Day/Night Vandal Resistant Dome with IR Ring

MLA2DN25IR

Installation and Operating Instructions
1. Read Instructions - All safety and operating instructions should be read before the unit is operated.
2. Retain Instructions - The safety and operating instructions should be retained for future reference.
3. Heed Warnings - All warnings on the unit and in the operating instructions should be adhered to.
4. Follow Instructions - All operating and use instructions should be followed.
5. Cleaning - Unplug the unit from the outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
6. Attachments - Do not use attachments not recommended by the product manufacturer as they may cause hazards.
7. Accessories - Do not place this unit on an unstable stand, tripod, bracket, or mount. The unit may fall, causing serious injury to a person and serious damage to the unit. Use only with a stand, tripod, bracket, or mount recommended by the manufacturer or sold with the product. Any mounting of the unit should follow the manufacturer's instructions and should use a mounting accessory recommended by the manufacturer.

8. Ventilation - Openings in the enclosure, 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. This unit should not be placed in a built-in installation unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
9. Power Sources - This unit 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 supply you plan to use, consult your appliance dealer or local power company. For units intended to operate from battery power or other sources, refer to the operating instructions.
10. Grounding or Polarization - This unit may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug 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. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

Alternately, this unit may be equipped with a 3-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.
11. Power Cord Protection - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.
12. Power Lines - An outdoor system should not be located in the vicinity of overhead power lines or other electric light or power circuits or where it can fall into such power lines or circuits. When installing an outdoor system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal. U.S.A. models only - refer to the National Electrical Code Article 820 regarding installation of CATV systems.

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

14. Object and Liquid Entry - Never push objects of any kind into this unit through openings, as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the unit.

15. Servicing - Do not attempt to service this unit yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

16. Damage Requiring Service - Unplug the unit from the outlet and refer servicing to qualified service personnel under the following conditions:
   a. When the power supply cord or plug is damaged.
   b. If liquid has been spilled or objects have fallen into the unit.
   c. If the unit has been exposed to rain or water.
   d. If the unit does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions, as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the unit to its normal operation.
   e. If the unit has been dropped or the cabinet has been damaged.
   f. When the unit exhibits a distinct change in performance--this indicates a need for service.

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

18. Safety Check - Upon completion of any service or repairs to this unit, ask the service technician to perform safety checks to determine that the unit is in proper operating condition.

19. Coax Grounding - If an outside cable system is connected to the unit, be sure the cable system is grounded. U.S.A. models only--Section 810 of the National Electrical Code, ANSI/NFPA No.70, provides information with respect to proper grounding of the mount and supporting structure, grounding of the coax to a discharge unit, size of grounding conductors, location of discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

20. Lightning - For added protection of this unit during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the cable system. This will prevent damage to the unit due to lightning and power line surges.
SAFETY PRECAUTIONS

This label may appear on the bottom of the unit due to space limitations.

The lightning flash with an 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 presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE UNITS TO RAIN OR MOISTURE.

Attention: Installation should be performed by qualified service personnel only in accordance with the National Electrical Code or applicable local codes.

24 VAC Units: Do Not Exceed 30 VAC Input. Voltage applied to the unit's power input should not exceed 30 VAC. Normal input voltage is 24 VAC. User supplied wiring from 24 VAC supply to unit must be in compliance with electrical codes (Class 2 power levels). Do not ground 24 VAC supply at power supply terminals or at unit’s power supply terminals.
SECURITE

DANGER: POUR ÉVITER TOUT RISQUE D'ÉLECTROCUTION, NE PAS OUVIR LE BOÎTIER. IL N'Y A PAS DE PIÈCES REMPLAÇABLES À L'INTÉRIEUR. POUR TOUTE RÉVISION, S'ADRESSER À UN TECHNICIEN SPÉCIALISÉ.

En raison de limitation de place, cette étiquette peut être placée sur le dessous de l'appareil.

L'éclair fléché dans un triangle équilatéral, avertit l'utilisateur de la présence d'une "tension dangereuse" non isolée à l'intérieur de l'appareil et d'une valeur suffisante pour constituer un risque d'électrocution.

