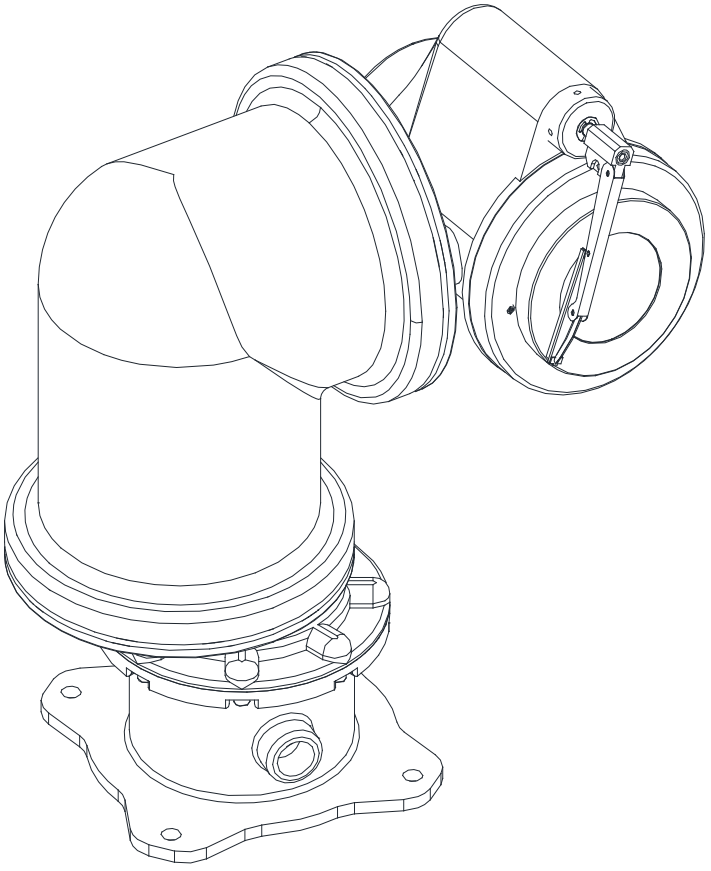
Honeywell

INSTALLATION&OPERATION GUIDE BOOK

EXPTZ Camera

(NORMAL 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).

Contents

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℃ to 50℃.

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

CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK.
DO NOT REMOVE COVER(OR BACK).
NO USER SERVICEABLE PARTS INSIDE
REFER SERVICING TO QUALIFIED SERVICE PRERSONNEL

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

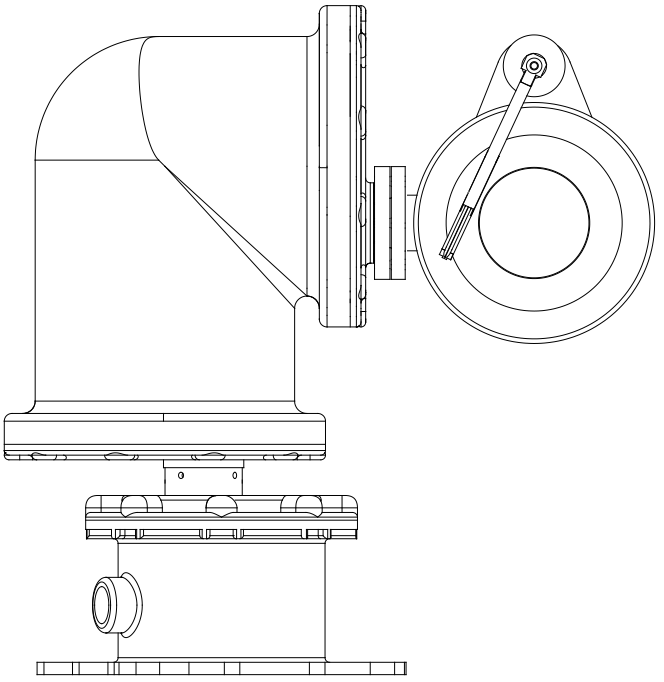


Figure1.

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

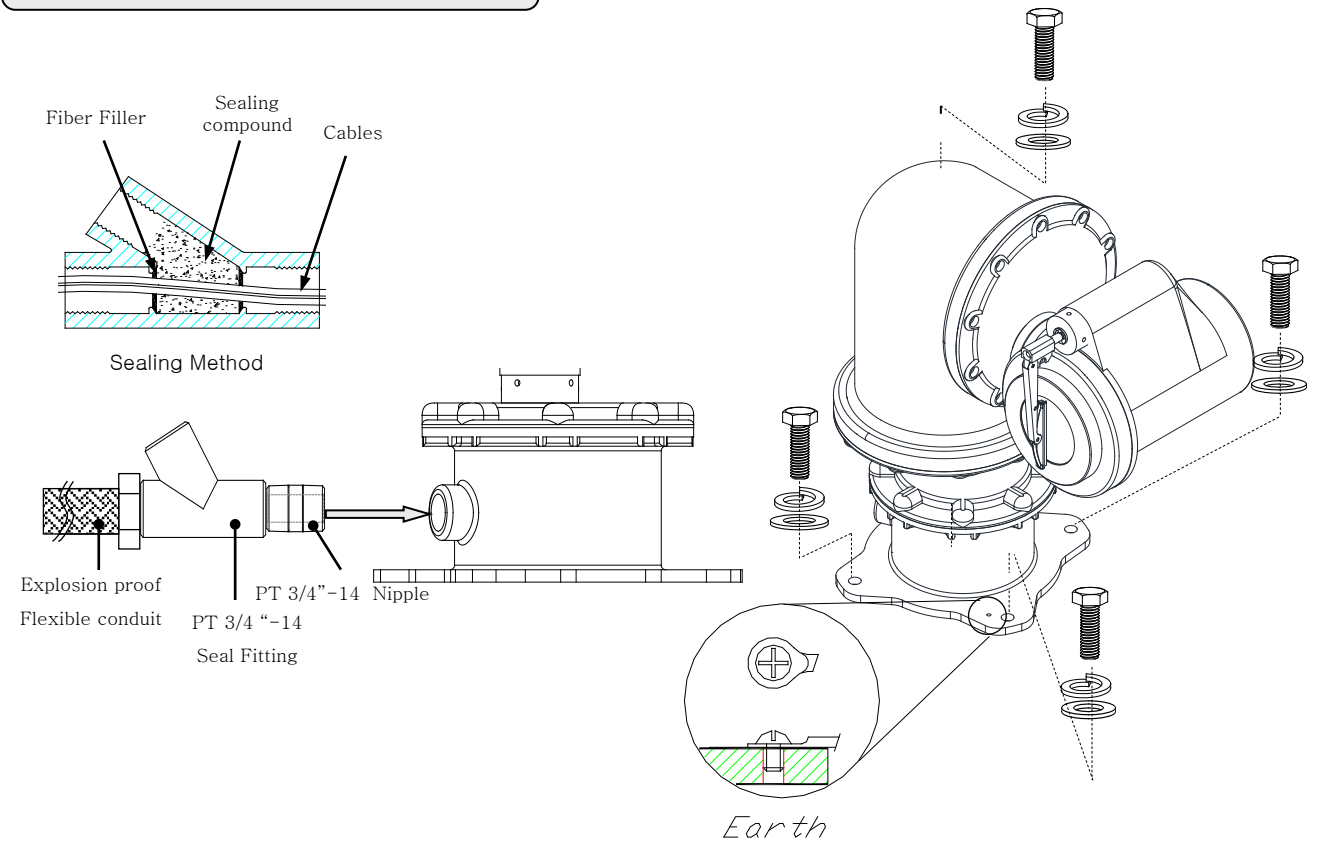


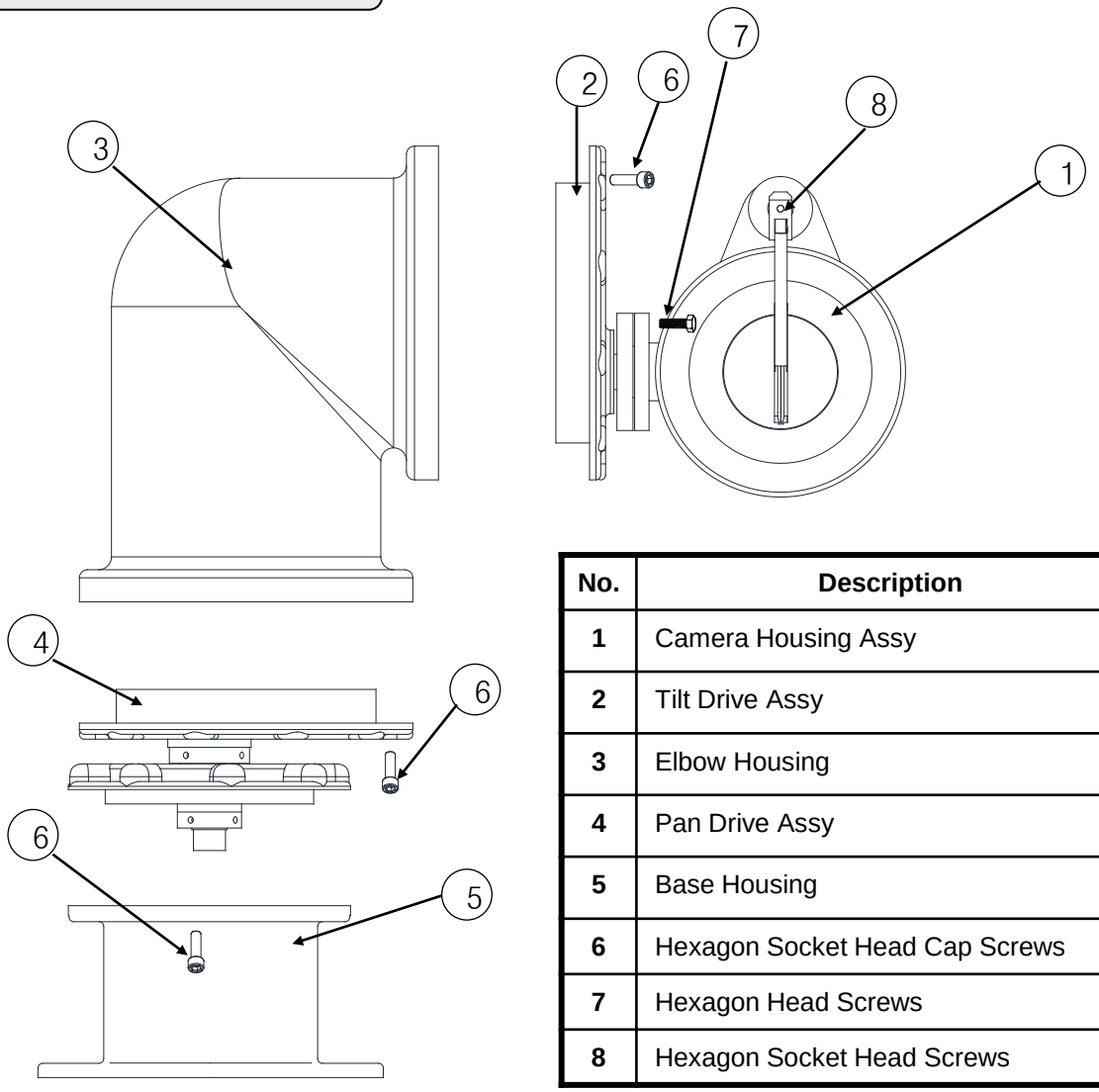
Figure2.
Standard Method of Installation

