

Installation Manual

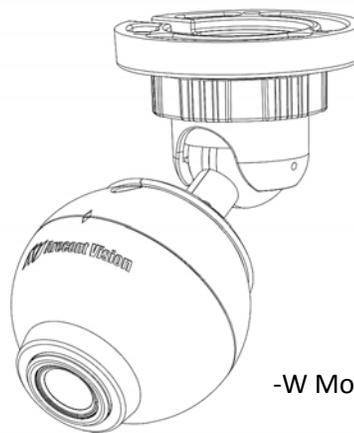
AV2245PM-W

AV2246PM-W

AV3245PM-W

AV3246PM-W

AV5245PM-W



-W Models

AV2245PM-D

AV2245PM-D-LG

AV2246PM-D

AV2246PM-D-LG

AV3245PM-D

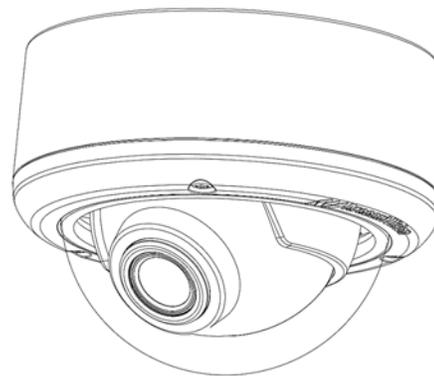
AV3245PM-D-LG

AV3246PM-D

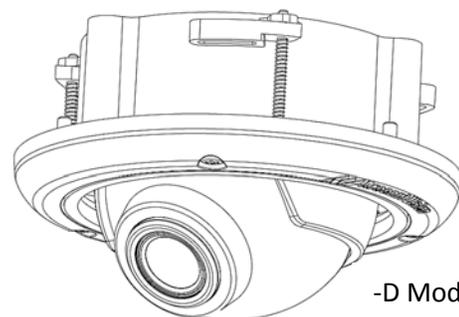
AV3246PM-D-LG

AV5245PM-D

AV5245PM-D-LG



-D Models



-D Models (In-ceiling)



MegaBall[™] 2 Installation

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Package Contents

MegaBall[™] 2 Wall Mount Version (-W)

- A. Arecont Vision MegaBall[™] 2 camera with wall mount (indoor use only)
- B. Mounting template
- C. CD with AV100 software and user manuals (license key required for recording)
- D. Pack of three (3) wood screws and three (3) dry wall anchors

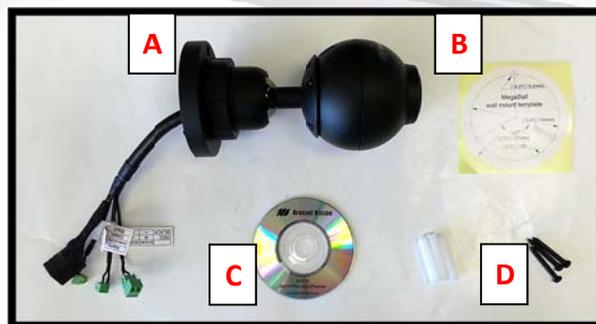


Image 1-1

MegaBall[™]2 Dome Version (-D)

- A. Arecont Vision MegaBall[™] 2 camera with in-ceiling mount (indoor use only)
- B. Surface mount (preassembled on dome)
- C. O-ring (preassembled on bezel)
- D. Dome cover (Bubble)
- E. CD with AV100 software and user manuals (license key required for recording)
- F. Security L-Key
- G. Pack of three (3) wood screws and three (3) dry wall anchors
- H. Mounting template



