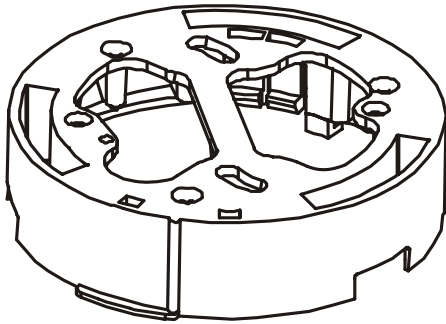


ADSDUIOB / ADSDUIOBW Mounting Base Indoor Installation

Installation Guide



Warnings and Cautions

Please review the following warnings and cautions before you install the mounting base. For additional warnings and cautions, see the camera dome installation guide.

WARNINGS



WARNING!

ALWAYS USE:

- Proper safety equipment for the location and type of installation.
- Proper lift equipment to reach the installation.
- Safety features of the lift equipment.

BE SURE:

- Electrical power is not connected to the dome when connecting wires. Dome will move when power is applied.
- Electrical power is not connected to nearby fixtures that you might touch during installation.



WARNING! DO NOT install this camera dome in hazardous areas where highly combustible or explosive products are stored or used.



WARNING!

This dome runs on 24Vac. DO NOT connect line voltage to this dome.

North America power requirements: In North America, this device is intended to be supplied from a Class 2 power supply. For outdoor installations, use Class 3 wiring techniques, liquid-tight conduit, or liquid-tight pipe.

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



WARNING! EU power requirements: This product runs on 24Vac. In the EU, it is intended to be powered from a Limited Power Source. A limited power source is a certified source of SELV, and if inherently limited, with 8 amps maximum output current, and a maximum of 100VA available; or if not inherently limited, fused with a maximum value of 3.3 Amps, meeting section 2.11 of IEC950, and a maximum of 250VA available. The power supply can be obtained through American Dynamics or through another source where the provider can furnish the verification. This is required to assure electrical safety in the product.

Stromanforderungen in der EU: Dieses Produkt wird mit 24 V Wechselstrom betrieben. In der EU ist es für den Betrieb durch eine begrenzte Stromquelle vorgesehen. Eine begrenzte Stromquelle ist eine zertifizierte SELV-Quelle (Schutzkleinspannung), bei inhärenter Begrenzung mit einem maximalen Ausgangsstrom von 8 A und 100 VA maximaler Verfügbarkeit, bei nicht inhärenter Begrenzung mit einer maximalen Sicherung von 3,3 A gemäß Abschnitt 2.11 der IEC950 und 250 VA maximaler Verfügbarkeit. Das Netzteil kann über S American Dynamics oder eine andere Quelle bezogen werden, wobei der Anbieter den Nachweis der Konformität bereitstellen sollte. Dies ist zur Gewährleistung der elektrischen Sicherheit des Produktes erforderlich.

Cautions

- The maximum length of power cable allowed between the Class 2 LPS (low voltage) ac source, such as a J-box, and the dome is 250m (820ft).
- Do not run data and power cables adjacent to or in the same conduit as line voltage mains power.
- SensorNet 485 networks require 22 AWG unshielded cable. Do not exceed 32 devices per cable run.
- RS-422 networks require 22 AWG shielded cable. Do not exceed 10 devices per cable run.
- Manchester networks require 18AWG shielded cable. Do not exceed three devices per cable run.
- Always terminate the camera dome connected at the end of a cable run.
- The I/O board is electrostatic-sensitive! Use a ground strap when handling the I/O board.
- The spring finger connector on the I/O board has a dust cover. DO NOT remove this cover until you have installed the dome's base. It protects delicate spring fingers. Keep the dust cover for use should you have to ship the mounting base back to the manufacturer.
- Screw terminal connectors on the I/O board are delicate! Use a jeweler's 2.5mm (0.1in) slotted screwdriver to tighten connector screws. DO NOT over tighten these screws.

Installation

This section explains how to attach the base and wire the I/O board. Once done, refer to installation and service Guide for the dome camera for further instructions. Perform procedures in the following order:

1. Detach the I/O board from the base (page 3).
2. Attach the base indoors to a:
 - Tile ceiling (page 3)
 - Hard ceiling (page 3)
 - Mounting structure (page 4).
3. Wire the I/O board (page 4).
4. Reattach the I/O board (page 6).

Before You Begin

Please read the following to ensure a smooth and successful installation.

