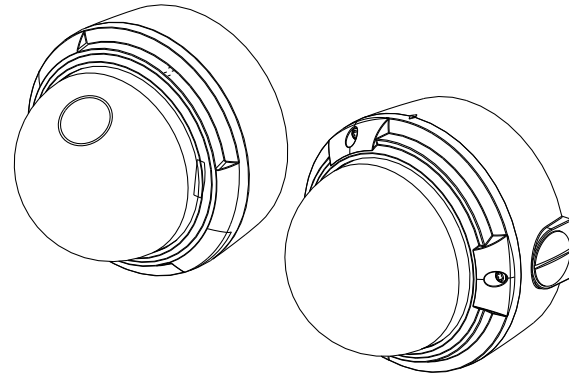


Ultra Resolution Day & Night IR Dome Camera



Ultra Resolution Day & Night IR Dome Camera

www.digimerge.com
V1.00

Vandal Model: DPV24DLR

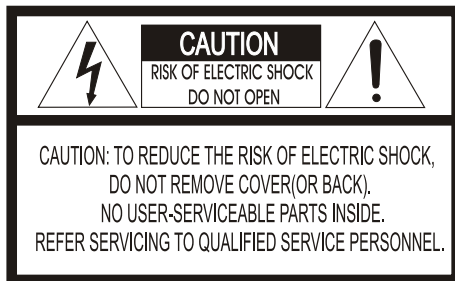
Indoor Model: DPD24DLR

Please read this manual thoroughly before use and keep it handy for future reference.

WARNINGS AND CAUTIONS:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE. DO NOT INSERT ANY METALLIC OBJECTS THROUGH THE VENTILATION GRILLS OR OTHER OPENINGS ON THE EQUIPMENT.

CAUTION:



EXPLANATION OF GRAPHICAL SYMBOLS



The lightning flash with arrowhead symbol, within an equilateral triangle, 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.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

PRECAUTIONS

Safety -----

Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by the qualified personnel before operating it any further.

Unplug the unit from the wall outlet if it is not going to be used for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.

Height and vertical linearity controls located at the rear panel are for special adjustments by qualified personnel only.

Installation -----

Do not install the unit in an extremely hot or humid place or in a place subject to excessive dust, mechanical vibration.

The unit is not designed to be waterproof. Exposure to rain or water may damage the unit.

Cleaning -----

Clean the unit with a slightly damp soft cloth. Use a mild household detergent. Never use strong solvents such as thinner or benzene as they might damage the finish of the unit.

Retain the original carton and packing materials for safe transport of this unit in the future.

FCC COMPLIANCE STATEMENT

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.

THIS CLASS A DIGITAL APPARATUS COMPLIES WITH CANADIAN ICES-003.

CET APPAREIL NUMÉRIQUE DE LA CLASSE A EST CONFORME À LA NORME NMB-003 DU CANADA.

CE COMPLIANCE STATEMENT

WARNING

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

IMPORTANT SAFEGUARDS

1. READ AND RETAIN INSTRUCTIONS

Read the instruction manual before operating the equipment. Retain the manual for future reference.

2. CLEANING

Turn the unit off and unplug from the power outlet before cleaning. Use a damp cloth for cleaning. Do not use harsh cleansers or aerosol cleansers.

3. ATTACHMENTS

Do not use attachments unless recommended by manufacturer as they may affect the functionality of the unit and result in the risk of fire, electric shock or injury.

4. MOISTURE

Do not use equipment near water or other liquids.

5. ACCESSORIES

Equipment should be installed in a safe, stable location. Any wall or shelf mounting accessory equipment should be installed using the manufacturer's Instructions. Care should be used when moving heavy equipment. Quick stops, excessive force, and uneven surfaces may cause the equipment to fall causing serious injury to persons and objects.

6. VENTILATION

Openings in the equipment, if any, are provided for ventilation to ensure reliable operation of the unit and to protect it from overheating. These openings must not be blocked or covered.

7. POWER SOURCES

The equipment should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied at the installation location, contact your dealer. For equipment designed to operate from battery power, refer to the operating instructions.

8. GROUNDING OR POLARIZATION

Equipment that is powered through a polarized plug (a plug with one blade wider than the other) will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. Do not defeat the safety purpose of the polarized plug.

Alternate Warning: If the equipment is powered through a three-way grounding-type plug, a plug having a third (grounding) pin, the plug will only fit into a grounding-type power outlet. This is a safety feature. Do not defeat the safety purpose of the grounding-type plug. If your outlet does not have the grounding plug receptacle, contact your local electrician.

9. CORD AND CABLE PROTECTION

Route power cords and cables in a manner to protect them from damage by being walked on or pinched by items placed upon or against them.

10. LIGHTNING

For protection of the equipment during a lightning storm or when it is left unattended and unused for long periods of time, unplug the unit from the wall outlet. Disconnect any antennas or cable systems

that may be connected to the equipment. This will prevent damage to the equipment due to lightning or power-line surges.

11. OVERLOADING

Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

12. SERVICING

Do not attempt to service the video monitor or equipment yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

13. DAMAGE REQUIRING SERVICE

Unplug the equipment from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- A. When the power supply cord or the plug has been damaged.
- B. If liquid has spilled or objects have fallen into the Unit.
- C. If the equipment has been exposed to water or other liquids.
- D. If the equipment does not operate normally by following the operating instructions, adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage to the unit.
- E. If the equipment has been dropped or the casing Damaged.
- F. When the equipment exhibits a distinct change in performance.