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



No.	Description	Q'TY
1	Camera Housing Assy	1EA
2	Tilt Drive Assy	1EA
3	Elbow Housing	1EA
4	Pan Drive Assy	1EA
5	Base Housing	1EA
6	Hexagon Socket Head Cap Screws	28EA
7	Hexagon Head Screws	4EA
8	Hexagon Socket Head Screws	1EA

Figure3.

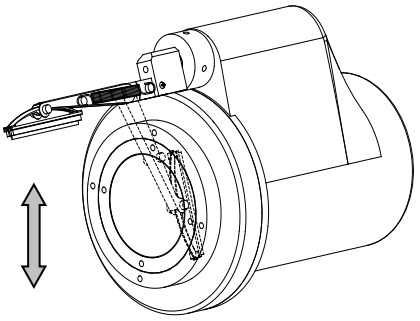
To disassembly this product, please refer to Figure3 and do the following steps.

1. Use a Φ5 Wrench for loosen 28EA Hexagon socket head screws.

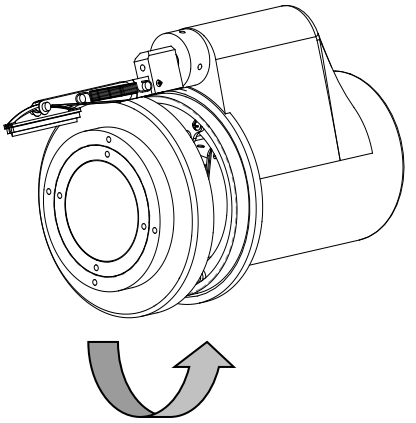
2. The Torque of jointing screws is approximately 160~200 kgf.cm . Therefore consider the torque when the screws are loosen.

3. If there is any problem to disassemble or assemble, you should discuss with the specialist or Engineering site of the product.

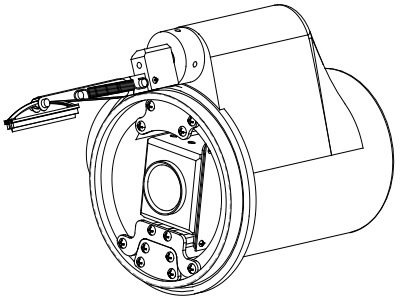
Maintenance

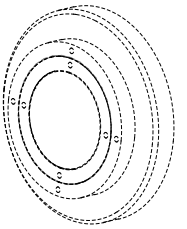


1. Put up Wiper

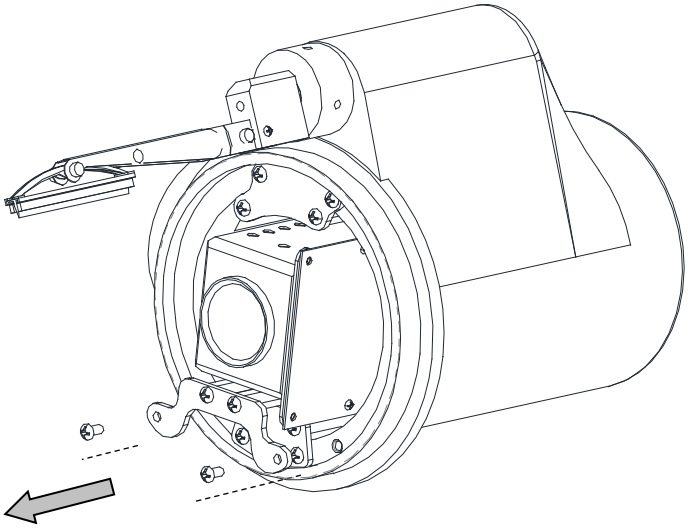


2. Turn to the left to loosen the cover from Housing





3. Remove the cover

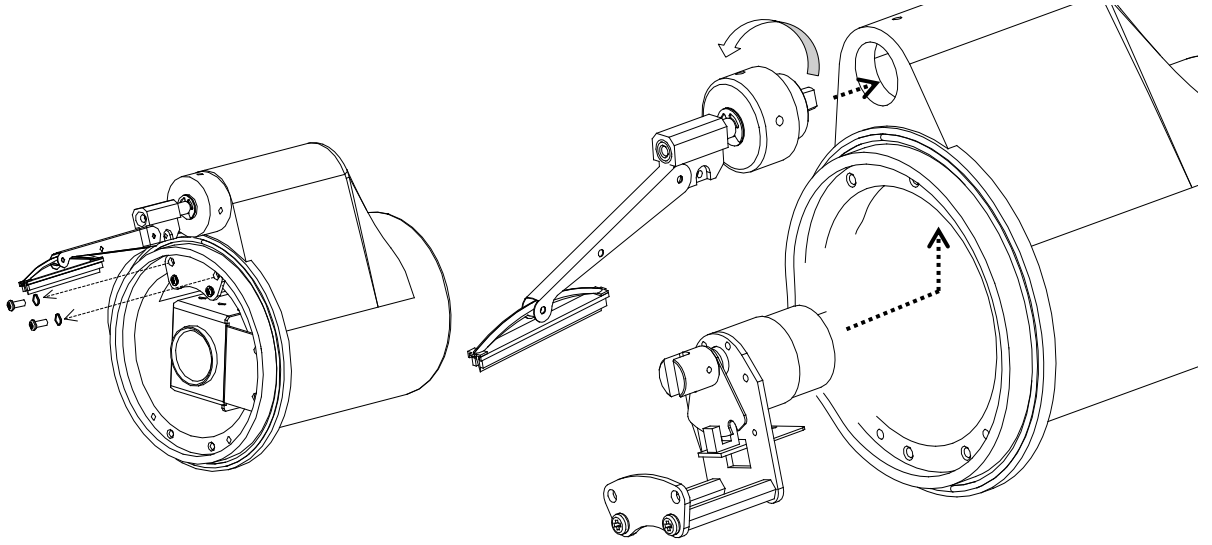


4. Loosen the two screws and then apart the camera module out of the Housing. Then the rear connector is taken out as showing the above figure.

⚠ **CAUTION:** When drawing the camera module out of, take care that the cables don't get caught the other parts in the camera housing.

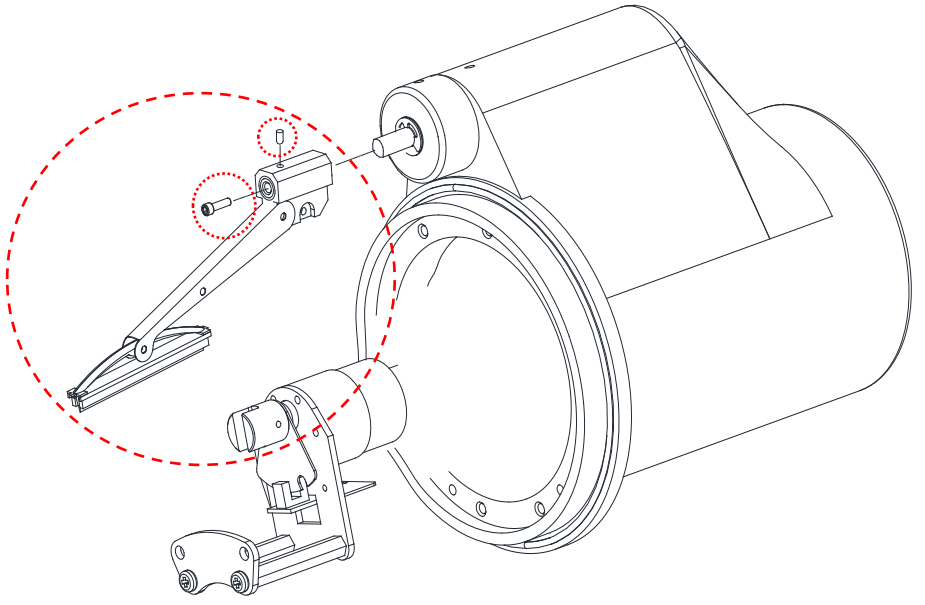
⚠ **WARNING:** To reduce the risk of ignition of Hazardous Atmospheres, disconnect the equipment from the supply circuit before opening.
Keep assembly tightly closed when operating.

