



MZ-HD34-1 Installation Guide

READ THIS FIRST

Version 1.1.0

Table of Contents

Part I	Check Receipt of All Components	1
1.1	Component List.....	1
1.2	Additional Installation Requirements.....	1
Part II	Set Up and Bench Test Camera	3
2.1	Remove Packaging and Inspect Camera.....	3
2.2	Connect Camera Cable.....	3
2.3	Set Camera IP Address.....	4
2.4	Set Administrator Password.....	6
2.5	Bench Test Completed.....	8
Part III	Configuring IVC VMS Software	9
3.1	Relay Server Settings.....	9
3.2	Longwatch Settings.....	10
Part IV	Install Camera	13
4.1	Mount the Camera.....	13
4.1.1	MB-100-14 Mount Option	14
4.2	Camera Power.....	16
Part V	Support Information	17
Part VI	Appendix A - Camera Specifications	19

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1

Check Receipt of All Components

1.1 Component List

Before you proceed, be sure you have received all of the components listed below:

- Stainless steel dome camera with mount
- Torx wrench
- Mounting hardware
- Bench test kit



MZ-HD34-1

If ordered, you may have also received:

- a) Any special mounting equipment (e.g. IVC Pole Mount Kit)

NOTE: Only one bench test kit is enclosed per order, it may be in a separate box

NOTE: Special mounting equipment may be in a separate box and may require additional materials for installation. (Consult the specific kit for more information)

1.2 Additional Installation Requirements

The following items are required to properly complete installation:

- Phillips head screwdriver
- Straight-through Ethernet cable with RJ-45 connectors
- A Windows™ computer running IVC Camera Management Software
- A Windows™ computer running Internet Explorer 8.x (or higher)
- Tools for Special Mounting Kit (e.g. IVC Pole Mount Kit). (See kit for details)

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2

Set Up and Bench Test Camera

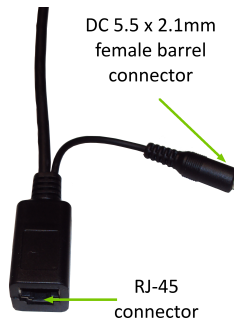
2.1 Remove Packaging and Inspect Camera

Inspect the camera for any signs of damage. Keep in mind the enclosure lens is constructed of soft acrylic for optimal optical characteristics. It can be scratched easily. Use only a damp soft cloth or vigorous water spray to clean.

If any damage occurred during shipping please call our support line (617-467-3059) for assistance.

2.2 Connect Camera Cable

The MZ-HD34-1 may be powered through the network cable or via a 12 VDC power source. To power the camera via PoE, connect a straight through Ethernet cable to the camera and to an IEEE 802.3af compliant port of a network switch or midspan.

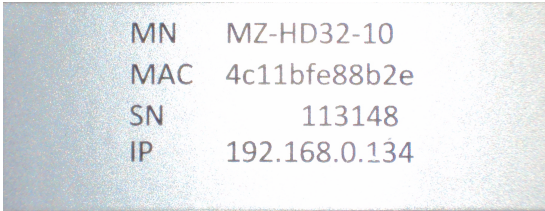


To power the camera with 12 VDC, plug the DC 5.5 x 2.1mm male barrel connector from your power source into the female DC connector connected to the camera. Then plug your network cable into the camera's RJ-45 connector.

Once connected and powered, you should see link activity on the switch or midspan port to which the camera is connected.

2.3 Set Camera IP Address

For your convenience, the camera's default IP is printed on the information label attached to the camera box. This label can also be found on the camera enclosure.



Example of camera information label

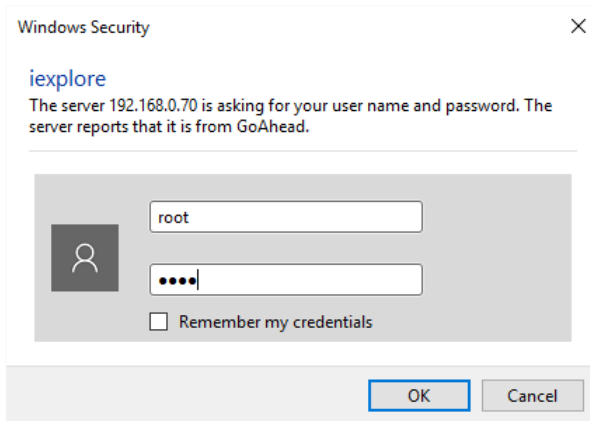
The camera's IP address has been set on a 192.168.0.x/ class network. For this section, the computer you are using for bench testing must be set to the same subnet as the camera (e.g. 192.168.0.###). Consult your network administrator if you need assistance.