You must:

- Have electrical work comply with latest national electrical code, national fire code, and all applicable local codes and ordinances.
- Coordinate work with other trades to avoid interference.
- Verify existing site conditions and coordinate with the owner's representative and appropriate utilities as required.
- Obtain copies of all related plans, specifications, shop drawings and addenda to schedule and coordinate related work.
- Thoroughly review the project to ensure that all work meets or exceeds the above requirements. Bring alleged to the attention of the CCTV Project Coordinator.

Tools Required

- Phillips screwdriver
- Power drill with 3.2mm (1/8in), 6.4mm (1/4in), 9.5mm (3/8in), and 19.5mm (3/4in) drill bits
- Hammer
- Socket wrench with 152mm (6in) extension, and 5.5mm and 10mm sockets
- Jeweler's 2.5mm (0.1in) slotted screwdriver (for wire connections)
- 18-14AWG and 22-20AWG wire strippers
- Vacuum and broom.

Parts Required

<u>Item</u>	<u>Qty</u>	<u>Part Number</u>
Base with I/O Board	1	0101-0175-01/02
Install Kit	1	0352-0324-01
Anchor, Toggle	2	2880-0073-01
Screw, STAP, 4.2x32 PH	2	5810-4091-120
Washer, Flat, M4	2	5842-0300-020
Nut, Locking, M3	2	5826-0200-020

Detaching the I/O Board

To attach the mounting base, you must first remove the I/O board. To do this, push the fingers molded into the base away from the board while pushing on the I/O board with your index finger (Figure 1). Put the board in a safe place; you will use it when you attach the dome.

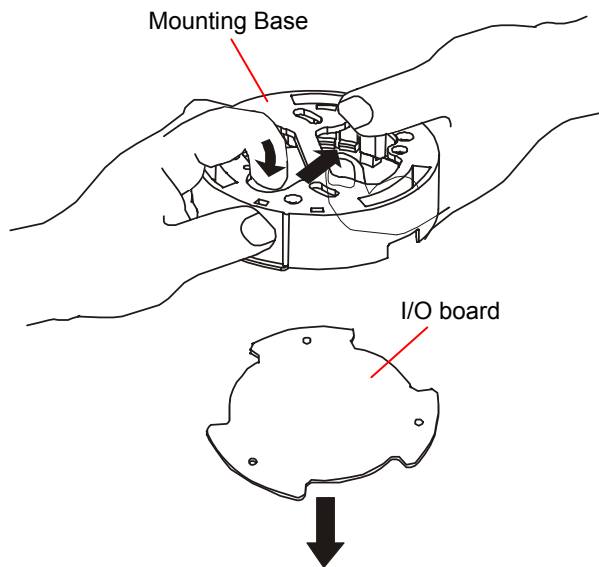


CAUTION: The spring finger connector on the I/O board has a dust cover. DO NOT remove this cover until you have installed the dome's base. It protects delicate spring fingers. Keep the dust cover for use should you have to ship the mounting base back to the manufacturer.



CAUTION: Use a ground strap when handling the I/O board.

Figure 1. Detaching the I/O board



Attaching to a Tile Ceiling

Requires RHIUTBAR T-bar kit (optional).

Attaching to a Hard Ceiling

To attach the base to a hard ceiling, do the following (Figure 2):

1. Mark and drill holes.

Place the base against the ceiling and mark and drill holes for two mounting screws. If mounting to sheet rock, also mark and drill a hole for cable access.

SHEET ROCK: Drill two 9.5mm (3/8in) holes for plastic anchors. Drill one 19.5mm (3/4in) hole for cable access.

WOOD: Drill two 3.2mm (1/8in) holes for mounting screws. If wood covers the cable access hole, drill one 19.5mm (3/4in) hole for cable access.

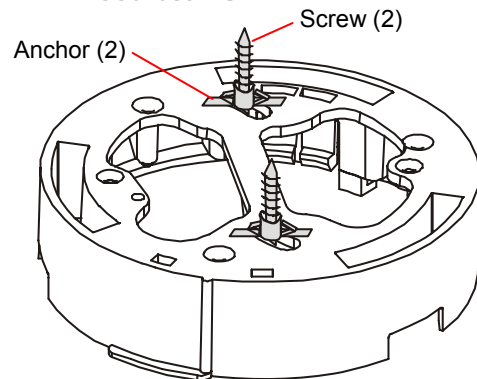
2. Attach the base to the ceiling.