Image 1-2

Warranty Information

3 Year Limited Warranty

ARECONT VISION warrants to Purchaser (and only Purchaser) (the "Limited Warranty"), that: (a) each Product shall be free from material defects in material and workmanship for a period of **thirty-six (36) months** from the date of shipment (the "Warranty Period"); (b) during the Warranty Period, the Products will materially conform with the specification in the applicable documentation; (c) all licensed programs accompanying the Product (the "Licensed Programs") will materially conform with applicable specifications. Notwithstanding the preceding provisions, ARECONT VISION shall have no obligation or responsibility with respect to any Product that (i) has been modified or altered without ARECONT VISION's written authorization; (ii) has not been used in accordance with applicable documentation; (iii) has been subjected to unusual stress, neglect, misuse, abuse, improper storage, testing or connection; or unauthorized repair; or (iv) is no longer covered under the Warranty Period. ARECONT VISION MAKE NO WARRANTIES OR CONDITIONS, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, OTHER THAN THE EXPRESS LIMITED WARRANTIES MADE BY ARECONT VISION ABOVE, AND ARECONT VISION HEREBY SPECIFICALLY DISCLAIMS ALL OTHER EXPRESS, STATUTORY AND IMPLIED WARRANTIES AND CONDITIONS, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT AND THE IMPLIED CONDITION OF SATISFACTORY QUALITY. ALL LICENSED PROGRAMS ARE LICENSED ON AN "AS IS" BASIS WITHOUT WARRANTY. ARECONT VISION DOES NOT WARRANT THAT (I) THE OPERATION OF THE PRODUCTS OR PARTS WILL BE UNINTERRUPTED OR ERROR FREE; (II) THE PRODUCTS OR PARTS AND DOCUMENTATION WILL MEET THE END USERS' REQUIREMENTS; (III) THE PRODUCTS OR PARTS WILL OPERATE IN COMBINATIONS AND CONFIGURATIONS SELECTED BY THE END USER; OTHER THAN COMBINATIONS AND CONFIGURATIONS WITH PARTS OR OTHER PRODUCTS AUTHORIZED BY ARECONT VISION OR (IV) THAT ALL LICENSED PROGRAM ERRORS WILL BE CORRECTED.

For RMA and Advance Replacement information visit ArecontVision.com

Install MegaBall[™] 2 Wall Mount Camera (-W Models)

Mounting the Camera:

1. Remove the camera and hardware from the box.
2. Using the mounting template, prepare the mounting surface for camera installation.
3. Plug the Ethernet cable into the MegaBall[™] 2 PoE female RJ45 connector. (Image 2)

NOTE: If the camera will be powered via PoE, please skip to step 5.

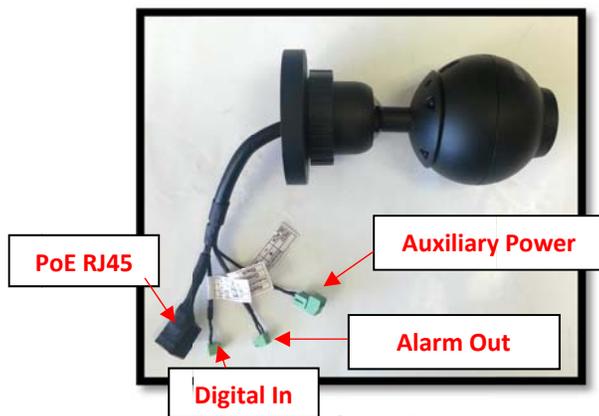


Image 2

4. If the camera will be powered by an AC 24V or DC 12-48V power supply, connect external power with pigtail cable connector.

NOTE 1: Ensure that the polarity of the DC input on the camera matches the way that the wires are installed in the connector shown in Image 2.

NOTE 2: AC power does not have polarity.

5. Align the holes on the camera wall mount with the prepared holes on the mounting surface. Attach the camera to the mounting surface with the wood screws or any other hardware suitable for the mounting surface.

Adjusting the Tilt, Pan, Z-Axis (yaw):

6. To adjust the camera tilt, pan or z-axis (yaw), loosen the ring on the wall mount bracket as shown in Image 3 then adjust as necessary and retighten the ring.