Le point d'exclamation contenu dans un triangle équilatéral, avertit l'utilisateur de la présence, dans la documentation qui accompagne l'appareil, de consignes d'utilisation et de maintenance importantes.

ATTENTION: POUR ÉVITER LE RISQUE D'ÉLECTROCUTION OU D'INCENDIE, NE PAS EXPOSER À LA PLUIE OU À L'HUMIDITÉ UN APPAREIL.

Attention: L'installation doit être effectuée uniquement par du personnel de service qualifié conformément à la réglementation du Code Electrique National ou à la réglementation locale.

Appareils 24 VCA

Ne pas excéder 30 VCA. La tension appliquée à l'entrée d'alimentation de l'appareil ne devrait pas excéder 30 VCA. Toute installation électrique fournissant du 24 Volts courant alternatif doit être conforme aux codes électriques. (Niveaux d'alimentation de la Classe 2). Ne pas brancher une prise de terre sur les bornes d'alimentation 24 Volts ou aux bornes d'alimentation de l'appareil.
SICHERHEITSVORKEHRUNGEN

VORSICHT: UM EINEN ELEKTRISCHEN SCHLAG ZU VERMEIDEN, ABDECKUNG NICHT ENTFERnen. WARTUNGEN ALLER ART QUALIFIZIERTEM PERSONAL ÜBERLASSEN.

Aus Platzgründen kann diese Warnung auf der Unterseite des Gerätes angebracht sein.

Das Blitzsymbol im gleichseitigen Dreieck soll den Benutzer auf nicht isolierte "Hochspannung" im Gehäuse aufmerksam machen, die eventuell stark genug ist, um einen elektrischen Schlag zu verursachen.

Das Ausrufezeichen im gleichseitigen Dreieck soll den Benutzer auf wichtige Bedienungs- und Wartungsanleitungen in der dem Gerät beigefügten Literatur aufmerksam machen.

WARNUNG: UM FEUER ODER ELEKTRISCHE SCHLÄGE ZU VERMEIDEN, SETZEN SIE DAS GERÄT NIEMALS REGEN ODER FEUCHTIGKEIT AUS.

Achtung! Die Installation sollte nur von qualifiziertem Kundendienstpersonal gemäß jeweilig zutreffender Elektrovorschriften ausgeführt werden.

24 VAC Geräte
PRECAUCIONES DE SEGURIDAD

PRECAUCIÓN: PARA REDUCIR EL RIESGO DE CHOQUE ELÉCTRICO, FAVOR NO ABRIR LA CUBIERTA. ESTE EQUIPO NO CONSTA DE PIEZAS O PARTES QUE REQUIEREN SERVICIO O MANTENIMIENTO. PARA REPARACIONES FAVOR REFERIRSE A UN TÉCNICO CALIFICADO.

Debido a limitaciones de espacio, esta etiqueta puede aparecer en la parte inferior de la unidad.

El símbolo representado por un relámpago con punta de flecha dentro de un triángulo equilátero, se muestra con el objetivo de alertar al usuario que existen "voltajes peligrosos" sin aislamiento, dentro de la cubierta de la unidad. Dichos voltajes pueden ser de tal magnitud que constituyen un riesgo de choque eléctrico a personas.

El símbolo de exclamación dentro de un triángulo equilátero, se muestra con el objetivo de alertar al usuario de que instrucciones de operación y mantenimiento importantes acompañan al equipo.

PELIGRO: PARA EVITAR EL PELIGRO DE INCENDIO Ó CHOQUE ELÉCTRICO, NO EXPONGA A LA LLUVIA Ó HUMEDAD.

Atención: La instalación de este equipo debe ser realizada por personal capacitado, solo en acuerdo, y en cumplimiento de normas del "National Electric Code" (Código Eléctrico Nacional) ó las normas del Gobierno Nacional Local.

