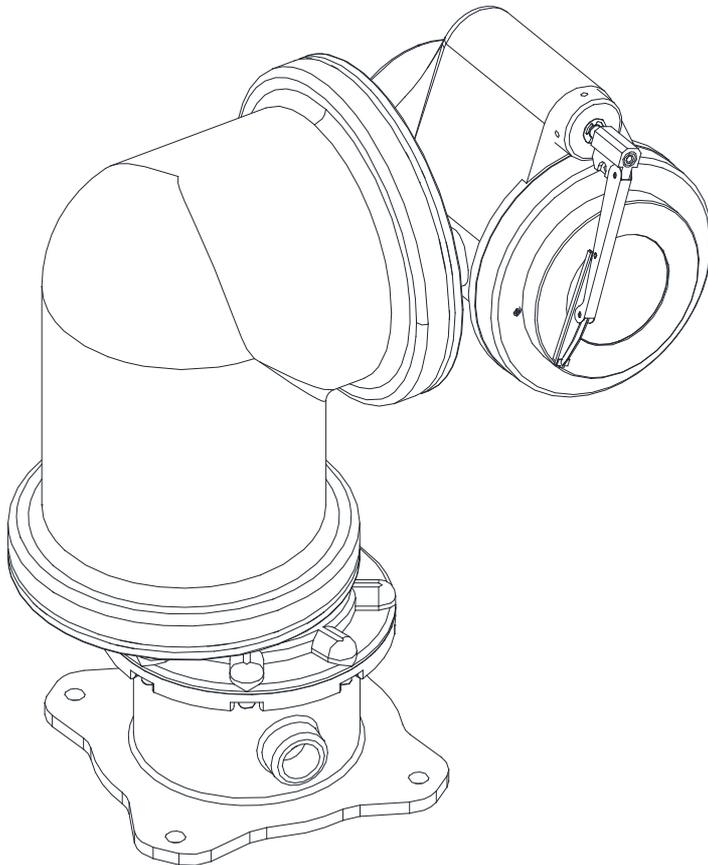


INSTALLATION&OPERATION GUIDE BOOK

EXPTZ Camera

(HIGH SPEED)

Explosive proof Security Camera



The EXPTZ Series follow the stringent explosion-proof requirements with creative mechanical strength and design. Moreover, the EXPTZ explosion-proof system is designed to meet the rigorous requirements of explosion-proof electrical **equipment** installed in hazardous locations. The system has built-in True Day & Night zoom camera with programmable Camera setting, Video Flip and BMB™ (Black Masking BLC).

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Important Safety Instructions

1. Install and use this system after reading these instruction thoroughly.
2. Keep these instructions.
3. Install in accordance with the manufacture's instruction.
4. Take care of all Cautions and Warnings.
5. Use stainless steel hardware to fasten the mount to outdoor surfaces.
6. A readily accessible disconnect device shall be incorporated in the building installation wiring.
7. Only use replacement parts recommended by Honeywell.
8. The maximum ambient temperature range is -20°C to 50°C.

Explanation of Graphical Symbols.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (Servicing) Instructions in the literature accompanying the appliance.



WARNING: To reduce the risk of ignition of Hazardous Atmospheres, disconnect the equipment from the supply circuit before opening.



WARNING: To reduce the risk of ignition of hazardous atmospheres, conduit runs must have a sealing fitting connected within 3/4 inches of the enclosure.



TO REDUCE THE RISK OF IGNITION DO NOT OPEN WHEN AN EXPLOSIVE GAS ATMOSPHERE MAY BE PRESENT

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

Methods of Installation

This system can be installed in a standard as below Figure1.

If you wish to install another method, you must do it after discussing with a manufacture.aas

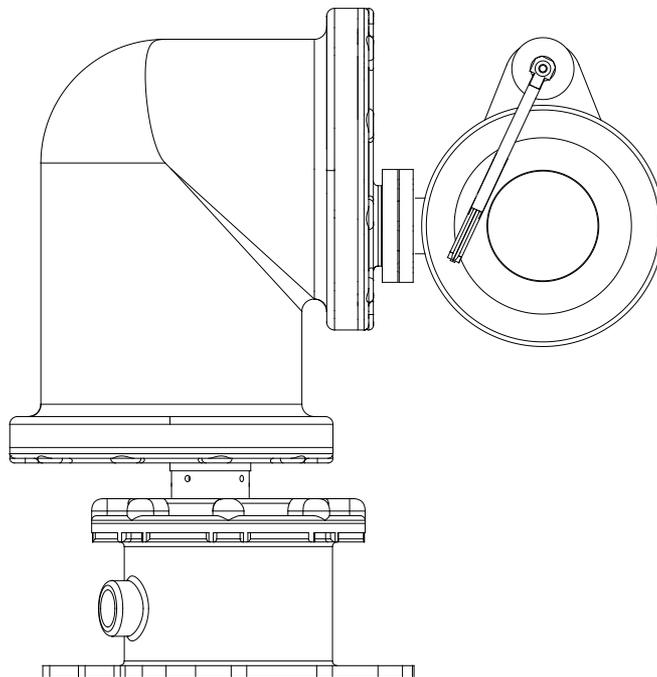


Figure1.

Standard Method of Installation

⚠ WARNING: Gross weight of this system is about 40kg. Use caution when lifting and installing. It is recommended you to wear proper non-slip gloves during installation.

Methods of Installation

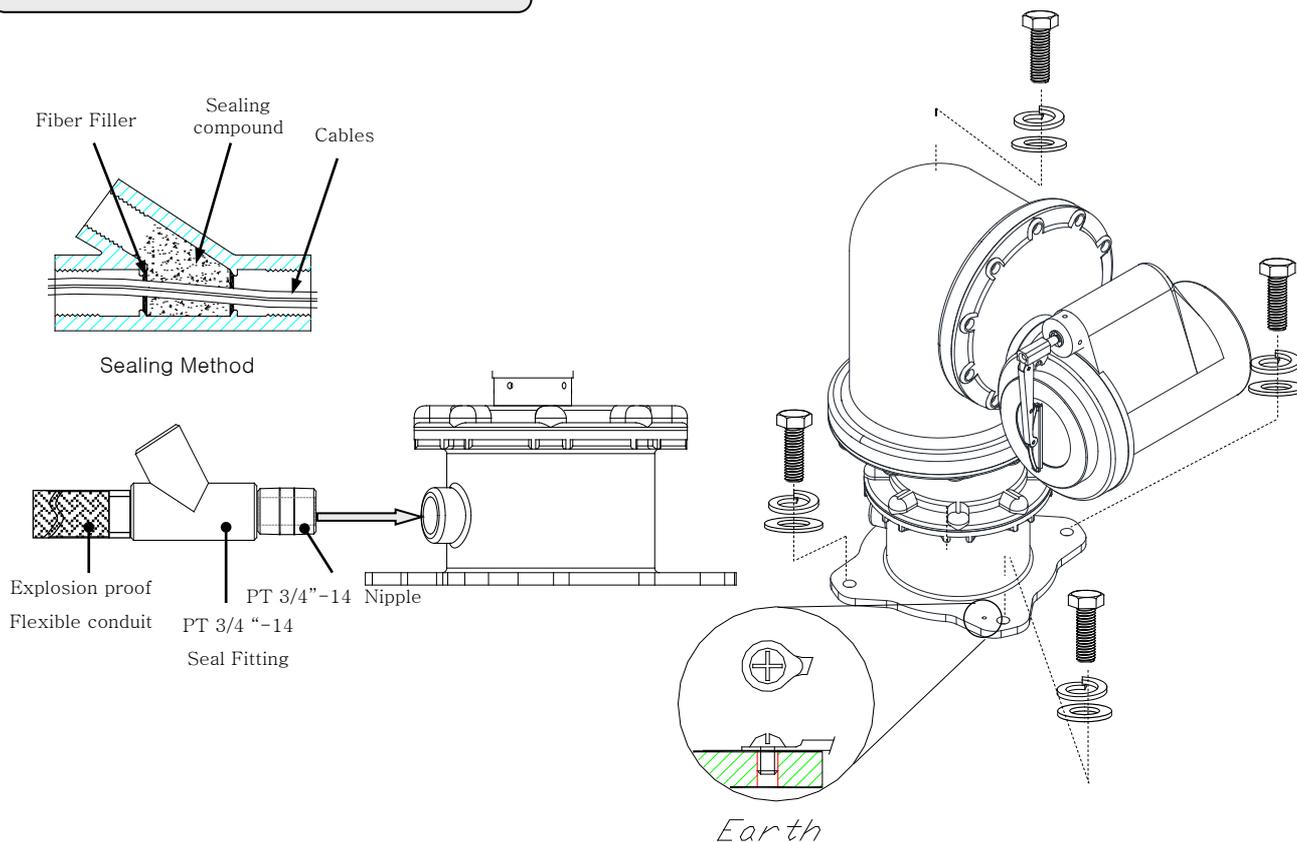


Figure2.
Standard Method of Installation

To install this system, please refer to Figure2 and do the following steps.

1. Fix this system with M10 x L40mm stainless steel bolts, flat washers and spring washers with at least four parts each.
2. Make sure the seal fittings and the threaded hole of this system are free of the dirt and particles..
3. Assemble Nipple, the threaded hole of this system, seal fitting and flexible conduit to be fasten firmly and then the cables must be passed through the seal fitting, Nipple and flexible conduit. Plus, the sealing fitting, flexible conduit, Nipple should be acquired IECEx Certification.
4. Pack the seal fitting with fiber as the sealing method of Figure2,
Fiber filler makes a dam that keeps the sealing compound in chamber of the seal fitting while it cures and hardens. And Pour the sealing compound into the fitting.
5. Install the Earth Cable like Figure2.

⚠ WARNING: Keep assembly tightly closed when operating.

