

Model# REXT800-1





**Super High Resolution**

**Box Camerawith**

**Enclosure**

*Please read this manual thoroughly before use, and keep it handy for future reference. Design and specifications are subject to change without notice.*

# FCC COMPLIANCE STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**FCC INFORMATION** : This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**CAUTION** : Changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

**CE COMPLIANCE STATEMENT**

**WARNING** : This is a Class A poduct. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

**IMPORTANT SAFETY INSTRUCTIONS**

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.

5.. Do not block any ventilat ion openings. Install in accord ance with the manufacturer`s instructions.

1. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.



1. Only use attachments/accessories specified by the manufacturer.
2. Use only with the ca rt, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.

***9***. ***CAUTION - THESE SERVICING IN STRUCTIONS ARE FOR USE BY QUALIFIED SERVICE PERSONNEL ONLY***. ***TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT PERFORM ANY SERVICING OTHER THAN THAT CONTAINED IN THE OPERATING INSTRUCTIONS UNLESS YOU ARE QUALIFIED TO DO SO***.

***10***. ***Use satisfy clause 2***.***5 of IEC60950***-***1***/***UL 60950***-***1 or Certified***/***Listed Class 2 power source only***.

11. Indoor use only.

# EXPLANATION OF GRAPHICAL SYMBOLS





###### LIMITATION OF LIABILITY

THE INFORMATION IN THIS PUBLICATION IS BELIEVED TO BE ACCURATE IN ALL RESPECTS, HOWEVER, WE CANNOT ASSUME RESPONSIBILITY FOR ANY CONSEQUENCES RESULTING FROM THE USE THEREOF. THE INFORMATION CONTAINED HEREIN IS SUBJECT TO CHANGE WITHOUT NOTICE. REVISIONS OR NEW EDITIONS TO THIS PUBLICATION MAY BE ISSUED TO INCORPORATE SUCH CHANGES.

# TABLE OF CONTENTS

CONTENTS OF PACKAGE 4

INTRODUCTION 5

CAMERA CONNECTION 6 WALL BRAKET MOUNTING 7 CAMERA OVERVIEW 8 MENU MAP 9

CONTROL AND CONNECTIONS/ 20

DAY & NIGHT-IN / ALARM OUT TERMINALS

WIRING DIAGRAM 21 HOUSING KIT SPECIFICATIONS 22 SPECIFICATIONS 23

**CONTENTS OF PACKAGE**

Installation of the camera must be performed by qualified service personnel in accordance with all local and national electrical and mechanical codes.

Carefully remove the color camera and its accessories from the carton and verify that they were not damaged in shipment.

The content of the package includes:

1. CAMERA HOUSING KIT
2. L-wrench (5mm)

 1 EA

L-wrench (2.5mm) 1 EA

1. ANCHOR (5mm) 1 EA
2. This manual 1 EA



The camera provides a high-quality image using SONY Wide Dynamic 1/3” Super-HADII 960H CCD and digital signal processing LSI chips.



1/3" Super-HADII 960H CCD

Super high-resolution of 800TV lines Digital Wide Dynamic Range -ATR-EX

Auto Electronic Shutter [1/50(60) ~ 1/100,000] and manual electronic shutter modes [1/50(60) ~ 1/10,000]

0.1 lux(Colour), 0.01 lux(B/W), 0.001 lux(Slow-Shutter) @ F1.4 Sensitivity Digital Noise Reduction- 2D,3D

Day & Night(Auto, Day, Night)

Sens-Up (~x256)

Various Detection Methods (zone detection, motion trace, face trace, mine area, absent detection, cross object counting, entrance counting)

Intelligent scene recognition - Provide the best image automatically for every scene Mechanical iris auto adjustment

Privacy Mask or Mosaic (MAX. 15 area /4-point polygonal/transparency) E-Zoom

White pixel detection and compensation Digital Effect-FLIP (H/V reverse, inverse)

Defog(Auto) - Detects foggy condition automatically and provides high contrast picture

IR Optimizer

Coaxial communication (Coaxitron by Pelco)

RS-485 Remote camera control(Pelco-D)-Option

Support Line-Lock external synchronization (Line lock) -Option Quick connect for DC lens with 4-pin connector

Operates in 12VDC, 24VAC-Option



**CAMERA CONNECTIONS**

### 2



1

###### Color Lead Wire & Color Display Label



**COLOR**

**WHITE RED**

**DESCRIPTION**

**AC24V AC24V**

|  |  |
| --- | --- |
| **BLUE** | **RS485 -** |
| **BROWN** | **RS485 +** |

**COLOR DESCRIPTION BLACK DC12V**

**WHITE DC12V**

**REMINDER:**

Never aim the camera directly into the sun.