Unidades de 24 VCA

No exceder 30 VCA de entrada. Voltage suplido a la unidad no debe exceder 30 VCA. Voltage de entrada normal es de 24 VCA. El cableado de 24 VCA provisto por el usuario debe cumplir con las normas eléctricas (Clase 2 de niveles de alimentación). No conectar los 24 VCA a tierra en las terminales de la alimentación ó a las terminales de la fuente de alimentación de la unidad.
FCC & ICES INFORMATION  
(U.S.A. and Canadian Models Only)

WARNING - 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 and ICES-003 of Industry Canada. 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. Intentional or unintentional changes or modifications not expressly approved by the party responsible for compliance shall not be made. Any such changes or modifications could void the user’s authority to operate the equipment.

If necessary, the user should consult the dealer or an experienced radio/television technician for corrective action. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No.004-000-00345-4.

1 UNPACKING

Unpack carefully. This is an electromechanical device and should be handled carefully. Check to ensure that the following items are included:
- Integrated camera/housing unit.
- Special Hex Key Wrench
- Base Gasket
- Desicant Kit

2 SERVICE

If the unit needs repair service or parts, contact Aigis Mechtronics for authorization to return as well as shipping instructions.

3 DESCRIPTION & SPECIFICATIONS

The MLA2DN25IR is a small, high security surveillance dome containing a 1/4-inch day/night CCD camera with integral fixed or varifocal lenses. This dome combines advanced day/night technology with high intensity infrared illuminators to create a sharp picture in complete darkness. Mounting directly to the wall or ceiling the units come ready to use. Equipped with line lock, phase adjustment and backlight compensation controls ensures the highest quality image and performance.

Construction/Finish: Polycarbonate Dome on cast aluminum housing.
4 COVER REMOVAL & REPLACEMENT

1. Using the special Hex Key provided, remove the 4 tamper resistant screws located on the cover. The 4 screws are captive and will remain with the cover. See Figure 1.

2. Lift the housing off the base to make required camera adjustments.

3. Replace the cover and tighten the retaining screws securely.

Figure 1 MLA2DN25IR Series Assembly
5 INSTALLATION

Attention: Installations should be performed by qualified service personnel only in accordance with the National Electrical Code or applicable local codes.

5.1 Connecting Low Voltage Power & Video Signal

The wiring harness has a BNC connector to accept video coax and two stripped leads to accept the low voltage power. For mounting to a single gang electrical box, run power and video lines through a knockout into the box (not provided). When mounting directly to a wall or ceiling, run power and video lines to the desired location using conduit.

Caution: Before proceeding to disconnect the power at its source, be sure that the unit is of the proper voltage type for the line power.

5.1.1 Connecting Low Voltage Power

Connect the line and neutral wires. See Figure 2

1. 24 VAC Applications: Camera operation is not affected by the polarity of the 24 VAC wires. However, in multiple camera systems, consistent wiring configurations will help maintain roll-free switching.

5.1.2 Connecting Video Cable

Route and connect video cable to BNC connector.

5.2 Mounting

See Figure 1.

1. Using the rubber base gasket as a template, mark the mounting hole locations on the mounting surface. The unit is intended to be mounted with four #10 screws or four M5 screws (not supplied) through the four outer holes in the base plate.
2. Install the appropriate anchors or threaded inserts at the locations marked in step 1.

3. Install a 3/4-inch threaded service conduit coupling into the back conduit hole, using pipe sealant on the threads. If conduit is to enter from the side, use a 2.5mm Hex Key wrench to loosen the set screw from the conduit hole plug. Remove the plug and reinstall it in the conduit hole on the back of the unit.

4. If mounting this unit outdoors, apply a generous bead of silicone sealant around the back of the base casting, surrounding all holes. Apply the rubber base gasket to the back of the base casting and apply another generous bead of sealant to the outer edge around the exposed surface of the gasket.

5. Place the unit into position on the wall or ceiling. Install the mounting screws securely. If sealant is used, make sure that the sealant between the wall or ceiling and the gasket forms a complete seal. Add more sealant if needed. Make all final service connections and secure the conduit.

6 CAMERA ADJUSTMENT

Set the camera to the desired position by performing the following steps.

1. Remove dome cover (see section 4 COVER REMOVAL AND REPLACEMENT).

2. Camera module position can be adjusted both vertically and horizontally. The camera module can also be rotated for proper tilt orientation (see Figure 3).