Once you have located the IP address please follow the instructions below to set it to a permanent address:

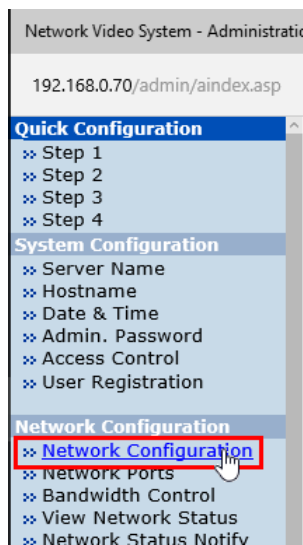
1. Using a web browser enter the IP Address in the address bar.
2. To change the IP address click on the **Admin** link.



3. When prompted by your browser, enter the camera username (factory default = **root**) and password (factory default = **root**). Click the **OK** button.



4. Under the **Network Configuration** section, click **Network Configuration**.



5. Make sure the **Static IP** radio button is selected. Then type in the new IP address, NetMask, GateWay, and other address values on this page. Consult your network administrator for assistance, if necessary. Click on the **Apply** button.

Network Configuration : Static IP

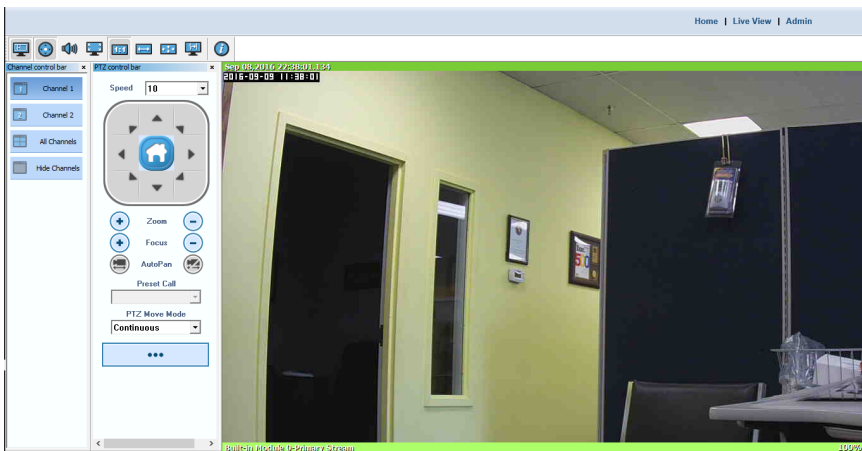
Static IP DHCP Client PPPoE

IP Address	192.168.0.70	
NetMask	255.255.255.0	
GateWay	192.168.0.1	
DNS 1	192.168.0.1	
DNS 2	164.124.101.2	

IPv6

Service	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
IP Address	<input type="text" value="Ex) fec0:1234::abcd:abcd/64"/>
GateWay	<input type="text" value="Ex) fec0:1234::abcd:1"/>
IPv6 Link-Local	fe80::230:6fff:fe85:9a43/64

- Camera will reboot. Wait ten seconds and then click the **Live View** link.
- Enter the new IP address in the browser address bar, click the Home tab, and observe live video from the camera.



NOTE: Change no other settings. All other relevant settings will be managed by your IVC video management software.

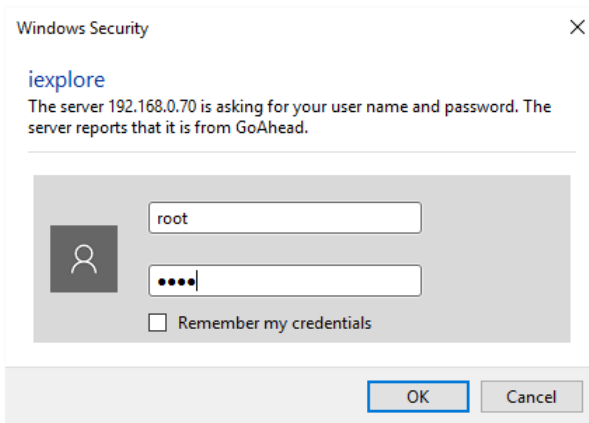
2.4 Set Administrator Password

If you wish to change the administrator password from the factory default, follow the instructions below.