1. **Video :** BNC connector used to connect the camera to a monitor, switcher, etc.

## WALL BRACKET MOUNTING

1. Use fasteners of appropriate size and type to attach the bracket to the wall surface. Position the housing so that it allow for viewing of the selected area.
2. Adjust the movable arm of the wall bracket to attain the desired position.

One it is in place,tighten the bolt located at the pivot point of the movable arm.

1. If you want to pull out the relevant cable, remove the knockout on the wall bracket mounting.



1

2

3

**CAMERA OVERVIEW**

**SIDE VIEW**



120 (4.7)

**FRONT VIEW**



66 (2.6)

1-32UNEF

56 (2.2)

1/4-20UNC



43 (1.7)

##### BOTTOM VIEW

14 ( 0.55)

Unit: mm (inches)

7 (0.27)

##### REAR VIEW



* 1. Left Button



* 1. Up Button
	2. Enter Button
	3. Right Button
	4. Down Button
	5. Power Indicator
	6. Video Out Connector (BNC)
	7. AC/DC Compatible Input Terminal

# MENU MAP

**SETUP MENU**

1/ 2

SCENE SELECT PICT ADJUST EZOOM

DIS

PRIVACY MASK MOTION DET SYS SETTING EXIT

**SCENE SELECT**

CUSTOM FULL AUTO INDOOR OUTDOOR BACKLIGHT ITS

**PICTURE ADJUST**

BRIGHTNESS CONTRAST SHARPNESS HUE

COLOR GAIN

MAG PAN TILT

**EZOOM**

RETURN RETURN

**ADVANCED MENU**

1/ 2

SHUTTER/AGC WHITE BAL HLC/BLC WDR/ATR-EX DNR DAY/NIGHT

IR OPTIMIZER RETURN

**SHUTTER**/**AGC**

AUTO

**WHITE BAL**

ATW

OFF

**ATR-EX**

**DAY/NIGHT**

AUTO

MANUAL FIX

PUSH USER1 USER2 MANUAL PUSH LOCK

ATR-EX

DAY NIGHT

**AUTO SETUP**

AE LEVEL AGC MAX SENS UP

**ATW SETUP**

SPEED DELAY CNT ATW FLAME

ENVIRONMENT

**ATR-EX SETUP**

CONTRAST CLEAR FACE

**D/N AUTO SETUP**

BURST

CNTL SIGNAL DELAY CNT DAY->NIGHT NIGHT->DAY

RETURN

RETURN

RETURN

RETURN

**IR OPTIMIZER SETUP**

MODE IR AREA LEVEL IR LED

COLOR NIGHT

TOP

**IR AREA**

**IR LED**

DAY/NIGHT

**IR SHADE COMP SETUP**

PATTERN

IR SHADE COMP

RETURN

BOTTOM LEFT RIGHT WEGHT

OFF FIX

POSH POSV LEVEL

RETURN RETURN

# MENU MAP

**ADVANCED MENU**

2/ 2

LENS SHD COMP DEFOG

FLK LESS ANTI CR

RETURN

**LENS SHADE**

**COMP SETUP**

PATTERN POSH POSV

**DEFOG SETUP**

LEVEL

**FLK LESS**

AUTO OFF ON

**ANTI CR**

AUTO OFF ON

RETURN

RETURN

**SETUP MENU**

1/ 2

SCENE SELECT PICT ADJUST EZOOM

DIS

PRIVACY MASK MOTION DET SYS SETTING EXIT

**MOTION DET**

DETECT SENSE INTERVAL BLOCK DISP MASK AREA MONITOR AREA

**DIS**

OFF

ON

**PRIVACY MASK**

AREA SEL DISPLY POSITION COLOR TRANSP MOSAIC

RETURN

RETURN

**SYS SETTING**

SYNC MODE LENS

FLIP LCD/CRT

COMMUNICATION CAMERA ID ENTRANCE RETURN

**MONITOR AREA**

AREA SEL AREA MODE TOP BOTTOM LEFT

RIGHT

**AUTO IRIS SETUP**

MODE ADJUST SPEED

**FLIP**

OFF

V H

HV

**COMMUNICATION**

PROTOCOL ADDRESS BAUDRATE DATABIT PARITY STOPBIT

RETURN

RETURN

RETURN

RETURN

**MENU MAP**

**SETUP MENU**

2/ 2

LANGUAGE VERSION MAINTENANCE EXIT

**LANGUAGE**

ENGLISH ESPANOL PYCCKNN PORTUGUES DEUTSCH FRANCAIS

日本語

RETURN

**MAINTENANCE**

W.PIX MASK CAMERA RESET

RETURN

**AUTO COMP**

LEVEL1 LEVEL2 AUTO

**MANUAL COMP**

REGISTRATION REG.POINT CUSOR COLOR BLINK REG.NUMBER

**W.PIX MASK**

AUTO

DATA CLEAR MANUAL

RETURN

RETURN

#### <SETUP MENU>

###### Scene Select function

The six modes can be selected.

CUSTOM /FULL AUTO / INDOOR / OUTDOOR / BACK LIGHT / ITS