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

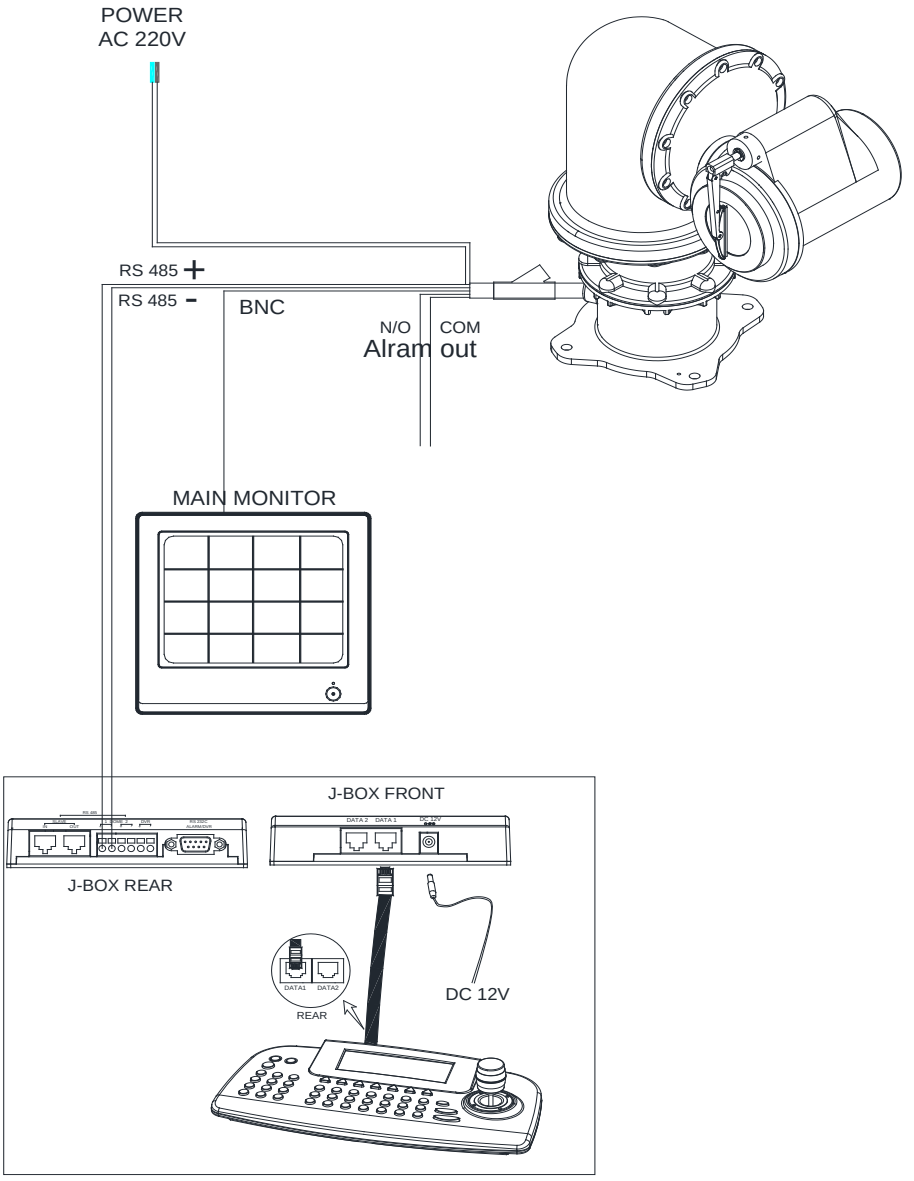


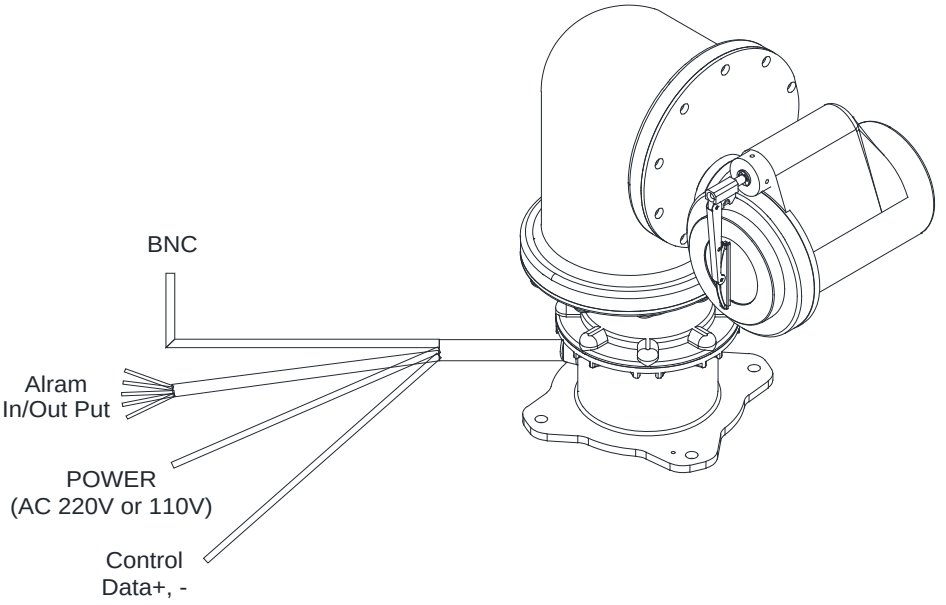
Figure4.

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.

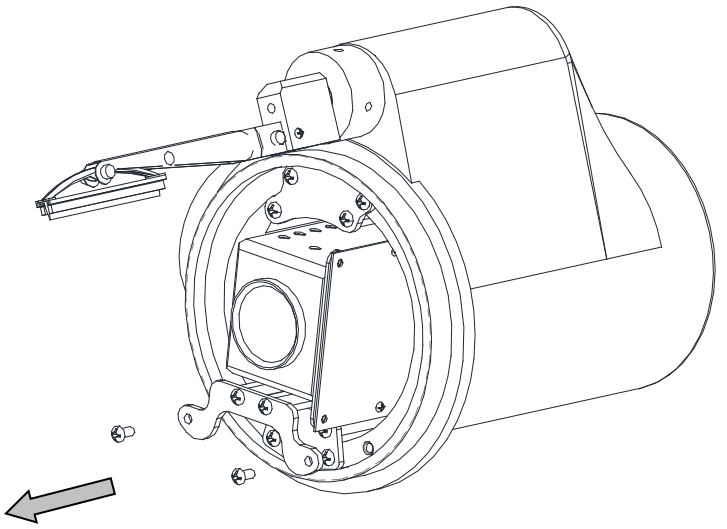
Wire and Power Connection Guide



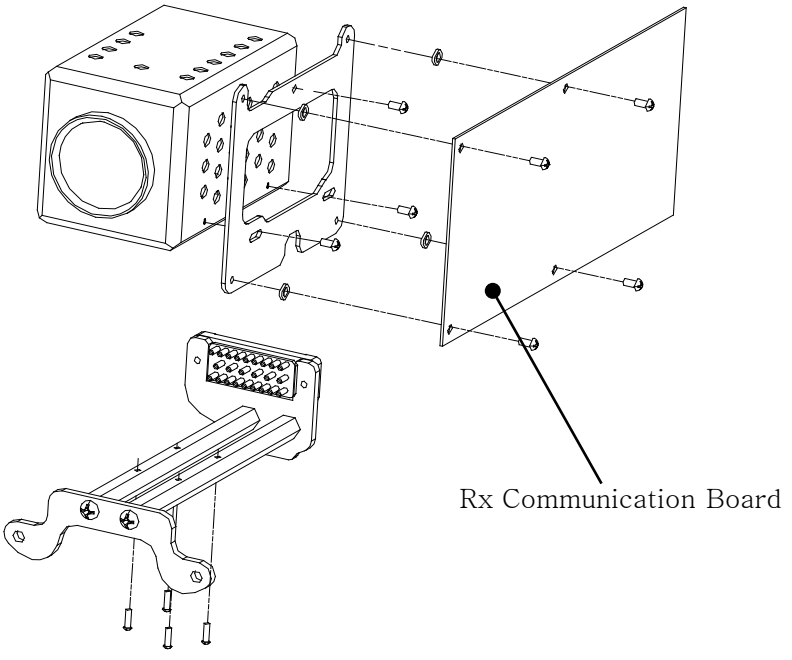
Configuration of Wire Harness

Wire Color	Function	Description
Brown SkyBlue	Power Input (220V or 110V)	Hi Low
Yellow Red Pink Blue Violet	Alarm Input	Alarm 1 Alarm 2 Alarm 3 Alarm 4 GND
Green SkyBlue	Alarm Output	relay contact relay contact
Black (Coaxial cable)	Video	BNC Cable
Black (Shield Cable) White (Shield Cable)	Control Data	RS485 Data + RS485 Data -

Camera ID & Protocol Setting



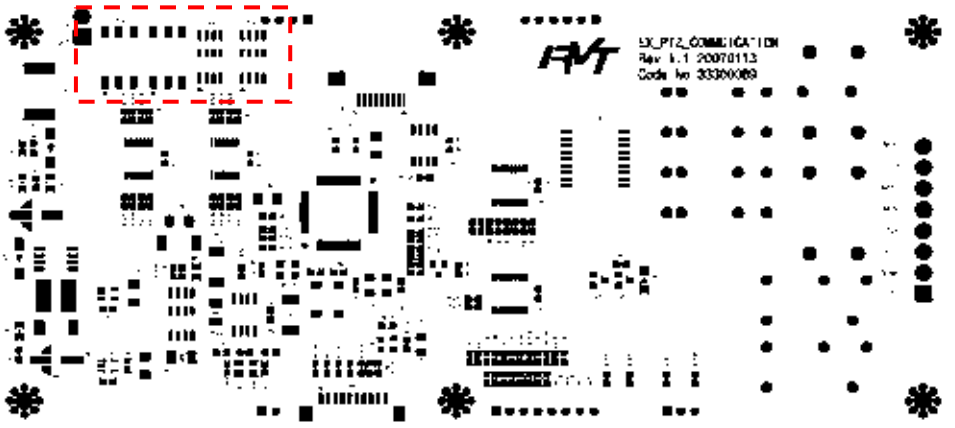
1. Loosen the two screws and then apart the camera module out of the Housing. Then the rear connector is taken out as showing the above figure.



