

FLIR M-Series and NavNet TZtouch

Overview

The following example illustrates the integration of the FLIR M-Series into a NavNet network. The M-Series and the JCU controller are set with a fix IP address compatible with NavNet TZtouch. When you purchase a FLIR (with JCU), it will have a different IP address and will require changes before it is used with the TZtouch system.



Installation

FLIR Configuration

You have to assign the M-Series and the Controller (JCU), a fixed IP address. We recommend you use 192.168.252.200 / 255.255.255.0 for the M-Series Camera, and 192.168.252.201 / 255.255.255.0 for the JCU (although any IP beginning with 192.168.252.x would work as long as they don't collide with any existing IP).

The FLIR M-Series and the JCU controller are UPnP-enabled devices. You can easily see the list of UPnP-enabled devices from your computer by opening "My Network Places" if using a Microsoft XP computer or "Network" if using a Vista, Windows 7 or Windows 8 computer. Note that the M-Series and JCU will **only** appear on your PC, **if they are all on the same network domain**.

Normally, the JCU gets its power from the camera when directly connected to the M-Series. When connecting the JCU to a HUB or Switch, you must use a power injector (48V) to power the unit (see diagram above).

When the computer is connected to the M-Series Camera and JCU via an Ethernet cable or via a Hub/Switch (without router or DHCP server on the network), the M-Series and JCU automatically assign themselves an IP address of 169.254.x.x / 255.255.0.0. In order to access the configuration

page of the M-Series and JCU, you need to setup your PC on that network (ex: 169.254.1.2 / 255.255.0.0)

Note: If your computer is set to "obtain an IP address automatically," it should automatically set an IP address of 169.254.x.x from the FLIR after two minutes. However, it is easier to directly fix the PC IP address at 169.254.1.2 / 255.255.0.0.

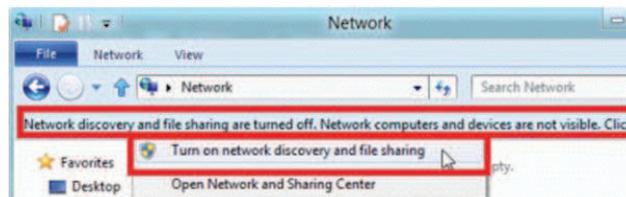
Note: If the JCU and the M-Series were previously assigned another IP address, you can display the JCU IP address by pressing the COLOR button while pushing the puck. You can then assign an IP address to your PC accordingly, and thus be able to access the M-Series and JCU configuration page.

Once the computer is on the same domain as the M-Series and JCU, and UPnP is enabled, you should see the M-Series and JCU icon under "My Network Places" (XP) or "Network" (Vista/Windows 7 / Windows 8):



Note: If the devices do not appear, try to restart the M-Series and JCU, then check if your computer is setup to display UPnP notifications:

- Using Windows XP:
 - Start the Control Panel and go to Add/Remove programs
 - On the left-hand side, select the Add/Remove Windows components
 - From the Windows Component Wizard, scroll down to Networking Services, then highlight and select the "Details" button
 - Check the box to enable the UPnP User Interface and select Ok
 - Select Next when returning to the Windows Component Wizard
 - Select Finish
- Using Windows Vista and Windows 7
 - Turn on "Network Discovery" on the "Network" page as highlighted below:



CAMERA SETUP:

Double click on the M-SERIES icon to open its configuration webpage. To configure a fixed IP address, click on "Network Setup":



Select the Static (fixed) option rather than Dynamic:



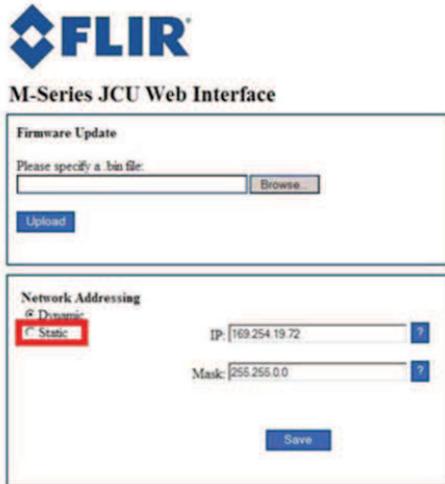
The screen will refresh, and the IP, Mask, and Gateway fields will change from grey to white, indicating they can accept user entries. Once you have entered the appropriate IP address and subnet mask (192.168.252.200 / 255.255.255.0 in this example), click on the "Save" link and wait 1 minute.