SHEET ROCK: Install the plastic anchors. Then place the washers onto the screws and insert them into the anchors.

WOOD: Place the washers onto the screws and insert them into the wood.

3. Feed the cables through the access hole and go to "Wiring the I/O Board," page 4.

Figure 2. Surface mounting to sheet rock and wood beams

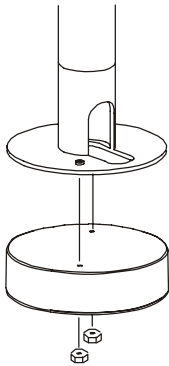


Attaching to a Mounting Structure

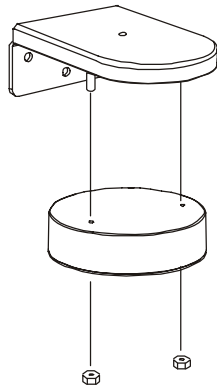
To attach the base to a mounting structure:

1. Attach the base to the structure using the two nuts supplied with the structure (Figure 3).
2. Feed the cables through the access hole.
3. Go to "Wiring the I/O Board," page 4.

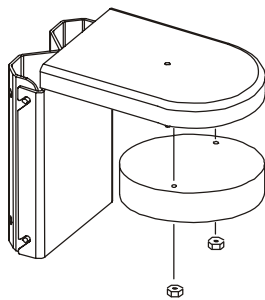
Figure 3. Attaching the base to a mounting structure



Use M3 nuts from mounting structure RHIULWM or RHIUPND



Use M3 nuts from mounting structure RHIUWM



Use M3 nuts from mounting structure RHIUCM

Wiring the I/O Board



CAUTION: The maximum length of cable allowed between the Class 2 LPS (low voltage) ac source, such as a J-box, and the dome is 250m (820ft).

This procedure explains how to connect the cables to the I/O board, check the cable connections, and attach the I/O board to the dome's base. Once done, attach the housing and eyeball assembly to the base (refer to the instructions included with the housing and eyeball assembly).



WARNING: Ensure that ac power and electrical signals are off during wire connections!

Referring to Figure 4:

1. Set the termination jumper JW1 according to the dome's position in the communications line.

Position of dome in communications line...	Setting	Pins
Between other devices	Unterminated	Off
End of communications line	Terminated	1-2

Note: You may need a small slotted screwdriver to gently pry jumper loose. Be careful not to damage the PC board.

2. Connect the video cable to the I/O board BNC video cable extension.
3. Connect the Manchester, RS-422, or SensorNet 485 data wires to connector TB1. If using a Pelco Coaxitron or Panasonic UTC protocol, no data wires are connected, just power.

Manchester data connections.

Order data cable 88760 (plenum) or 8760 (non-plenum) from Belden by calling 1-800-235-3361.

Pin	Color	Designation
1-4	—	Not used.
5	Black	Manchester (+)
6	White	Manchester (-)

RS-422 data connections

Pin	Color	Designation
1	Orange	RS-422 Data In High (+)
2	Green	RS-422 Data In Low (-)
3	Yellow	RS-422 Data Out High (+)
4	Brown	RS-422 Data Out Low (-)
5-6	—	Not used.

