



**e-Watch®**

## **Installation Guide for CAM-312-Q**

### **Half Dome Day/Night Camera**

#### **e-Watch Corporation**

7800 IH-10 West, Suite 720  
San Antonio, TX 78230  
USA

[www.e-watch.com](http://www.e-watch.com)  
tel: 210 349-2000  
fax: 210 341-1020

#### READ THIS NOTICE

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR E-WATCH REPRESENTATIVE FOR A COPY. NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED 'AS IS' WITH ALL FAULTS. E-WATCH AND ITS SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL E-WATCH OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF E-WATCH OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### UNITED STATES FEDERAL COMMUNICATIONS COMMISSION NOTICE

The following information is for FCC compliance of Class A devices: This equipment has been tested and found to comply with the limits for 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 users will be required to correct the interference at their own expense.

You can determine whether your equipment is causing interference by turning it off. If the interference stops, it was probably caused by the e-Watch® equipment or one of its peripheral devices. If the equipment causes interference to radio or television reception, try to correct the interference by using one or more of the following measures:

- Turn the television or radio antenna until the interference stops.
- Move the equipment to one side or the other of the television or radio.
- Move the equipment farther away from the television or radio.
- Plug the equipment into an outlet that is on a different circuit from the television or radio. (That is, make certain the equipment and the television or radio are on circuits controlled by different circuit breakers or fuses.)

Modifications to this product not authorized by e-Watch could void the FCC approval and negate your authority to operate the product.

#### COPYRIGHT AND TRADEMARK NOTICE

Copyright© 2003-2006 e-Watch Corporation. All rights reserved. e-Watch is a registered trademark of e-Watch Corporation. ViewWatch, DecisionWatch, EventWatch, SiteWatch, MotionWatch, GateWatch, AirWatch, PocketWatch, PeopleWatch, BankWatch, ClassWatch, ObjectWatch, WatchLink, Activity Gated Storage, and Gigapixel are trademarks of e-Watch Corporation. Any other trademarks mentioned in this document are the property of their respective owners.

The use of the word partner does not imply a partnership relationship between e-Watch and any other company.

e-Watch systems do not prevent crimes from being committed, but are intended to be used to monitor and investigate.

e-Watch components are electronic devices and complex commercial software products. As such, they may fail on occasion. Multiple devices with overlapping zones should be used for redundancy.

e-Watch event notification capabilities must be user programmed and activated prior to use. System reliability is dependent on the underlying network infrastructure and associated communications services that may fail on occasion. The user of the e-Watch system is advised to evaluate risk associated with network failures and operator errors. Routine auditing and preventive maintenance of the system is essential to assure optimum performance.

Event analysis and recreation is subject to system configuration, lighting conditions, environmental conditions, lens and housing cleanliness, distance to subject, operator-invoked control settings, and many other factors.

Read and follow all documentation to assure proper performance.

**C O N T E N T S****Preface**

Purpose  
 Audience  
 Organization  
 Conventions  
 Obtaining Documents  
 Documentation Feedback  
 Obtaining Assistance

|                   |   |           |
|-------------------|---|-----------|
| <b>PART 1</b>     | <b>Installation Guide</b>               |           |
| <b>CHAPTER 1</b>  | <b>INTRODUCTION</b> .....               | <b>1</b>  |
|                   | Key Features and Benefits .....         | 1         |
|                   | Components Supplied with the Unit ..... | 1         |
|                   | Components Supplied by Customer .....   | 1         |
|                   | For More Information .....              | 2         |
| <b>CHAPTER 2</b>  | <b>CAM-312-Q ASSEMBLY</b> .....         | <b>3</b>  |
|                   | Assembly .....                          | 4         |
| <b>CHAPTER 3</b>  | <b>CAM-312-Q POWER</b> .....            | <b>6</b>  |
|                   | Power .....                             | 6         |
| <b>CHAPTER 4</b>  | <b>CAM-312-Q ETHERNET</b> .....         | <b>9</b>  |
|                   | Install Ethernet .....                  | 9         |
| <b>CHAPTER 5</b>  | <b>FINAL ASSEMBLY</b> .....             | <b>10</b> |
|                   | Assembly .....                          | 10        |
| <b>PART 2</b>     |   |           |
| <b>APPENDIX A</b> | <b>COMPLETED SYSTEM</b> .....           | <b>11</b> |

## **PREFACE**

The preface describes the purpose, audience, organization, and conventions of this guide and provides information on how to obtain related documents.