Maintenance

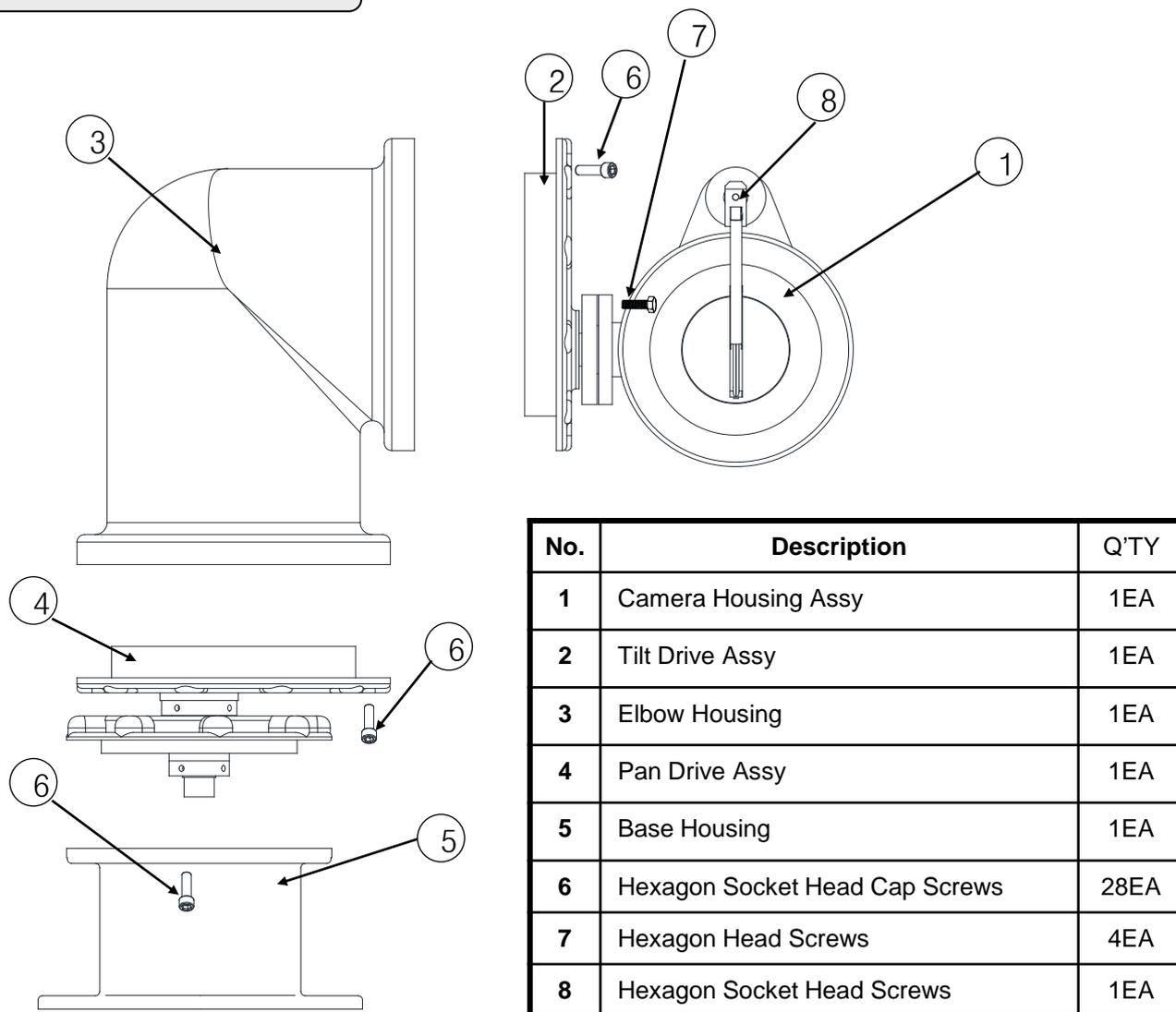
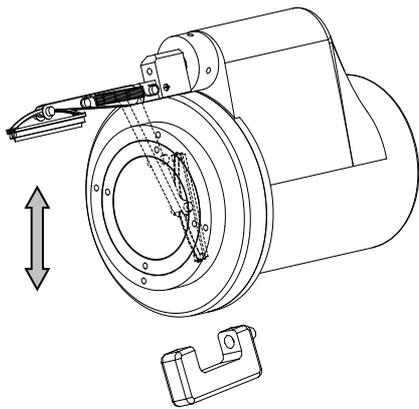


Figure3.

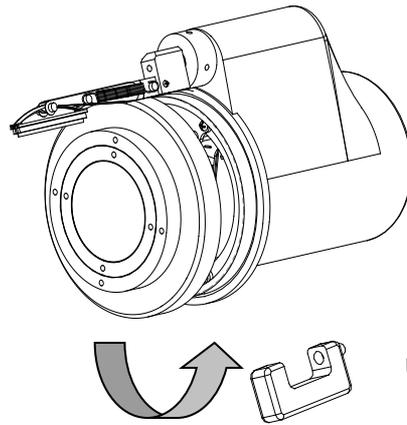
To disassembly this product, please refer to Figure3 and do the following steps.

1. Use a $\Phi 5$ Wrench for loosen 28EA Hexagon socket head screws.
2. The Torque of jointing screws is approximately 160~200 kgf.cm . Therefore consider the torque when the screws are loosen.
3. If there is any problem to disassemble or assemble, you should discuss with the specialist or Engineering site of the product.

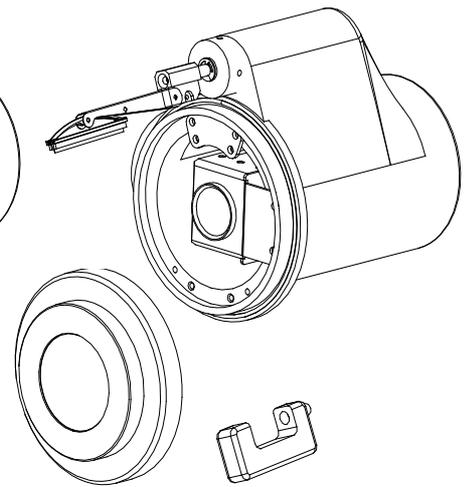
Maintenance



1. Make the wiper vertical and depart the clamp.

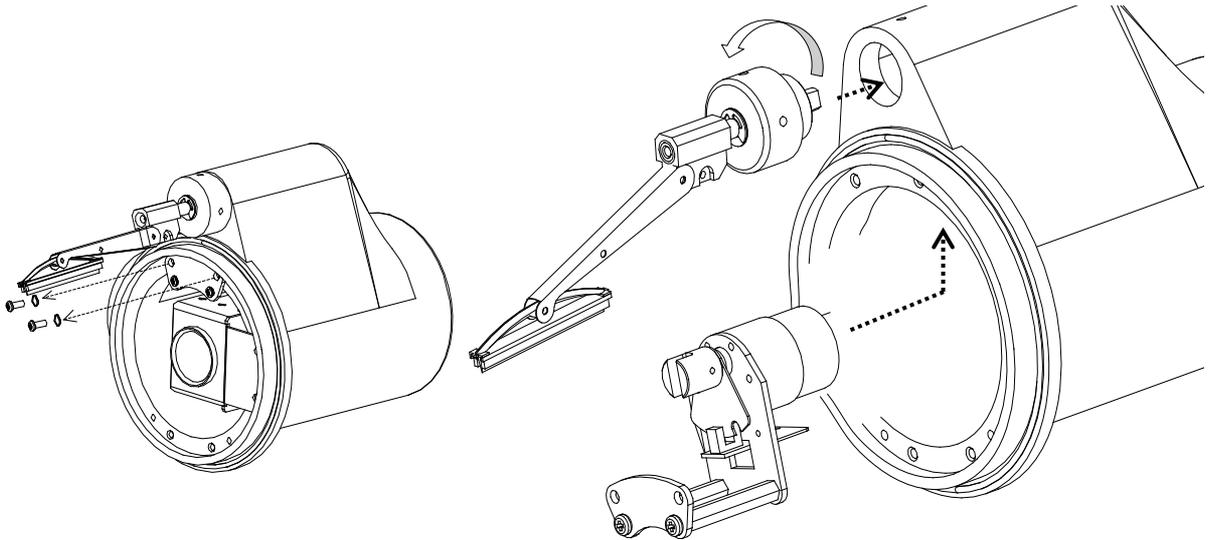


2. Depart the cover with twist.



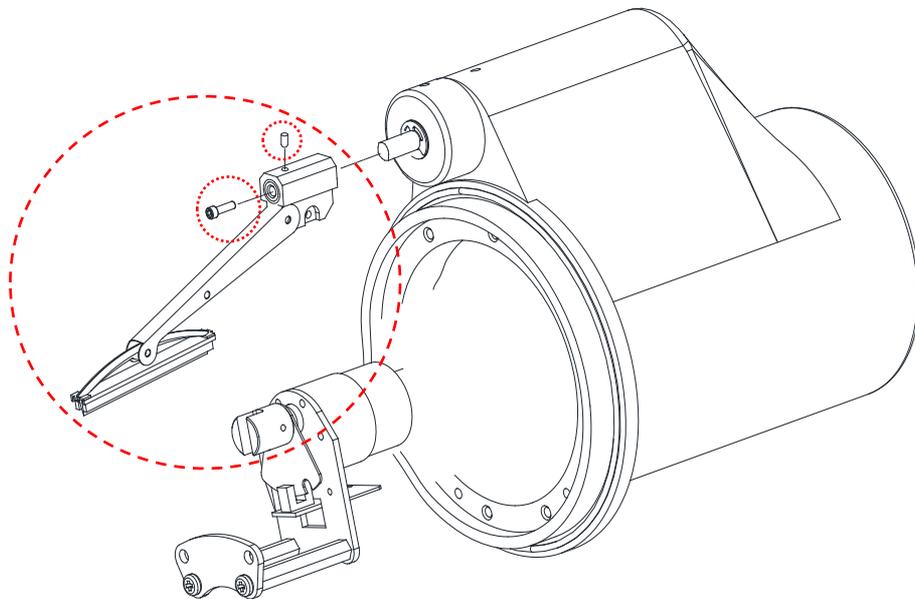
3. Loosen the two screws from housing and put out the camera bracket and loosen other screws to depart the camera, bracket and PCB,

Maintenance



1. Loosen the two screws on the bracket.

2. Loosen the Wiper Head and depart the wiper motor assembly.



2. Loosen the Hexagon socket head screws and depart the wiper bar from the wiper head.
It can be changed as the expendable supplies.