14. REPLACEMENT PARTS

When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

15. SAFETY CHECK

Upon completion of any service or repairs to the equipment, ask the service technician to perform safety checks to verify that the equipment is in proper operating condition.

16. FIELD INSTALLATION

The installation of equipment should be made by a qualified service person and should conform to all local codes.

17. CAUTION-these servicing instructions 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.

17-1 Regulated Class 2 power source only.

17-2 Do NOT use power source other than that specified.

INTRODUCTION

Features

All Models Feature:

- 1/3" Sony EX-View™ II 960H
- 2.8-12mm Varifocal Day/Night Lens F1.4 DC Iris
- 700+ TV lines of resolution
- Advanced Digital Noise Reduction (DNR)
- Shadow Reduction (ATR)
- Smart-IR Night Vision
- OSD menu control
- Privacy Masking / Motion Detection
- VIDEO OUT(BNC)
- Operates in 12VDC or 24VAC
- Test Monitor Output (RCA)
- 0 Lux with IR LED

DPD24DLR

- Indoor Dome Model
- Camera Mounting: Surface / Semi-Flush Mount

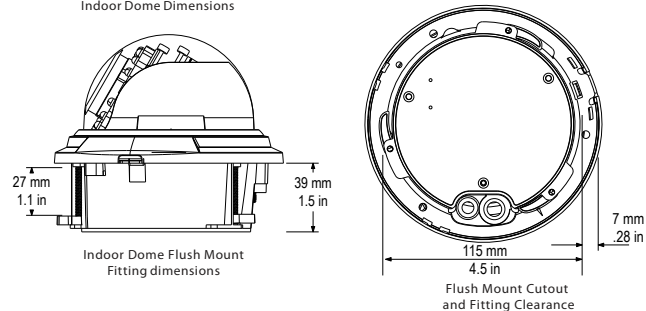
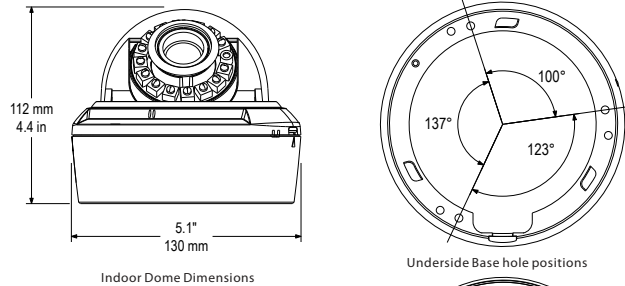
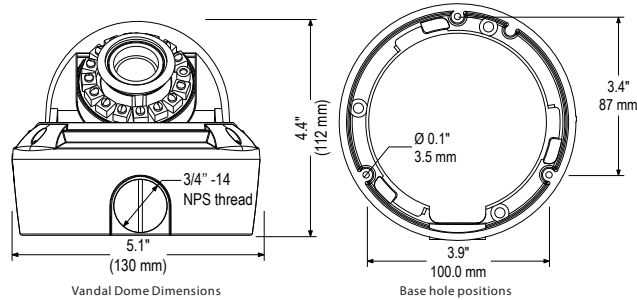
DPV24DLR

- Vandal Dome Model
- IP66 Weatherproof and IK10 Vandal-proof
- Camera Mounting: Surface Mount

SPECIFICATIONS

General	DPD24DL	DPV24DL
Power source	DC 12V / AC 24V ±10%	
Power consumption	6.6Watt Max	
Minimum Power Requirement	560mA	
Image sensor	1/3" Sony EX-View™ II 960H	
Total pixels	976 (H) x 494 (V)	
Scanning system	2:1 interface	
Scanning frequency	15.734KHz(H), 59.95Hz(V)	
Sync.system	Internal / Line Lock	
Resolution	700+ TV Lines	
Min.illumination	0 Lux IR LED On	
Video output	1.0 Vp-p (75 ohm, composite)	
S/N Ratio	more than 54dB (AGC OFF)	
Power input	2-Pin terminal block (Detachable)	
Video output	BNC Connector (2nd video RCA)	
Lens mount	Fixed mount	
Lens	2.8 - 12mm F1.4 Varifocal DC Auto iris	
Operating temperature	-10~50°C	
Operating humidity	0-90% (non-condensing)	

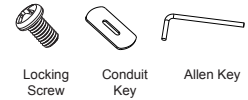
MEASUREMENTS



PACKING CONTENTS

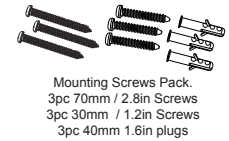
Indoor Dome package contains the following:

Camera in housing	1
Camera Locking screws (PA3 Type)	2
Instruction guide (This Document)	1
Surface & Flush Mounting Templates	2
RCA - BNC test cable	1
Junction Box Plate	1
Mounting screw pack	1



Vandal Dome package contains the following:

Camera in housing	1
Camera Locking screws (PM4 Type)	3
Instruction guide (This Document)	1
Surface Mounting Template	1
RCA - BNC test cable	1
Junction Box Plate	1
Mounting screw pack	1
Tamper allen key	1
Conduit Key	1