3. For vertical or horizontal adjustment, tilt module to desired position.

4. Module can be rotated 360° if required.

5. For wall mount applications, you can square the camera image, if needed, by using the smaller bracket inside to rotate the camera so that the arrow is pointing up.

6. Replace the dome cover after camera position is set (see section 4 COVER REMOVAL AND REPLACEMENT).
7 CAMERA AND LENS SETTINGS

The camera module has various settings for any additional adjustments that may be required. See Figure 4 for adjustment locations.

![Dip Switch Locations. See Figure 5 for Switch Positions.](image)

**Figure 4 Camera Adjustments**

### 7.1 Dip Switches

The following chart diagrams the selectable dip switches and their respective functions. When changing the DIP switch settings, take care when making the settings and adjustments because power is still being supplied to the camera.

![Dip Switch Locations.](image)

<table>
<thead>
<tr>
<th>Control Name</th>
<th>Factory Set Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Color and Black/White level switch(C/B)</td>
<td>LOW</td>
</tr>
<tr>
<td>(Normal: LOW/High sensitivity: HI)</td>
<td></td>
</tr>
<tr>
<td>2 3 High speed electronic shutter setting (ES)</td>
<td>1/60 sec.</td>
</tr>
<tr>
<td>4 Aperture compensation setting (AP)</td>
<td>SHRP</td>
</tr>
<tr>
<td>(Sharp: SHRP/Normal: NORM)</td>
<td></td>
</tr>
<tr>
<td>5 Backlight compensation setting (BL-M)</td>
<td>OFF</td>
</tr>
<tr>
<td>(ON (MULT)/OFF)</td>
<td></td>
</tr>
<tr>
<td>6 Backlight compensation setting (BL-C)</td>
<td>OFF</td>
</tr>
<tr>
<td>(ON (CENT)/OFF)</td>
<td></td>
</tr>
<tr>
<td>7 White balance switch (WB) and color (R or B) adjustment volume</td>
<td>ATW</td>
</tr>
<tr>
<td>8 Synchronization setting (SYNC)(LL/INT)</td>
<td>LL</td>
</tr>
<tr>
<td>9 Line phase adjustment (PHASE)</td>
<td>adjustable</td>
</tr>
<tr>
<td>10 Lens iris level adjustment</td>
<td>adjustable</td>
</tr>
</tbody>
</table>

![Dip Switch Locations.](image)

**Figure 5 Layout of Dip Switches**
7.2 Color/Black & White Setting

This switch in Figure 6 lets you select the timing of the automatic switching of the optical filter to color image or black and white image, according to the subject brightness. The default setting is down (LOW). Set the switch according to the brightness.

![Figure 6 C • B/W (Color/Black & White) Switch Setting](image)

H: For a brighter setting than LOW:
L: Standard setting

**Notes:**

1. After the power has been turned off, switching will restart from color, when the power is restored.
2. A sound may be heard when the color image or black and white image is switched. Also, the image will be distorted as shown in Figure 6, this is normal and does not indicate a problem.
3. When using infrared lighting, if there is a strong reflection on the subject, the optical filter may switch from black and white to color mode. Use only enough infrared lighting so that the mode is not switched.
4. The focus setting may be different in black and white mode and color mode. Please check the focus setting in both modes.

7.3 High Speed Electronic Shutter Setting

Normally, the speed setting switches for the high speed electronic shutter are all set to the down (OFF) position. This sets the electronic shutter (ES 1, 2) speed to 1/60 sec. The switches can be set as indicated in Figure 7 to select one of the 4 speeds available.

**CAUTION:**

Using the high speed electronic shutter indoors with low lighting will give darker pictures. In such a case add some lights to make sure the lighting is sufficient. If the lighting is very bright, pay attention to the light angle in order to avoid or minimize the smear phenomenon effect.

![Figure 7 (Switch 2-3)](image)
7.4 Aperture
If you would like to emphasize the contours of the object, set the switch 4 (AP) to the up (SHRP) position.

![Figure 8 Aperture Dip Switch](image)

7.5 Backlight Compensation Setting
This camera has two different backlight compensation functions: Normally backlight compensation switch 5 (BL-M) and 6 (BL-C) are set to the down (OFF) position. Change the backlight compensation switch settings depending on the conditions.