Base Schematic

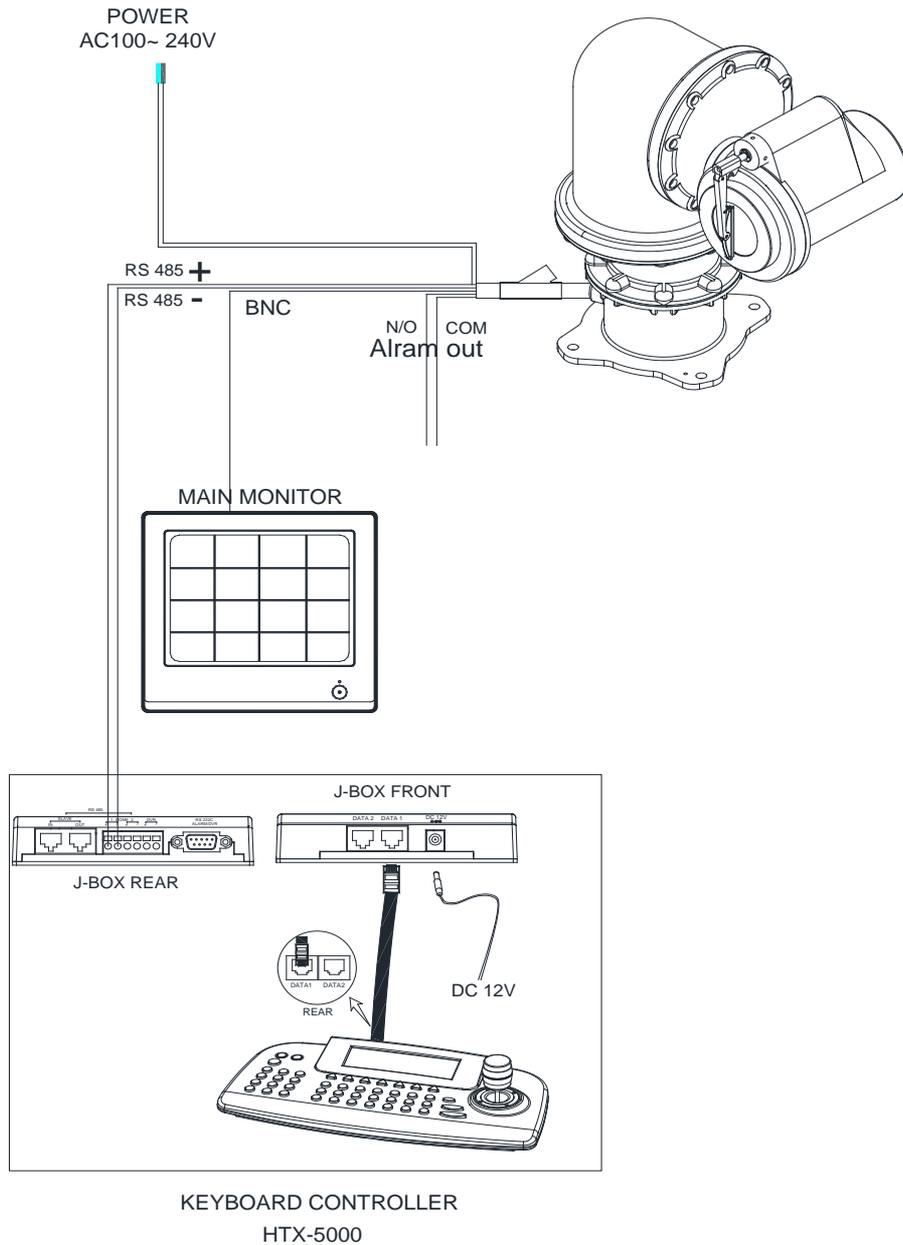


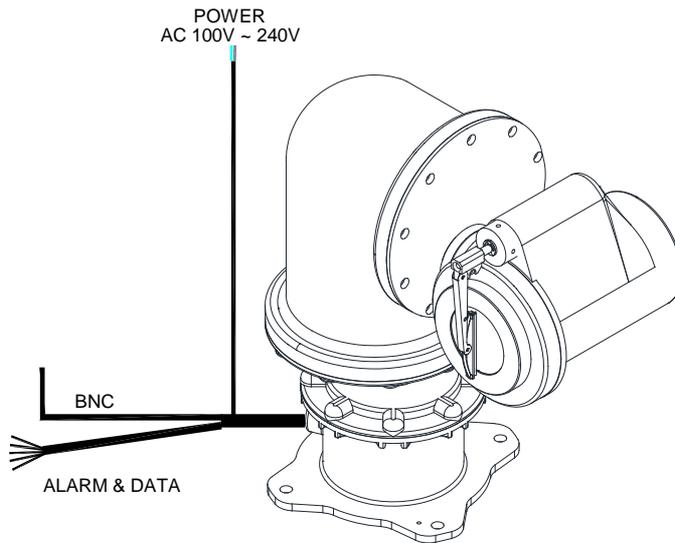
Figure4.

Base Schematic of Installation

Figure4 is recommended for the base Schematic of Installation.

If you wish to consist of another method or other components, you must proceed to do after conferring with a manufacture.

Wire and Power Connection Guide



Configuration of Wire Harness

Wire Color	Function	Description
Brown SkyBlue	Power Input (AC 100V ~ 240V)	Hi Low
Red Orange Yellow Green Black	Alarm Input	Alarm 1 Alarm 2 Alarm 3 Alarm 4 GND
White Violet Blue	Alarm Output	NO NC Com
Black (Coaxial cable)	Video	BNC Cable
Blue stripe White stripe	Control Data	RS485 Data + RS485 Data -

Simple Function Control Guide

* This function is specialized to HTX-5000 keyboard.

Function	Process	Results	Remarks
PAN/TILT	<p>① Press 1 and  (CAM) button in sequence.</p> <p>② Move Joystick to the right, left, up and down.</p>	<p>To matching ID 01 of 01~99. If ID set 02, press 2 and  (Cam) button</p> <p>You can see the moving as following the direction.</p>	Only in full screen mode.
ZOOM /FOCUS/ Iris	<p>① Twist Joystick to the right.</p> <p>② Twist Joystick to the left.</p> <p>③ Press  button.</p> <p>④ Press  button.</p>	<p>-ZOOM IN</p> <p>-ZOOM OUT</p> <p>-Focus is changed to Near or Far -Return to Auto Focus mode by moving the joystick.</p> <p>-Iris is opened or closed -Moving the joystick reactivates Auto Iris mode</p>	<p>Overrides auto focus</p> <p>Overrides auto iris</p>
Wiper Control	<p>① Press  (On) button or Press 2 and  (On) button in sequence. (86+  Preset) at Pelco Protocol</p> <p>② Press  (Off) button or Press 2 and  (Off) button in sequence. (79+  Preset) at Pelco Protocol</p>	<p>-Wiper moves as keeping a steady angle.</p> <p>-Wiper stops.</p>	Forbid to keep the moving status over 1 hour continually.
Water jet (Optional)	<p>① Set washing position -.Move the window face to nozzle by using pan/tile and save the position on preset 59.</p> <p>② Press 4 and  button. (88+  Preset) at Pelco Protocol</p>	<p>- Set the specific position to wash front window toward the nozzle on preset 59.</p> <p>-Run washing and wiping.</p>	Check water level in the tank periodically.

Simple Function Control Guide

Function	Process	Results	Remarks
Menu	<ol style="list-style-type: none"> ① Press  (Menu) button. (95+  Preset) at Pelco Protocol ② Move Joystick  to the right or left. ③ Move Joystick  Up or Down. ④ Press  (Menu) or  (Esc) or  (Enter) button twice. 	<ul style="list-style-type: none"> -Menu screen is displayed. -Go into the sub-menu items. Change value. Navigate through the menu items -Navigate through the menu items. -Escape from the menu. 	<p>(Esc) = (96+  Preset) at Pelco protocol</p>
Preset	<ol style="list-style-type: none"> ① Set Preset (direct) -.Select one button of  ~    (128) and Press  (Shift) and  (Preset) in sequence. ②Running Preset -.Press Number button and  in sequence. 	<ul style="list-style-type: none"> -PTZ moves to the position which you have saved the preset. 	<p>1~59+  Preset to operate Preset1~59 at Pelco protocol.</p> <p>-See 17 page for Detail.</p>
Alarm	<ol style="list-style-type: none"> ① Input Alarm 1 ② Input Alarm 2 ③ Input Alarm 3 ④ Input Alarm 4 	<ul style="list-style-type: none"> -PTZ goes to Preset1. -PTZ goes to Preset2. -PTZ goes to Preset3. -PTZ goes to Preset4. 	<p>Maximum Input Capacity: 4EA -.See 22 page for Detail.</p>
Scan	<ol style="list-style-type: none"> ① Press  (Scan) button. (60+  Preset) at Pelco Protocol ② Press  (Esc) button or move Joystick  to the right or left. 	<ul style="list-style-type: none"> -PTZ continually moves between the start and end point which user set among the preset. -Escape from the moving Auto Pan. 	<p>61~68+  Preset to operate Scan1~8 at Pelco protocol.</p> <p>-See 19 page for Detail</p>
Tour	<ol style="list-style-type: none"> ① Press  (Tour) button. (70+  Preset) at Pelco Protocol ② Press  (Esc) button or move Joystick  to the right or left. 	<ul style="list-style-type: none"> -PTZ continually moves to user set position of the presets. -Escape from the moving Tour. 	<p>71~74+  Preset to operate Tour1~4 at Pelco protocol.</p> <p>-See 20 page for Detail.</p>

Program and Operation

Camera ID Selection

Before you start programming or operating a camera, you should make the camera be under control of the joystick controller. In other words, the dome camera that you want to effect changes must be currently selected.

Example: Pressing **1**, **6** and **CAM** key sequentially will select dome camera 16.

The selected dome camera ID will be displayed on the monitor.

Principle of joystick usage in the programming (editing) mode

Button or Joystick movement in menu	Function
 Joysti ck left or right	Go into the sub-menu items. Execute the command(exit) Change value. Navigate through the menu items.
 Joysti ck up or down	Navigate through the menu items.
 Joysti ck down	Finish editing title.
 Zoom handle twist	Change value.(Increase / Decrease) Enter editing title mode.
 SHFT + Joysti ck	PTZ control mode.
ESC	Escape from the menu without change.
Home or Off button	Delete value or name of the field.

1. FUNCTION

Pressing the **MENU** button on the keyboard controller, the following On-screen **MAIN MENU** will be shown on your monitor screen.

MAIN MENU
FUNCTI ON
 ALARM
 SCREEN
 CAMERA
 SETUP
 PASSWORD
 COMMUNI CATI ON
 EXI T MENU

Program and Operation

Locate the cursor on the **FUNCTION** item and then push the joystick to the right to enter **FUNCTION** menu.

```
FUNCTION  
HOME FUNCTION  
PRESET  
SCAN  
TOUR  
EXIT MENU
```

1.1 HOME FUNCTION (MENU =>FUNCTION => HOME FUNCTION)

After **HOME FUNCTION** item has been selected, follow the directions below to set **HOME** function.

```
HOME FUNCTION  
FUNCTION      : TOUR  
NUMBER       : ---  
TIME        : 060 SEC  
OPERATION    : DISABLE  
SAVE AND EXIT
```

```
FUNCTION      : Tour/ Preset/ AutoScan  
NUMBER       : ---  
TIME        : 10~240 Seconds  
OPERATION    : ENABLE/ DISABLE
```

The **HOME** function invokes predefined functions such as Preset, Tour, Pattern, or Scan function after the keyboard controller has been idle for a programmed time.