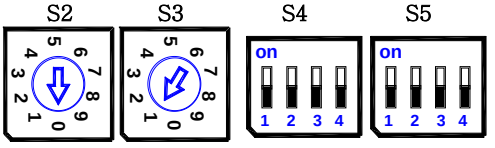
2. Loosen the screws such as the picture and apart the Rx communication Board from the assembly.

Camera ID & Protocol Setting

<Rx Communication Board>



Refer to Figures 5 for setting the EXPTZ camera address (ID) and protocol selection



ID	S2	S3
1	0	1
.	.	.
99	9	9

Figure5. Setting RX Address and Protocol

A EXPTZ camera is capable of negotiating with multiple protocols if the communication speed is matched (same baud rate i.e., 9600 bps). See Figure 6 for the appropriate protocol switch settings.

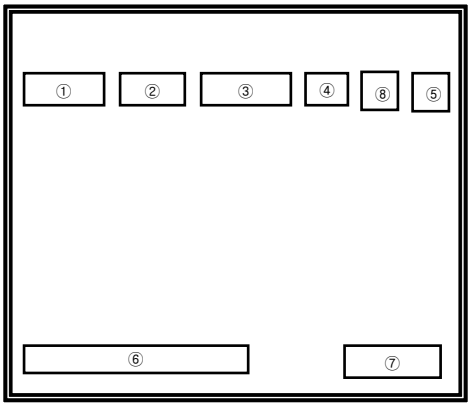
Protocol	S4-1	S4-2	S4-3	S4-4
AUTO	off	off	off	off
Pelco P	on	off	off	off
Pelco D	off	on	off	off
S-422	on	on	off	off
Reserved	off	off	on	off
Panasonic	on	off	on	off
Vicon	off	on	on	off
Dynacolor	on	on	on	off
Reserved	off	off	off	on
Reserved	.	.		.
Reserved	on	on	on	on

Baudrate	S5-1	S5-2	S5-3	S5-4
9600	off	off	off	off
19200	on	off	off	off
38400	off	on	off	off
57600	on	on	off	off
Reserved	off	off	on	off
Reserved	on	off	on	off
Reserved	off	on	on	off
Reserved	on	on	on	off
Reserved	off	off	off	on
Reserved	.	.		.
Reserved	on	on	on	on

Figure6. Protocol selection tables.

Camera Function

1. Screen **Display**



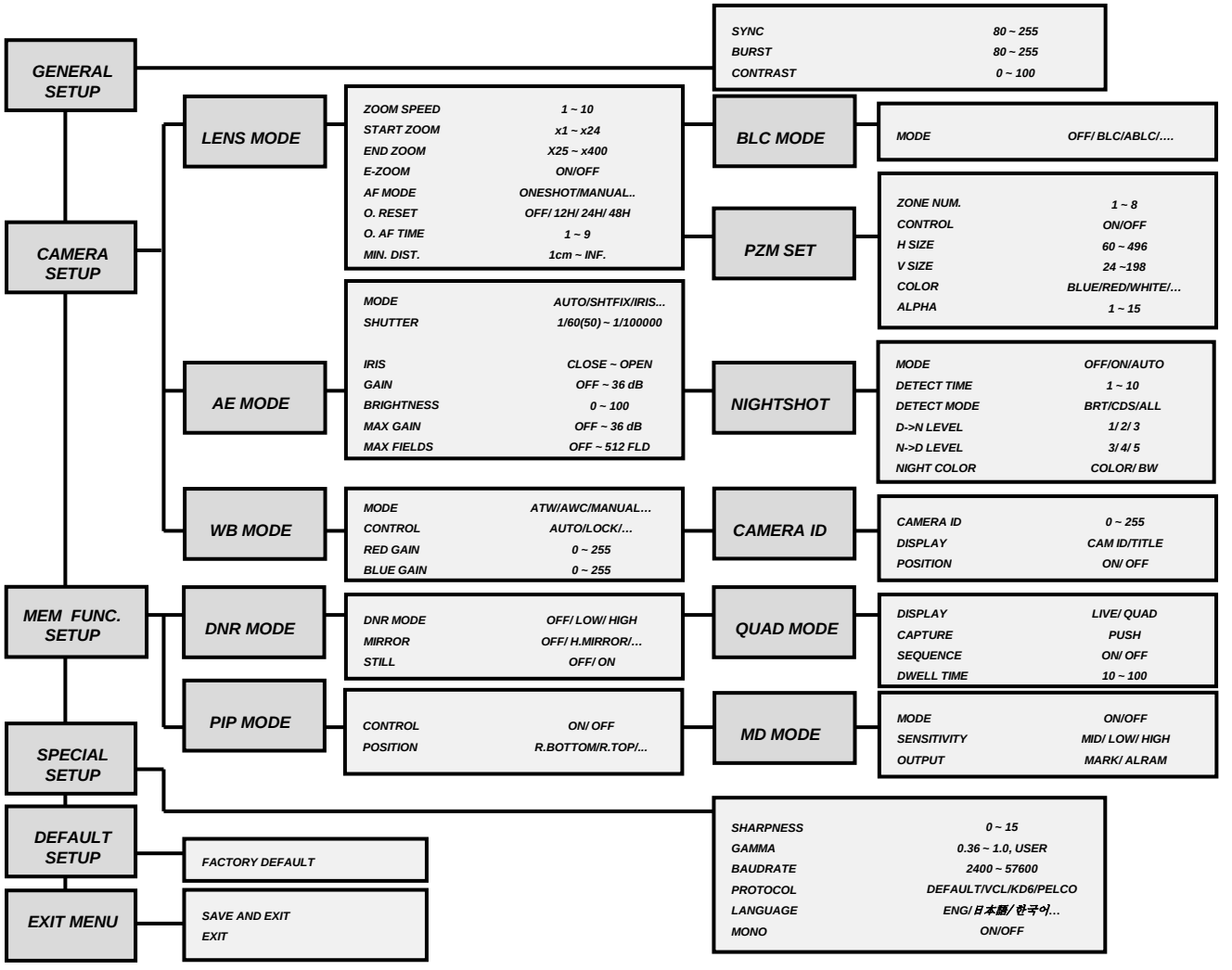
<Operating OSD display position>

	•FUNCTION	•OSD FORMAT	•DESCRIPTION
①	•Focus Mode	•Non display	•Oneshot Focus Mode
		•MF	•Manual Focus Mode
②	•Back Light	•Non display	•Backlight OFF
		•O	•Backlight ON
		•A	•Auto Backlight ON
		•B	•BMB ON
		•W	•WDR ON
③	•Shutter Speed	•Non display	•NTSC: 1/60, PAL:1/50
		•1/250 **1/100000**	•variable steps
		•FL	•1/100 (NTSC), 1/120 (PAL)
④	•Night Mode	•Non display	•Night OFF
		•IR	•Night ON
⑤	•WB Mode	•Non display	•Auto Trace WB mode
		•IN	•Indoor Preset (3200°K)
		•OUT	•Outdoor Preset(5400°K)
		•MWB	•Manual WB mode
		•AWC	•One Push Mode
⑥	•Zoom Display	•Dx90	•Digital Zoom
		•>>TELE	•Zoom IN
		•<<WIDE	•Zoom OUT
⑦	•CAMERA **ID/TITLE**	•Non display	•In case that ID is 0
		•ID: 002	•In case that ID is 1 ~ 255
		•TITLE	•DISPLAY set as TITLE
⑧	•MD Mode	•Non display	•Motion Detection is OFF
			•Motion Detection is ON

<Operating OSD description>

Camera Function

2. OSD Setup MENU Structure



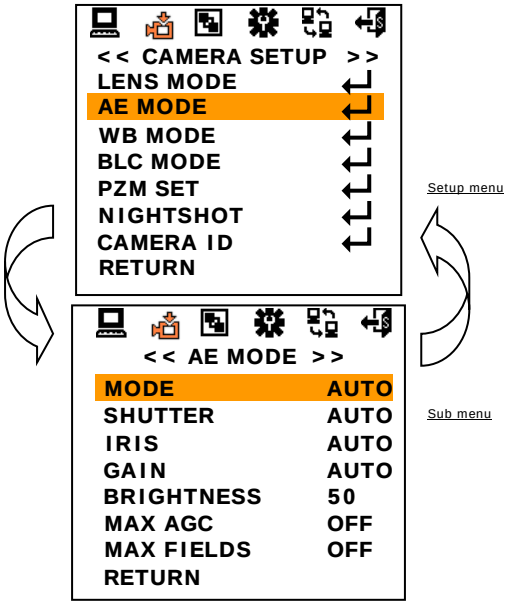
Camera Function

3. Display SETUP MENU

a. Press MENU key above for 2 seconds so that SETUP MENU is displayed on the screen.

b. Select item from SETUP MENU using TELE(up) / WIDE(down) key.

c. NEAR(+) / FAR(-) key is used to increase / decrease data of selected item.