###### CUSTOM

This mode turns off the auto scene recognition. All functions can be set and adjusted manually

###### FULL AUTO

This mode supports various shooting scenes. It is not specialized to any particular scene, so it allows average shooting in any situation.

###### INDOOR

This mode is specialized to indoor scenes, such as indoor shop surveillance. It allows natural shooting with high contrast.

###### OUTDOOR

This mode is specialized to outdoor scenes, such as road surveillance. It features high contrast and resolution, and allows shooting with high visibility even in foggy outdoor conditions.

###### BACKLIGHT

This mode is specialized to scenes that mix indoor and outdoor conditions, such as entranceway surveillance.

It allows shooting with high visibility and a high dynamic range, even under backlighting conditions.

###### ITS

This mode is specialized to scenes where moving subjects enter the picture, such as traffic surveillance scenes. It allows high-resolution shooting of moving subjects with low blur.

###### Scene Select function

This Camera system provide functions that enable users to easily adjust the image quality to suit the image output device used.

**Brightness** - Adjusts the brightness

**Contrast** - Adjusts the image contrast (light and shade differences).

**Sharpness** - Adjusts the apparent resolution

**Hue** - Adjusts the hue

**Color Gain** - Adjusts the intensity (brilliance) of the colors

1. **EZOOM (Electronic Zoom) EZoom** - ON / OFF

**MAG** - Magnification rate = ZOOM (0~255)

**PAN** - Horizontal position settings

**TILT** -Vertical position settings

###### DIS (Digital Image Stabilizer)

Digital Image Stabilizer (DIS) function internally detects shaking of the image due to camera shaking, and performs digital compensation processing inside the DSP to suppress this shaking and stabilize the image output.

###### PRIVACY MASK

The mask function hides one or more areas which the user does not want to be displayed on the screen. This SET is capable of outputting 15 masks to the display. Each of these 15 masks can be set with its own display area, color, darkness and mosaic processing.

**AREA SEL** - Select mask area (1-15). **DISPLAY** - Mask to ON or OFF **POSITION**

**COLOR** - Sets the color blend:

RED/ GREEN/ BLUE/ YELLOW/ CYAN/ MAGENTA/ WHITE/ BLACK

**TRANSP** - Sets the brightness blend ratio: 0%, /50%/75%/100%

**MOSAIC** - Sets the mosaic to ON or OFF.

###### MOTION DET (Motion Detection)

By using the motion detection function, it is possible to create surveillance cameras which are capable of detecting moving objects. The motion detection function identifies motion and outputs motion information when the difference in brightness exceeds a specific level between frames(2VD).

###### DETECT SENSE

Sets the motion detection threshold.

###### INTERVAL

Sets the MD detection interval. Subjects are detected when an interval exceeding the set number of fields has elapsed from the previous motion detection.

###### BLOCK DISP

Motion detection result frame display selection

Outputs the results of the motion detected in each block

###### MASK AREA

MD (Motion Detection) setting menu, for setting the no-detection area.