Note: You will not be able to access anymore the M-Series configuration page after changing its IP address (until you change the IP address of your computer later in this process).

JCU SETUP

Go back to "My Network Places" or "Network" and double click on the JCU icon to open its configuration page.

Set the Network Addressing to "Static":



The screenshot shows the FLIR M-Series JCU Web Interface. At the top is the FLIR logo. Below it is the title "M-Series JCU Web Interface". There are two main sections: "Firmware Update" and "Network Addressing". The "Firmware Update" section has a text input field for a bit file, a "Browse..." button, and an "Upload" button. The "Network Addressing" section has two radio buttons: "Dynamic" and "Static". The "Static" radio button is selected and highlighted with a red box. To the right of the radio buttons are two input fields: "IP: 192.168.252.201" and "Mask: 255.255.255.0". There is a "Save" button at the bottom of the "Network Addressing" section.

Enter the appropriate IP address and subnet mask (192.168.252.201 / 255.255.255.0) and click on the "Save".

FINAL SETUP

After changing the IP address of the M-Series Camera and JCU, change the IP address of the PC (192.168.252.10 / 255.255.255.0) to confirm that you see the FLIR and JCU icon again in "My Network Place" (XP) or "Network" (Vista/Windows 7,8).

Note: You may need to restart the Camera and JCU for the Icon to appear in "My Network Place".

TZtouch Configuration

Press the [HOME] key, the [MENU] button and select [Camera]. Press [Scan] under "FLIR Installation":



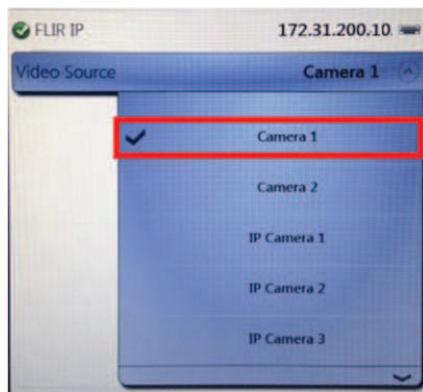
The screenshot shows the TZtouch configuration menu. The title is "Menu Camera". There is a "Close" button in the top right corner. The menu is divided into several sections: "Second Axis Server 241Q" with a "Server 241Q" toggle switch set to "ON"; "FLIR Installation" with a "Scan IP" button highlighted by a red box and a "FLIR IP" field set to "255.255.255.255"; "Video Source" with "Camera Offset (Right-left)" and "Camera Offset (Up-Down)" both set to "+0.0°". On the right side, there is a vertical menu with options: "Sounder", "Alarm", "Files", "Units", "Camera" (highlighted with a blue bar), and "Initial Setup".

This should automatically enter the IP address of the M-Series. If the M-Series is correctly detected, you should see a green light:



IMPORTANT: If the M-Series is not discovered automatically, refer to the appendix (at the end of this document) to configure the internal M-Series NEXUS server.

Once the FLIR has been detected, select the video input where the analog video output of the FLIR is connected:



Note: You could connect the analog video output of the M-Series to an AXIS IP video converter. In that case, you would select the corresponding IP Camera feed in the menu above.

Using an AXIS converter allows the video to be distributed on the network and available on every TZtouch MFD.

