# Indoor Mini Dome & Indoor Mini Fisheye Dome

Mounting on a Ceiling with Flat Surface (Face Down)

**Installation Guide** 

For Models:

D9x / E9x / ACM-3701E

ACTi
Connecting Vision

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## **Installation Procedures**

This section describes the procedures in installing the camera directly on the ceiling. Prepare a screwdriver and network cable for this installation; no additional accessories are required.

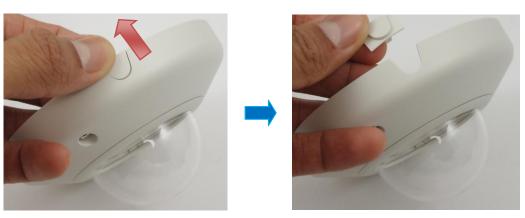
**NOTE:** For simplicity, the camera with fixed lens was used to take the images in the succeeding sections; similar procedures apply to the other models in terms of installation. Therefore, the camera images used in the succeeding sections may differ from your camera.

## **Step 1: Prepare the Camera**

1. Using the bundled hex screwdriver, loosen the three (3) screws to remove the dome cover.



2. *If the network cable will be routed along the surface*, slide the cable exit tab from the dome cover. Otherwise, skip this step.

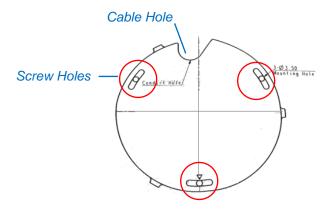




### **Step 2: Route the Network Cable**

**NOTE:** Before installation, consider the camera viewing angle and camera logo placement. The arrow on the drill template and mounting plate align with the direction of the camera logo. Rotate the drill template as needed.

If the cables will be routed along the surface, route the network cable along the surface. If the cable will pass through the surface, drill the cable hole according to the bundled drill template, then route the network cable to pass through the hole.



## **Step 3: Install the Camera on the Surface**

Depending on the material of the ceiling, you can use the camera itself as the template and attach the three (3) screws included in the camera package. Or, use the drill template to mark and drill the screw holes, insert the plastic plugs and install the camera using the three (3) supplied screws.



NOTE: Make sure the screws are flat on the plate.

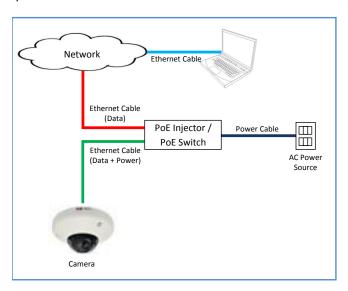


## **Step 4: Connect the Cable**

Connect the network cable to the Ethernet port of the camera. If the cable passes through
the surface, push the excess length of cable further into the hole.



2. On the network side, connect the other end of the cable to a switch or injector. Then, connect the switch or injector to a network or PC and a power source. See Power-over-Ethernet (PoE) connection example below.



## **Step 5: Access the Camera Live View**

See *How to Access the Camera Live View* on page 7 for more information on how to access the Live View of the camera.



## **Step 6: Adjust the Viewing Angle and Focus**

Based on the Live View, adjust the viewing angle, focus, and orientation of the camera.

Adjustments vary depending on model, see *How to Adjust the Viewing Angle and Focus* on page 15 for more information.

## **Step 7: Close the Dome Cover**

- 1. Align cable tab side of the dome cover to the direction of the network cable.
- 2. Tighten the three (3) screws using the supplied hex screwdriver to attach the dome cover.



Final installation should look similar to the illustration below.





# **Appendices**

#### **How to Access the Camera Live View**

#### **Connect the Equipment**

To be able to connect to the camera firmware from your PC, both the camera and the PC have to be connected to each other via Ethernet cable. At the same time, the camera has to have its own power supply. In case of PoE cameras, you can use a PoE Injector or a PoE Switch between the camera and the PC. The cameras that have the DC power connectors may be powered on by using a power adaptor.