Follow the steps below to program the **Home** function:

1. Select the camera number by pressing **No.** and **CAM**
2. Press **MENU** to display the main menu on the monitor.
3. Push the **Joystick** to the right on "**FUNCTION**".
4. Enter Home Function menu by pushing the **Joystick** to the right.
5. Push the **Joystick** to the right/ left (or twist CCW/CW) to scroll Tour, Auto Scan and Preset functions.
6. Select Function Number by pushing the **Joystick** down, and twist the **Joystick** to the CCW/CW (or push right/left). The executable function number will be scrolled. If selected function is not programmed, it won't change. Go to setup function first.

Program and Operation

7. Pushing the **Joystick** down and twist the **Joystick** to CCW/CW (or push the stick to right/left) to set waiting time.
8. Locate the cursor on **OPERATION** option by pushing the **Joystick** down. Choose operation status Enable or Disable by pushing the **Joystick** to the right or to the left (or twist CCW/CW).

1.2 PRESET (MENU => FUNCTION => PRESET, Short Cut :PRST)

Preset memorizes pan, tilt, zoom, focus and iris settings. Once programmed, pressing combination of **0 ~9** numbers and a **Preset** button on your controller automatically calls up the preset position. Presets may be assigned to alarm actions or as the “home” position for the dome camera. Locate the cursor on the **PRESET** item and then push the joystick to the right to enter **PRESET** menu.

FUNCTION
HOME FUNCTION
PRESET
SCAN
TOUR
EXIT MENU

There are 16 pages of preset programming menu. Each page can hold 8 presets. Locate the cursor on “**PREV** **NEXT**”, preset menu pages can be scrolled by pushing the **Joystick** to the Left or Right on the “**PREV** **NEXT**”.

<u>PRESET</u>	01/16
NO. F I B W TITLE	
001 A A F X	XXXXXXXXXXXXXXXXXXXX
002 M M O X	-----
003 - - -	-----
004 - - -	-----
005 - - -	-----
006 - - -	-----
007 - - -	-----
008 - - -	-----
PREV	NEXT
SAVE AND EXIT	

F : FOCUS I : IRIS B : BLC W : WDR
X : 16 digit of preset title
- : not defined
█ : Current cursor position
F : **A**(Auto Tracking)/**M**(Manual Tracking)
I : **A**(Auto Iris)/**M**(Manual Iris)
B : **F**(BLC OFF)/**O**(BLC ON)/**A**(Auto BLC)/**B**(BMB)
W : **O**(on) / **X**(Off)

Program and Operation

Follow the steps below to program the **Preset positions**.

1. Select the camera number by pressing 0 ~9 and CAM.
2. Simply press PRST button to enter preset menu. (MENU => FUNCTION => PRESET)
3. Select the empty preset location to be programmed using the Joystick up/down. If selected location is not empty, pressing PRST button will show your predefined position.
4. After selecting an empty position, press and hold SHFT/PGM then use the Joystick to control the direction of the camera and lens.(Or twist zoom handle or hit zoom button to start PTZ control for view selection.)
5. After aiming the camera (view direction and lens control) at specific position, release SHFT/PGM button (or hit the focus button). The selected location No. field will be filled with "A A F". Push the joystick to the right to select each Focus/ Iris /BLC mode using zoom handle.
6. Move the cursor to the title field to edit/enter the title. Rotate the handle CW and CCW to scroll through the alphanumeric characters. Push the handle to right or left to select next or previous digit.
7. To finish entering the title, push the Joystick up/downward.
8. Locate the cursor on "PREV NEXT" item to select the previous/next page of presets, scroll the page by pushing the Joystick to the Left on "PREV NEXT".
9. Repeat steps 2 through 8 for each additional preset position.
10. Select Save and Exit by pushing the Joystick to the right. Press ESC to exit the Preset menu without saving
11. Press the **HOME** or **OFF** button to delete programmed data.

NOTE: Press the Home or OFF button at programmed position to delete a programmed preset view.

Shortcut of Preset Program.

Select direction of the camera, zoom and focus to be programmed, then press No. (1~128), and then press **SHFT, PRST** subsequently. The current view will be stored to the selected preset number if position is empty. If selected preset number is not empty, "PRESET EXISTING" message will be displayed on the monitor and you will be prompted to overwrite.

Example: 1, 0 + PGM + PRST will memorize current view as preset No. 10. In this case, focus and Iris mode will be memorized as auto and dwell time will be set to 3 sec.

Program and Operation

1.3 SCAN (MENU => FUNCTION => SCAN or Shortcut: SCAN)

The Scan function supports up to 16 programmed section of angles at 8 programmable speeds.

<u>SCAN MENU</u>	01/08
SCAN 01	: AUTOSCAN01
SPEED	: 1~8/SLW/MID
START	: 127. 1, 027. 0 zoom
END	: 157. 7, 080. 7 zoom
DIR.	: CCW (PAN: 000. 0)
SWAP	: OFF
SAVE AND EXIT	

SCAN01:AUTOSCAN01 ~ SCAN08:AUTOSCAN08

SPEED(MODE) : 1/ 2 / 3/ 4/ 5/ 6/ 7/ 8/ SLOW / MEDIUM

1: SLOWER ↔ 8 FASTER

SLW : smooth Diagonal Scan in slowest speed

MID : smooth Diagonal Scan in medium speed

Diagonal Scan shows moving path from start point to end point including tilt and zoom simultaneously.

Follow the steps below to program **Scans**.

1. Press the **SCAN** key to enter Auto Scan menu directly. (or **MENU => FUNCTION => SCAN**).
2. Select an Auto Scan number by pushing the **Joystick** left or right.
3. Twist the **Joystick** to enter the title by scrolling through the alphanumeric characters and pushing the handle to the right or left to move to the next space. Press **ENTR** key or push the **Joystick** down to finish title mode.
4. Push the **Joystick** downward to select "SPEED" and set the speed by twisting the **Joystick** clockwise or counterclockwise or moving the **Joystick** left/ right to select the auto scan speed.
5. When finish entering the title, select "START ANGLE" with the **Joystick**. Hold down the **SHFT/PGM** key while selecting the start position using the **Joystick**. Current panning position will be displayed. Release **SHFT/PGM** key to complete the selection of the start position. (Or twist zoom handle or hit zoom button to start PTZ control for view selection and hit the Focus button to stop.)
6. Push the **Joystick** downward to select "END ANGLE." Hold down the **SHFT/PGM** key while moving the Joystick to select the end position. The end position angle should be larger than start position. Release the **SHFT/PGM** key to complete the selection of the end position. (Or twist zoom handle or hit zoom button to start PTZ control for view selection and hit the Focus button to stop.)
7. Push the **Joystick** downward to select "DIR." Set the scan direction by moving the **Joystick** left and right to select the auto scan direction.(CW or CCW)

Program and Operation

8. Push the Joystick downward to select "SWAP" and set the swap by moving the Joystick left and right to select the swap ON or OFF.
9. Select Save and Exit by pushing the Joystick to the right. Press ESC to exit the program without saving.
10. Press the **HOME** or **OFF** button to delete programmed data

NOTE: Press **17 + SCAN** to automatically calls up the auto-pan function.

1.4 TOUR (or MENU => FUNCTION => TOUR, Short Cut: TOUR)

There are 8 programmable Tours. Each Tour consists of up to 64 Preset positions, Scans or other Tours. Using second-level Tours, it can be expanded to over 56 functions in a single Tour. However tours second level Tours will be ignored when called by a Tours. This can be best illustrated by the following example:

If Tour 01 : Preset 02, Preset 03, Tour 02, Tour 03
 Tour 02 : Preset 05, Preset 06, Tour 04, Preset 05
 Tour 03 : Preset 07,
 Tour 04 : Preset 08. Preset 05,

Tour01 executes as follows:

Preset 02 → Preset 03 → Preset 05 → Preset 06 → Preset 05 → Preset 07 → ...
 (Repeat) ---Tour 04 in Tour 02 will be skipped in Tour 01

Tour02 executes as follows:

Preset 05 → Preset 06 → Preset 08 → Preset 05 → ...(Repeat) (Tour4 is still valid if called directly from Tour2.)

<u>TOUR</u> 01: xxxxxxxxxxxxxx				01/04
FUNC	NO	S	DW	TITLE
PRST	001	S	99	-----
SCAN	016	S	99	-----
TOUR	008	S	99	-----
----	----	-	-	-----
----	----	-	-	-----
----	----	-	-	-----
----	----	-	-	-----
PREV			NEXT	
SAVE	AND		EXIT	

xxxxx : 16 digits of title for tour label
 - - - : blank preset position
Speed : Fast (Normal)/ Slow V
 . Scan/ Medium V. Scan
DWell : 01-99 Sec
PRST : Preset 1~128
SCAN : SCAN 1~8
TOUR : TOUR 2~4

Program and Operation

Follow the steps below to program the Tours:

1. Press **MENU => FUNCTION => TOUR**, Short Cut: **TOUR MENU** to display the main menu on the monitor. **No. + SHFT+TOUR** will open directly Tour **No.**
2. Choose an empty location of function by pushing the **Joystick** up or down.
3. Stored Preset view can be recalled by pressing **Prst** button, the camera will move to the stored Preset view.
4. To place predefined functions as a Tour, press the function buttons (such as **Tour** or **Scan ,Prst**). Then select function No. by twisting the Zoom handle. (Programmed function No. will be scrolled). To remove functions from the Tour, press the **HOME** or **Off** button, blank position mark (- - -) will be displayed. You can overwrite the programmed position.
5. Repeat Step 2 through 4 for each desired position. Each title will be displayed on top of the line.
6. Up to 8 Presets, Tours, Patterns Scans can be selected for a Tour. You can expand the Tour sequence by calling other programmed tours. Push the **Joystick** handle to right or left while the cursor is on the top of the line (TOUR 01) to select another page of the Tour menu. (TOUR 01)
7. You can enter a title for the selected Tour by twisting the **Joystick** while the cursor is on the top of the line (TOUR 01). Rotate the handle clockwise or counterclockwise to scroll through the alphanumeric characters. Push the handle to the right or left to select the next or previous digit.
8. Select Save and Exit by pushing the **Joystick** to the right. Press **ESC** to exit the program without saving.
9. Press the **HOME** or **OFF** button to delete programmed data.

NOTE: All functions should be programmed before being referred to in the tour menu. Otherwise functions won't be selectable by item 4 in the procedure.

Program and Operation

2. ALARM (MENU => ALARM)

MAIN MENU
FUNCTI ON
ALARM
SCREEN
CAMERA
SETUP
PASSWORD
COMMUNI CATI ON
EXI T MENU

Locate the cursor on **ALARM** item in the main menu and push the joystick to the right for **ALARM** programming of the camera.

