

# Deploying a GigE Camera

This is a easy How-to guide for adding new GigEs to an experimental setup. This guide assumes that the desired GigE has an [ioc](#) and has been set up in [netconfig](#)

## Set up

1. Determine where you want your GigE camera to be **attached**
2. Obtain a GigE that is specific to your <hutch> (usually placed in drawers nearby). This GigE should be labeled with the netconfig and camViewer name, ioc name, or at the very least a factory sticker containing the MAC address.
3. Connect the new camera to a PoE port to first see if you are able to communicate with the camera. Check to make sure an LED light on the camera is on.
4. "ping" it using either the IP address or the netconfig name. To find the netconfig name, open a terminal and run "netconfig search <mac address>" and it should come up with the correct name which you can pass to your "ping"
5. If the camera is "ping"-able you can now position your camera onto your system and reconnect via a PoE port.
6. Once the camera is adhered to your system, open a new terminal session and type the following command "camViewer -c <camviewer name> -e. This command turns on the camera ioc. Keep in mind that as of right now you cannot run this command from an "opr" account, you must be logged in as a user.
7. To determine whether or not the ioc has actually been enabled, in the same terminal type "iocmanager <hutch>". This will pull up a screen that lists all the iocs running in that hutch. Look for one of the names located on the camera and make sure that you see a green "Running" label in a column to the right.

You should now be able to see your camera in [camViewer](#).

## Return

1. Open a new terminal session and type the following command "camViewer -c <camviewer name> -d. This command turns off the camera ioc since we don't want to overload the server it runs from.
2. Disconnect from PoE port
3. Remove from experimental set up
4. Return GigE to its rightful home

## Troubleshooting

1. If LED light does not turn on, then you are not on a PoE port. Find an expert to help in finding a port for you or with setting up an external power supply.
2. If your camera is not pingable:
  - a. It does not have the right netconfig mac address. To check this in a terminal session, run the same "netconfig search <netconfig name>" and cross check the mac address with what is found on the factory label. If wrong, contact an expert
3. If you see your camera among the list in camViewer but aren't able to get an image but instead reporting static images, open the EDM camViewer for this specific camera by typing "camViewer -c <camviewer name> -m. Click "IOC" and then "REBOOT". This reboots the ioc and hopefully solves your problem. Check camViewer again, if no desired images are seen, contact an expert.