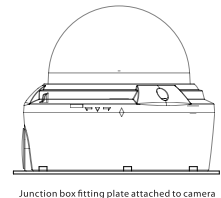
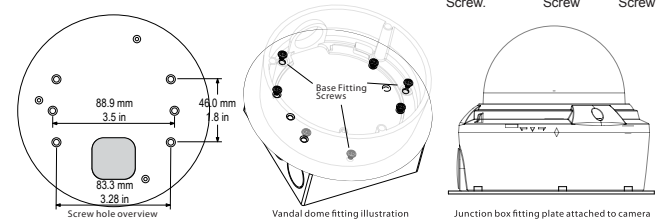
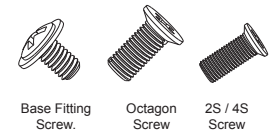


JUNCTION BOX PLATE

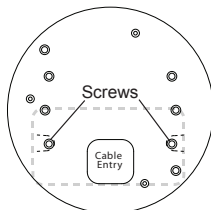
Junction box plate allows fitting of either Vandal dome or Indoor dome to standard 2S, 4S and Octagon junction boxes.

Junction Box fitting plate accessories:

Junction Box Fitting plate	1
2S / 4S plate screws (KM3.5 Type)	4
Octagon fitting screws (KM4 Type)	2
Base Fitting Screws PWM3	3



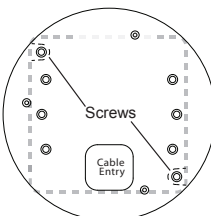
JUNCTION BOX INSTALLATION TYPES



2S FITTING

- a. 2S Fitting requires only 2pcs of 2S/4S screws.

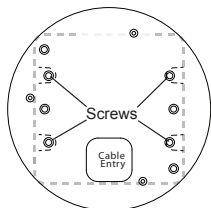
Note: You have a reduced space in which to hide cables using this type of installation. Recommended for indoor dome only.



4S FITTING

- a. 4S Fitting requires 2pcs of 2S/4S screws.

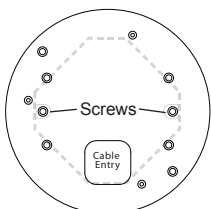
Note: Suitable for both indoor and vandal domes.



TWO GANG FITTING

- a. Two gang fitting (switch box) requires 4pcs of 2S/4S screws.

Note: A two gang provides the most robust fitting. Suitable for both indoor and vandal domes.



OCTAGON FITTING

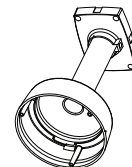
- a. 4" Octagon fitting requires only 2pcs of Octagon screws.

Note: Screws used for the octagon fitting are larger compared to those used for the 2S/4S (M4 type). Suitable for both indoor and vandal domes

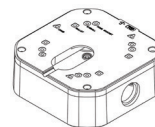
VANDAL DOME FITTINGS



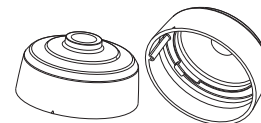
Wall Mount - model # MNTV2XW



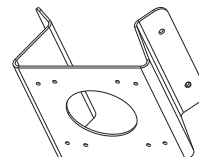
Pendant Mount - model # MNTV2XC



Junction Box Mount - model # MNTV2XB
Mount for either Vandal or Indoor Dome.
Can also mount MNTV2XC or MNTV2XW.



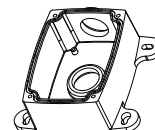
Pendant Cap - model # MNTV2XPC
Replaces the need for the camera base.
Compatible with ceiling conduit installations.



Corner Mount bracket - model # MNTV2XR
Can fit either MNTV2XW or MNTV2XJ.

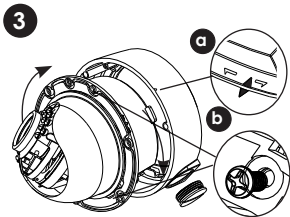
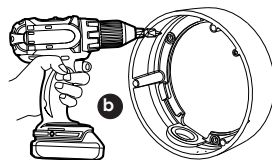
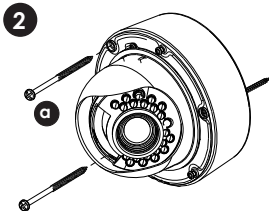
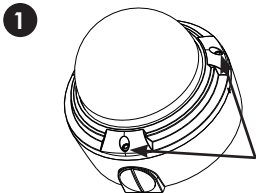


Pole Mount - model # MNTV2XP
Can fit either MNTV2XW or MNTV2XJ.



Junction Box Attachment for
MNTV2XW & MNTV2XC - model # MNTV2XJ
Fits either wall mount and ceiling mount.
Symmetrical design - reversible for top or bottom conduit.

INSTALLATION. VANDAL DOME



ATTENTION - If using DC power, follow the correct polarity as marked on the power cable.

1) Loosen the three tamper screws using the provided allen key. Lift the dome cover.

Note: If you plan to use conduit fitting, remove conduit cap using the provided conduit key.



Method 1 - Direct Attach Install

2a) Use the included mounting template (Installation Option 2) to mark and pre-drill the required holes. Remove 2 of the 3 base locking screws. Use 2pc of the 2.8" screws to mount the camera directly to the mounting surface.