Image 3

NOTE : The 3-axis bracket allows 360° camera body rotation, 90° tilt and 360° bracket rotation for easy installation in any location. (Image 4)



Image 4

CAUTION: Adjusting the camera without loosening the bracket ring may result in scratches on the bracket joint. Incorrect installation practices are not covered under warranty!

Install MegaBall™ 2 Dome Version (-D Models)

Mounting the Camera:

1. Remove the camera and hardware from the box.
2. Using the mounting template, prepare the mounting surface for camera installation.
3. Plug Ethernet cable into the MegaBall™ 2 PoE female RJ45 connector. (Image 5)

NOTE: If the camera will be powered via PoE, please skip to step 5.

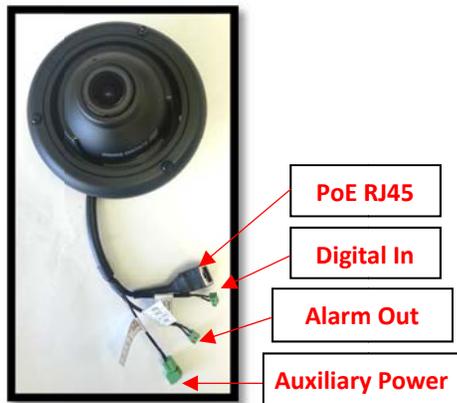


Image 5

4. If the camera will be powered by an AC 24V or DC 12-48V power supply, connect auxiliary power to terminal block on pigtail cable connector.

NOTE 1: Ensure that the polarity of the DC input on the camera matches the way that the wires are installed in the connector shown in Image 5.

NOTE 2: AC power does not have polarity.

5. Using the provided Security L-key (Image 1F), loosen the three (3) screws securing the dome cover (Image 6). Remove the vandal resistant dome cover.

NOTE: Do not remove the screws from the dome cover.



Image 6

6. Loosen the three (3) machine screws (Image 7) and remove the in-ceiling mount camera from the surface mount housing.



Image 7



In-ceiling Mount Installation (Optional)

7. Using the mounting template, cut a hole in the surface for mounting.
8. Insert the in-ceiling mount camera into the hole.
9. Tighten the “lever screws” until the flush mount is snug, as shown in Image 8. The “Support Arm” will ride down the screw to compress the mounting surface.

NOTE: Do not over-torque the lever screws.

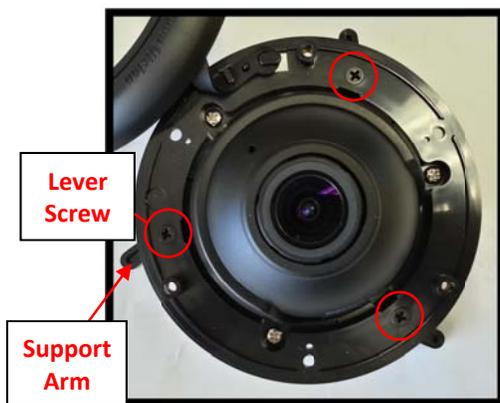


Image 8

Surface mount installation

10. Align the holes in the surface mount with the prepared holes on the mounting surface with the wood screws or any optional hardware suitable for the mounting surface.
11. Attach the in-ceiling camera to the surface mount, using the three machine screws as shown on Image 7.

Adjusting the Tilt, Pan, Z-Axis (Yaw):

12. To adjust the camera tilt, pan or z-axis (yaw), loosen the 3 set screws on the in-ceiling mount as shown in Image 9. Then adjust as necessary and retighten the 3 set screws.

