nd Position
- **1st Position** [PRESET 1~128]
2nd Position Set up the 2 position for Swing function. If a selected preset is not defined, "UNDEFINED" will be displayed as shown below.



When swing function runs, camera moves from the preset assigned as the 1st point to the preset assigned as the 2nd point in CW(Clockwise) direction. Then camera moves from the preset assigned as the 2nd point to the preset assigned as the 1st point in CCW(Counterclockwise) direction. In case that the preset assigned as the 1st point is same as the preset assigned as the 2nd point, camera turns on its axis by 360° in CW direction and then it turns on its axis by 360° in CCW direction.

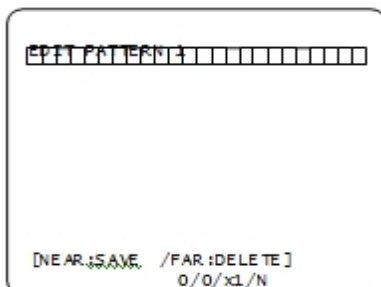
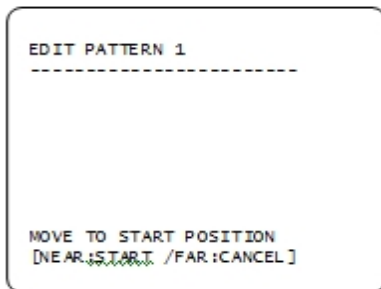
- **Swing Speed** [1°/sec ~180°/sec]
Sets Swing speed from 1°/sec to 180°/sec.
- **Clear Swing** [CANCEL/OK]
Deletes current Swing data.

10. Pattern Setup



- Pattern Number [1~4]
Selects Pattern number to edit.
If a selected pattern number is not defined, "UNDEFINED" will be displayed under selected pattern number.
- Clear Pattern [CANCEL/OK]
Deletes data in current pattern
- Edit Pattern Starts editing pattern.

Edit Pattern



- (1) By using Joystick, move to start position with appropriate zoom. To start pattern recording, press **NEAR** key. To exit this menu, press **FAR** key.

- (2) Move camera with joystick of controller or run preset function to memorize the path (mostly curve path) in a selected pattern. The total memory size and the rest memory size is displayed in the form of bar. Maximum 1200 communication commands can be stored in a pattern.
- (3) To save data and exit, press **NEAR** key. To cancel recording and delete record data, press **FAR** key.

11. Group Setup

```

GROUP SETUP
-----
->GROUP NO.      1
                  UNDEFINED
CLEAR GROUP      CANCEL
<EDIT GROUP>

BACK
EXIT
    
```

- Group Number [1~8]
 - Selects Group number to edit.
 - If a selected Group number is not defined, "UNDEFINED" will be displayed under selected Group number.
- Clear Group [CANCEL/OK]
 - Deletes data in current Group
- Edit Group Starts editing Group.

Edit Group

```

EDIT GROUP 1
-----
->NO ACTION ### DWELL OPT
-----
 1 NONE
 2 NONE
 3 NONE
 4 NONE
 5 NONE
-----
SAVE
CANCEL [NEAR: EDIT]
    
```

(1) **NEAR** key in "NO" list to start Group setup.

```

EDIT GROUP 1
-----
NO ACTION ### DWELL OPT
-----
-> 1 NONE
 2 NONE
 3 NONE
 4 NONE
 5 NONE
-----
SAVE [NEAR: EDIT ACT]
CANCEL [FAR : EDIT END]
    
```

(2) Note that MAX. 20 Functions are allowed in a Group. Move cursor up/down and press **NEAR** key to set up.

```

EDIT GROUP 1
-----
NO ACTION ### DWELL OPT
-----
1 NONE
2 NONE
3 NONE
4 NONE
5 NONE
-----
SAVE [ :MOVE CURSOR]
CANCEL [ :CHANGE VAL.]
    
```

(3) Set up Action, Dwell time and Option. Note that selected item is displayed in reverse. Move cursor **Left/Right** to select items and move cursor **Up/Down** to change each value.

- Action [NONE/PRESET/SWING/PATTERN] ###
- [0 second ~ 4 minutes]
- DWELL Sets Dwell Time between functions
- OPT Option. It should be preset speed when preset is set in Action. It should be the number of repeat when Pattern or Swing is selected in Action

```

EDIT GROUP 1
-----
NO ACTION ### DWELL OPT
-----
1 PRESET 1 00:03 360
2 NONE
3 NONE
4 NONE
5 NONE
-----
SAVE [ :MOVE CURSOR]
CANCEL [ :CHANGE VAL.]
    
```

(4) Set up items such as Action, ###, Dwell and OPT.

```

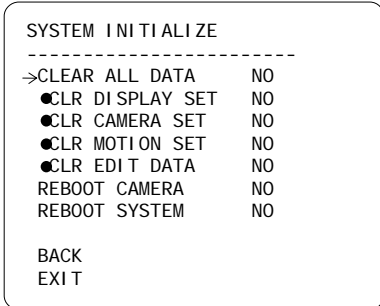
EDIT GROUP 1
-----
NO ACTION ### DWELL OPT
-----
-> 1 PRESET 1 00:03 360
2 NONE
3 NONE
4 NONE
5 NONE
-----
SAVE [NEAR: EDIT ACT]
CANCEL [FAR : EDIT END]
    
```

(5) After finishing setting up a Action, press **Near** key to one-upper-level menu(Step ②). Move cursor **Up/Down** to select Action number and repeat Step ② ~ Step ④ to edit selected Group

```
EDIT GROUP 1
-----
NO ACTION ### DWELL OPT
-----
 1 PRESET  1 00:03 360
 2 NONE
 3 NONE
 4 NONE
 5 NONE
-----
->SAVE
  CANCEL
```

(6) After finishing setting up all Actions, press **FAR** key to exit. Then cursor should be moved to "SAVE". Press **Near** key to save data.