< SETUP MENU change>

4. Move between SETUP MENU and Sub MENU

a. In order to change from SETUP MENU to Detail MENU, select Sub MENU using TELE / WIDE key, and press NEAR / FAR key.

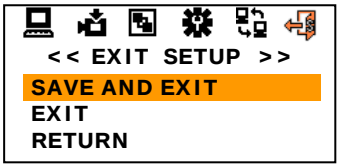
b. In order to change from Sub MENU to SETUP MENU, select RETURN MENU using TELE / WIDE key, and press NEAR / FAR key.

5. Exiting from Main-Menu

a. At Main-menu, move cursor to icon, and press MENU button.

① SAVE AND EXIT : Camera will save the changes

② EXIT : Camera will not save the changes.



< EXIT SETUP >

6. GENERAL SETUP

① SYNC adjustment

: User can adjust SYNC level (80 ~ 255)

SYNC 80 → 81 → … → 255

② BURST adjustment

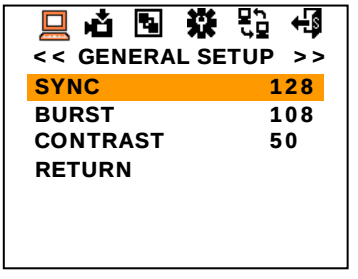
: User can adjust BURST level (80 ~ 255)

BURST 80 → 81 → … → 255

③ CONTRAST adjustment

: User can adjust CONTRAST (0 ~ 100)

CONTRAST 0 → 1 → … → 100

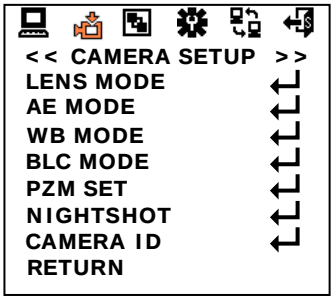


< GENERAL SETUP >

Camera Function

7. CAMERA SETUP MENU

a. At main menu, select icon, and press MENU button.



< CAMERA SETUP menu>

7-1. LENS MODE

① ZOOM Speed Control

: Set zoom speed 1 to 10, 10 steps.

ZOOM SPEED 1 → 2 → … → 10

② Start Zoom Ratio

: Set boundary value of WIDE zooming.

START ZOOM x 1 ~ x 24 (in optical zoom region)

③ End Zoom ratio

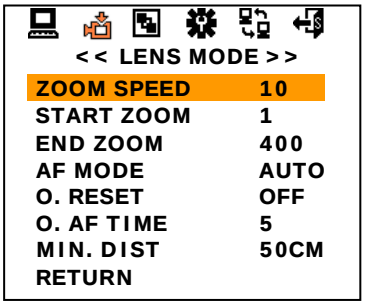
: Set boundary value of TELE zooming. It can be set up to x400 including electronic zoom. (in case the digital zoom limit is 16 times) Once Start Zoom and End Zoom ratio are set, Camera moves to setting zoom times simultaneously as it is enabled to move to the desired position.

END ZOOM x 25 ~ x 400 (in digital zoom region)

④ E-Zoom Control

: ON means up to x400, OFF means only optical zoom region.

E-ZOOM OFF → ON.



< LENS MODE setup >

⑤ Set Focus Mode

: Three modes are available

AUTO

:It is used to focus automatically at all times.

MANUAL

: It is used to focus manually by pushing NEAR(+) / FAR(-)key. When MANUAL mode is selected, it will focus for about 5 seconds after zoom in(TELE) / out(WIDE), and return to MANUAL mode automatically. This is useful to focus accurately after zooming.

(In MANUAL mode, when it is powered not to focusing, it will be returned to the setting before power off.)

ONESHOT

: It is similar to MANUAL mode, but some differences do exist. In case the focus mode is ONESHOT, it is focused whenever ONESHOT (AUTO/MANUAL key) key is pushed. It will be returned to MANUAL mode after seconds (Special Menu : O.S. AF TIME) if best focus cannot be found. In this case, press ONESHOT(AUTO/MANUAL key) key again to set to the best focus.

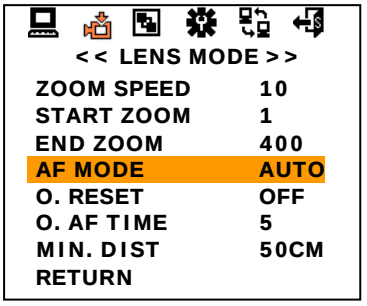
PUSHAUTO (option)

: While key is pressed, Focus mode will remain AUTO.

☞ caution

1. According to the Model , order is Auto -> Manual -> Oneshot, or Auto > Manual -> Pushauto.

Camera Function



< AF MODE change >

⑥ ONESHOT AF RESET

: Use in case focus is deviated due to impact, vibration etc. Auto Focusing is operated during set time.

O.RESET **OFF → ON**

☞ caution

1. Focus deviation occurs based on the conditions

(brightness, facility to focus the object, etc).

⑦ ONESHOT AF TIME

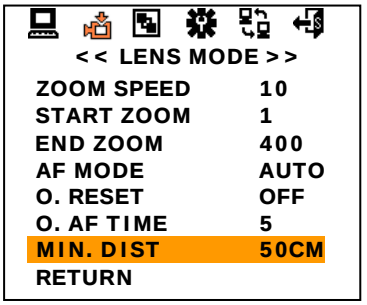
: Set Oneshot AF operating time. When AF is completed, Focus mode will be Manual. Even when AF is not completed, it stops when time is up.(unit:sec)

O.AF TIME **1 → 2 → … → 10**

⑧ Minimum Distance

: Set the minimum distance which can be focalized.

MIN. DIST. **1CM → 10CM → 50CM → 1M →**
3M → 5M → 10M → INF.



< Minimum focus distance >

7-2. AE MODE

① Exposure Mode

: It is composed of five modes according to circumstantial illuminance.

AUTO

: Exposure is controlled by Shutter Speed,Iris,Gain to meet the Brightenss.

SHUTTER FIX

: Low/High shutter speed is fixed, Exposure is controlled by Iris and Gain.

IRIS FIX

: Iris is fixed, Exposure is controlled by Shutter Speed and Gain. (Shutter Speed,GAIN is not adjust and operate automatically.)

GAIN FIX

: Gain is fixed, Exposure is controlled by Shutter Speed and iris.

MANUAL

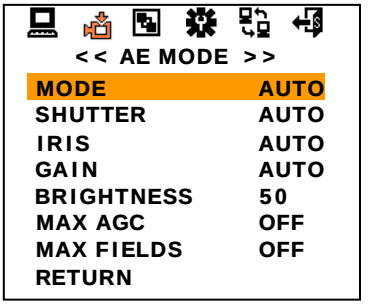
: Shutter Speed,Iris,Gain is fixed as set value regardless of illuminance.

☞ caution

1. There are menu items not to adjust and to skip according to mode.

2. Field Integration is not operated in Shutter Fix, Gain Fix, Manual.

MODE **AUTO → SHT FIX → IRIS FIX →**
GAIN FIX → MANUAL



< AE MODE >

Camera Function

② SHUTTER Speed

: In Shutter Fix and Manual Mode, range is from 1/60(50) sec to 1/100,000 sec.

SHUTTER 1/60 → .... → 1/100000

③ IRIS

: In Iris Fix, Manual Mode, range is 12 phases from OPEN (full Open) to CLOSE.

IRIS CLOSE → F16.0 → F11.0 → . . . . → OPEN

④ GAIN

: In Gain Fix, Manual Mode, range is 16 phases from OFF to 36dB.

GAIN OFF → 8dB → 10dB → . . . . → 36dB

⑤ Brightness

: Adjust level of Auto Iris. The smaller brightness value indicates the darker it gets, as iris is more closed. On the contrary, it gets brighter as the brightness value becomes bigger when iris is opened more.

BRIGHTNESS 0 ~ 100

⑥ MAX AGC

: Adjust Max AGC level.

MAX GAIN OFF→ 8dB → 10dB → . . . . → 36dB

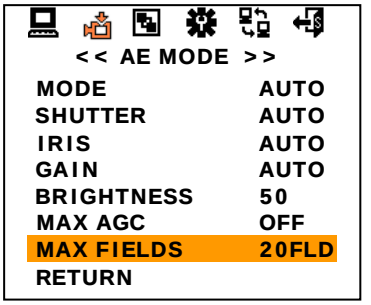
⑦ MAX FIELDS (option)

: Use for compensating the low illumination condition. In case this function is used due to low illumination condition, adjust maximum integration fields to get brighter and dynamical image. However, the scene becomes slower than OFF mode. The larger max fields is simultaneously the noise of image is larger. This phenomenon occurs due to very small video output integrated on many fields memory. To get more dynamical image, adjust maximum integration fields and set maximum AGC gain as HIGH, to result in better standard of dynamic image.

MAX FLDS OFF → 1FLD → 2FLD → 3FLD →
4FLD → 5FLD → , , , → 10FLD →
20FLD → 40FLD → , , , → 160FLD
→320FLD →512FLD

☞caution

1. In Fields Integration mode, noises as well as video information are increased. When an ambient temperature keeps high, CCD pixel defect happens to be larger and whiter. This is not due to failure.