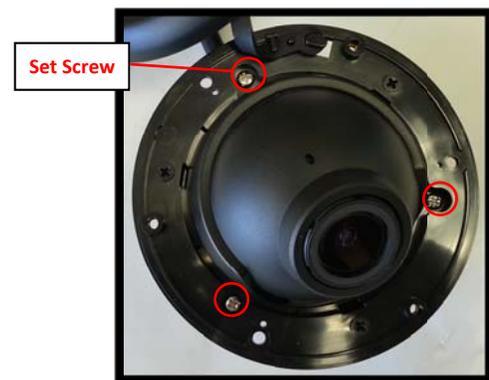


Image 9

NOTE : The 3-axis in-ceiling camera allows 360° camera body rotation, 90° tilt, and 360° camera sleeve rotation for easy installation in any location as shown in Image 10.

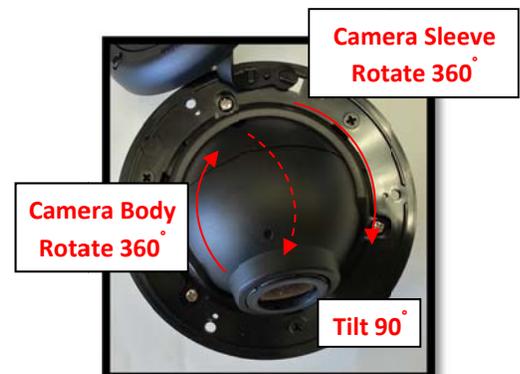
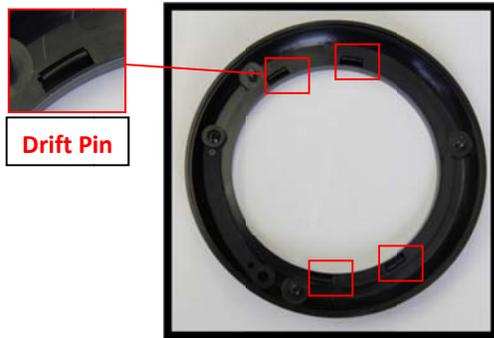


Image 10

Dome Cover (Bubble) Installation (Optional):

13. Remove the O-ring (Image 1D on Page 3) from the bezel by pushing on the 4 drift pins on the back of bezel shown in Image 11.
14. Attach the provided dome cover (Image 1D on Page 3) to the bezel as shown in Image 12.



Drift Pin

Image 11



Image 12

15. Remove the protective film from the bubble.

NOTE: Take precaution not to scratch the bubble.

16. Secure the dome cover to the camera using the provided Security L-Key (Image 1F on Page 3)

Adjusting the Remote Focus and Zoom:

17. To adjust focus or zoom, open the camera web interface and click the “Focus” tab as shown in image 13.
18. To manually adjust zoom, click the “+20”, “+5”, “+1”, “-20”, “-5”, “-1” buttons to zoom in and out, adjusting the field of view.

NOTE 1: “+20” zooms in 20x further than “+1”

NOTE 2: If the “Enable Auto Focus after zoom” option is checked as shown in image 13, the focus will automatically be adjusted when zoom is changed.

19. Set up a focus area (if necessary) by drawing a rectangle with the mouse (by left-clicking and dragging the mouse to a desired zoom size) shown in Image 13.
20. To automatically adjust focus, choose “Full-range Focusing” or “Fast Focusing” depending on the image clarity as shown in image 13.
21. If the image is completely out of focus, choose “Full-range Focusing” to scan the full focus range and find the best focus position.
22. If the image is slightly out of focus, choose “Short-range Focusing” to fine tune and quickly get a precise focus position to save time.
23. 31. To manually focus, click the “+20”, “+5”, “+1”, “-20”, “-5”, “-1” buttons to fine tune the focus.

Zoom & Focus

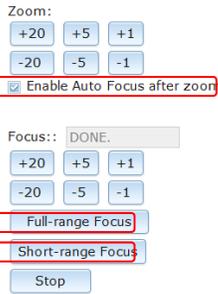


Image 13



Adjusting P-Iris:

Note: If “Enable P-Iris” is unchecked, the iris will be fully open to the maximum. It may result in less sharpness and artificial color under strong light condition.