The preface covers these topics:

- **Purpose**
- **Audience**
- **Organization**
- **Related Documentation**
- **Conventions**
- **Obtaining Documentation**
- **Documentation Feedback**
- **Obtaining Assistance**

### **Purpose**

This document provides instruction for the installation of the CAM-312-Q Half Dome Camera. The Installation Guide for CAM-312-Q provides a parts list and diagrams. It also provides illustrations of the connections and construction required. This document acts as an illustrated guide for hardware installation.

### **Audience**

This Installation Guide provides information for hardware construction and is intended for qualified technicians involved in hardware maintenance and repair. This guide requires knowledge of basic electronic hardware installation and tools. Ability to lift five to ten pounds is required for installation of the unit.

## Organization

This guide is organized as shown in the following table

| Part   | Description  |
|--------|--|
| Part 1 | ‘Installation Guide’<br><br>Contains information on constructing and installing a CAM-312-Q. Diagrams and procedures are included. |
| Part 2 | ‘Appendix’<br><br>Contains an illustration of a completed CAM-312-Q.   |

## Related Documentation

Refer to the following documents for further information about related e-Watch applications and products:

- **URG-9110-001—SiteWatch™ Situational Awareness System Administration Guide**
- **5188 VIDEOLARM® Installation Manual**

## Conventions

This document uses the following conventions:

| CONVENTION           | DESCRIPTION  |
|----------------------|--|
| <b>Boldface font</b> | Commands and keywords are in <b>boldface</b> .   |
| <i>Italic font</i>   | Arguments for which you supply values are in <i>italics</i> .  |
| [ ]                  | Elements in square brackets are optional.  |
| {x y z}              | Alternate keywords are grouped in brackets and separated by vertical bars.   |
| [x y z]              | Optional keywords are grouped in brackets and separated by vertical bars.  |
| String               | A non-quoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks. |
| Screen font          | Terminal sessions and information the system displays are in screen font.  |

|                         |        |   |
|-------------------------|--------|---|
| <b>Boldface</b><br>font | screen | Information you must enter is in <b>boldface</b> screen font.   |
| <i>Italic</i><br>font   | screen | Arguments for which you supply values are in <i>italic</i> screen font.   |
| ^                       |        | The symbol ^ represents the key labeled Control - for example, the key combination of ^D in a screen display means hold down the Control key while you press the D key. |
| -->                     |        | This pointer highlights an important line of text in an example.  |
| <                       |        | Non-printing characters, such as passwords, are in angle brackets.  |

## Obtaining Documentation

The following sections provide sources for obtaining documentation from e-Watch Corp.

### World Wide Web

e-Watch documents can be found by going to the e-Watch web site [www.e-watch.com](http://www.e-watch.com)

### By Mail

e-Watch Corp.  
7800 IH 10 West, Suite 720  
San Antonio, Texas 78230  
210.349.2000  
[support@e-watch.com](mailto:support@e-watch.com)

## Documentation Feedback

You can submit technical comments about e-Watch documentation in the following ways:

E-mail your comments to [support@e-watch.com](mailto:support@e-watch.com)

To submit comments by mail, write to the following address:

e-Watch Corp.  
7800 IH 10 West, Suite 720  
San Antonio, Texas 78230

We appreciate your comments.

## Obtaining Assistance

The following sections provide sources for obtaining assistance from e-Watch Corp.

### Customer Support

For technical assistance please send requests to [support@e-watch.com](mailto:support@e-watch.com) or your local e-Watch reseller. You may also call 210-349-2000 and ask for Customer Support.

### Sales

For assistance with sales or marketing please call 210-349-2000 and ask for Sales or send requests to [sales@e-watch.com](mailto:sales@e-watch.com)

# Introduction

CAM-312-Q is a half dome camera for indoor use only

## Key Features and Benefits

The CAM-312-Q half Dome Camera is an e-Watch® day/night camera integrated into a half dome housing, capable of full communication with any PC running the ViewWatch™ software.

e-Watch is an enterprise wide surveillance and situational awareness system optimized for transmitting MPEG video streams, high resolution JPEG images, detected event data and other sensor and detector data using digital data transmission over both wired and wireless networks (LANs, WLANs).