![Figure 9 BL-M & BL-C Dip Switches](image)

**BL-M mode**: Use this position when applying backlight. *(Multi-spot)* compensation to the whole of the screen.

**BL-C mode**: Use this position when applying backlight. *(Center-focus)* compensation to only the central portion of the screen.

**Notes:**
1. If switches 5 and 6 are set to the up (ON) position at the same time, the BL-M setting will have priority.
2. When BL-M mode is set, scenes with no backlighting may appear extremely dark and the object may appear over-exposed. If this happens, set to BL-C mode.

![Figure 10 BL-M and BL-C Modes](image)
7.6 White Balance Adjustment

Normally the switch 7 (WB) is set to the down (ATW: auto white balance) position and the white balance is adjusted automatically. If a manual white balance adjustment is necessary, follow the steps below. Set the switch 7 (WB) to the up (MANU: manual) position, then adjust the color. See Figure 11.

Turn R (VRM302) to set the red ratio and/or B (VRM303) to set the blue ratio.

![Figure 11 White Balance Adjustment](image)

7.7 Synchronization Settings

The default setting Line Lock (LL). You can change the power supply synchronization by moving switch 8 to the down (INT) position for internal synchronization.

7.8 Line Phase Adjustment

If camera is set to internal synchronization (INT) and a camera switcher to connect 2 cameras or more to one monitor is used there may be a vertical roll of the images when switched. In such a case, set as described below.

1. Set the switch 8 (SYNC) to the up (LL) position.
2. Switch the display on the monitor from camera 1 to camera 2. Adjust the PHASE control on camera 2 until the vertical roll of the image stops. If more than two cameras are used, please repeat this procedure for all the cameras.

![Figure 12 Line Phase Adjustment](image)

CAUTION:
If the vertical roll cannot be corrected by adjusting the PHASE control on camera 2, try adjusting the PHASE control on camera 1. If it still cannot be corrected, please check that the polarity of the power cords of all connected devices is correct.
7.9 Manual Color/Black and White Setting
Connect each cable as indicated in Figure 13, to set the image to black and white or color as desired.

**Color image setting.**
Connect the Color (yellow) and the White (ground) cables.

**Black and white setting.**
Connect the B/W (purple) and the White (ground) cables.

<table>
<thead>
<tr>
<th>Day/Night Cable</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COLOR</strong></td>
<td><strong>B/W</strong></td>
</tr>
<tr>
<td>OFF</td>
<td>OFF</td>
</tr>
<tr>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>ON</td>
<td>OFF</td>
</tr>
<tr>
<td>ON</td>
<td>ON</td>
</tr>
</tbody>
</table>

ON: CLOSE
OFF: OPEN

**Figure 13 Manual Color/Black & White Setting**

**Notes:**
1. The maximum length of cable for CONTROL terminal is 1968 ft or 600 m (AWG 24).
2. If manual switching is attempted while unit is automatically switching the cut filter, the unit may not know what state it is in (color or B/W). If this occurs another manual command is required.

7.10 Lens Iris Adjustment
You will need to set the LEVEL (VRM121) control when shooting in the conditions described below. See Figure 14.

1. If shooting simultaneously in a dark room and through a bright window.
2. If the subject background is extremely bright or dark.
3. If the brightness of the picture on the monitor is not correct.

**Counterclockwise:** To decrease the contrast.
**Clockwise:** To increase the contrast

**Figure 14 Lens Iris Adjustment**
8 DESICCANT INSTALLATION

Figure 15 Desiccant Installation

9 IR BOARD ADJUSTMENT

9.1 User Adjustments

9.1.1 Light sensor sensitivity
   SENSE Adjustment - turn CCW increases sensitivity.
   To adjust for daytime setup - turn CCW until STATUS led (red) turns off.