The active point (MASK AREA 1~96) is displayed. Move the point with 4-arrow keys. Press [ENTER] key is to finish edit point. (No-detection area)

###### MONITOR AREA

Sets the position of the monitoring frames in pixel or line increments

###### SYS SETTING

**7-1. SYNC MODE (OPTION)**

External synchronization is a function with synchronization of the phase between an output video signal and an external reference signal. Use line lock mode to minimize color rolling.

###### INT

In this mode, synchronization is not implemented with a multiple number of cameras.

###### LL

In this mode, PLL is used to synchronize the vertical sync signal with the AC power supply with a power line frequency of 60 Hz (for the NTSC format) or 50 Hz (for the PAL format).

**PHASE** -External synchronization phase adjustment.(LL)

***Note:*** LLC can only be used when AC power is used.

LL of DC power input state, IC operates internally(INT).

###### 7-2. LENS

Set the lens type

**AUTO** Select the Lens DC Iris type

**Manual** Select the Lens Manual type

###### 7-2-1. MODE

**AUTO** This mode controls the iris in accordance with the subject brightness.

**OPEN** This mode fully opens the iris.

**CLOSE** This mode fully closes the iris.

###### 7-2-2. ADJUST

When performing the automatic mechanical iris adjustments, the convergence speed which is suitable for the lens installed is calculated, Shoot a high-brightness subject which will make the brightness of the whole screen uniform.

-Check that the shooting conditions are sufficiently bright and stable.

###### 7-2-3. SPEED

Sets the convergence speed.

###### 7-3. FLIP

Select digital Flip / Rotate state

Off / V(Top / bottom reversal) / H(Left / right reversal) / HV(Rotation by 180 degrees)

###### 7-4. LCD / CRT

Seclect Monitor mode.

###### 7-5. COMMUNICATION (OPTION)

Communication using the RS-485 format.(Option) Press the Enter button to access the Communication. **Protocol** - RS-485 protocol. (PELCO-D)

**ADDRESS** - Select the camera ID. (001 - 255)

**Baud Rate** - Select serial communication speed. (2400 / 4800 / 9600 / 19200)

***Note.*** Key of Keyboard Controller

**MENU** Joystick Handle turn clockwise , ZOOM TELE **ENTER** Joystick Handle turn clockwise, IRIS CLOSE **OSD Cursor Movement** Joystick Up / Down / Left / Right

###### 7-6. CAMERA ID

CAMERA ID SETUP.

**CAMERA ID SETUP**

CAMERA ID

ABCDEFGHIJKLMNOPQRSTUVWXYZ 0123456789`~!@#$%^&\*()-\_=+<,>.?/;:’”

CLR POS

RETURN

Sets the camera ID to ON or OFF. A title of 64 Characters per line can be applied.

Use the joystick to navigate the cursor.

Pushing centrally on the joystick will allow selection of that character.

The arrows at the bottom allow you to move the cursor without changing the character.

###### CLR

Inserts a space

###### POS

Allows you adjust the location of the camera ID title display. (if you move too much right side or down, it might lose ID on the screen)

###### EXIT-MENU

**SAVE** Save the settings (settings are saved)

**NOT SAVE** Exit

Menu without saving SAVE : Exit menu without saving.

**CANCEL** Changes (restore settings to those selected when the menu was displayed)

**BACK** Return to previous menu

**RETURN** Return to page on the hierarchical level immediately before.

###### LANGUAGE

LANGUAGE select between:

English, Spanish, Russian, Portuguese, German, French, Japanese.

###### VERSION

Camera version information.

###### MAINTENANCE W.PIX MASK

White pixel compensation menu. The white pixel detection and compensation function can

automatically detect and compensate up to 64 white pixels.(Static detection)

###### AUTO

This mode performs the optimal operation for detecting white pixels, and automatically detects the white pixels of CCD image sensors.

**LEVEL1** - Normal Defect

The threshold adjustment of the white pixel detection

**LEVEL2** - Large Defect

The threshold adjustment of the very large white pixel detection

**AUTO** Press Enter button to turn White Pixel Compensation mode Start.

**RUN** Press Enter button to start White Pixel Compensation start.

**RUNNING** Process to find white pixel.

**SBC SUCCESS** Process ended.

###### MANUAL

* **REGISTRATION**

Manual white pixel defect information registration

* 1. Press the Enter button to turn White pixel compensation position marker display.
	2. Use the Arrow buttons align the marker with the position of the white pixel.
	3. Press the Enter button to exit and Press the EXIT button to save.