The comprehensive e-Watch® Situational Awareness System is based on standard networking and Internet technology. Both real-time and archived data may be viewed from any authorized PC on the LAN, WAN or the Internet. The archive application tracks and maintains all situational awareness information and provides high-speed random access for fast location of data relating to specific events

## Components Supplied with the Unit

The unit contains the following components:

- CAM-312-Q Camera
- Half Dome Enclosure.

## Components Supplied by Customer

Power, mounting hardware and other connections must be supplied by the customer.

## For More Information

e-Watch Sales at [sales@e-watch.com](mailto:sales@e-watch.com)

e-Watch Technical Support at [support@e-watch.com](mailto:support@e-watch.com)

# CAM-312-Q Assembly

The CAM-312-Q unit comes unassembled. You must assemble the unit before attempting final installation.

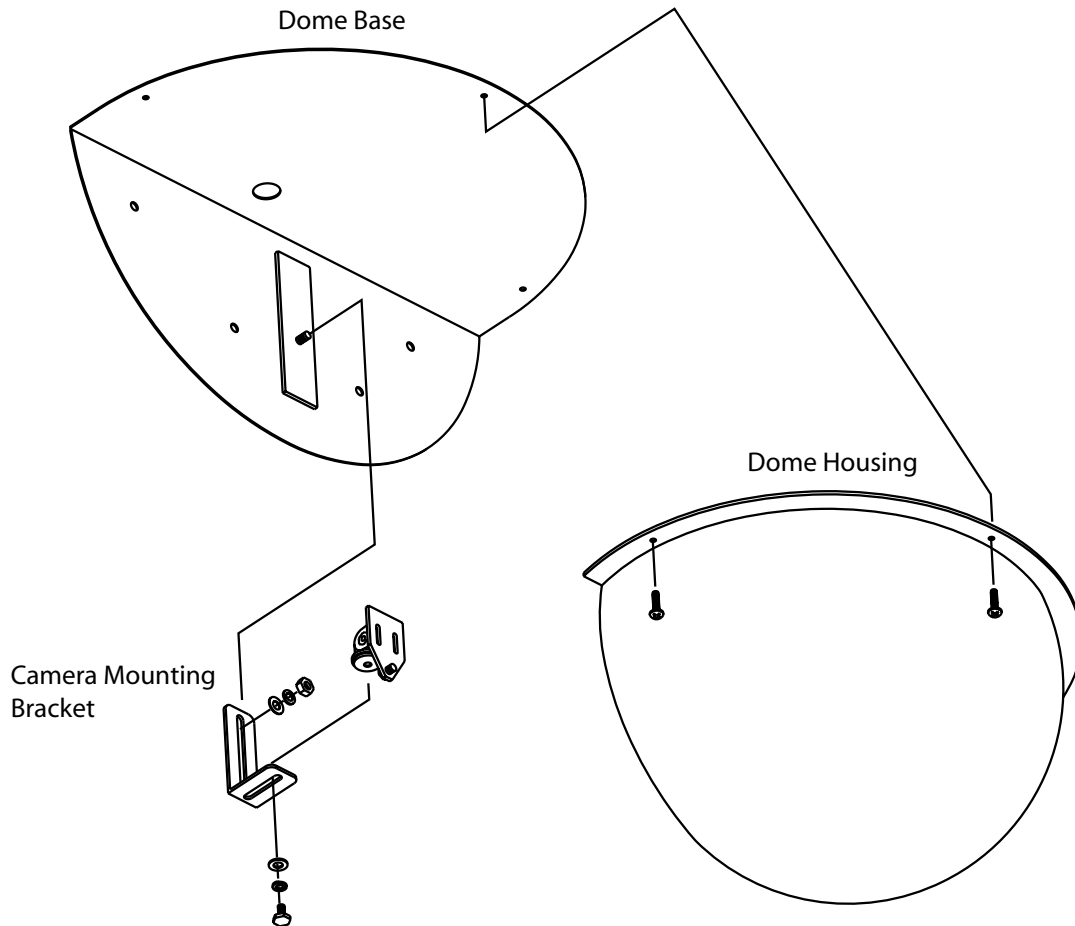


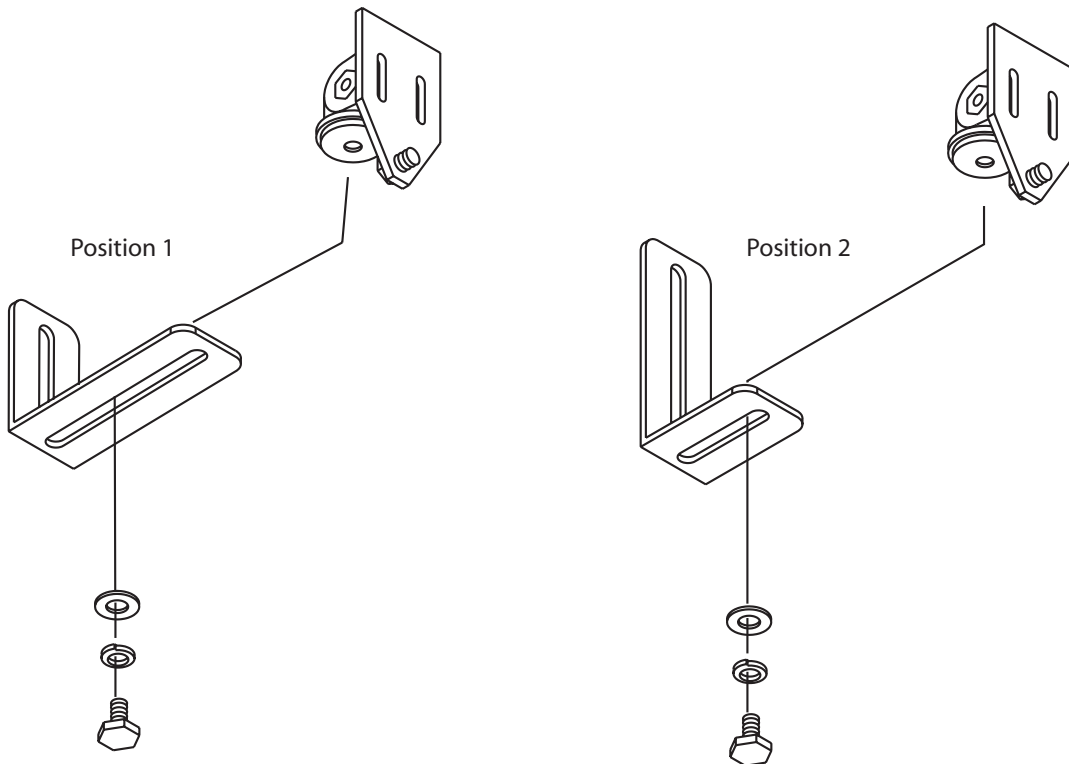
Figure 2-1 CAM-312-Q Assembly

## Assembly

Please follow the next steps to assemble the unit.

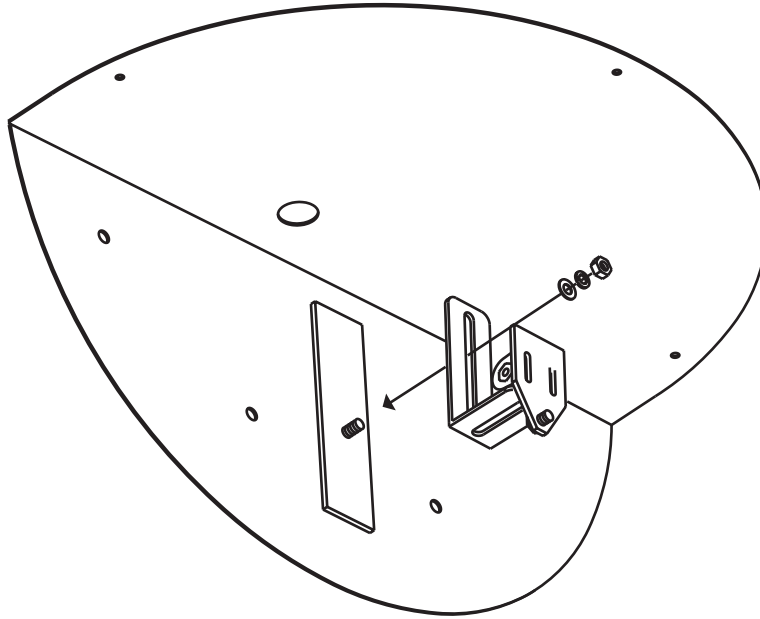
1. Assemble the camera mount bracket

There are two possible ways to attach the mounting bracket. For level viewing angles attach the bracket in position 1. For steep viewing angles attach the bracket in position 2.