ALARM SETUP

NO	FUN	PRI	I N	OUT	HLD	LATCH
01	001	0	OFF	OFF	001	OFF
02	002	4	OFF	OFF	001	OFF
03	003	4	OFF	OFF	001	OFF
04	004	3	OFF	OFF	001	OFF
SAVE AND EXI T						

NO : Alarm input number

FUNC : Priority 1~4 calls Preset(xxx),

Priority 0 supports dedicated functions like a Preset.

PRI : Lower No. has higher priority, Equal priority alarms will be serviced repeatedly.

I N : NO/NC - normally open /Closed, OFF - ignore

OUT : RO1 - Relay out 1 OFF - No output.

HLD : Alarm will be held for programmed time (01 to 255 seconds)

LATCH : ON - Shows all alarms including past alarm, OFF - Shows activated alarms only.

There are 4 levels of priority. 0 : Highest priority supports repeated/dedicated functions like a Preset.

1~4: Same level of alarm calls presets one after the other.

Ex) Alarm 01 calls Preset 01, After alarm 01 is released alarm 02, 03 will call preset 48 and preset 01

Program and Operation

1. Press Menu to display the main menu on the monitor. Select the Alarm option by pushing the Joystick up or down and push to right to enter the detail menu.
2. Select the alarm input number by pushing the Joystick up or down and select the column you wish to setup. Selected position will be highlighted.
3. Select the Preset, Status of Input (NC/NO/OFF), and Output (RO1/OFF) by pushing the Joystick to the right or to the left.
4. To increase or decrease the preset number or to change the status or output number, twist the Joystick clockwise or counterclockwise. In case of preset, programmed preset number will be scrolled.
5. Locate the cursor on Save and exit and push the Joystick to the **Save and exit**. Press **ESC** to exit the program without saving.

3. SCREEN (MENU => SCREEN)

Pressing the **MENU** button on the keyboard controller, the following On-screen **MAIN MENU** will be shown on your monitor screen.

```
MAIN MENU
FUNCTI ON
ALARM
SCREEN
CAMERA
SETUP
PASSWORD
COMMUNI CATION
EXIT MENU
```

Locate the cursor on the **SCREEN** item and then push the joystick to the right to enter **SCREEN** menu.

```
SCREEN MENU

LANGUAGE
PRIVACY ZONE
NORTH DIRECTI ON : 000.0
ZONE TITLE
CAMERA TITLE : EXPTZ
OSD DI SPLAY
SAVE AND EXIT
```

Program and Operation

3.1 LANGUAGE(MENU => SCREEN => LANGUAGE)

Current, Language supports the only English.

3.2 PRIVACY ZONE (MENU => SCREEN => PRIVACY ZONE)

Locate the cursor on the **PRIVACY ZONE** item and then push the joystick to the right to enter the menu.

```
SCREEN MENU

LANGUAGE
PRIVACY ZONE
NORTH DIRECTION : 000.0
ZONE TITLE
CAMERA TITLE : EXPTZ
OSD DISPLAY
SAVE AND EXIT
```

This function disables the viewing of restricted areas for privacy reasons. Mask up to 8 unwanted views in a camera.

```
PRIVACY ZONE SETUP

NO      TITLE                METHOD
01 xxxxxxxxxxxxxxxxxxxx ON   MASK
02 xxxxxxxxxxxxxxxxxxxx OFF  V. OFF
03                      OFF  ----
04                      OFF  ----
05                      OFF  ----
06                      OFF  ----
07                      OFF  ----
08                      OFF  ----
COLOR   : BLUE
SAVE AND EXIT
```

COLOR : BLUE/GREEN/YELLOW/CYAN/MAGENTA/BLACK/GRAY/D.GRAY/WHITE/RED

Program and Operation

1. Select the Privacy Zone option by pushing **Joystick** Up or Down and push to right to enter the detail menu.
2. Select the privacy zone number by pushing the Joystick up or down.
3. To enter the zone name, rotate the handle clockwise or counterclockwise. You can select alphanumeric characters by rotating the handle. Move to the next character position by pushing the Joystick to the right. To finish entering the title, push the **Joystick** down or press the **ENTER** key.
4. To adjust the “marked” (privacy) area, press and hold down the **SHFT/PGM** key and then use the Joystick (direction and zoom) until you get desired view. Release the key, the right column will be set to ON. (Or twist zoom handle or hit zoom button to start PTZ control for view selection and hit the Focus button to exit from control mode.)
5. You can overwrite an existing zone. Use the Home key to delete the marked zone, or push the Joystick to the right or left to turn the stored zone On or Off.
6. Select the mask color by pushing the Joystick left or right
7. Select the Save and Exit option by pushing the Joystick up or down. Save and exit the program by pushing the **Joystick** to the right. Press **ESC** to exit the program without saving.

Press the **HOME** or **OFF** button to delete programmed privacy zone.

Program and Operation

3.3 NORTH DIRECTION (MENU => SCREEN => NORTH DIRECTION)

Push the joystick handle to the right to select NORTH DIRECTION options

```
SCREEN MENU

LANGUAGE
PRIVACY ZONE
NORTH DIRECTION : 000. 0
ZONE TITLE
CAMERA TITLE : EXPTZ
OSD DISPLAY
SAVE AND EXIT
```

1. Move to **POSITION** item to set north direction, press and down the **SHFT/PGM** key and then use the Joystick (direction and zoom) until you get desired direction. Release the key then current pan angle will be displayed on position item. (Or twist zoom handle or hit zoom button to start PTZ control for view selection and hit the Focus button to exit from control mode.)

3.4 ZONE TITLE (MENU => SCREEN => ZONE TITLE)

Enter a specific name in sectioned angle between START and END.

```
ZONE TITLE                                01/03

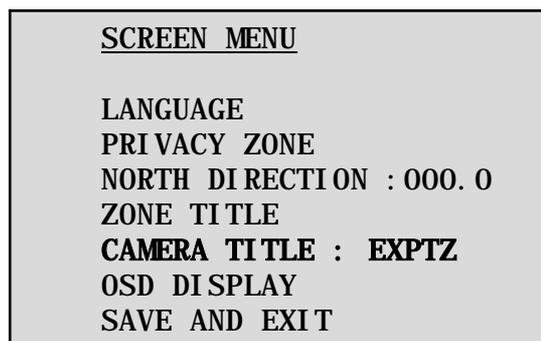
NO      TITLE                            START  END
01 WINDOW                            123. 4 345. 6
02                                         -----
03                                         -----
04                                         -----
05                                         -----
06                                         -----
PREV    NEXT
SAVE AND EXIT
```

Program and Operation

1. Press **MENU => SCREEN => ZONE TITLE** to display zone title menu on the monitor.
2. Select the zone number by pushing the Joystick up or down. Select Start, End or number column to be set by pushing the handle to the right or left. The selected column will be highlighted.
3. Twist the joystick handle on the No. column to enter zone title. You can select alphanumeric characters by rotating the handle. Move to the next character by pushing the Joystick to the right. To finish entering the title, push the Joystick down.
4. To adjust panning limit, press the SHFT/PGM key and hold down. Then use the Joystick to go the desired direction. The end limit must be in an increasing direction. (Start < End). (Or twist zoom handle or hit zoom button to start PTZ control for view selection and hit the Focus button to exit from control mode.)
5. PREV NEXT : got to previous page or next page of the menu
6. Save and exit the program by pushing the Joystick to the right. Press ESC to exit the program without saving.
7. Press the **HOME** or **OFF** button to delete programmed data.

3.5 CAMERA TITLE (MENU => SCREEN => CAMERA TITLE)

Push the joystick handle to the right to select CAMERA TITLE options



1. Move the joystick handle right. You can select alphanumeric characters by rotating the handle. Move to the next character by pushing the Joystick to the right. Camera title is limited to 8 characters (A~Z, 0~9).
2. To finish entering the title, push the **Joystick** down.
3. **Save and exit** with joystick handle to right (Or **ESC** to exit without saving)

Program and Operation

3.6 OSD DISPLAY (MENU => SCREEN => OSD DISPLAY)

Push the joystick handle to the right to select OSD DISPLAY options

```
SCREEN MENU

LANGUAGE
PRIVACY ZONE
NORTH DIRECTION : 000.0
ZONE TITLE
CAMERA TITLE : EXPTZ
OSD DISPLAY
SAVE AND EXIT
```

```
OSD DISPLAY

FUNCTION TITLE           : ON
CAMERA TITLE             : ON
ZONE TITLE                : ON
NORTH DIRECTION          : OFF
CAMERA POSITION            : ON
CAMERA ID                 : ON
ZOOM MAGNIFICATION       : OFF
SAVE AND EXIT
```

1. Move the joystick handle right. You can select OSD DISPLAY ON/OFF each functions.
2. **Save and exit** with joystick handle to right (Or **ESC** to exit without saving)

Program and Operation

4. CAMERA (MENU => CAMERA)

NOTE: The menu features will vary depending on the camera module installed in your EXPTZ camera.

<p><u>CAMERA MENU</u></p> <p>FOCUS CONTROL : AUTO / MANUAL</p> <p>WB CONTROL</p> <p>AE CONTROL</p> <p>BLC SETUP</p> <p>SHARPNESS : 10</p> <p>DIGITAL ZOOM</p> <p>NIGHT SHOT</p> <p>CAMERA DEFAULT</p> <p>SAVE AND EXIT</p>
--

4.1 FOCUS CONTROL(MENU => CAMERA => FOCUS CONTROL)

1. Move the joystick handle right. You can select FOCUS CONTROL AUTO / MANUAL.
2. Save and exit with joystick handle to right (Or ESC to exit without saving)

CAUTION: Avoid continuous, 24-hour use of the auto focus heavy movement condition. This will shorten the lifespan of the lens.

4.2 WB (white balance) (MENU => CAMERA => WB CONTROL)

<p><u>WB SETUP</u></p> <p>MODE : ATW</p> <p>R. GAIN : AUTO</p> <p>B. GAIN : AUTO</p> <p>EXIT MENU</p>

MODE: ATW / INDOOR / OUTDOOR / MWB / AWC(LOCK) / AWC(AUTO)

R.GAIN/B.GAIN: 0~255 (MWB)

Use the ATW mode for normal use.

Push the **Joystick** to the right or left to change.

Program and Operation

4.3 AE CONTROL (MENU => CAMERA => AE CONTROL)

Depending on your dome camera, you will see either the following screen or the next.