***Note*** *:* In manual detection mode, the detection data is always treated as a very large white pixel. Up to 64 white pixel compensation.

###### NEXT REGISTRATION

Continue with manual white pixel compensation settings

###### REG.POINT

Selects whether to display the registered White or Black pixels

###### CURSOR COLOR

Cursor color during manual defect registration

###### BLINK

Cursor display blinking during manual defect registration

###### REG.NUMBER

Registered white pixel defect count display

###### DATA CLEAR

Initializes the white pixel compensation information

Select erasing white pixel function to press Enter button (YES)

#### <ADVANCED MENU>

###### SHUTTER / AGC

AEME (Auto Exposure / Manual Exposure) selection, shutter / AGC

This type of control adjusts the exposure amount using the shutter speed.

###### 12-1. AUTO

Exposure control is performed automatically.

###### AE LEVEL (Auto Exposure Lebel)

AE performs exposure control so that the OPD output level (evaluation value) is the target brightness level (AE reference level). This control is called AE gain control.

###### AGC MAX

Maximum gain setting item in shutter priority mode AGC (Auto Gain Control)

This type of control adjusts the exposure amount during CCD signal input by applying AFE gain

###### SENS UP (Slow Shutter)

Low-brightness sensitivity enhancement menu Select maximum Slow-Shutter (AUTO and Off)

###### 12-2. MANUAL

Exposure control is performed manually.

###### 12-3. FIX

Exposure control is stopped. AE does not track even if the subject brightness changes.

###### WHITE BAL

Compensates for deviations in the white colour caused by changes in the colour temperature of the light source so that the colours are reproduced correctly.

**ATW** - ATW mode (1800ºK ~10500ºK)

Performs indoor / outdoor identification, estimates the light source, and performs WB control automatically.

###### Push (Full pull-in)

This control is resistant to the effects of deeply colored subjects. The PUSH function performs WB control automatically regardless of the indoor/outdoor and light source conditions. Compensation may be performed incorrectly since this control is easily affected by deeply colored subjects.

###### USER1

The USER1 functions set the WB gain in accordance with preset values. (3200ºK) WB control does not track even if the subject color temperature changes.

Adjust red or blue gain.

R(R-GAIN):Adjust R-GAIN value (0-255) B(B-GAIN):Adjust B-GAIN value (0-255)

###### USER2

The USER2 functions set the WB gain in accordance with preset values. (5800ºK) WB control does not track even if the subject color temperature changes.

Adjust red or blue gain.

R(R-GAIN):Adjust R-GAIN value (0-255) B(B-GAIN):Adjust B-GAIN value (0-255)

###### MANUAL

MWB allows WB control to be performed manually following the black body radiation curve. The configurable color temperature setting range is 1500K to 15000K. The setting can be performed in 64 steps.

###### PUSH LOCK

Holds the all pull-in frame The **PUSH LOCK** function first transfers to PUSH mode and performs pull-in operation, and then transfers to HOLD mode when pull-in is complete.

###### HLC / BLC

**HLC (Highlight Compensation)**

HLC luminance signal processing is a function that suppresses or masks the luminance signal. It reduces the load on watchers' eyes and enhances visibility impaired by strong light sources or other factors by performing output while suppressing the brightness of high-brightness areas.

**CLIP LEVEL** HLC mask level

###### BLC (Backlight Compensation)

The BLC function provides compensation by increasing the brightness of the overall screen so that subjects being shot with a loss of dark detail due to backlight will have just the right brightness level.

###### 15.WDR/ATR-EX

**CONTRAST(LOW/MID/HIGH)** Contrast adjustment gain

**CLEAR FACE(OFF/ LOW/MID/HIGH)** High-frequency component adjustment gain

###### ATR-EX(Extended)

The ATR function provides gradation compensation with the aim of improving visibility. It compensates to the optimum gradation on the basis of the luminance information.

This function compresses the dynamic range while storing the contrast component of the subject.