Remove the 3rd base locking screw and install the 3rd 2.8" screw.

Go to step **4** on page 7 to complete installation.
OR

Method 2 - Camera Base Install

2b) Use the included mounting template (Installation Option 1) to mark and pre-drill the required holes. Remove the camera base by unscrewing the 3 base locking screws, and turn camera module approx. 5 degrees counter-clockwise to detach camera base from the camera module. Install the base to the correct holes as indicated on the mount template using the 1.2" screws. Go to step 3a.

Method 3 - Junction Box Install

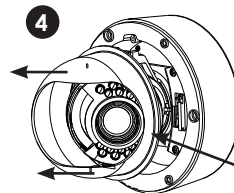
2c) Attach provided fitting plate to junction box (see page 4 for details). Remove the camera base by unscrewing the 3 base locking screws, and turn the camera module approx. 5 degrees counter-clockwise to detach camera base from camera module. Install the base to the junction box using the base attachment screws. Go to step 3a.

3a) Reinsert camera module into camera base by aligning the arrow notches on the edge of the camera module and the camera base (label on edge of camera module indicates the location of the arrow notch), and turning camera module clockwise to lock into place.

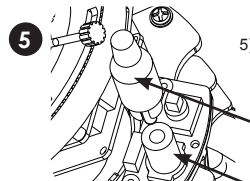
3b) Use the 3 base locking screws to secure camera base to camera module.

Go to step **4** on page 7 to complete installation.

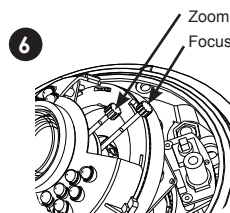
INSTALLATION. VANDAL DOME



4) Remove camera cover by squeezing the back and front of the cover (as indicated by the arrow indicators) at the same time and lifting it up and away from the lens.

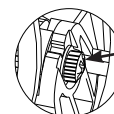


5) Insert the included video test cable into the RCA jack and connect to a test monitor to set up camera.



Video test cable

RCA Jack



Thumb Screw

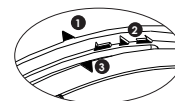
6a) Adjust camera viewing angle and secure into place by tightening thumb screw using a flat head screwdriver.

Note: Lens adjustment levers are by default in the locked position. Turn counter clockwise to unlock. Tighten levers to secure lens setting.

6b) Adjust lens and OSD as required.

6c) Re-attach the camera cover, using the thumb screw as a guide, until it snaps into place.

7a) Re-attach the dome cover. Align arrows according to the diagram below to ensure a weatherproof seal.



1 Arrow on camera base

2 Arrow on camera module (inside camera)

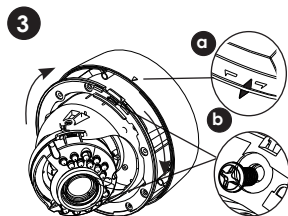
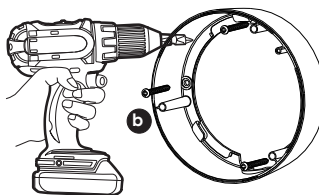
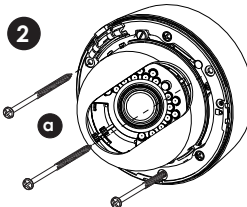
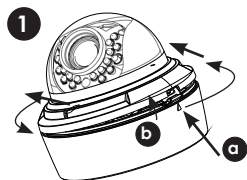
3 Arrow on dome cover.

Correct arrow alignment

7b) Use the allen key to tighten the tamper screws.

Note: Make sure dome cover cord does not get caught in the rubber seal.

INSTALLATION. INDOOR DOME (Surface Mounting)



ATTENTION - If using DC power, follow the correct polarity as marked on the power cable.

- 1a) Press down on the tab marked with an arrow to lift up the dome cover slightly
- 1b) While pressing on tab, twist the dome cover counter clockwise just a few degrees to release dome cover from back clips.
Lift off the cover.

Method 1 - Direct Attach Install

- 2a) Use included mounting template to mark and pre-drill the required holes. Use included 2.8" screws to mount the camera directly to the mounting surface.

Go to step 3 on page 9 to complete installation.

OR

Method 2 - Camera Base Install

- 2b) Use the included mounting template (Installation Option 1) to mark and pre-drill the required holes. Remove the camera base by unscrewing the base locking screws (indicated by padlock markings) and turn camera module approx. 5 degrees counterclockwise to detach camera base from the camera module. Install the base as indicated using the 1.2" screws. Go to step 3a.

Method 3 - Junction Box Install

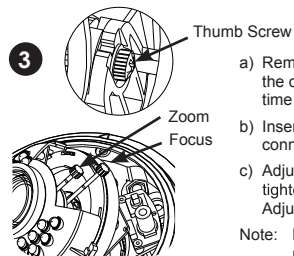
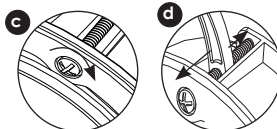
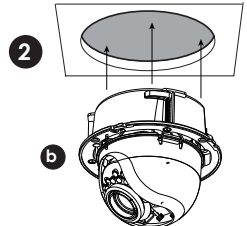
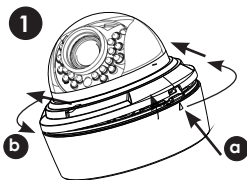
- 2c) Attach provided fitting plate to junction box (see page 4 for details). Remove the camera base by unscrewing the 3 base locking screws, and turn the camera module approx. 5 degrees counterclockwise to detach camera base from camera module. Install the base to the junction box using the base attachment screws. Go to step 3a.