<u>AE SETUP</u>	
MODE	: FULL AUTO
SLOW SHUTTER	: x10
IRIS	: Auto
GAIN	: Auto
BRIGHT	: 008
SHUTTER	: Normal
MAX GAIN	: 30DB
DNR	: OFF
EXIT MENU	

MODE	: FULL AUTO / SHUTTER FIX / IRIS FIX / AGC FIX / MANUAL
SLOW SHUTTER	: OFF / X1~X18 / X20 / X40 / X80 / X160 / X320 / X512
IRIS	: CLOSE / F16/ F11 / F8.0 / F7.6 / F5.6 / F4.2 / F4.0 / F2.8 / F2.0 / F1.8 / OPEN
GAIN	: OFF / 8 DB / 10 DB / / 36 DB / AUTO
BRIGHT	: 000 ~ 015 / NORMAL (008: Default)
SHUTTER	: 1/60(1/50), 1/100(1/120), 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000, 1/20000, 1/50000. 1/100000
MAX GAIN	: OFF / 8DB / 10DB / ... / 36DB
DNR	: OFF / LOW / HIGH

NOTE : Values in () are for PAL Camera.

Program and Operation

4.4 BLC SETUP (MENU → CAMERA →BLC SETUP)

Objects in front of bright backgrounds will be clearer with BLC ON/AUTO/BMB.

*) **BMB** [Black Mask BLC] : It mask the excessive light to dark level and make brighter to see object around the excessive light.

<u>BLC SETUP</u>	
BLC	: OFF
BLOCK SET	
BLOCK PREVIEW	
LEVEL	: 07
EXIT MENU	

BLC : OFF / ON / AUTO / WDR / BMB

LEVEL : 01 ~ 20

(As BMB level lower, BMB masked range enlarge more and more)

Select BMB operated area depending on circumstance, for using BMB more effectively.

Screen is divided 16 areas, each area is set separately.

<u>BLC SETUP</u>				
BLC	: BMB			
BLOCK SET				
	1	2	3	4
01	-	-	-	-
02	-	*	*	-
03	-	*	*	-
04	-	-	-	-
SET→FAR/NEAR, EXIT→ESC				
SELECT→TELE/WIDE				
PREVIEW→OPEN/CLOSE				

4.5 SHARPNESS CONTROL (MENU => CAMERA =>SHAPENESS)

The higher, the more enhanced edges in the picture. : 0~15

Program and Operation

4.6 DIGITAL ZOOM (MENU => CAMERA =>DIGITAL ZOOM)

<u>DIGITAL ZOOM SETUP</u>	
MAX	: OFF
PIP	: ON
POSITION	: R. TOP
EXIT MENU	

MAX : OFF(Optical zoom only) / **2x / 4x / Max**(Digitally magnifies up to 2x, 4x 8x 16x respectively)

PIP(Picture in Picture) : ON / OFF

POSITION : R/BOT / R.TOP / L.BOT / L.TOP

4.7 NIGHT SHOT MENU (MENU => CAMERA =>NIGHT SHOT)

The NIGHT SHOT option removes the IR Cut filter of the camera and makes the camera sensitive to near infrared.

If NIGHT SHOT mode of the selected camera is set to Manual, **10+ ON** will enable the NIGHT SHOT mode, **10+ OFF** will turn off the NIGHT SHOT mode

<u>NIGHT SHOT SETUP</u>	
MODE	: AUTO
LOCAL CONTROL	: OFF
EXIT MENU	

MODE : **MANUAL / AUTO**

AUTO – Camera automatically goes into B&W mode at low light.

MANUAL - Manually controls the Night Shot mode in LOCAL CONTROL option.

On/Off Night Shot mode remotely by pressing **10+ ON/ 10+ OFF**.

4.8 CAMERA DEFAULT (MENU => CAMERA =>CAMERA DEFAULT)

Returns all changed camera values to factory default .

<u>CAMERA DEFAULT</u>	
ARE YOU SURE ?	
YES	
NO	

YES : ENTER OR MENU KEY

NO : ESC KEY

Program and Operation

5. SETUP (MENU => SETUP)

```
      SETUP MENU
FLIP FUNCTION : ON
P/T SPEED     : FAST
PRESET FREEZE : OFF
RESET ORIGIN
FACTORY DEFAULT
ERASE DATA
SYSTEM INFORMATION
SAVE AND EXIT
```

5.1 FLIP (MENU => SETUP => FLIP)

When the EXPTZ camera is mounted on a somewhere, you can set one of three ways in how it can track a target moving in a path directly below the camera:

ON - When the camera reaches the floor directly above the moving object, the dome camera tracks the object smoothly with a digitally corrected image.

OFF – The dome camera does not perform a flip.

5.2 P/T SPEED (MENU => SETUP => SPEED)

User can select preferable speed curves of manual control.(FAST / MID/ SLOW)

5.3 PRESET FREEZE (MENU => SETUP => PRESET FREEZE)

ON - This option is used to set the pause previous image until the preset action is complete.

OFF – No action

5.4 RESET ORIGIN (MENU => SETUP => PRESET ORIGIN)

This option is used to find and adjust origin position.

Program and Operation

5.5 FACTORY DEFAULT (MENU => SETUP => FACTORY DEFAULT)

```
FACTORY DEFAULT
ARE YOU SURE ?
YES
NO
```

YES : ENTER OR MENU KEY
NO : ESC KEY

Programmed data go back to initial state as ex-factory

5.6 ERASE DATA (MENU => SETUP => ERASE DATA)

```
ERASE PROGRAMMED DATA
ARE YOU SURE ?
YES
NO
```

YES : ENTER OR MENU KEY
NO : ESC KEY

Erase programmed data in the EEPROM of the selected dome camera. Press **MENU** or **ENTER** button to erase data, **ESC** key to exit without erasing. Origin offset value is not affected.

CAUTION: *Unless you download the data into a safe place, all the data in the selected EXPTZ camera will be lost. (Refer to Download/ Upload data function in the Keyboard Configuration utility)*

5.9 SYSTEM INFORMATION (MENU => SETUP => SYSTEM INFORMATION)

```
SYSTEM INFORMATION
CAMERA TYPE : XXXXXXXX
H/W VERSION : REV1.1
ROM VERSION : V0.16
PROTOCOL : S2E
BUADRATE : 9600BPS
EXIT MENU
```

This screen shows information of the EXPTZ camera for service or trouble shooting

Program and Operation

6. PASSWORD (MENU => PASSWROD)

```
PASSWORD SETUP  
  
MENU PASSWORD : ON/OFF  
CHANGE PASSWORD : ****  
CONFIRM      : ****  
SAVE AND EXIT
```

1. Change password : Move the joystick handle right and up or down to select number 0~9(a number of four figures), and do same way to confirm.
2. Save and exit with joystick handle to right (Or ESC to exit without saving)

7. COMMUNICATION (MENU => COMMUNICATION)

```
COMMUNICATION SETUP  
  
EXPTZ ID : 0001  
BAUDRATE : 9600  
PROTOCOL : AUTO  
SAVE AND EXIT
```

1. Move the joystick handle right. You can select CAMERA ID to select the joystick up or down.
2. Move the joystick handle right. You can select BARDRATE (2400/ 4800/ 9600/ 19200/ 38400/ 57600/ 115K/ 230K) to select the joystick up or down.
3. Move the joystick handle right. You can select protocol by the joystick up or down.
4. Save and exit with joystick handle to right (Or ESC to exit without saving)
5. You should use the remote controller which was included to the product to change its protocol for communicating.

Specifications

Mechanical Part

Spec \ Models	EXPTZ252/363NA	EXPTZ252/363PA
Signal System	NTSC	PAL
Ex. Class	Ex d IIC T6 (IECEx, ATEX, CE, FCC, KC, CCEs)	
Front window	Ground and polished, fully tempered plate glass	
Construction	SUS 316	
Protection Degree	IP 67	
Pan & Tilt	Angle: 360° Continuous rotation	
	Speed: 0.5°~ 60°/sec (Manually, Proportional to Zoom, Vector Scan) 60°/sec Max (Preset)	
Wiper Angle	Angle : 50° ± 2° movement	
Flip	Rotate 90° /270° at tilt angle	
Scan	8 Scan Selectable	
Preset	128 positions with focus, iris, & BLC setting	
Tour	4 Tour Selectable	
Alarm	Input: 4 Normal dry contacts (Selectable NC/NO)	
	Output: 1 Normal relays 24VDC/1A max. (Selectable NC/NO)	
Control	RS-485	
Input Voltage	100-240 V~, 50/60Hz	
Power consumption	1.0A, 50W	
Operating Temperature	-10°C ~ 60°C (Recommend -5°C ~ 50°C)	
Weight	Approx. 40 kg	