12. System Initialize



- Clear All Data Deletes all configuration data such as display, camera, motion setup and so on.
- Clear Display Set Initializes Display Configuration
- Clear Camera Set Initializes Camera Configuration
- Clear Motion Set Initializes Motion Configuration
- Clear Edit Data Deletes Preset Data, Swing Data, Pattern Data and Group Data
- Reboot Camera Reboots Zoom Camera module
- Reboot System Reboots Speed Dome Camera

Initial Configuration Table

| ● Display Configuration | | ● Camera Configuration | |
|-------------------------|-----------|------------------------|----------------|
| Camera ID | ON | Focus Mode | SemiAuto |
| PTZ Information | AUTO | Digital Zoom | ON |
| Action Title | AUTO | Line Lock | OFF |
| Preset Label | AUTO | White Balance | AUTO |
| Alarm Input | AUTO | Backlight | OFF |
| North Direction | Pan 0° | Day&Night | AUTO1 |
| Privacy Zone | Undefined | Brightness | 25 |
| | | Iris | AUTO |
| | | Shutter | ESC |
| | | AGC | NORMAL |
| | | SSNR | MIDDLE |
| | | SENS-UP | AUTO (4 Frame) |
| ● Motion Configuration | | ● User Edit Data | |
| Motion Lock | OFF | Preset 1~128 | Undefined |
| Power Up Action | ON | Swing 1~8 | Undefined |
| Auto Flip | ON | Pattern 1~4 | Undefined |
| Jog Max Speed | 120°/sec | Group 1~8 | Undefined |
| Jog Direction | INVERSE | | |
| Freeze In Preset | OFF | | |
| Park Action | OFF | | |
| Alarm Action | OFF | | |

13. Specifications

| Model | | ×10 | |
|---------------------|--|---|-----------------------|
| Video Signal System | | NTSC | PAL |
| Camera | CCD | 1/4" Interline Transfer CCD | |
| | Max. Pixels | 811(H)×508(V) 410K | 795(H)×596(V) 470K |
| | Effective Pixels | 768(H)×494(V) 380K | 752(H)×582(V) 440K |
| | Horizontal Res. | 500 TV Line(Color), 570 TV Line(B/W) | |
| | S/N Ratio | 50 dB (AGC Off) | |
| | Zoom | ×10 Optical Zoom, ×10 Digital Zoom | |
| | Focal length | F1.8, f=3.8~38mm | |
| | Min. illumination | 0.7 Lux (Color) / 0.02 Lux (B/W), 50 IRE | |
| | Day & Night | Auto / Day / Night(ICR) | |
| | Focus | Auto / Manual / SemiAuto | |
| | Iris | Auto / Manual | |
| | Shutter Speed | x128 ~ 1/120000 sec | |
| | AGC | Normal / High / Off | |
| | White Balance | Auto / Manual(Red, Blue Gain Adjustable) | |
| | BLC | Low / Middle / High / Off | |
| | Flickerless | Selectable | |
| | SSNR | Low / Middle / High / Off | |
| Pan/Tilt | Range | Pan : 360°(Endless) | |
| | | Tilt : 180° (Auto-Flip), 95° (Normal) | |
| | Pan/Tilt Speed | Preset : 360°/sec | |
| | | Manual : 0.05 ~ 360°/sec (proportional to zoom) | |
| | | Swing : 1~ 180°/sec | |
| | Preset | 127 Preset (Label, Camera Image Setting) | |
| Pattern | 4 Pattern, 1200 commands(about 5 minute)/Pattern | | |
| Swing | 8 Swing | | |

| | | | |
|-----------------|-----------------|---|--------------------|
| | Group | 8 Group (20 action entities per Group) | |
| | Other Functions | Auto Flip, Auto Parking, Power Up Action etc. | |
| General | Communication | RS-485 | |
| | Protocol | Pelco-D, Pelco-P selectable | |
| | Privacy Zone | 4 Zone | |
| | Alarm Input | 4 Input | |
| | OSD | Menu / PTZ information etc | |
| | Rated Power** | DC Type : | DC 12V / 0.8A |
| | | AC Type : | AC 24V / 0.4A |
| | Dimension | Dome : | Ø115 |
| | | Housing : | Ø147.5 × 141(H) mm |
| | Weight | | about 1 Kg |
| Operating Temp. | | 0°C ~ 40°C | |

* Specifications of this product can be subjected to change without notice.

** Check the voltage and current capacity of rated power carefully.