###### WDR(Wide Dynamic Range)-Option

When users shoot subjects which exceed the dynamic range of the CCD image sensor, parts of the subjects suffer from loss of dark detail (blocked up shadows) or overexposure (blown out highlights). The Wide Dynamic Range (WDR) function ensures that when images are shot under conditions such as these, images free from loss of dark detail or overexposure are output.

###### DNR

Used to reduce image noise in order to improve the image quality of the camera.

It reduces the noise which is generated under low-light conditions and other high-gain states.

**LEVEL** Adjusts the NR (3D+2D) strength (0~6)

###### DAY/NIGHT 17-1 AUTO

Camera automatically switches between Day&Night modes according to the D>N & N>D levels.

**BURST** : Select B/W Burst On/Off

###### CNTL SIGNAL

Selection of brightness reference for identifying Day/Night Control Signal.

**INT** ILM levels

**EXT1** external sensor inverting.

**EXT2** external sensor non-inverting.

Ext : Camera switches between Day & Night modes according to the D/N EXT input. (ILM level or GPI Cable)

**Delay CNT** : Adjust the judgment time for the transition between the Day and Night. (0-255).

**DAY>NIGHT Level** : Select switching level Day to Night (0-255). **NIGHT>DAY Level** : Select switching level Night to Day (0-255) **Day** : Camera stays in Day mode (Color)

**Night** : Camera stays in Night mode (B/W)

1. **IR OPTIMIZER (OPTION)**

If, when the Night operation mode of the Day/Night function is established, the mode is used together with an external infrared LED light source, excessive front lighting may be generated, resulting in overexposure.

###### 18-1. IR OPTIMIZER SETUP

**MODE(IR Model only)**

IR optimizer photometry mode selection

###### IR AREA

IR optimizer judgment area setting menu in spot photometry mode

###### LEVEL

IR optimizer intensity(0~12)

###### IR LED(IR Model only)

**OFF** LED light level is LOW

**FIX** Adjust LED light level (0~255).

**DAY/NIGHT** LED light level determinate AE reference level

###### COLOR NIGHT

The Color Night Mode (CNM) function allows images to be taken as color images even with infrared LED floodlighting under low-brightness conditions.

This Camera System feature a function that achieves both improved sensitivity and the ability to reproduce colors under infrared LED floodlighting using signal processing that separates the infrared LED light components from the images taken and extracts the original colors of the subject. This function takes effect during Night operations.

**COLOR GAIN** LOW/MID/HIGH

###### IR SHADE COMP (IR Model only)

The IR-SHD function compensates for observable events in which the light passing through the lens is imaged non-uniformly.

Shading function ON/OFF selection

###### PATTERN

Selects the shape of the ellipse (HIGH/MID/LOW)

###### POSH / POSV

Use the center coordinate settings to adjust the shading compensation to the center position of the optical axis.

###### LEVEL

The compensation level can be set to low, medium or high for basic shading compensation data.

###### LENS SHD COMP

The LENS SHD function compensates the lens is imaged non-uniformly.

###### PATTERN

Selects the shape of the ellipse (HIGH/MID/LOW)

###### POSH / POSV

Use the center coordinate settings to adjust the shading compensation to the center position of the optical axis.

###### DEFOG

Defoging function ON/OFF selection. The defog function raises the contrast to improve visibility. For example, in foggy conditions, contrast is reduced and visibility drops. In such cases, enabling the defog function prevents a drop in contrast. In addition to compensating for contrast, compensation is also made for the saturation, edges, and 3D-NR moving body identification threshold. The defog compensation strength can be set to three levels (Low, Mid, High) using the Auto function.

###### FLK LESS

Flickerless function ON/OFF selection

###### MODE

**GAIN CNTL** Selects gain modulation ON.

**SHUTTER FIX** Selects flickerless shutter fix ON.

###### 21. ANTI CR (Anti color-rolling)

Anti color-rolling mode is valid when the AEME parameter is set to AE. When the parameter is set to HOLD, the status of the previous field is maintained.

Users can select from the following anti color-rolling modes.

**AUTO** Anti color-rolling is automatically detect and compensate

**ON** Anti color-rolling is always compensate

**OFF** Anti color-rolling is not compensate

When the Auto anti color-rolling mode is selected, then the auto flickerless mode is turned on at the same time.