- 3a) Reinsert camera module into camera base by aligning the arrow notches, and turning camera module clockwise to lock into place.

- 3b) Reinstall the base locking screws. (indicated by padlock markings)

Go to step 3 on page 9 to complete installation.

INSTALLATION. INDOOR DOME (Semi-Flush Mount)



ATTENTION - If using DC power, follow the correct polarity as marked on the power cable.

- 1a) Press down on the tab marked with an arrow to lift up the dome cover slightly
- 1b) While pressing on tab, twist the dome cover counter-clockwise to release dome cover
- 1c) Remove the camera base by unscrewing the base locking screws (indicated by a padlock markings) and turn camera module approx. 5 degrees counter-clockwise to detach camera base from the camera module.

- a) Cut semi flush mounting hole into surface using provided Semi-flush Mount Cut-out Template.

Note: Always cut using the inside line of the cutout template

- b) Insert camera into cutout. Make sure that the mounting arms are not extended.
- c) Turn screwdriver clockwise to unlock all of the 3 mounting arms.
- d) Continue turning clockwise to move mounting arms down until they make contact with inner mounting surface.

Note: Once mounting arms have made contact with the inner mounting surface, do not apply too much pressure to avoid damaging surface.

- a) Remove camera cover by squeezing the back and front of the cover as indicated by the arrow indicators at the same time and lifting it up and away from the lens.

- b) Insert the included video test cable into the RCA jack and connect to a test monitor to set up camera. (see page 10).

- c) Adjust camera viewing angle and secure into place by tightening thumb screw using a flat head screwdriver. Adjust lens and OSD as required.

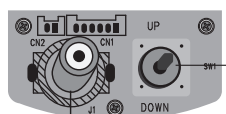
Note: Lens adjustment levers are by default in the locked position. Turn counter clockwise to unlock. Tighten levers to secure lens setting.

- 4 a) Re-attach the camera cover, using the thumb screw as a guide, until it snaps into place.
- b) Reattach dome cover.

CAMERA ADJUSTMENT

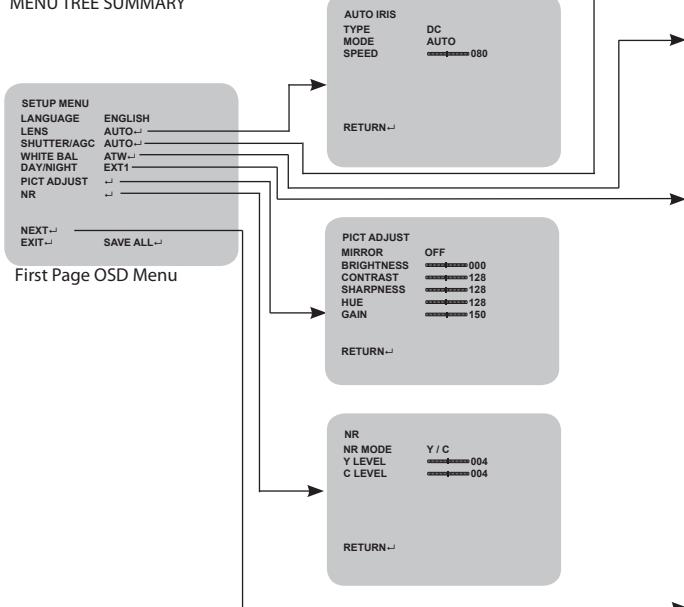


RCA Service Connector
Use supplied RCA - BNC cable
If you require BNC output.



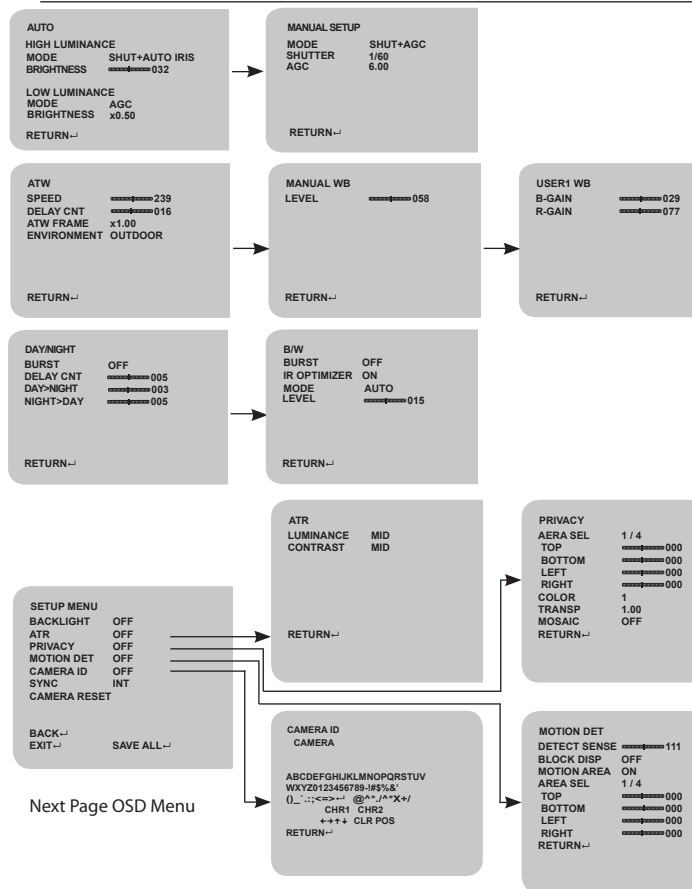
OSD function joystick. Pressing down on joystick acts as ENTER function.