#### **Configure the IP Addresses**

In order to be able to communicate with the camera from your PC, both the camera and the PC have to be within the same network segment. In most cases, it means that they both should have very similar IP addresses, where only the last number of the IP address is different from each other. There are 2 different approaches to IP Address management in Local Area Networks – by DHCP Server or Manually.

#### **Using DHCP Server to Assign IP Addresses**

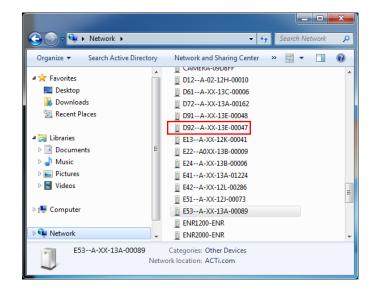
If you have connected the computer and the camera into the network that has a DHCP server running, then you do not need to configure the IP addresses at all – both the camera and the PC would request a unique IP address from DHCP server automatically. In such case, the camera will immediately be ready for the access from the PC. The user, however, might not know the IP address of the camera yet. It is necessary to know the IP address of the camera in other to be able to access it by using a Web browser.





The quickest way to discover the cameras in the network is to use the simplest network search, built in the Windows system – just by pressing the "Network" icon, all the cameras of the local area network will be discovered by Windows thanks to the UPnP function support of our cameras.

In the example below, we successfully found the camera that we had just connected to the network.



By double-clicking the mouse button on the camera model, it is possible to automatically launch the default browser of the PC with the IP address of the target camera filled in the address bar of the browser already.

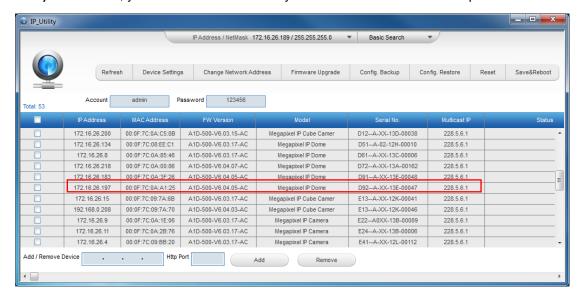
If you work with our cameras regularly, then there is even a better way to discover the cameras in the network – by using IP Utility. The IP Utility is a light software tool that can not only discover the cameras, but also list lots of valuable information, such as IP and MAC addresses, serial numbers, firmware versions, etc, and allows quick configuration of multiple devices at the same time.





The IP Utility can be downloaded for free from <a href="http://www.acti.com/IP\_Utility">http://www.acti.com/IP\_Utility</a>

With just one click, you can launch the IP Utility and there will be an instant report as follows:



You can quickly see the camera model in the list. Click on the IP address to automatically launch the default browser of the PC with the IP address of the target camera filled in the address bar of the browser already.

#### **Using the Default Camera IP Address**

If there is no DHCP server in the given network, the user may have to assign the IP addresses to both PC and camera manually to make sure they are in the same network segment.

When the camera is plugged into network and it does not detect any DHCP services, it will automatically assign itself a default IP:

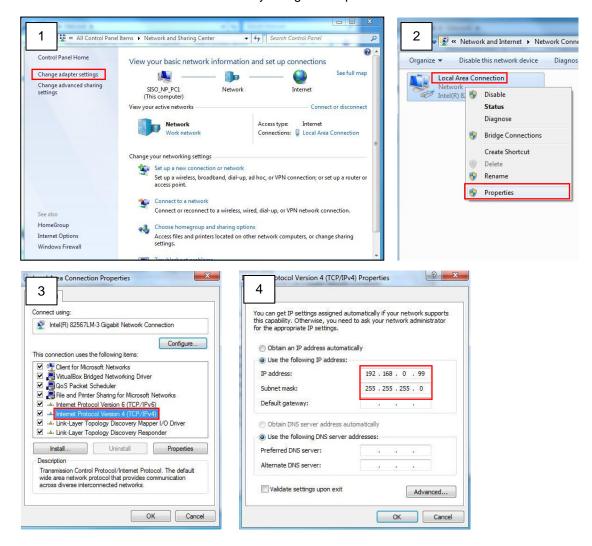
#### 192.168.0.100

Whereas the default port number would be **80**. In order to access that camera, the IP address of the PC has to be configured to match the network segment of the camera.