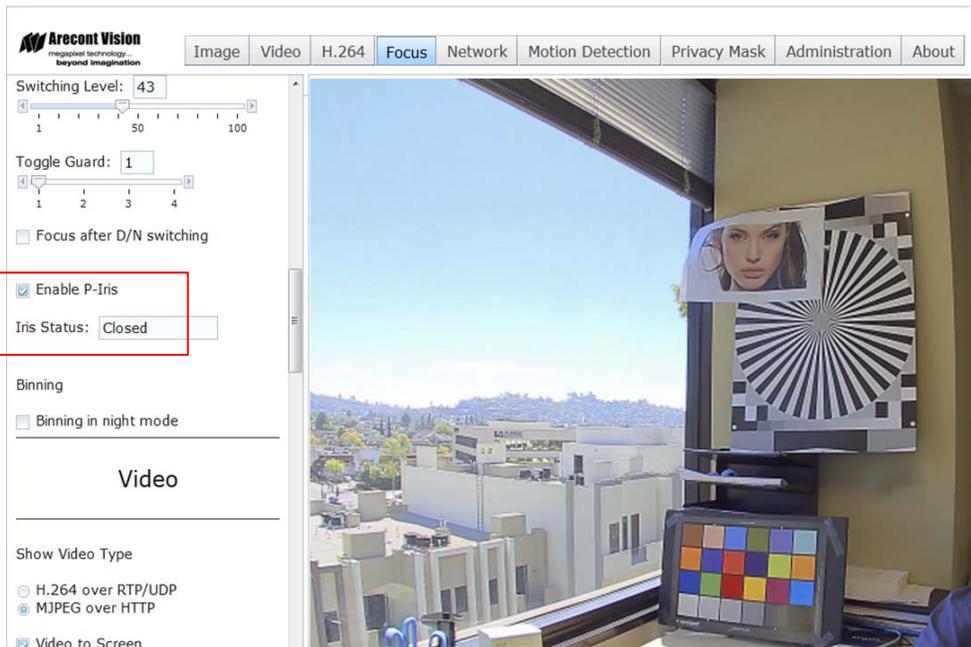


Image 14

Optional: Connecting Alarm I/O:

24. To use the Alarm I/O, connect the alarm I/O to the pigtail cable connector as shown in Image 2.

NOTE: Table 1 shows the electrical characteristics and Table 2 shows cable color for digital I/O.

Electrical Characteristics:		Min	Max	Camera
Input voltage (V) (measured between + and - terminals)	ON	2.9	6.3	IR & DN Versions
	OFF	0	1.3	
Output current (mA) (measured between + and - terminals) Applied Voltage Range: 0 - 80V	ON	-	50	DN version Only
	OFF	-	0.1	

Table 1

NOTE: Both the input and the output are electrically isolated from the rest of the camera's electrical circuitry via general-purpose photo couplers. The input is additionally protected with a serial 250 Ohm resistor and a debouncing circuit. Duration of any input signal should be at least 5ms to comply with the requirements of the debouncing circuit.

Yellow	Digital IN +
Red	Digital IN -
Green	Digital OUT +
Black	Digital OUT -

Table 2

Camera Software Installation

25. Install the AV100 application manager Software. (Image 15, found on the CD).

26. Run the AV100 application manager by double clicking on the icon shown below. (Image 16, found on your desktop).

NOTE: you can download latest version AV100 on website

<http://www.arecontvision.com/software.php>

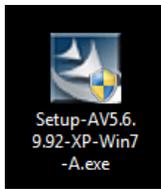


Image 15



Image 16

27. Select “Run” next to “Setup cameras” from the AV100 application manager as shown in Image 17 and wait for “Arecont Vision Camera Installer” window to appear as shown in Image 18.