< MAX FIELDS change >

7-3. White Balance Mode

① White Balance Mode

: Outer illumination condition is expressed by Color temperature, Kelvin (°K). It is White Balance that shows white as white in any illumination conditions. It is composed of five modes as follows;

ATW (Auto Trace White balance)

: Trace automatically under any condition within range of 2,500°K ~ 8,000°K

(It is adjustable to red and blue point for desired white position.)

INDOOR

: Use to set the preset illumination condition as 3200°K

OUTDOOR

: Use to set the preset illumination condition as 5400°K

MANUAL

: Use to adjust to desired RED, BLUE gain manually.

AWC

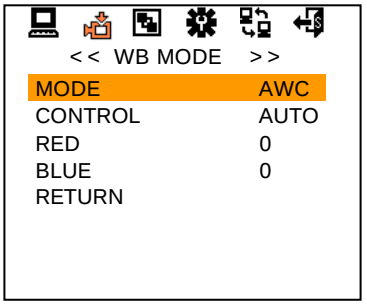
: Consider current illumination condition, force to conduct white balance and lock as manual

Camera Function

② White Balance Mode Control
: It displays and changes White Balance Mode Control status of Camera. (According to Mode, it just display the state and not to adjust.)

ATW	**AUTO**
INDOOR	**3200°K**
OUTDOOR	**5400°K**
MANUAL	**R/B CONT**
AWC	**LOCK →PUSH**
AWC	**AUTO**

(LOCK means Manual white balance status. Press NEAR(+) / FAR(-) key continuously, LOCK mode becomes PUSH mode and white balance acts automatically, and then white balance mode is locked as manual.)



< WB MODE >

③ RED GAIN (Range is different on each Mode.)
: Adjust RED Gain, and tune the sensitivity of white point.

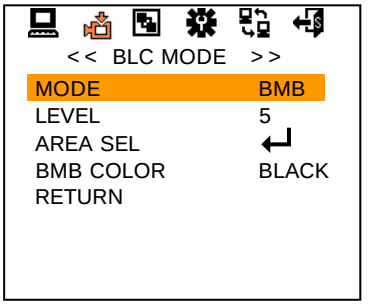
ATW	**-20 → -19 → .... → 19 → 20**
MANUAL	**0 → 1 → .... → 254 → 255**
AWC	**30 (Current RED gain display)**

④ BLUE GAIN (Range is different on each Mode.)
: Adjust BLUE Gain, and tune the sensitivity of white point.

ATW	**-20 → -19 → .... → 19 → 20**
MANUAL	**0 → 1 → .... → 254 → 255**
AWC	**30 (Current BLUE gain display)**

7-4. BLC/BMB Mode

① Backlight Compensation Mode
: It is for preventing the center object getting too dark when the excessive light is behind the central object.
Set BACKLIGHT ON, then the center object gets brighten in the contrast to the background light.
MODE OFF → BLC → ABLC → WDR → BMB
(WDR [Wide Dynamic Range] function combines dark area's image and bright area's image inside memory, and makes a subject shown more clearly.)
(BMB [Black Mask BLC] is different backlight compensation, mask the excessive light and make objects look clearly.)
② Backlight Compensation Level (BLC, ABLC, WDR, BMB Level)
LEVEL 5 (0 ~ 20)



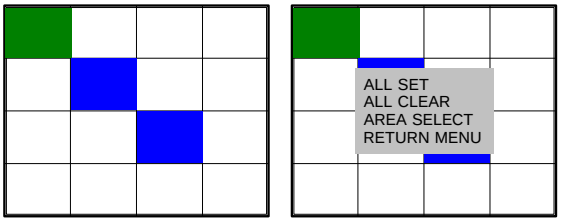
< BLC MODE >

③ BMB Color selection: User can select masking color of BMB

BMB MASKING BLACK →D.GRAY → … → WHITE

AREA SEL : User can select area for BMB.

If you press MENU at AREA SEL, you can configure the area of BMB. To exit area selection menu, press the MENU button for more than 2 seconds.



< BMB MODE areas setting >

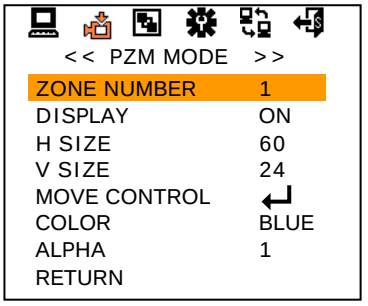
-. ALL SET : Select all area
-. ALL CLEAR : Clear all area
-. AREA SELECT : Back to area select mode
-. RETURN MENU : Exit AREA SEL, and return to BLC MODE

Camera Function

7-5. PRIVACY ZONE

① Set Privacy ZONE
: PZM(Privacy Zone Mask) is to hide the unwanted view to protect privacy invasion. It works with Zoom/PAN/TILT operation. Select PZM zone up to 8 zones.

ZONE NUMBER **1 → 2 → …. → 8**



< PZM MODE change >

② PZM display
: Set ON/OFF for each PZM Zone.

CONTROL **OFF → ON**

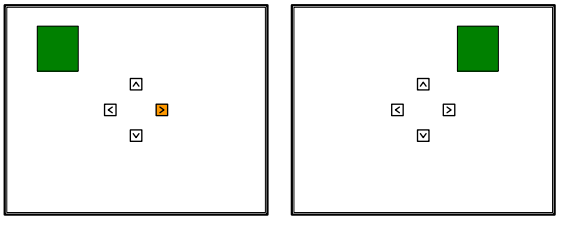
③ PZM Horizontal center starting point
: Set PZM for the starting point of Horizontal center.

H SIZE **60 ~ 496**

④ PZM Vertical center starting point
: Set PZM for the starting point of vertical center.

V SIZE **24 ~ 198**

⑤ Moving PZM area
: Configured PZM area can be moved by this menu. If you press MENU button at MOVE CONTROL, below screen will appear. You can move PZM area by TELE, WIDE, NEAR, FAR buttons. To exit MOVE CONTROL menu, press MENU button for more than 2 seconds.



< PZM position move >

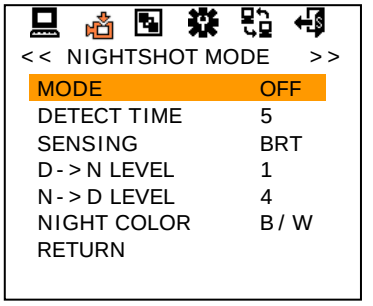
⑥ PZM Masking
: Choose the Color to mask the PZM zone. 8 color (Black, Gray, Light Gray, White, Red, Blue, Green, Yellow) is available.

PZM MASKING **BLUE → RED → …. → GREEN**

⑦ Transparency of PZM area
: Transparency of PZM area can be decided

ALPHA **0 ~ 15**

7-6. NIGHTSHOT MODE



< NIGHTSHOT MODE >

① NIGHTSHOT MODE
: It is used in low illumination condition. ON is Night mode, OFF is normal state. Sensitivity of camera becomes more higher level like BW camera.
external IR illuminator can be available when AUTO mode is converted ON / OFF automatically according to illuminance change.

MODE **OFF → ON → AUTO**

② NIGHTSHOT MODE DETECT TIME
: Set time to protect susceptible conversion of ON/OFF according to illuminance change on Auto. When illuminace keeps the state during detect time, convert ON/OFF.

DETECT TIME **1 → 2 → …. → 10**

③ NIGHTSHOT DETECT MODE
: It is useful with external IR illuminator set on Auto. Select CDS sensor ON/OFF to detect the illuminance state more effectively.

DETECT MODE **BRT → CDS → ALL**

☞ *caution*
BRT means shooting scene brightness, CDS sensor's operation
depends on circumstantial brightness. Select to match with installation
circumstance.

Camera Function

④ Turnover LEVEL from DAY TO NIGHT
: Set the LEVEL to turnover from Day to Night.

D→N LEVEL **1 → 2 → 3**

⑤ Turnover LEVEL from NIGHT TO DAY
: Set the LEVEL to turnover from Night to Day.

N→D LEVEL **3 → 4 → 5**

⑥ Color on Nightshot Mode
: Set Color Mode on Night Mode.

NIGHT COLOR **B/W → COLOR**

7-7. Camera ID SET

① ID SET
: Camera ID identifies each assigned Camera when many cameras are under control. It ranges from 0 to 255, however 0 is not displayed on screen. It is always displayed even though whole Operating OSD is disappeared from the screen. Still, it is possible to make non display and to choose display position (BOTTOM RIGHT, TOP RIGHT, TOP LEFT) by RS-232C communication.

CAMERA ID **0 ~ 255**

☞ *caution*
1. In case of Camera ID FIX model, it cannot be selected..
2. ID is not changed by MENU control through communication.

② DISPLAY MODE
: Choose which is to display Camera ID or Title.

DISPLAY **CAM ID → TITLE**

③ DISPLAY POSITION
: Choose Camera ID or Title to display ON/OFF.

POSITION **OFF → ON**

④ Title
: It is the name of Camera. It enters 10 characters including space.

TITLE: ■■■■■■■■■■

▣ *How to Enter the Title* ▣

Let's enter the Title as "R1" , example
-. Select the position of title character by using Near or Far key. The chosen position is blinking.
(Only chosen Cursor will be blink as "■", rest of them will be shown as a blank " ".)

TITLE: □

-. Select the character "R" among ⓐ ~ ⓓ by using UP,DOWN, (+),(-) key. The chosen character "R" is blinking.

ABCDEFGHIJKLMNOPQRST
UVWXYZabcdefghijklmn
opqrstuvwxyz12345678
9!?#$%&<>*,.:;/+-=~■

-. Press MENU key, the character "R" is entered in the Title.
(Automatically the position will be forward to next position.)