# CONTROL AND CONNECTIONS/

**DAY & NIGHT-IN / ALARM OUT TERMINALS**

###### Terminal Block





GND

**1-1. DAY&NIGHT EXTERNAL INPUT (1pin)**

Switches the cameras D/N mode to either Day or Night based on the input status. Refer to the diagram below. The cameras D/N mode must be set to EXT for this to function.

Open contact: DAY Close contact: NIGHT



###### 1-2. Common/Ground – Used for D/N and Alarm connections

**1-3. ALARM OUT** - TTL level

Motion detection signals are output through this port. Active state is Low.(GND) Normal : Open Collector, ALARM : Low.(GND)

###### 1-4/5. CAMERA CONTROL





1. **POWER INPUT TERMINAL**





(Option)

~ AC 24V ~

In DC power, use the Adapter mode than DC 12V 500mA Capacity.

###### VIDEO OUT CONNECTOR

BNC : This BNC connector provides a 1.0Vp-p/75 ohms composite video Signal.

# WIRING DIAGRAM

##### \* HEATER AND BLOWER

****

24Vdc Out to Blower

(B+)

(Ground)

J6

J3

Ground 24Vac Power

Supply Output

Ground

24Vac Power Supply Input

J1

24Vac Out to Heater

J4

J5

24 Vac





|  |  |  |
| --- | --- | --- |
| **Blower** | **Hea** | **ter** |
|  | 24 Vac |  | 24 Vac |
|  | 3.4W |  | 20W |
|  | t C > 35 C +/-3 C T F > 95 F +/-5 F |  | t C < 5 C +/- 3 C T F < 41 F +/- 5 F |
|  | t C < 20 C +/-3 C |  | t C > 15 C +/- 3 C |

# HOUSING KIT SPECIFICATIONS

Camera Housing Window Size 2.5" W x 2.3" H (6.4cm x 5.9cm) Camera Housing Construction Die-cast, extruded, and sheet aluminum

Camera Housing Finish Light-gray ployester powder coat

Wall Bracket Pan Adjustment 360

Wall Bracket Tilt Adjustment 70

Wall Bracket Locking Method 4 holes for fasteners of a suitable size & type.

Mount to a secure solid surface.

Total Dimension(WxHxL) 5.5" W x 9.68" H x 20.5" D (14cm x 24.6cm x 52.02cm)

Total Weight 9.15Ib( 4.15kg)

Unit: inch(cm)



5.5(14)

 2.5(6.4)

2.3(5.9)

9.68(24.6)



20.5(52.02)

# SPECIFICATIONS

(Option) AC24V / DC12V- 200mA(2.3Watts)







































DC12V - 180mA(2.1Watts) 1/3" Super-HADII 960H CCD

Effective pixels

1028(H)x508(V)

976(H)x494(V)

1028(H)x596(V)

976(H)x582(V)

0.01

/ Line Lock(Option) 800 TVL

, 0.001Lux(Slow-shutter)

Tact Switch, Coaxial COMM(32BIT),RS485(Pelco D)

Lens DC / MANUAL

Scene Select CUSTOM / FULL AUTO / INDOOR / OUTDOOR / BACKLIGHT / ITS

White Balance ATW/ PUSH/ USER1/ USER2/ MANUAL/ PUSH LOCK

6~44.8DB

Shutter Speed

1/60-1/100,000 sec.(Auto)

1/50-1/100,000 sec.(Auto)

BLC OFF / HLC / BLC

Camera Title

Alpha Numeric

DNR 2DNR, 3DNR : Gain Adjust

Auto / Day / Night

IR Optimizer OFF / ON

Color Night OFF / ON

Privacy zone Max 15 (Tilt, Colour, Transparency, Mosaic)

Effect V-Flip / Mirror / Rotation / Nega&Posi / Freeze / Sharpness Sens-up OFF / AUTO

Sharpness 0~15 steps

D.WDR

E-Zoom Bad Pixel

MOTION

ATR-EX (LOW/MID/HIGH)

OFF / 0 ~ x255(E-Zoom) / PAN/TILT

AUTO/MANUAL/Done (Max 64 point), Detected pixel display Detect Sense/Interval/Block DISP/Mask Area/Monitor Area

Auto-color-roling Auto / ON / OFF

English, Spanish., Russian, Portuguese, German, French, Japanese(OPTION)

LANGUAGE

Terminal block

.

260g(only camera)

5030XXXXA