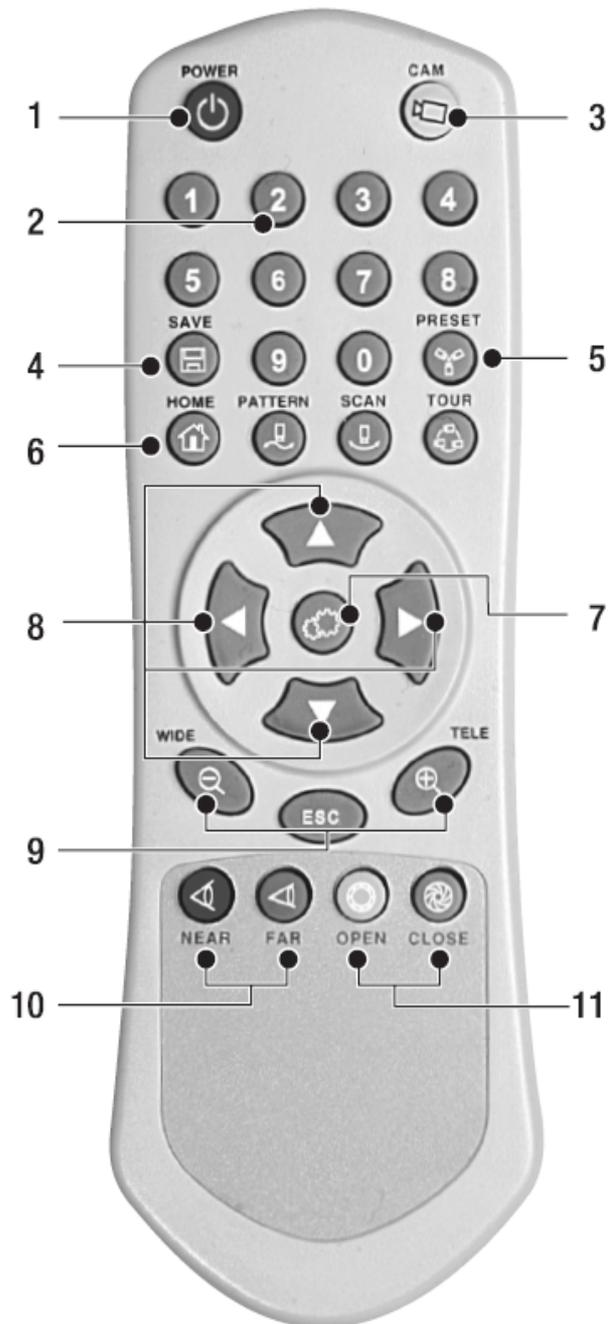
Specifications

Optical Part

Models Spec	EXPTZ252NA	EXPTZ252PA	EXPTZ252NA	EXPTZ252PA
Pick-up Device	1/4" SONY Supper HAD CCD			
Total pixels	410,000 pixels (811(H)x508(V))	470,000 pixels (795(H)x596(V))	410,000 pixels (811(H)x508(V))	470,000 pixels (795(H)x596(V))
Effective pixels	380,000 pixels (768(H)x494(V))	440,000 pixels (752(H)x582(V))	380,000 pixels (768(H)x494(V))	440,000 pixels (752(H)x582(V))
Television System	NTSC, 525 Lines, 2:1 Interlace	PAL, 625 Lines, 2:1 Interlace	NTSC, 525 Lines, 2:1 Interlace	PAL, 625 Lines, 2:1 Interlace
Lens specifications	x25 (f=3.8~95mm), F1.6 (Wide) ~ F3.7 (Tele)		x36 (f=3.4 ~ 122.4mm), F1.6 (Wide) ~ F4.5 (Tele)	
View of angle	D: 68.8°(wide), 3.0°(tele), H: 56.2°(wide), 2.4°(tele), V: 42.6°(wide), 1.8°(tele)		H: 57.8°(wide), 1.7°(tele), V: 43.7°(wide), 1.3°(tele)	
Digital Zoom	OFF ~ x16 Variable (Total x400)		OFF ~ x16 Variable (Total x576)	
Sync. System	Internal			
Horizontal Resolution	More than 520 TV lines			
S/N Ratio	More than 50dB (AGC OFF)			
Minimum Illumination	0.5 lx (50 IRE)			
	0.05 lx (50IRE, IR Filter OFF)			
	0.001 lx (50IRE, IR Filter ON, 512 Fields)			
	0.0001 lx (50IRE, IR Filter OFF, 512 Fields)			
Digital Slow Shutter	ON / OFF, (x2 ~ x512 Variable)			
Shutter Control	1/60 ~ 1/100,000	1/50 ~ 1/100,000	1/60 ~ 1/100,000	1/50 ~ 1/100,000
White Balance	ATW/INDOOR/OUTDOOR/MANUAL/AWC			
BMB Mode	ON/OFF (16 Area Selectable, 5 Color Selectable)			
BLC Mode	OFF / BLC / ABLC			
WDR Mode	ON / OFF			
PIP Mode	ON / OFF			
DNR Mode	OFF / LOW / HIGH			
QUAD Mode	ON / OFF			
MD Mode	ON / OFF (64 Area Selectable)			
Day & Night Mode	ON / OFF / AUTO			
Privacy Zone Masking	ON / OFF, (8 Zones, Color Selectable)			
Video Output	Composite Output 1Vp-p (75 Ohm Terminal)			

Remote Controller

1. POWER
Power on/off.
2. NUMBERS
Numeric keypads (0~9),
3. Camera Address (ID)
Change camera ID.
Number + CAM
4. WRITE PRESET(1~99)
Saves camera picture's condition.
Number + SAVE
5. PRESET(1~99)
Recall preset.
Number + PRESET
6. HOME
Immediately calls Home function.
7. MENU
OSD menu on.
8. DOWN / UP / LEFT / RIGHT
Moves up/down in the menu.
Moves left/right in the menu.
Decreases/increases control.
9. ZOOM
Zoom in/out
10. FOCUS
Controls Focus.
11. IRIS
Controls Iris.



Optional Accessories

Note: These Mounting Accessories are not supplied with the EXPTZ Series units.

These are purchasing parts.

Models

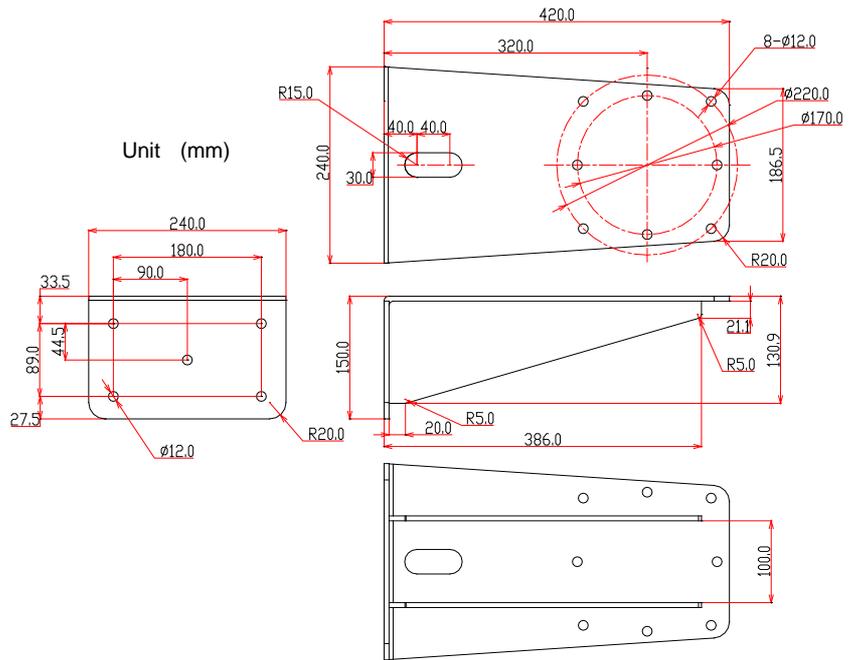
1. EXPTZ-WL: **Wall mount bracket** designed to mount the EXPTZ Series Camera directly to a load-bearing vertical surface.
2. EXPTZ-CN: **Corner adapter Bracket** for use with the EXPTZ-WL to mount the EXPTZ Series Camera to the corner of a structure.
3. EXPTZ-PL: **Pole adapter Bracket** for use with the EXPTZ-WL to mount the EXPTZ Series Camera to a vertical pole or itself to mount the EXPTZ Series to a horizontal pole.
* Recommended pole diameter is 5 to 10 inches (12.7 to 25.4 cm).
4. EXPTZ-SS: **Sun Shield Bracket** for blocking the direct radiant heat so that it can be safer against high temperature.
5. EXWJ400 : **Water jet** for washing and cleaning dust of front window .

General

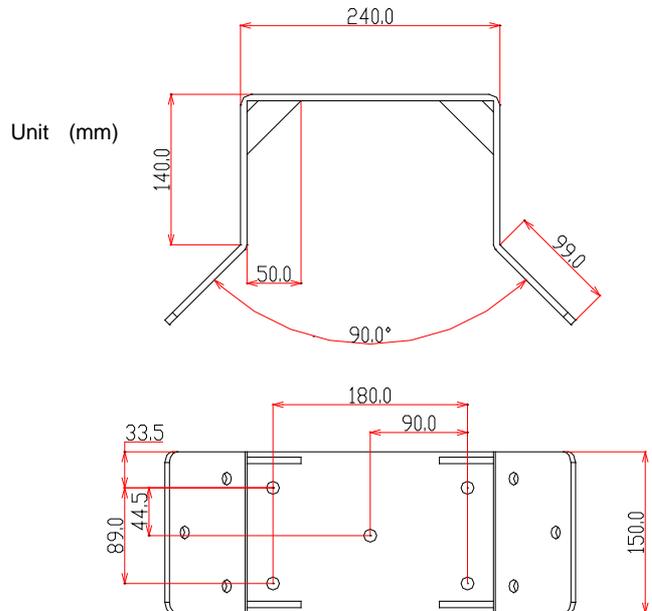
	EXPTZ-WL	EXPTZ-CN	EXPTZ-PL
Material	SUS316 Polished	SUS316 Polished	SUS316 Polished
Maximum Load	50kg	50kg	50kg
Unit Weight	6.5kg	4.8kg	4.5kg

Optional Accessories

EXPTZ-WL



EXPTZ-CN



Optional Accessories

EXWJ400

Explosive proof Washer & Water pump housing system

<Components>



A. Water Jet package



B. Tube



C. Nozzle install bracket

<Specification>

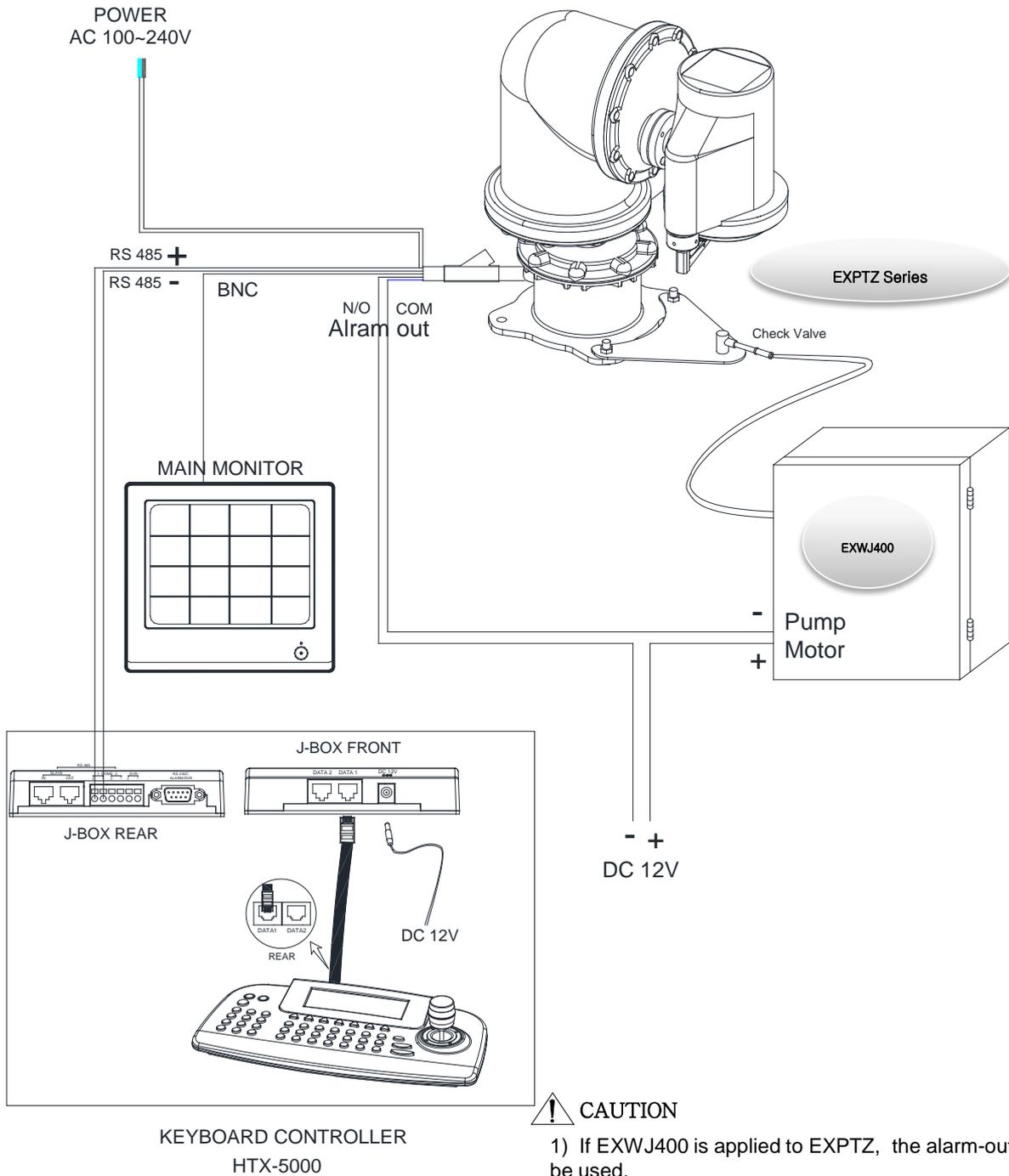
EXWJ400 _ Explosive water jet	
Material	SUS304
Thickness	1.2mm
Size	350(W) x 340(H) x120(D)
Weight	12kg(include Liquid)
Nozzle	Ø1.0
Water Capacity	4.0L
TUBE	Ø6.0 X 3m
Rated Voltage	DC 12 V
Maximum Current	1.0A
Input	20W
Maximum Pressure	25 psi (1.8kgf/cm ²)
Water Temperature	0°C ~ 40°C