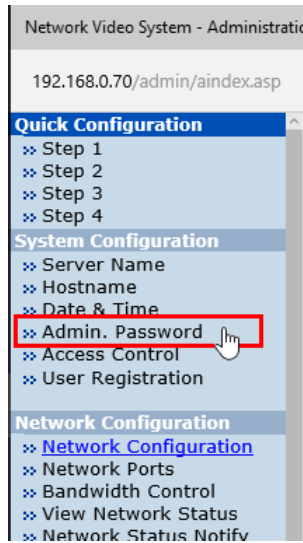
1. Type the camera IP address into a browser address bar.
2. In the subsequent window, click on the **Admin** link.



3. When prompted by your browser, enter the camera username (factory default = **root**) and password (factory default = **root**). Click the **OK** button.



4. Under the **System Configuration** section, click **Admin. Password**.



5. Type in the new and old administrator passwords where indicated on the subsequent page. Click the **Apply** button when satisfied with the entries.

Administrator's Password Configuration

Administrator's ID	root
Old Password	<input type="text"/>
New Password	<input type="text"/>
Confirm Password	<input type="text"/>

Notice : The password must be alphanumeric, within 4 ~ 23 characters.

6. Enter the new credentials when prompted by your browser to confirm proper operation.

2.5 Bench Test Completed

This concludes the bench test. Reassemble the camera.

3

Configuring IVC VMS Software

This chapter covers the settings for your IVC software that are unique to this camera. For more details on IVC software configuration and operation, consult the documentation provided with the software.

3.1 Relay Server Settings

To configure the MZ-HD34-1 in the Relay Server:

1. Enter the IP address of the Relay Server into your browser.
2. Login to the Relay Server when prompted for credentials. The user logging in must have sufficient rights to configure Relay Server.
3. Click on the **Management** link.
4. Click on the **Cameras** tab.
5. In the **Basic** menu, click **Camera**.
6. Click the **Camera** drop down menu and select an available ID number. Type a name for this camera in the corresponding text field.
7. Click the **Enable camera** check box.
8. In the **Encoder** drop down menu, select I-E1.
9. In the **IP address** text fields type the camera's IP address and Port number.
10. Enter the camera's username and password into the **Username and password** text fields.
11. Configure all other fields as shown below.

The screenshot shows the IVC web interface for camera configuration. The browser address bar indicates the URL is `http://localhost:84/IVC/management.htm`. The page title is "Welcome admin". The navigation menu on the left includes sections: "Basic" (Camera, Video Capture, Video Display, Video Storage, Presets, Panoramas, PTZ Limits, Control Display), "Advanced" (Camera Settings, Connection Timeout, Pan Tilt Settings, GPS Settings, Restore Position, Auxiliary Buttons, Event Notification, Slave Camera, On-screen Display, Troubleshoot), and "Autonomous" (Storage, Tour). The "Cameras" tab is selected in the top navigation bar.

The "Camera Setup" form contains the following fields and options:

- Camera:** Camera: (Required) [20] [MZ-HD34-1]
- State:** Active: Enable camera
- Encoder Type:** Encoder: (Required) [I-E1]
- Pan/Tilt:** Select pan/tilt code [v] Camera: Select camera code [v]
- Camera:** IP address: (Required) [192.168.25.99] Port: [80] Channel: [1]
- Username and password: [root] [root]
- Image type: [H.264] Stream ID: [1] Enable audio
- Image resolution: [Large] Image quality: [Normal]
- Frame rate: [0] fps NOTE: A value of zero will result in maximum camera frame rate
- Control COM: [1] Device ID: [1]
- Camera orientation: Flip orientation

At the bottom of the form, there are two buttons: "Submit" (highlighted with a red box) and "Restore".

3.2 Longwatch Settings

Invoke the VCC Administrator and click on the **Config** link. Then click the **Setup** tab on the right and the **Cameras** tab in the middle of the window. Other than **Name** field, IVC recommends this screen be configured as shown below. If you decide to change the default name with your own, click the **Save** button and then the **Deploy** button on the bottom right of the window.