MENU TREE SUMMARY



NOTE: Day / Night should be set to EXT1 on models with IR LEDs

CAMERA ADJUSTMENT



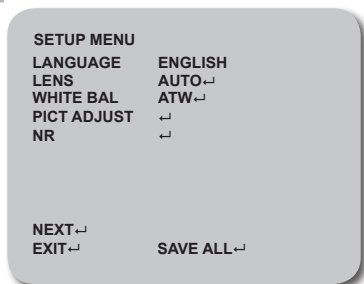
CAMERA ADJUSTMENT

OSD MENU control

Press down on the function joystick to access the setup menu.

- Main setup menu is displayed on the monitor screen.

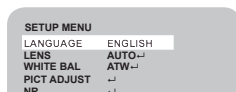
SETUP MENU



Select a function by moving the joystick up and down and move left or right to change setting value and press joystick to confirm selection.
If a menu option features a ↵, a sub menu is available which can be accessed by pressing down on the joystick.
Select 'NEXT ↵' to view remainder of the OSD setup menu

Once finished updating settings, highlight 'EXIT' and press down on the joystick to exit setup menu.
To retain the changed settings after a power on/off of the camera you need to select **SAVE ALL** option on the menu.

LANGUAGE



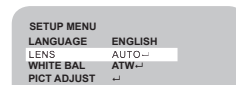
CAMERA ADJUSTMENT

Select the language in which to display the OSD menu.

Note: Selection changes the language displayed immediately.

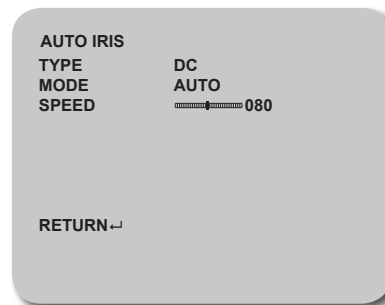
LANGUAGE: English, Japanese, German, French
Russian, Portuguese, Spanish, Chinese.

LENS:



Changes the settings of the internal lens..

TYPE: MANUAL, AUTO↵



MODE: **AUTO, CLOSE, OPEN**
-AUTO: The mechanical iris is controlled automatically
-CLOSE: The mechanical iris is set to the closed position
-OPEN: The mechanical iris is set to the open position
Default setting is **Auto**

SPEED: **000-255**
Sets the convergence speed of the mechanical iris.
Default setting is **80**

CAMERA ADJUSTMENT

SHUTTER/AGC

SETUP MENU
LANGUAGE ENGLISH
LENS AUTO
SHUTTER/AGC AUTO
WHITE BAL ATW
DAY/NIGHT AUTO

Shutter has two options: AUTO or MANUAL

AUTO SETUP
HIGH LUMINANCE
MODE SHUT-AUTO IRIS
BRIGHTNESS 40

LOW LUMINANCE
MODE AGC
BRIGHTNESS x0.50

RETURN

MANUAL SETUP
MODE SHUT+AGC
SHUTTER 1/60
AGC 6.00

RETURN

AUTO

HIGH LUMINANCE

- MODE: AUTO IRIS/SHUT+AUTO IRIS
- BRIGHTNESS: 000-255

LOW LUMINANCE

- MODE: AGC / OFF
- BRIGHTNESS: x0.25 / x0.50 / x0.75 / x1.00

MANUAL

- MODE: SHUT+ AGC
- SHUT: Select shutter speed in x/second.
Default setting is 1/60
- AGC: Set a fixed value for the AGC db.
6, 12, 18, 24, 30, 36, 42, 44.8

WHITE BAL

SETUP MENU
LANGUAGE ENGLISH
LENS AUTO
WHITE BAL ATW
PICT ADJUST
NR

White Balance can be set to following:

ATW / PUSH / USER1 / USER2 / ANTI CR
/ MANUAL / PUSH LOCK

CAMERA ADJUSTMENT

ATW

ATW
SPEED 239
DELAY CNT 016
ATW FRAME x1.00
ENVIRONMENT OUTDOOR

RETURN

- SPEED: 000-255 Specifies the AE control for ATW
Default setting is 239
- DELAY CNT: 000-255 Sets the time based of ATW
change. Default setting is 16
x0.50 / x1.00 / x1.50 / x2.00
- ATW FRAME: Sets pull in frame for magnification
Default setting is X1.00
- ENVIRONMENT: INDOOR / OUTDOOR
Set the pull in frame of ATW
Default setting is INDOOR.
Use white balance regardless of the subject conditions.