Image 17

28. Click “Mode” tab to select desired install mode on the Arecont Vision Camera Installer as shown in Image 18.



NOTE 1: Basic Mode: software will automatically discover and change / assign IP address to match PC subnet if they are not locked.

NOTE 2: Advanced Mode: software will automatically discover but allow manual update of the IP address. See “AV100 Installation Manual” (found on the CD) for details on Advanced Mode.

NOTE3: User can verify camera model number and FW version of all cameras as shown in Image 18.

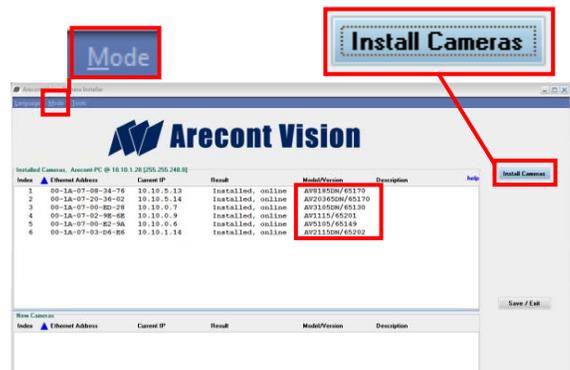


Image 18

29. For basic mode, select “Install Cameras” on the Arecont Vision Camera Installer as shown in Image 19.

30. Confirm that all the cameras connected to the network switch appear in the upper window.

31. Repeat Step 29 if all of the cameras do not appear in the upper window.

CAUTION: If the software does not find a camera, the software utility may be blocked by the anti-virus or Windows® firewall. Before turning them off, please consult your IT manager.

NOTE : Double click the camera model on the Camera Installer as shown in Image 19 to access the camera web interface. See “AV Camera Web Page User Manual” (found on the CD) for details on the web interface.



Index	Ethernet Address	Current IP	Result	Model/Version	Description
1	00-1A-07-09-34-76	10.10.5.13	Installed, online	AV81850M/65170	
2	00-1A-07-20-36-02	10.10.5.14	Installed, online	AV203450M/65170	
3	00-1A-07-09-8D-28	10.10.0.7	Installed, online	AV31100M/65130	
4	00-1A-07-03-06-86	10.10.0.8	Installed, online	AV21100M/65202	
5	00-1A-07-00-82-9A	10.10.0.6	Installed, online	AV5105/65149	
6	00-1A-07-03-06-86	10.10.1.14	Installed, online	AV21100M/65202	

Image 19

32. When all cameras are discovered and display “Installed, online”, select “Save/Exit.” The AV100 application main menu will appear.
33. From the “AV100 Application Manager” menu, select “Run” next to “Live video” to view live images.

NOTE: See the “AV100 Installation Manual” (found on CD) for details on camera configurations.

Wall Mount (D4S-WMT-B or D4S-WMT) Installation Instructions (Sold Separately)

Inside the box:

- A. Wall mount (Fits ¾" NPT Standard)
- B. Pack of three (3) machine screws, four (4) wood screws and four (4) dry wall anchors
- C. Mounting template

NOTE: D4S-WMT-B color is black and D4S-WMT color is light grey.

Not included but needed:

- #2 Phillips screw driver

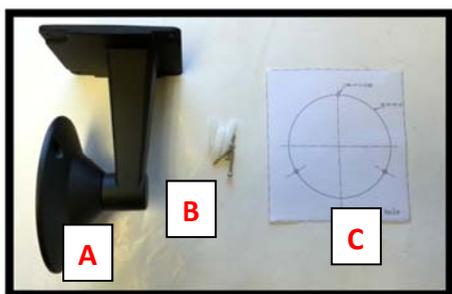


Image 20

1. Remove wall mount and hardware from the box.
2. Using the mounting template, prepare the mounting provisions for camera installation.
3. Attach surface mount (**Image 1B on Page 3**) to wall mount as shown in **Image 21** using three machine screws provided.