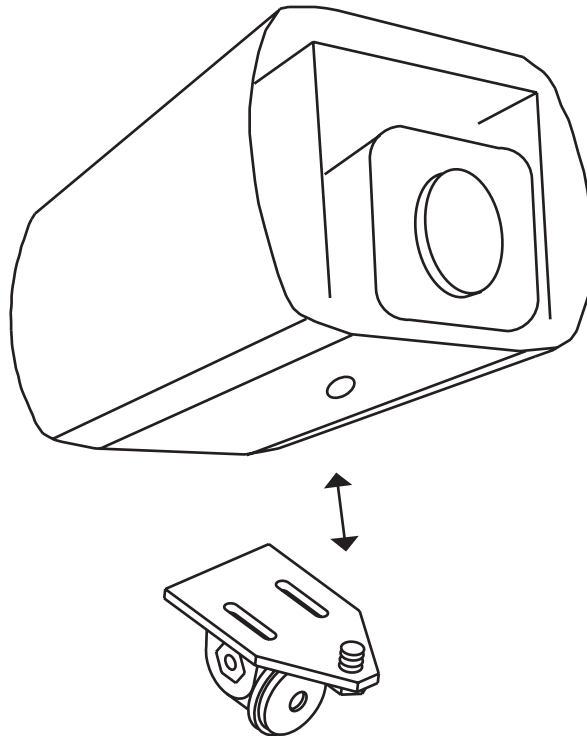
*Figure 2-2 Camera Mount Bracket*

2. Connect the camera mount bracket to the dome base.



*Figure 2-3 Camera Bracket to Dome Base*

3. Mount the e-Watch® CAM-312-Q to the camera mount bracket.



*Figure 2-4 Camera Mounting*

Note: Do not install the dome housing yet

## CAM-312-Q Power

### Power

The CAM-312-Q has a power requirement of 24 VAC/9-42 VDC. Power should be installed by a qualified technician. Do not exceed the device power ratings as it may cause damage to the device.

There are two different power connectors for this device, a ten pin and a five pin. These connectors are physically different and not interchangeable. The connector can be used to power the device with 24VAC or 9-42 VDC.