9.1.2 Narrow Beam Intensity
   NARROW adjustment - turn CW to increase intensity

9.1.3 Wide Beam Intensity
   WIDE adjustment - turn CW to increase intensity

9.1.4 Always On
   ALWAYS ON setting - Put Dip Switch 3 in the ON Position.

9.1.5 Time out
   Time out Adjustment - Put dip switch 4 in the ON position (about 30 seconds delay).

Notes:

1. Dip switch position 1 + 2 are for future options and should always be in the OFF position.

2. Connector 24V1(2 pin connector) and 24V2 (2 pin connector is used for 24V AC INPUT. Either pin on 24V1 is used for one leg of the 24VAC and either pin on 24V2 is used for the other leg.

Figure 16 IR Board Adjustment
## 10 SPECIFICATIONS

### CAMERA SPECIFICATIONS

<table>
<thead>
<tr>
<th>OPTIONS</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolution</td>
<td>Horizontal: 520 TV lines; Vertical: 350 TV lines</td>
</tr>
<tr>
<td>Voltage Range</td>
<td>24 VAC</td>
</tr>
<tr>
<td>Power</td>
<td>20W</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>1.2 lux (color mode); 0.00 lux (b/w mode)</td>
</tr>
<tr>
<td>Imager</td>
<td>1/4-inch Image Format; Interline Transfer CCD</td>
</tr>
<tr>
<td>Scanning System</td>
<td>NTSC standard 525 lines, 30 frames/sec 2:1 interlace</td>
</tr>
<tr>
<td>Signal to Noise</td>
<td>&gt; 48dB</td>
</tr>
<tr>
<td>Electronic Shutter</td>
<td>1/60, 1/100, 1/1000, 1/2000 sec</td>
</tr>
<tr>
<td>Lens</td>
<td>focal range: 2.8-5.8mm, F1.4-F200 DC Auto Iris, Vari-focal, 1/4-inch format</td>
</tr>
<tr>
<td>Backlight Compensation</td>
<td>Selectable On(two mode)/Off Control: 1) center weighted metering, 2) multi spot metering</td>
</tr>
<tr>
<td>White Balance</td>
<td>ATW/Manual</td>
</tr>
<tr>
<td>Video Output</td>
<td>Composite; 1.0 Vp-p, 75ohm</td>
</tr>
<tr>
<td>Synchronizing System</td>
<td>Internal/Line-lock synchronization</td>
</tr>
<tr>
<td>Phase Adjust</td>
<td>0° to 180°</td>
</tr>
<tr>
<td>IR Illumination Distance</td>
<td>Over 80 feet</td>
</tr>
<tr>
<td>IR Configuration</td>
<td>64 LEDs, ( 40° wide &amp; 18° narrow beams)</td>
</tr>
<tr>
<td>Connector</td>
<td>Video BNC, Power In-line push wire connectors</td>
</tr>
</tbody>
</table>
### Controls

| Camera | Color & Black/White Level Switch  
|        | Electronic Shutter  
|        | Aperture Compensation (Sharp/Normal)  
|        | Backlight Compensation  
|        | White Balance  
|        | Line-lock on/off  
|        | Phase Adjustment  
|        | Lens Iris Level Adjustment  
| IR Illuminator | IR Intensity (wide & narrow beams - 0 - 100%)  
|        | Visible Light Sensor  
|        | Light Sensor Override  
| Options | Includes unshielded twisted pair transmitter compatible with NVT receivers.  
|        | Permits video transmission of up to 1000 ft when passive receiver is used & 3000 ft when active receiver is used.  

### Mechanical Specifications

| Housing | Construction | Polycarbonate dome (with light tint) on custom cast aluminum housing.  
|         | Weight | 1.3 lb (0.57 kg)  
|         | Cable Entry | 3/4-inch conduit knockout through side or back  
|         | Mounting | Surface Mount | Mounts on wall or ceiling using up to four #10 screws.  

### Environmental

| Operating Temperature | -4 °F to +122 °F (-20 °C to +50 °C)  
| Humidity | 0% to 90% relative, noncondensing.  
| Protection Level | IP 65.  

### Electromagnetic Compatibility

| Electromagnetic Compatibility | EMC | FCC Class A.  
| Safety | UL, cUL |
Threaded for 3/4-inch Conduit

Mounting Holes
(4X) \(0.22\) [5.6]

11 DIMENSIONAL OUTLINE