The screenshot displays the configuration interface for the MZ-HD34-1 device. The 'Config' tab is active, showing various settings for a camera channel. The left sidebar shows a tree view with 'VCC' and 'LVE1'. The main configuration area includes the following sections:

- Description:** MZ-HD34-1, Enable:
- Source:** IVC-IV1-H264, IP Cam Setup
- IP Addr:** 192.168.25.99, Stream: 1, Chan: 1
- User:** root, TimeSync:
- Password:** ***** (masked), Multicast:
- Subnet:** 255.255.255.0, AutoConfig:
- Event Triggers:** IO, Motion, Tamper, Comm Loss, Analytic
- Event Actions:** Event Desc: [empty], Notification: None, Priority: 0, RTN: 0 (s)
- Video Settings:**

	Width	Height	Rate	Qty	Enab
DVR:	1920	720	1 spf	10	<input checked="" type="checkbox"/>
Live:	1920	720	1 spf	10	<input checked="" type="checkbox"/>
Event:	1920	720	1 spf	10	<input checked="" type="checkbox"/>
Before/After:	3	7			
- Event Actions:** Trigger Cam 1, Preset --, Trigger Cam --, Preset --, Trigger Cam --, Preset --, Trigger Cam --, Preset --, Output: + ++

At the bottom, there are tabs for 'General', 'Cameras', 'Inputs', 'Alarm', and 'Advanced'. The 'Cameras' tab is selected. Buttons for 'Save', 'Deploy', and 'Upload' are visible at the bottom right. A note at the bottom left states: '* - Asterisk indicates configuration changed - deployment required'.

More details about the configuration items on this page are discussed in detail in the IVC Longwatch User Guide.

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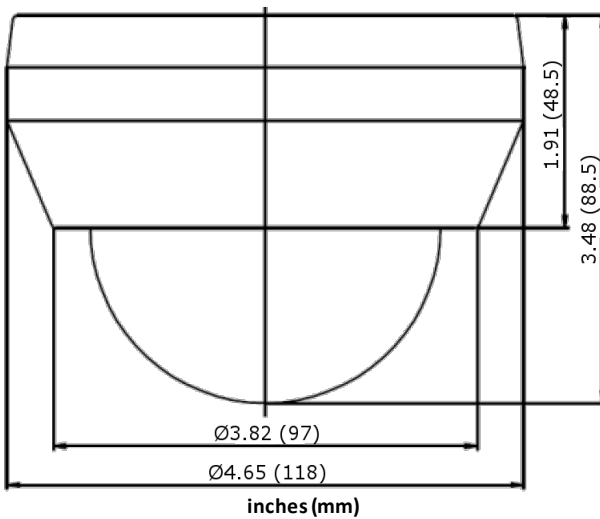
4

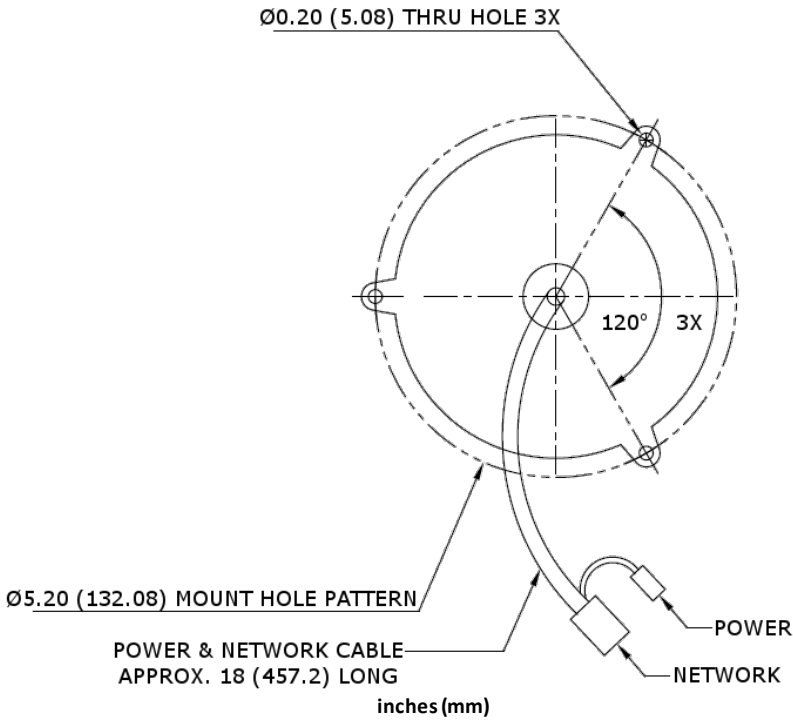
Install Camera

The sections of this chapter describe the steps necessary to install the camera at its operational location.

4.1 Mount the Camera

It is important to mount the camera to a stable surface or pole. Use the hardware provided to secure the camera mount bracket to a stable surface.