TITLE: R □

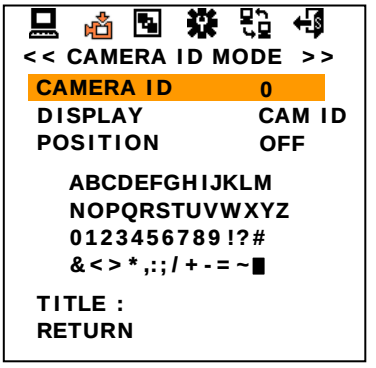
-. If you want to edit specified character, you shall use TELE/Wide to move on the position and NEAR/FAR to select on the character. By using TELE/WIDE to position the character to continue to edit.

-. Select character "1" using TELE, WIDE, NEAR, FAR button and it will blink the cursor on the character "1"

ABCDEFGHIJKLMNOPQRST
UVWXYZabcdefghijklmn
opqrstuvwxyz12345678
9!?#$%&<>*,.:;/+-=~■

-. Push MENU to enter the character "1".

TITLE: R 1 □



< CAMERA ID setting >

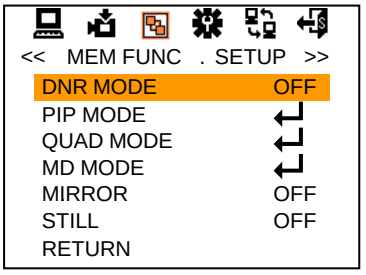
Camera Function

8. MEMORY FUNTION

8-1. DNR MODE

: Image noise can be reduced by using the DNR function. The intensity of the Noise Reduction filter can be selected High or Low.

DNR MODE **OFF → LOW →HIGH**



< DNR MODE >

8-1. PIP MODE

: PIP (Picture-in-Picture) works when Digital zoom is working. After you make CONTROL “ON” and exit OSD menu, if you push LEFT, RIGHT buttons then digital zoom will work and you can get PIP on the screen.

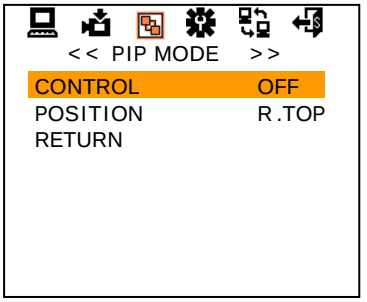
① Control of PIP
: This function makes PIP On/Off .

CONTROL **OFF → ON**

② Position of PIP
: PIP display can have a position of Right-Top, Right-Bottom, Left-Top, Left-Bottom.

.

POSITION **R.BOTTOM → … → L.TOP**



< PIP MODE >

8-2. QUAD MODE

: QUAD Mode supports 4 split screen display. There are two working mode of “manual push” or “sequence switching” for split screen change.

① Display mode
: It makes QUAD mode ON/OFF. If it is selected as LIVE, normal video will be displayed, and if it is selected as QUAD, screen will be split.

DISPLAY **LIVE → QUAD**

② Video Capture
: When DISPLAY is set as QUAD, if you push MENU button then still image will be displayed at each split screen with clockwise direction.

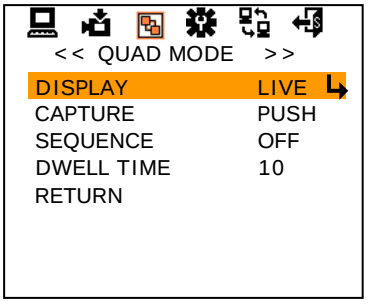
CAPTURE **PUSH**

③ Sequence
: If SEQUENCE is set as “ON” then each split screen will display still image, and still image will be changed by time interval decided at dwell time.

SEQUENCE **OFF → ON**

④ Switching time
: When SEQUENCE is set as “ON”, still image’s refresh time can be decided by this DWELL TIME value (sec)

DWELL TIME **10 → 11 → …. → 100**



< QUAD MODE >

8-3. MD MODE

:Supports Motion detection and 64 areas can be selectable.

① Mode : User can decide whether you will use motion detection function or not

MODE **OFF → ON**

② Motion area
: User can configure motion detection area. Area selection method is same to BMB area selection

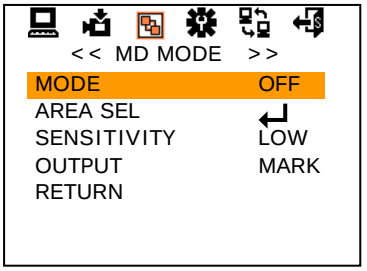
Camera Function

③ Sensitivity
: User can decide sensitivity of motion detection.

SENSITIVITY **LOW → MID → HIGH**

④ Output of motion detection
: Motion detection has two output method. One is marking on screen " " icon, and the other is MD signal.

OUTPUT **MARK → ALRAM**



< MD MODE >

⑤ Mirror Mode
: Mode set makes Mirrored image.

MIRROR **OFF → H MIRROR → V MIRROR → FLIP**

⑥ STILL
: It pause current image. ON is to stop, OFF is to return to normal state.

STILL **OFF → ON**

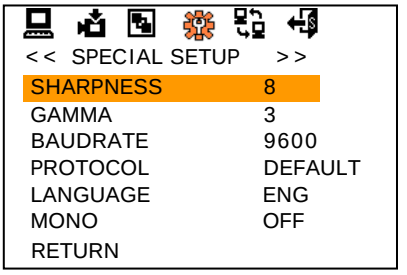
8-4. SPECIAL SETUP

① Sharpness
: Use to change the contour of Scene.

SHARPNESS **0 ~ 15**

② Gamma
: Gamma is controllable

GAMMA **0.36 → 0.38 → … → USER**



< SPECIAL SETUP >

③ BAUD RATE
: Use to communicate through RS232C, RS485, RS232TTL .

BAUDRATE **2400 → 4800 → …. → 57600**

☞ *caution*
1. If the Baud Rate does not match between Camera and external system, it may occur the communication failure. Please make sure a proper Baud Rate.

④ PROTOCOL Setting
: Setting the PROTOCOL with communication device.

PROTOCOL **DEFAULT → VCL → KD6 → PELCO**

⑤ OSD language

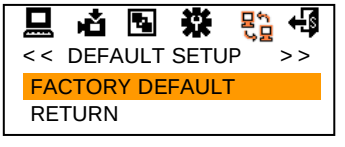
LANGUAGE **ENG → 한국어 →日本語 → 簡體中文 → 繁體中文**

⑥ Color Mode
: Use for changing color and monochrome (black & white)mode .
OFF is Color mode, ON is black&white mode.

MONO OFF → ON

9. FACTORY DEFAULT

: At main menu, selec icon, and press MENU button.
If you press "Factory default", all data will be returned factory default values



< DEFAULT SETUP >

Simple Function Control Guide

* This function is specialized to HTX-5000 keyboard.

Function	Process	Results	Remarks
PAN/TILT	①Press 1 and (CAM) button in sequence. ② Move Joystick to the right, left, up and down.	To matching ID 01 of 01~99. If ID set 02, press 2 and (Cam) button You can see the moving as following the direction.	Only in full screen mode
ZOOM /FOCUS/ Iris	① Twist Joystick to the right. ② Twist Joystick to the left. ③ Press button. ④ Press button.	-ZOOM IN -ZOOM OUT -Focus is changed to Near or Far Return to Auto Focus mode by moving the joystick. -Iris is opened or closed Moving the joystick reactivates Auto Iris mode	Only in full screen mode Overrides auto focus Overrides auto iris
Wiper Control	① Press (On) button or Press 2 and (On) button in sequence. (86+ Preset) at Pelco Protocol ② Press (Off) button or Press 2 and (Off) button in sequence. (79+ Preset) at Pelco Protocol	-Wiper moves as keeping a steady angle. -Wiper stops.	Forbid to keep the moving status over 1 hour continually.
Menu	① Press (Menu) button. Press 95+ Preset button at Pelco protocol. ② Move Joystick to the right or left. ③ Move Joystick Up or Down. ④ Press (Menu) or ESC (Esc) or (Enter) button twice.	-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.	

Simple Function Control Guide

Function	Process	Results	Remarks
Preset	①Saving Preset Select one button of (1) ~ (6) (4) (64) and Press (⇧) (Shift) and (Preset) in sequence ②Running Preset Press Number button and (Preset) in sequence.	-PTZ moves to the position which you have saved the preset.	
Alarm	① Input Alarm 1 ② Input Alarm 2 ③ Input Alarm 3 ④ Input Alarm 4	-PTZ goes to Preset1. -PTZ goes to Preset2. -PTZ goes to Preset3. -PTZ goes to Preset4.	Maximum Input Capacity: 4EA

Specifications

Mechanical Part

Models / Spec	EXPTZ252N-1/2	EXPTZ252P-1/2
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	Angle : 0~355° movement horizontal plane	
	Speed : 6°/sec ± 1° (60Hz), 5°/sec ± 1° (50Hz)	
Tilt	Angle : ± 90° movement in vertical plane	
	Speed : 6°/sec ± 1° (60Hz), 5°/sec ± 1° (50Hz)	
Wiper Angle	Angle : 50°±2° movement	
Input Voltage	110 VAC: EXPTZ252N-1	100 VAC: EXPTZ252P-1
	220 VAC: EXPTZ252N-2	220~240 VAC: EXPTZ252P-2
Power consumption	0.5A, MAX 110W	
Operating Temperature	-10°C ~ 60°C (Recommend -5°C ~ 50°C)	
Weight	Approx. 40 kg	

Specifications

Optical Part

Spec \ Models	EXPTZ252N-1/2	EXPTZ252P-1/2
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))
Effective pixels	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
Lens specifications	x25 (f=3.8~95mm), F1.6 (Wide) ~ F3.7 (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)	
Digital Zoom	OFF ~ x16 Variable (Total x400)	
Sync. System	Internal	
Horizontal Resolution	More than 520 TV lines	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
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)	

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).