PUSH

USER1/USER2

USER1 WB
B-GAIN 029
R-GAIN 077

RETURN

User defined gain adjustment on B and R

- B-GAIN: 000-255 B Gain adjustment for WB
- R-GAIN: 000-255 R Gain adjustment for WB

CAMERA ADJUSTMENT

ANTI CR

Activates color rolling suppression.

MANUAL WB

MANUAL WB
LEVEL 058

RETURN ←

- LEVEL 000-255
Specifies the R and B gain levels for manual WB.

The actual variable range is limited to the range from the low color temperature (approx. 1800K) to the high color temperature (approx. 10500K).

Default setting is 58

- PUSH LOCK Press down on joystick to set current scene as the white balance level. Use a grey card in front of lens to give a natural white level.

DAY/NIGHT AUTO ←/ BW ← / EXT1 / EXT2 /COLOR

SETUP MENU

EXPOSURE AUTO ←
PICT ADJUST ←
WHITE BAL ATW ←
WDR ←
DNR ←
DAY/NIGHT EXT1
PRIVACY ←

Day/Night mode can be set to the following options: COLOR/AUTO/EXT/BW. Select COLOR for a color image or BW for black and white. EXT1/EXT2 allows the use of an external trigger to activate day/night operation. Use AUTO to have the camera automatically adjust for Day/Night mode.

NOTE: Day/Night should be set to EXT1 on models with IR LEDs. EXT1 is used to sync IR LED operation when going into B/W mode.

AUTO ←

DAY/NIGHT

BURST OFF
DELAY CNT 003
DAY - NIGHT 002
NIGHT - DAY 005

RETURN ←

- BURST ON / OFF
Selects whether to output the burst signal when night mode has been identified.

CAMERA ADJUSTMENT

- DELAY CNT 000-255
Night/Day identification transfer time.
- DAY - NIGHT 000-255
Threshold for Night status from day status.
- NIGHT - DAY 000-255
Threshold for the Day status from night status.

B/W ←

B/W SETUP

BURST ON
IR OPTIMIZER ON
MODE AUTO
LEVEL 16

RETURN ←

Allows additional Smart IR settings to be enabled.

- IR OPTIMIZER ON / OFF Turn Smart IR feature ON/OFF. Smart IR must be enabled/disabled through the B/W menu. Smart IR is enabled by default on models with IR LEDs, and works when Day/Night is set to EXT1, Auto, or B/W.

- MODE AUTO / CENTER
When IR Optimizer is ON, set Front Light Compensation feature to center of image or automatic area. Adjust Level for Smart IR

PICT ADJUST

SETUP MENU

LANGUAGE ENGLISH
LENS AUTO ←
WHITE BAL ATW ←
PICT ADJUST ←
NR ←

PICT ADJUST

MIRROR OFF 000
BRIGHTNESS 128
CONTRAST 128
SHARPNESS 128
HUE 128
GAIN 150

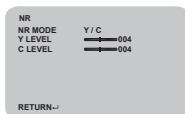
RETURN ←

Picture and display control settings

- MIRROR: ON / OFF Horizontally flip the display output.
- BRIGHTNESS: 000-255 Screen brightness.
- CONTRAST: 000-255 Screen contrast.
- SHARPNESS: 000-255 Screen sharpness.
- HUE: 000-255 Adjust the hue.
- GAIN: 000-255 Adjust the gain.

CAMERA ADJUSTMENT

NR



Digital Noise Reduction.

This function reduces the background noise in a low luminance environment.

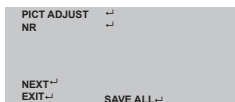
NR MODE: "Y/C" / "OFF" / "Y" / "C"

Noise reduction Filter mode.

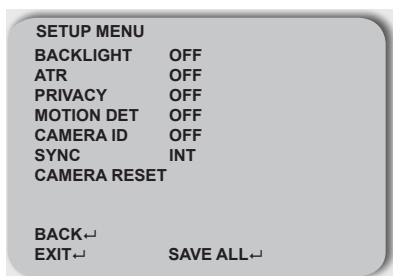
Y LEVEL: 000-015 Adjustment of the Y filter strength.
Default setting is 4

C LEVEL: 000-015 Adjustment of the C filter strength.
Default setting is 4

NEXT ↵



From the main menu select NEXT to enter the second page of the menu.



BACKLIGHT

OFF / BLC / HLC

- OFF Backlight compensation OFF
- BLC Backlight compensation ON
- HLC High light compensation ON

CAMERA ADJUSTMENT

SHADOW REDUCTION (ATR)

OFF / ON ↵

This function compensates for darker areas surrounding the object to provide naturally sharp picture and improves contrast in bright/dark areas.

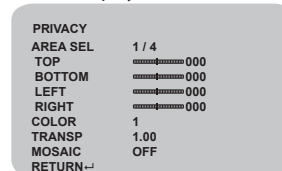


- LUMINANCE Sets the extent of the luminance compression (MID/HIGH/LOW)
- CONTRAST Sets the extent of the contrast enhancement (MID/MIDHIGH/HIGH/LOW/MIDLOW)

PRIVACY

OFF / ON ↵

Hide an area so that it is not displayed on the monitor.