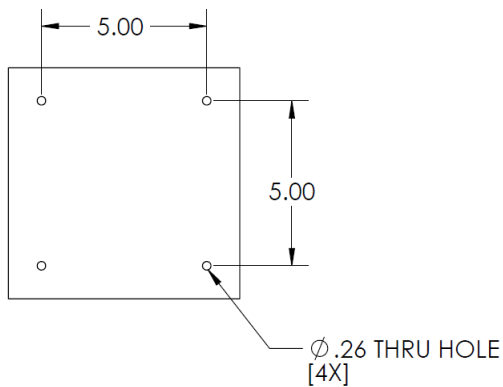
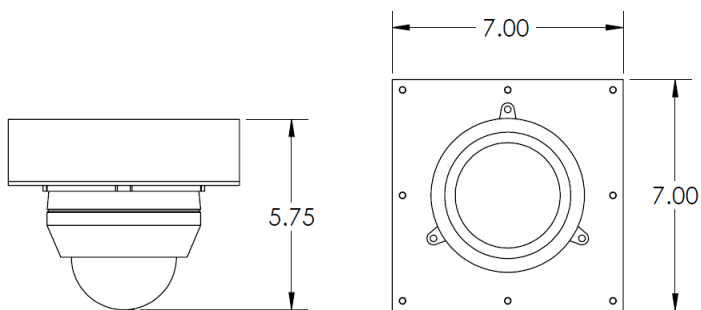
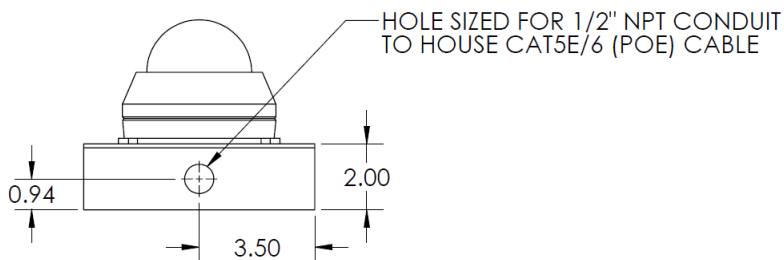




NOTE: If the camera is to be attached to a round pole 3" to 15" in diameter, we suggest a IVC Pole Mount Kit. A Pole Mount Kit requires a steel band installation. A banding tool is required but not included. It is available from McMaster Carr (1-732-329-3200) and is listed as "Standard Banding Tool" Item No: "PN 5424K3."

4.1.1 MB-100-14 Mount Option

The MB-100-14 is an optional stainless steel junction box to which the MZ-HD34-1 may be attached. The box includes an entry that can accommodate a 1/2" NPT conduit or cable gland.

**MB-100-14 footprint****MB-100-14 with MZ-HD34-1 dimensions****MB-100-14 with MZ-HD34-1 cable entry**

4.2 Camera Power

In some circumstances, IP cameras may require an occasional power interruption to reinitiate the camera software after installation. Ideally, the power for each installed camera should be routed through a permanent and conveniently accessible power switch.

5

Support Information

If you experience any problems please call us (617-467-3059) or email support@ivcco.com.

Please note that no equipment (in-warranty or out-of-warranty) should be sent back to IVC without an Return Material Authorization (RMA). Contact IVC support or your IVC sales representative for an RMA.

CAUTION: All installations must insure the camera assembly is mounted securely to ensure that it cannot become dislodged during high wind, accidental bumping or other such incidents. All wiring must comply with NEC, NFPA, and local codes.

NOTE: IVC is not liable for direct or consequential damages resulting from use of this product and IVC makes no guarantees regarding results of intended and unintended use of the product.

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6

Appendix A - Camera Specifications

Imager	1/3" Sony CMOS sensor
Minimum Illumination	0.0001 Lux (IR on)
Exposure	Auto
White Balance	Auto
Iris	Auto
Focus	Auto
Zoom Ratio	3x
View Angle	33° - 100°
Focal Length	2.7 – 12 mm
Ethernet	10/100 Mbps Ethernet (RJ-45)
Resolution	1280 x 720
Compression	M-JPEG, H264
Frame Rate	30 FPS at 720p
Protocols	TCP/IP, HTTP, FTP, SMTP
Weight	2.9 lbs.
Voltage Required	IEEE 802.3af compliant PoE, or 12 VDC
Power Consumption	11.5 W max.
Operating Temperature	-10°C - 50°C
Dimensions	4.65"(W) X 3.48"(H) Dome ø 3.15"
Rating	IP68

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