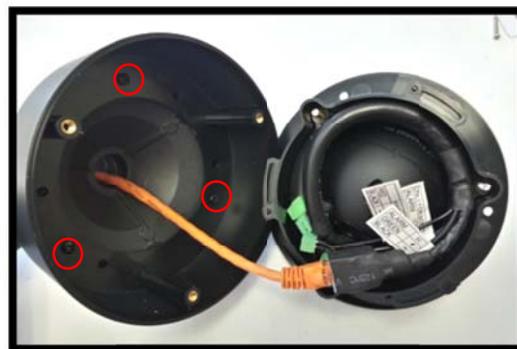


Image 21

4. Run Ethernet cable through the wall mount
5. Attach wall mount to the wall using drywall screws or any optional hardware suitable for the mounting surface.
6. Connect Ethernet cable with Megaball pigtail cable as shown on **Image 22**



Image 22

7. For installation of the camera, please reference "**Mounting the Camera**".



Junction Box Adapter (SV-JBA) Installation Instruction (Sold Separately)

Inside the box:

- A. Junction Box Adapter
- B. Pack of four (4) machine screws
- C. One double-sided hex key
- D. Pack of four (4) wood screws and four (4) dry wall anchors
- E. Mounting template

Not included but needed:

- #2 Phillips screwdriver
- Wall Mount, MD-WMT
- ¾" NPT Conduit (if necessary)

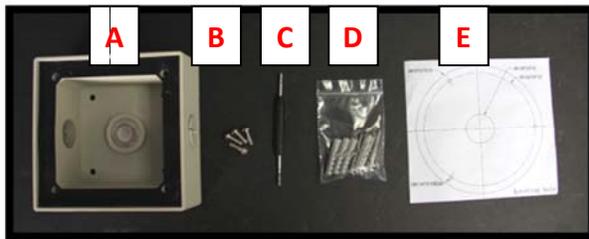


Image 23



Image 24



Image 25

1. Remove junction box adapter and hardware from the box
2. Remove the conduit plug by first removing the socket set screw using the provided hex key (C) as shown on **Image 24**.
3. Attach the junction box adapter to the wall using drywall screws or any optional hardware suitable for the mounting surface.
4. Attach the wall mount to junction box adapter then attach cap to the wall mount as shown in Image 25.
5. Connect ¾" NPT Conduit to the junction box adapter.
6. Run Ethernet cable and outside power cable (if necessary) through the Junction Box Adapter and Wall Mount.
7. For installation of the camera, please reference "**Mounting the Camera.**"

Electrical Box Adapter (SV-EBA) Installation Instructions (Sold Separately)

Inside the box:

- A. Electrical Box Adapter
- B. Pack of four (4) machine screws

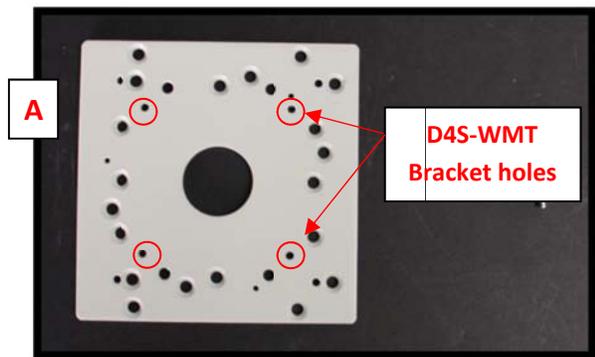


Image 26

Not included but needed:

- #2 Phillips head screwdriver
 - Common electrical box, such as single gang box, double gang box, or square electrical boxes shown in **Image 27-1~4**.
1. Remove the electrical box adapter and hardware from the box.
 2. Attach the wall mount bracket to the electrical box adapter.
 3. Attach adapter to electrical box.