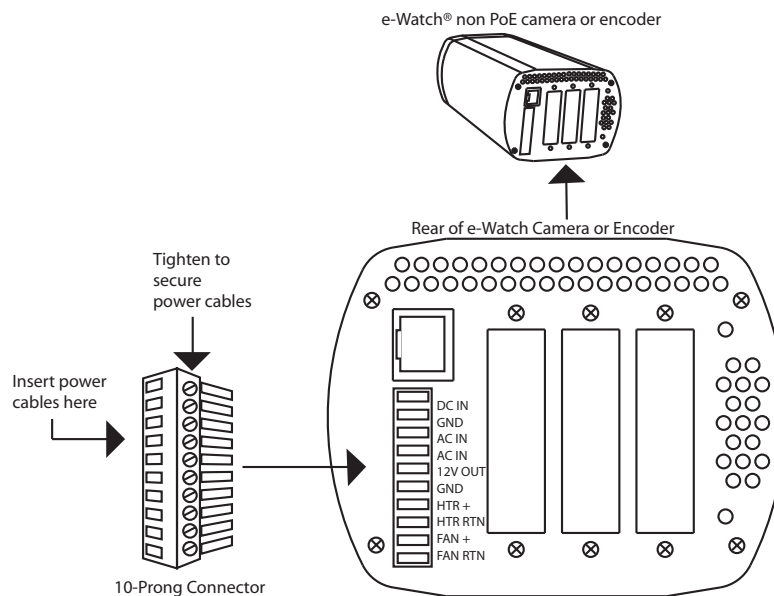


Figure 3-1 CAM-312-Q 10-Prong Power Connector

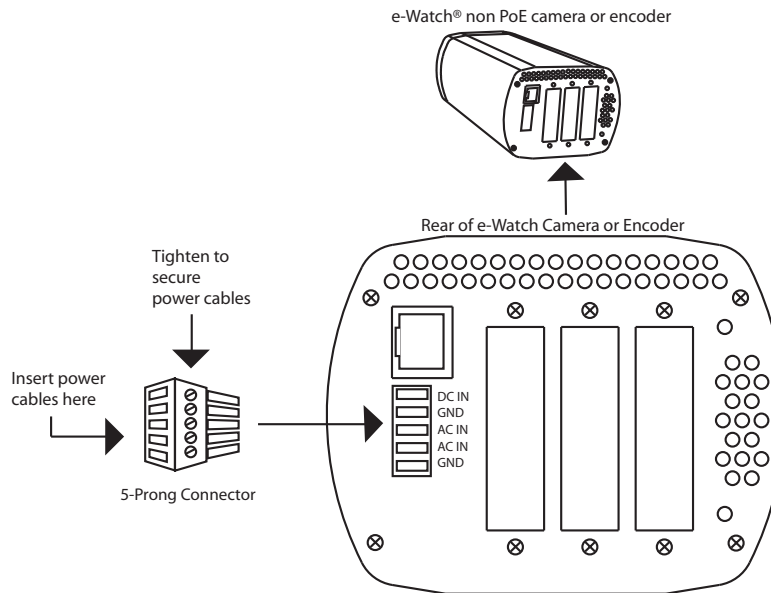


Figure 3-2 CAM-312-Q 5-Prong Power Connector

## AC Power

To power the CAM-312-Q with AC, connect your 24 VAC power supply to the appropriate input plugs on the 10 or 5 prong connector.

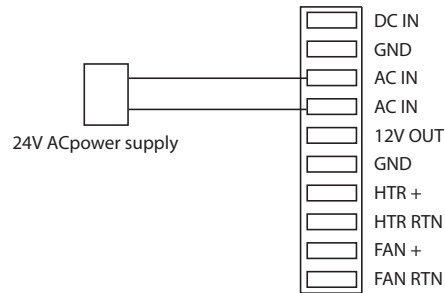


Image 3-3 AC 10 Prong Power Connection

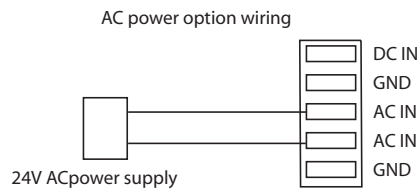
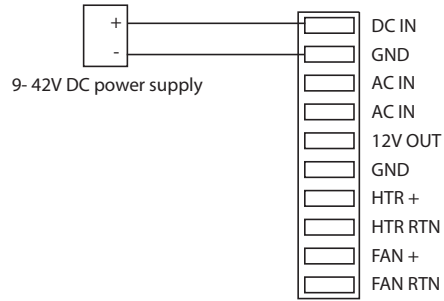


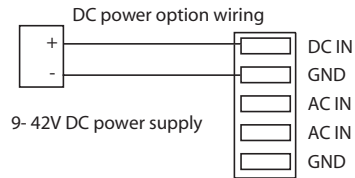
Image 3-4 AC 5 Prong Power Connection

## DC Power

To power the CAM-312-Q with DC, connect your 9-42 VDC power supply to the appropriate input plugs on the 10 or 5 prong connector.



*Image 3-5 DC 10 Prong Power Connection*



*Image 3-6 DC 5 Prong Power Connection*

## CAM-312-Q Ethernet

### Install Ethernet

Run the Ethernet cable thru the dome base and into the camera.