* The temperature can be lower until -10°C depended on thermal properties of liquid of inside tank such as antifreeze.

<Key Feature>

- IECEx Grade Exd IIC T6 IP66.
- For use in variety of harsh and/or hazardous environments, including marine environment.
- Specialized for High Speed EXPTZ Series.
- Easy to installation.
- Easy to clean any dried dust on the glass.

EXWJ400 Schematic & Operating



- CAUTION**
- 1) If EXWJ400 is applied to EXPTZ, the alarm-out can't be used.
 - 2) It is recommended that the water-Jet tank should be located on equal or lower (under 3m) level than the nozzle location.

EXWJ400 Schematic & Operating

[Do following step to operate water jet function]

1. Save the location of nozzle position (washing) on Preset 59.

* First of all, The EXPTZ pan/tilt direction should be decided and saved that window glass of camera housing toward nozzle of water jet on preset 59.

(Refer to the "Program and Function Operating 1-2 preset" about preset method)

2. Push The [4+On] button on HTX-5000 Keyboard.

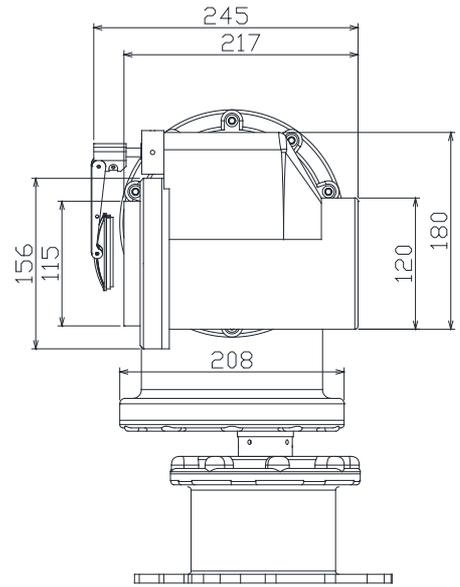
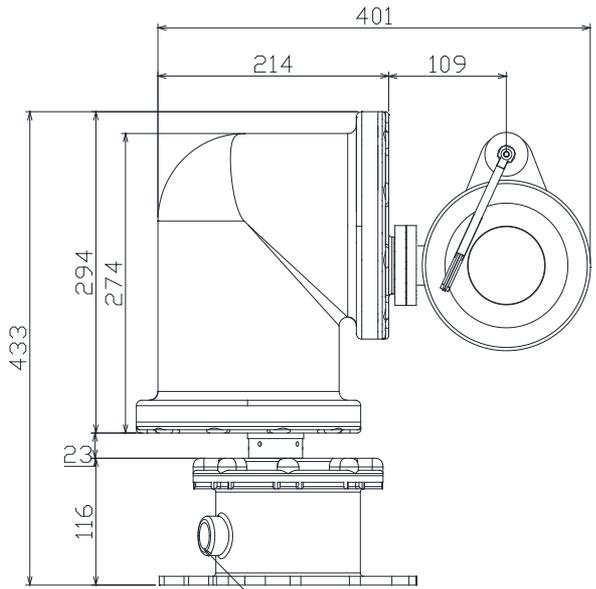
* Push the 88+preset button at Pelco protocol.

- Result : 1) Pan/Tilt's moving to nozzle position (location Preset 59)
 → 2) Auto-Stop after Spray water & Wiping (3 sec, 5 Wiping)
 → 3) Pan/Tilt's moving back to the previous position

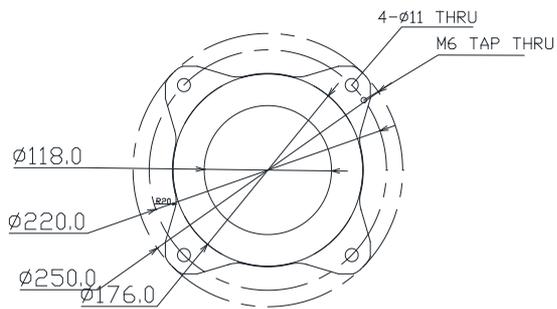
Water jet	<p>① Set washing position -.Move the window face to nozzle by using pan/tilt and save the position on preset 59.</p> <p>② Press  and  button.</p> <p>(88+  Preset) at Pelco Protocol</p>	<p>- Set the specific position to wash front window toward the nozzle on preset 59.</p> <p>-Run washing and wiping.</p>	Check water level in the tank periodically.
-----------	--	---	---

Dimensions

EXPTZ

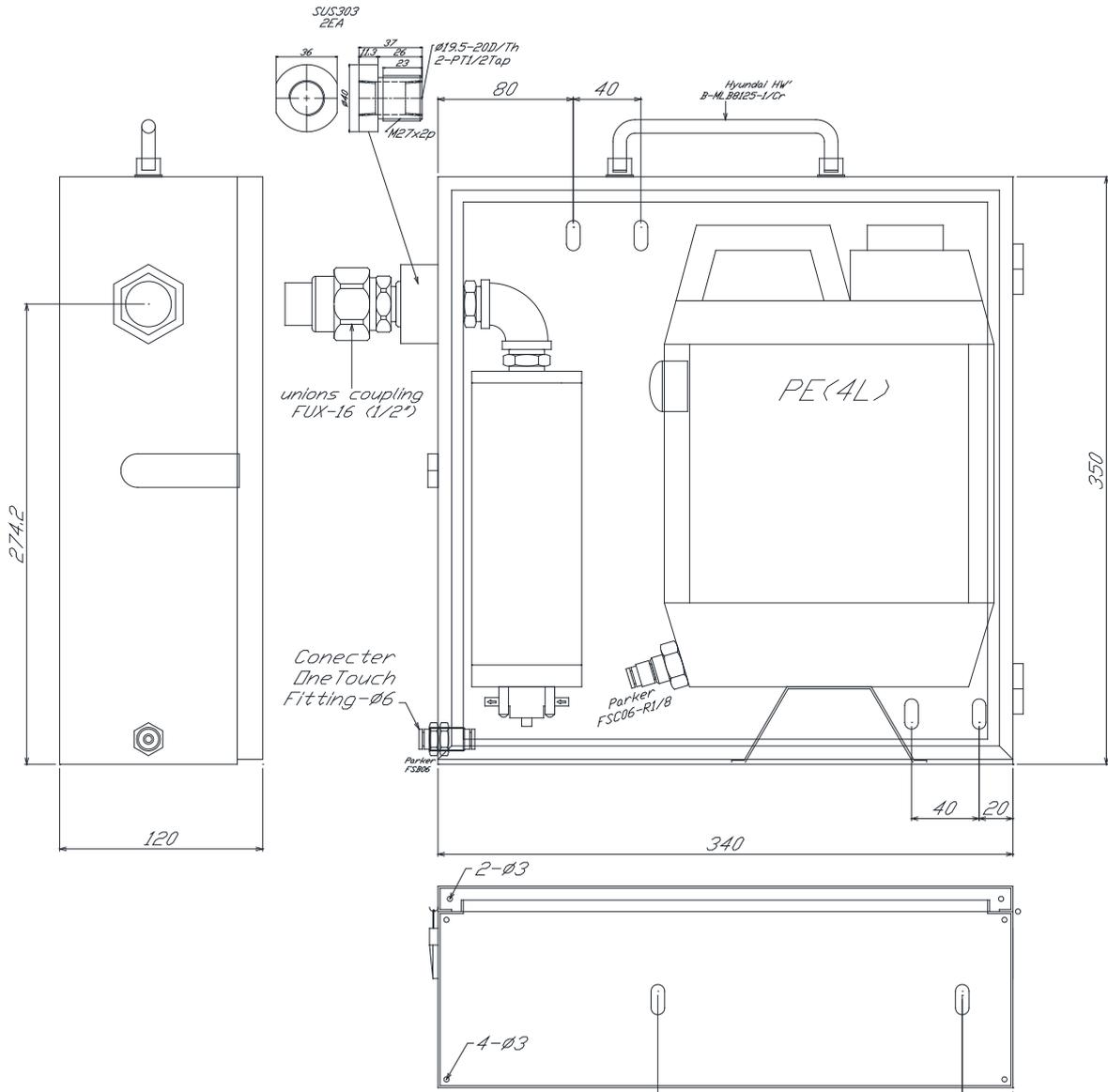


Cable Entry P/T 3/4"



Dimensions

EXWJ400



Product Warranty Guide

Warranty and Service

Subject to the terms and conditions listed on the Product Warranty Card, during the warranty period Honeywell will repair or replace, at its sole option, free of charge, any defective products returned prepaid.

In the event you have a problem with any Honeywell product, please call Customer Service for assistance or to request a Return Merchandise Authorization (RMA) number. See the back cover of this document for contact information.

Be sure to have the model number, serial number, and the nature of the problem outlined for the technical service representative.

Prior authorization must be obtained for all returns, exchanges, or credits. Items shipped to Honeywell without a clearly identified Return Merchandise Authorization (RMA) number may be refused.

For more information

Honeywell

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