#### Manually adjust the IP address of the PC:

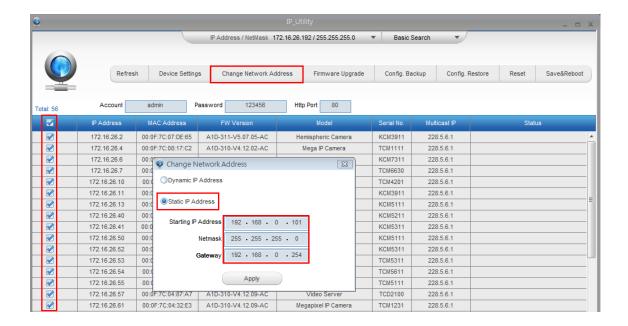
In the following example, based on Windows 7, we will configure the IP address to **192.168.0.99** and set Subnet Mask to **255.255.255.0** by using the steps below:





#### Manually adjust the IP addresses of multiple cameras:

If there are more than 1 camera to be used in the same local area network and there is no DHCP server to assign unique IP addresses to each of them, all of the cameras would then have the initial IP address of **192.168.0.100**, which is not a proper situation for network devices – all the IP addresses have to be different from each other. The easiest way to assign cameras the IP addresses is by using **IP Utility**:



With the procedure shown above, all the cameras will have unique IP addresses, starting from 192.168.0.101. In case there are 20 cameras selected, the last one of the cameras would have the IP 192.168.0.120.

Later, by pressing the "Refresh" button of the IP Utility, you will be able to see the list of cameras with their new IP addresses.



Please note that it is also possible to change the IP addresses manually by using the Web browser. In such case, please plug in only one camera at a time, and change its IP address by using the Web browser before plugging in the next one. This way, the Web browser will not be confused about two devices having the same IP address at the same time.



#### **Access the Camera**

Now that the camera and the PC are both having their unique IP addresses and are under the same network segment, it is possible to use the Web browser of the PC to access the camera.

You can use **any of the browsers** to access the camera, however, the full functionality is provided only for **Microsoft Internet Explorer**.

The browser functionality comparison:

| Functionality  | Internet Explorer | Other browsers |
|--|-------------------|----------------|
| Live Video   | Yes               | Yes*           |
| Live Video Area Resizable  | Yes               | No             |
| PTZ Control  | Yes               | Yes            |
| Capture the snapshot   | Yes               | Yes            |
| Video overlay based configuration (Motion Detection regions, Privacy Mask regions) | Yes               | No             |
| All the other configurations   | Yes               | Yes            |

<sup>\*</sup> When using non-Internet Explorer browsers, free third-party software plug-ins must be installed to the PC first to be able to get the live video feed from the camera. Check the firmware version of the camera to determine which plug-in is necessary:

| Firmware Version                      | Required Plug-In                                     |
|---------------------------------------|--|
| A1D-500-V6. <b>04</b> .xx-AC or older | Basic VLC Media Player (http://www.videolan.org)     |
| A1D-500-V6. <b>05</b> .xx-AC or newer | QuickTime (http://www.apple.com/quicktime/download/) |

The camera firmware version can be found on the **FW Version** column of the IP utility or access the **Setup** page of the Web Configurator (see page 14).

Disclaimer Notice: The camera manufacturer does not guarantee the compatibility of its cameras with VLC player or QuickTime – since these are third party softwares. The third parties have the right to modify their utility any time which might affect the compatibility. In such cases, please use Internet Explorer browser instead.

When using Internet Explorer browser, the ActiveX control for video stream management will be downloaded from the camera directly – the user just has to accept the use of such control when prompted so. No other third party utilities are required to be installed in such case.

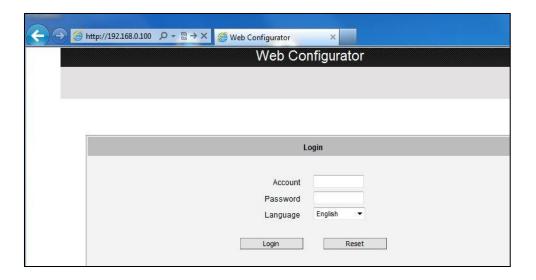


The following examples in this manual are based on Internet Explorer browser in order to cover all functions of the camera.