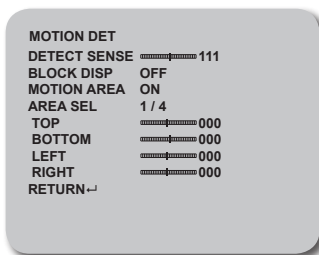
- AREA SEL: Selects the mask frame to be adjusted.
- TOP: Sets the top side of the mask frame selected by the AREA SEL parameter
- BOTTOM: Sets the bottom side of the mask frame selected by the AREA SEL parameter.
- LEFT: Sets the left side of the mask frame selected by the AREA SEL parameter.
- RIGHT: Sets the right side of the mask frame selected by the AREA SEL parameter
- COLOR: Sets the colors of the mask frames
- TRANSP: Sets the transparency ratio of the mask frames.
- MOSAIC: Sets the mask frame mosaic to ON or OFF

CAMERA ADJUSTMENT

MOTION DET

OFF / ON↵

Motion Detection is defined by rectangular areas. This give a visual identification of motion areas.



DETECT SENSE: Sets the motion detection sensitivity

BLOCK DISP: ON/OFF/ENABLE status of the motion detection block display.
 ON: Make motion areas visible, OFF: Hide motion areas
 ENABLE↵ Press enter to access the "dead band setting" screen, on-screen cursor moves in response to the inputs Left, Right, Up and Down to set the sensing area, or dead band for specified blocks. This allows you to specify and set an area of motion which is not rectangular in shape.
 Press and hold SET button 3 seconds to exit.

MOTION AREA: ON / OFF Enable / Disable Area No.

AREA SEL: 1/4 / 2/4 / 3/4 / 4/4. Selects motion area number.

TOP: Set the top side of the monitoring frame selected by the AREA SEL parameter.

CAMERA ADJUSTMENT

BOTTOM: Set the bottom side of the monitoring frame selected by the AREA SEL parameter

LEFT: Set the left side of the monitoring frame selected by the AREA SEL parameter.

RIGHT: Sets the right side of the monitoring frame selected by the AREA SEL parameter

CAMERA ID

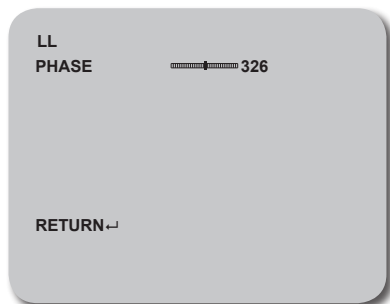
OFF / ON↵

Camera ID shows a name on the screen as chosen.



Use Up/Down/Left/Right to move around. CHR1/2 changes the selection fonts to alternative selection, CLR will clear info. POS allows position change.

CAMERA ADJUSTMENT



SYNC

INT / LL ←

Video synchronization displayed
INT(Internal) or LL (Line Lock)

Note: Shows **INT** with DC only model.
And **LL** setting for camera model
when connected to a AC supply.

PHASE:

000-524

Adjust the phase in the vertical direction when the line
lock mode is available.

• CAMERA RESET ←

This will reset all settings for all menus to manufacturer
defaults. This allow you to return to shipped settings
from the manufacturer.

EXIT / SAVE ALL

- EXIT
- SAVE ALL

Exit OSD menu.

Saves the settings to camera

TROUBLE SHOOTING

Refer to the following table if you are experiencing trouble with your camera.
Contact an authorized technician if the table does not provide you with a
solution to the trouble.

• Nothing appears on the screen.

Check that the power cord and line connection between the camera and monitor are connected properly.
Check that you have properly connected VIDEO cable to the camera VIDEO output jack.

• The image on the screen is dim.

Is lens stained with dirt? Clean lens with soft, clean cloth.
Adjust the monitor contrast & brightness controls
Re-position the camera if necessary.

• The image on the screen is dark.

Adjust the contrast feature of the monitor.
If you have an intermediate device, set the 75Ω / Hi-Z properly.

• The camera is not working properly, and the surface of the camera is hot.

Check that you have properly connected the camera to an appropriate power source.

• IR LED's don't appear to be working (not glowing red in the dark)

Ensure that the power provided to the camera at the camera end meets the power consumption
requirements as per the camera specifications.

• The Motion Detection function does not work.

Check that MOTION DET in SETUP 2 menu is 'ON' for the selected area.
Enable Block display ON will show a visual indication on the display output for the detected areas.

• Color is not correct.

Check the setting of WHITE BAL SETUP menu.
Under certain incandescent lighting, some color shifting may take place.
This is normal due to sensitivity to IR light

• When the resistance value of copper wire is at [20°C(68°F)]

Copper wire size (AWG)	#24(0.22mm ²)	#22(0.33mm ²)	#20(0.52mm ²)	#18(0.83mm ²)
Resistance (Ω/m)	0.078	0.050	0.030	0.018
Voltage Drop (V/m)	0.028	0.018	0.011	0.006

As shown in the table above, voltage decreases as the wire gets longer. Therefore use of
an excessively long adaptor output line for connection to the camera may affect the
performance of the camera.

*Standard voltage for camera operation : AC 24V ±10% or DC 12V ±10%

*There may be some deviation in voltage drop depending on the type of wire and the manufacturer.



Notes

- Be sure to connect power only after all the installation is complete.
- Use the UL listed, CLASS 2 power transformer for AC24v adaptor.