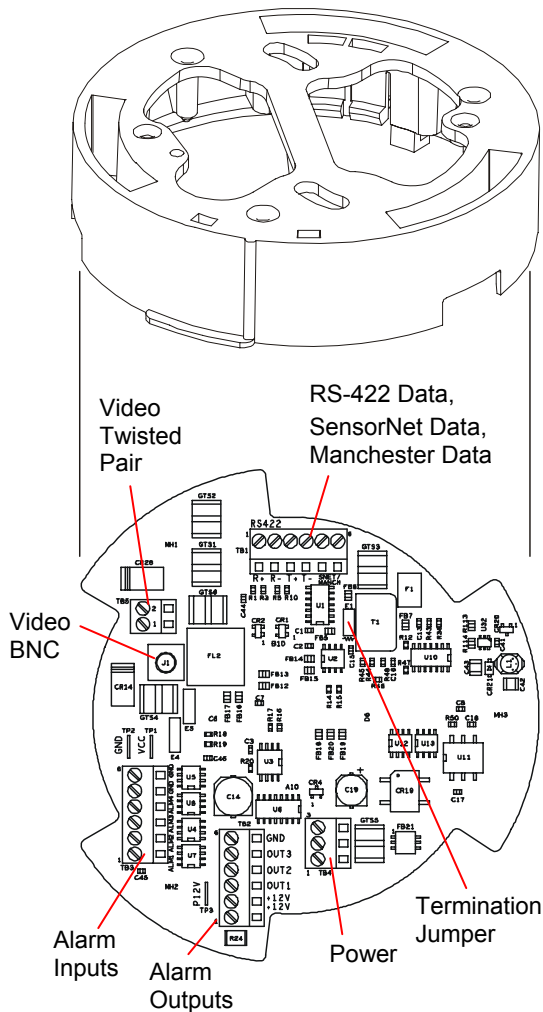
SensorNet data connections

Pin	Color	Designation
1-4	—	Not used.
5	Orange	SensorNet (unshielded)
6	Yellow	SensorNet (unshielded)

- Connect twisted pair wires, if used, to connector TB5.

Pin	Designation
1	Video
2	Video Ground

Figure 4. Electrical connections



- Connect the alarm output cable, if used, to the TB2 connector.

Pin	Color	Designation
1	—	12Vdc (100mA max.)
2	—	12Vdc (100mA max.)
3	—	Output 1 (40mA sync. max.)
4	—	Output 2 (40mA sync. max.)
5	—	Output 3 (40mA sync. max.)
6	—	Ground

- Connect the alarm input cable, if used, to the TB3 connector.

Pin	Color	Designation
1	—	Alarm 1 input (3.5mA sink)
2	—	Alarm 2 input (3.5mA sink)
3	—	Alarm 3 input (3.5mA sink)
4	—	Alarm 4 input (3.5mA sink)
5	—	Ground
6	—	Ground

- Connect power to the TB4 connector.

Pin	Color	Designation
1	Black	24Vac
2	Red	Ground
3	White	24Vac

- Reattach the I/O board.

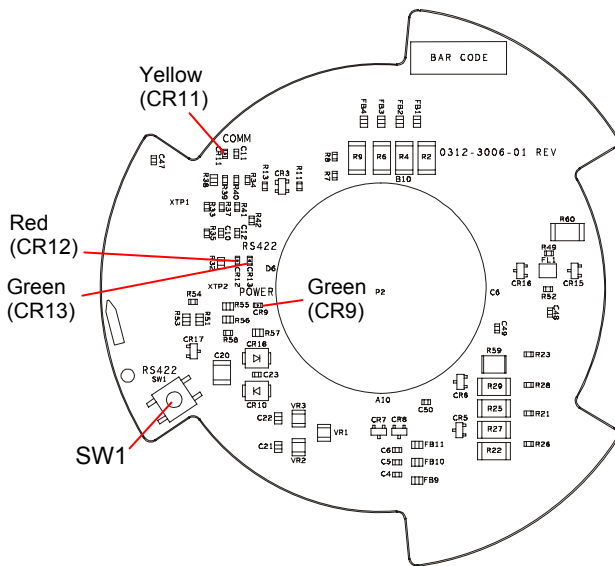
- Connect power to the base.

10. Check the LEDs on the I/O board to verify power and data are reaching the dome (Figure 5).
- The green ac power LED (CR9) glows steadily when ac power is applied.
 - For Manchester or SensorNet: The yellow comm. LED (CR11) glows steadily (Manchester) or blinks (SensorNet). If this LED is off, then probably one or both communication wires are open or both are shorted together.

For RS-422: Press and hold data test switch SW1 and observe nearby red (CR12) and green (CR13) LEDs; they indicate the following:

Constant green, Blinking red	RS-422 line correctly wired.
Constant green, Red off	RS-422 "Data In -" shorted to ac ground.
Constant red, Blinking green	"Data In +/ -" wires reversed.
Blinking red, Green off	"Data In +" shorted to ac ground.
Both LEDs off	"Data In +/ -" wires shorted or open.

Figure 5. Test switch/LEDs on I/O board



Reattaching the I/O Board

The following procedure refers to Figure 6:

- If the wiring is OK, then pull the excess cable up through the access hole.
- Reinsert the I/O board.
Insert the board under the retaining fingers. The board is keyed; it only fits into the base one way. Press on the board to snap it into place.
- Gently remove the dust cover.

Remove the cover from the 32-pin connector and inspect the spring finger contacts. For reliable connections, all contacts should be at least 2mm above the surface of the connector.



CAUTION: Keep the dust cover for use should you have to ship the base and I/O board back to the manufacturer.

Figure 6. Reattaching the I/O board