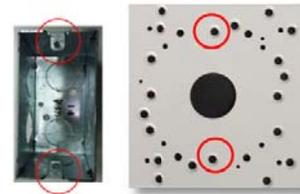


Image 27-1 Single gang box



Image 27-2 Double gang box



Image 27-3 Square box

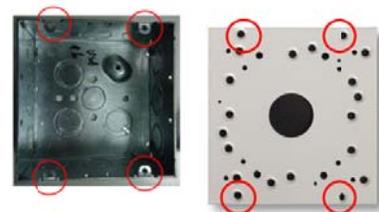


Image 27-4 Square box

LED Indicators

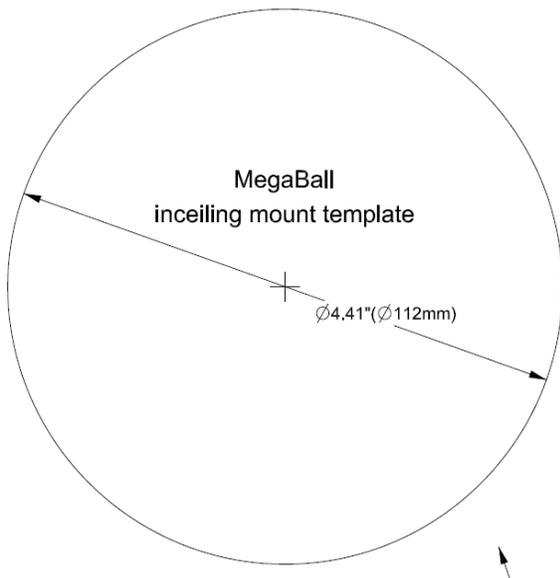
LED	Status	Description
Green	Flashing	Camera has been accessed. Normal operation.
	Solid	N/A
	None	No Connection.

Support

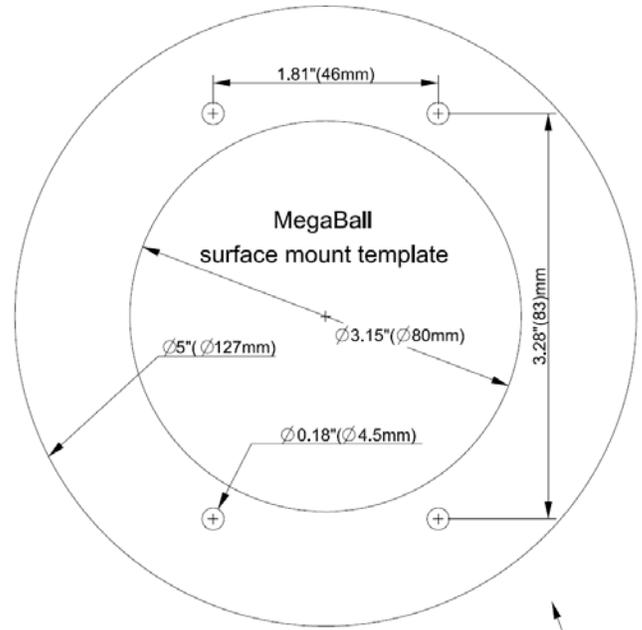
1. Arecont Vision FAQ Page Located at ArecontVision.com
2. Check the following before you call:
 - ✓ Restore camera to factory default with AV100, AV200 or the camera webpage.
 - ✓ Upgrade to the latest firmware by visiting ArecontVision.com.
 - ✓ Isolate the camera on a dedicated network and test with AV100 or AV200.
 - ✓ Swap the “troubled” camera with a known good camera to see if the problem follows the camera or stays at the location.
3. Contact Arecont Vision Technical Support one of three ways:
 - 1. Online Portal : Support.ArecontVision.com**
 - 2. Phone : 1.818.937.0700 (option #1)**
 - 3. Email : support@arecontvision.com**

Mounting Template

MegaBall Dome (In-ceiling) (-D)



MegaBall Dome Surface mount (-D)



MegaBall Wall Mount (-W)