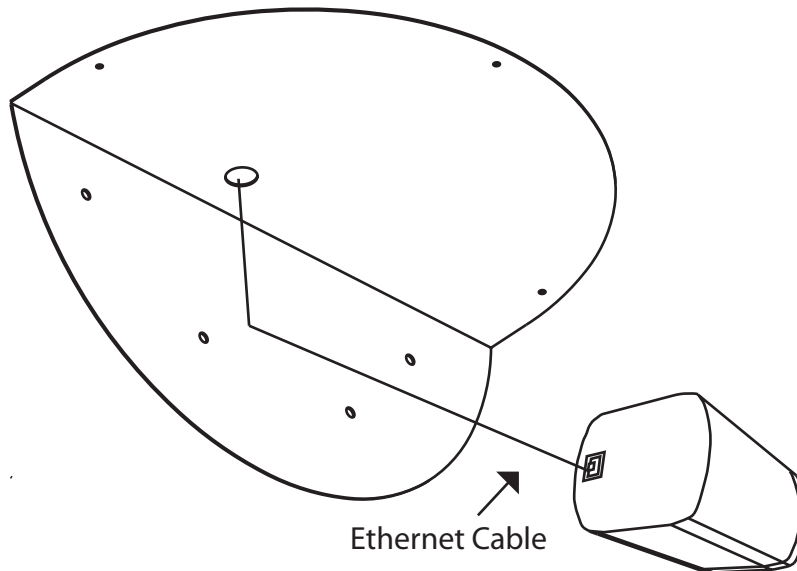
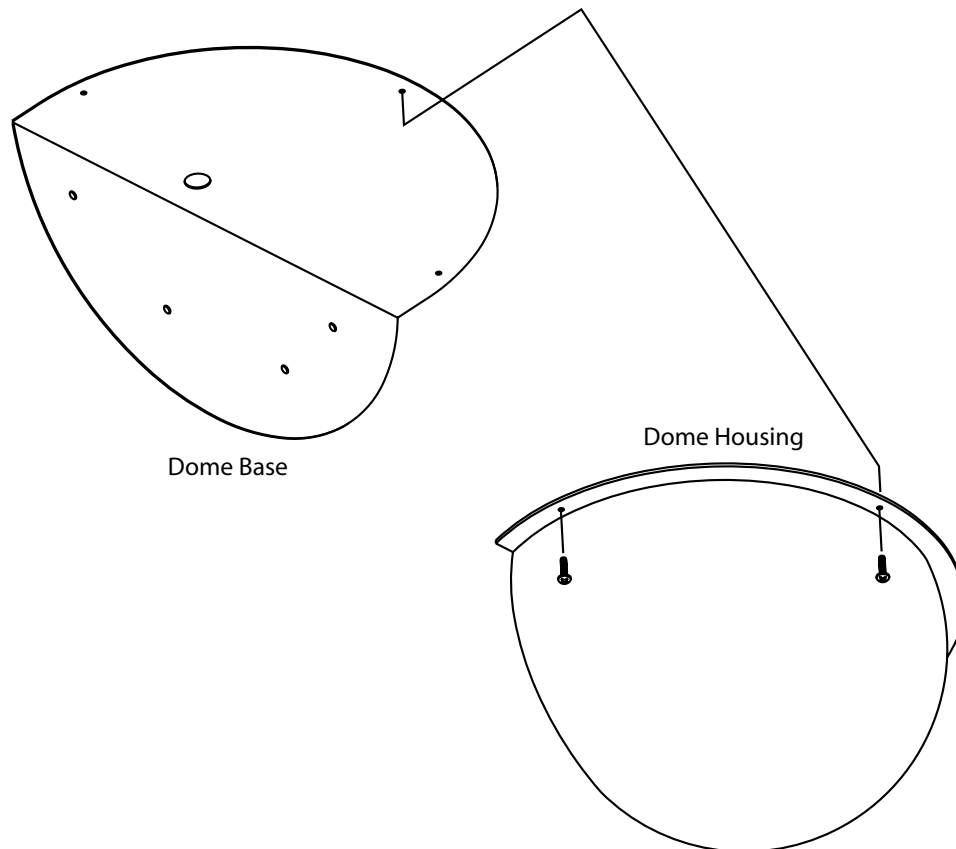


Figure 4-1 Ethernet Cable Connection

## Final Assembly

### Assembly

Install the half dome, Please see the VIDEOLARM® document 5188 included in the half dome package. Adjust the camera to have it point to the desired location. Bolt on the dome housing.



*Figure 5-1 Dome Housing*

## Completed System

The CAM-312-Q should appear similar to Figure A-1 below.



*Figure A-1. CAM-312-Q Half Dome Camera*