3. EXPTZ-SS: **Sun Shield Bracket** for blocking the direct radiant heat so that it can be safer against high temperature.

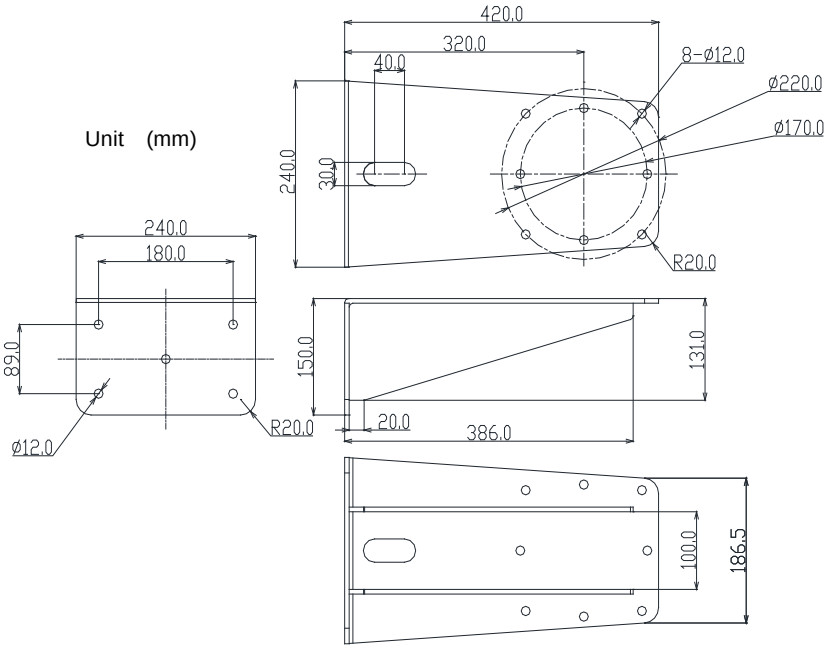
General

	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

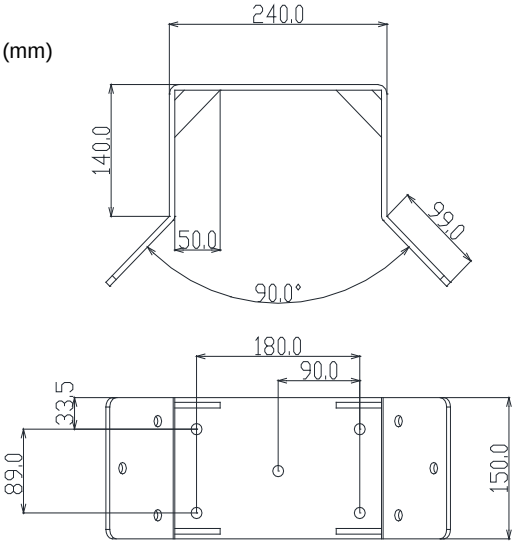
EXPTZ-WL

Unit (mm)



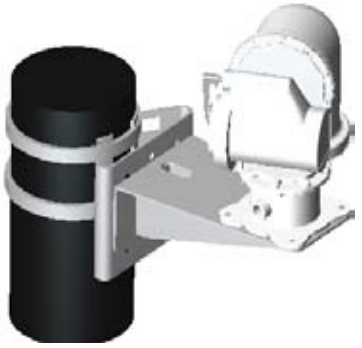
EXPTZ-CN

Unit (mm)

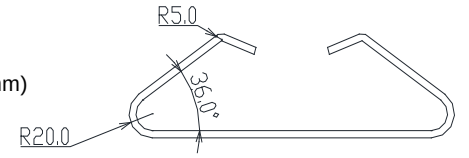


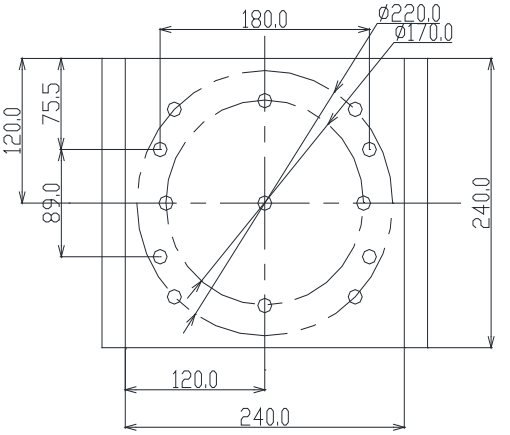
Optional Accessories

EXPTZ-PL

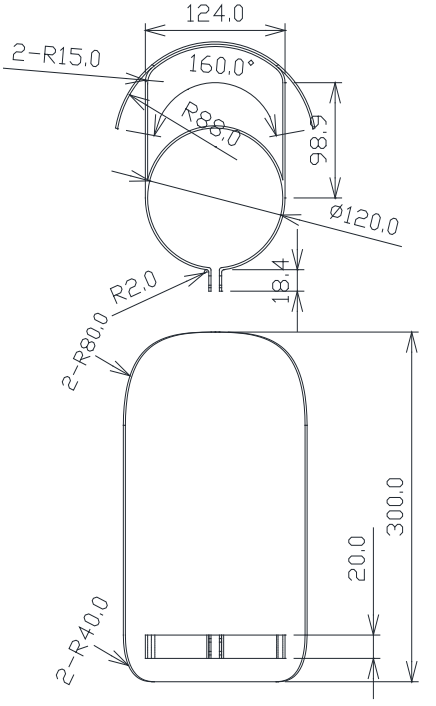


Unit (mm)



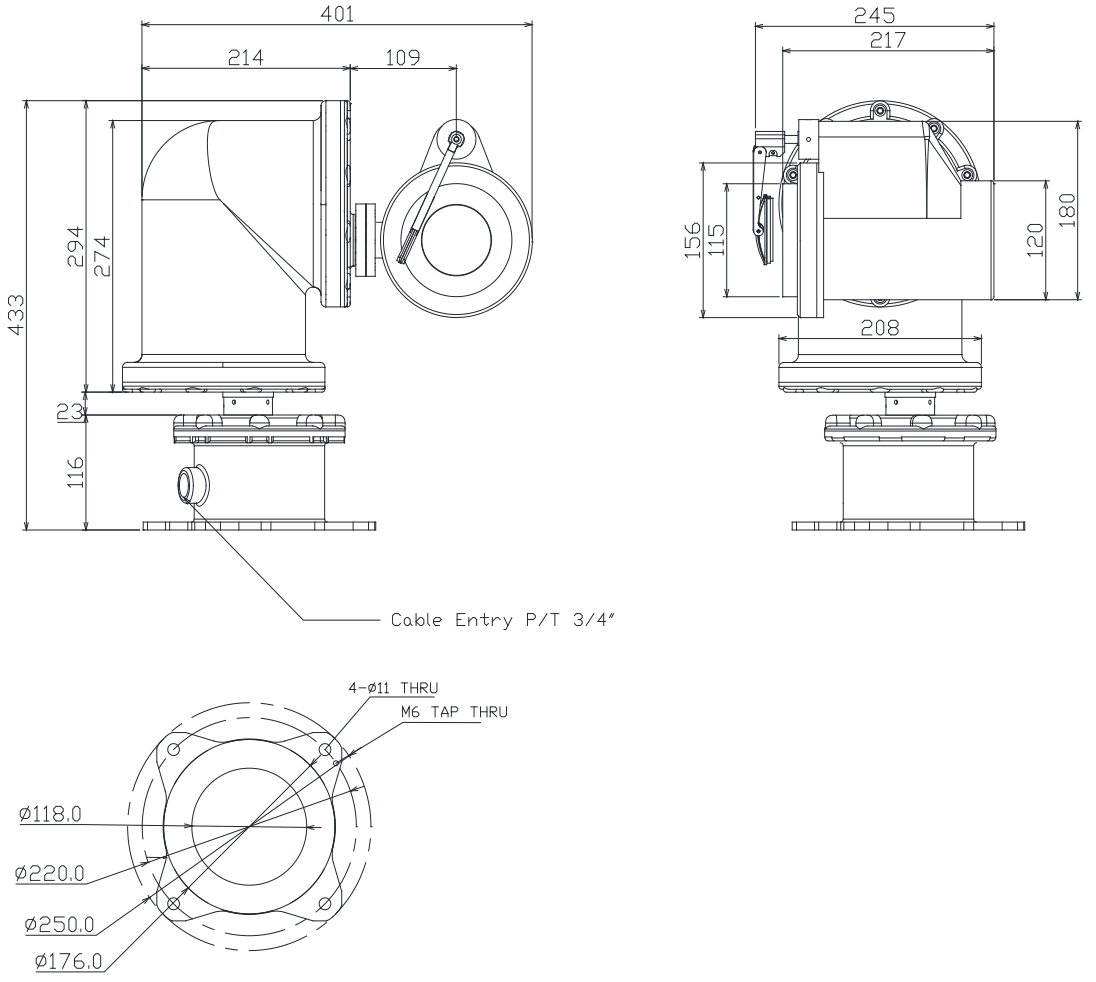


EXPTZ-SS



Dimensions

-. OUTLINE DRAWING



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

Honeywell Security Group.
Honeywell Co., Ltd.

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