Assuming that the camera's IP address is **192.168.0.100**, you can access it by opening the Web browser and typing the following address into Web browser's address bar:

## http://192.168.0.100

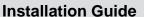
Upon successful connection to the camera, the user interface called **Web Configurator** would appear together with the login page. The HTTP port number was not added behind the IP address since the default HTTP port of the camera is 80, which can be omitted from the address for convenience.



Before logging in, you need to know the factory default Account and Password of the camera.

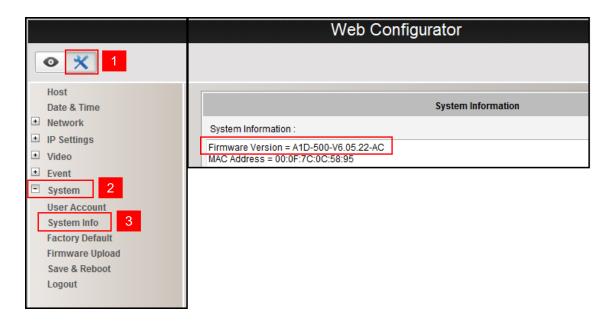
Account: Admin

Password: **123456** 





To check the firmware version through the Web Configurator, access the **Setup** page and click **System > System Info**.



For further operations, please refer to the **Firmware User Manual** downloadable from the website (www.acti.com).



## **How to Adjust the Viewing Angle and Focus**

**NOTE:** The following procedures are not applicable to E96 (Mini Fisheye Dome) cameras.

1. Loosen the three (3) screws to remove the dome cover.



2. Based on the live view from the camera, adjust the viewing angle with pan and tilt direction (for Mini Dome models only).







3. Adjust the focus.

NOTE: Not applicable for E93 / E97 model because the camera is already pre-focused.

a. Attach the focus tuner (included in the camera package) on the lens and adjust the focus of the lens.





- b. Remove the lens focus tuner.
- 4. Attach the dome cover to the camera and tighten the three (3) screws.







# **Safety Information**

#### Read these instructions

You should read all the safety and operating instructions before using this product.

#### **Heed all warnings**

You must adhere to all the warnings on the product and in the instruction manual. Failure to follow the safety instruction given may directly endanger people, cause damage to the system or to other equipment.

#### **Trademarks**

All names used in this manual are probably registered trademarks of respective companies.

#### Liability

Every reasonable care has been taken during the writing of this manual. Please inform your local office if you find any inaccuracies or omissions. We cannot be held responsible for any typographical or technical errors and reserve the right to make changes to the product and manuals without prior notice.

#### Cleaning

Disconnect this video product from the power supply before cleaning.

#### **Attachments**

Do not use attachments not recommended by the video product manufacturer as they may cause hazards.

#### Do not use accessories not recommended by the manufacturer

Only install this device in a dry place protected from weather

#### Servicing

Do not attempt to service this video product yourself. Refer all servicing to qualified service personnel.



#### **Damage Requiring service**

Disconnect this video product from the power supply immediately and refer servicing to qualified service personnel under the following conditions.

- 1) When the power-supply cord or plug is damaged
- 2) If liquid has been spilled, or objects have fallen into the video product.
- 3) If the inner parts of video product have been directly exposed to rain or water.
- 4) If the video product does not operate normally by following the operating Instructions in this manual. Adjust only those controls that are covered by the instruction manual, as an improper adjustment of other controls may result in damage, and will often require extensive work by a qualified technician to restore the video product to its normal operation.

#### Safety Check

Upon completion of any service or repairs to this video product, ask the service technician to perform safety checks to determine if the video product is in proper operating condition.



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7F, No. 1, Alley 20, Lane 407, Sec. 2, Ti-Ding Blvd., Neihu District, Taipei, Taiwan 114, R.O.C.

Email: sales@acti.com