APPENDIX

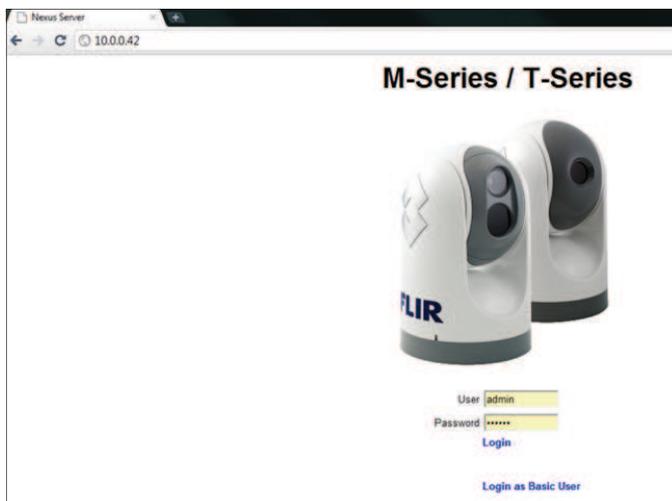
How to enable the discovery and control of the M-Series from the PC

In some instances, the internal server of the M-Series ("NEXUS" server) is configured in a way that prevents the PC from discovering it and controlling it. If you are unable to discover the M-Series from your TZtouch display but are able to use the Web Control of the M-Series to control it via a web browser on your PC, follow the guide below.

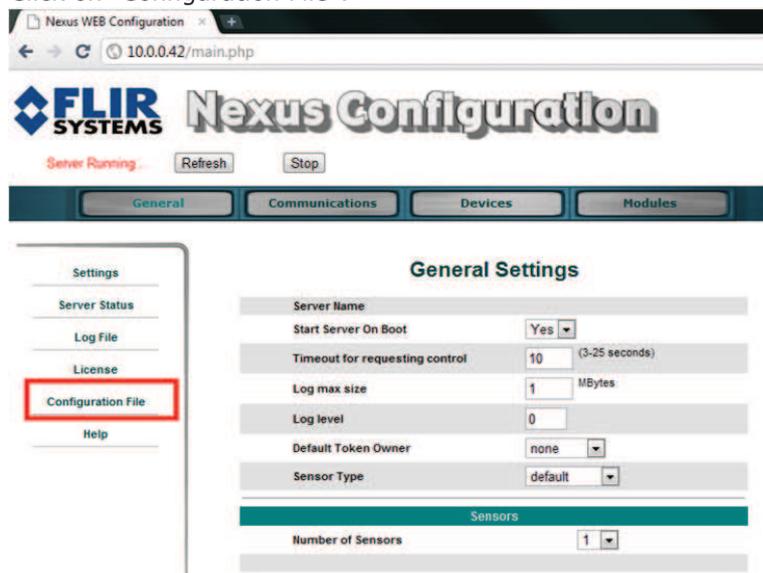
Note: If you are not able to control the M-Series from a Web Browser on your PC, make sure that the Ethernet connection and IP addresses are correctly setup.

Open a Web Browser and type the IP address of the M-Series: `http://<IP ADDRESS >`.
Example: <http://192.168.252.200>

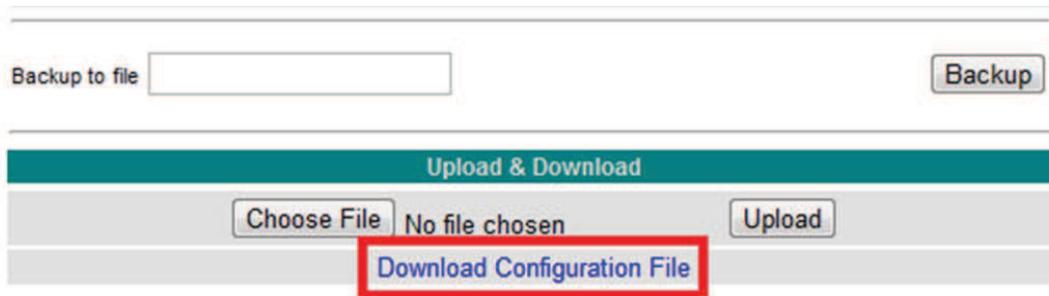
Note: To access the Web Server configuration, just type the IP address (do not add any port number)
The Nexus configuration page should appear. Log in as an admin (default password is "indigo")



Click on "Configuration File":

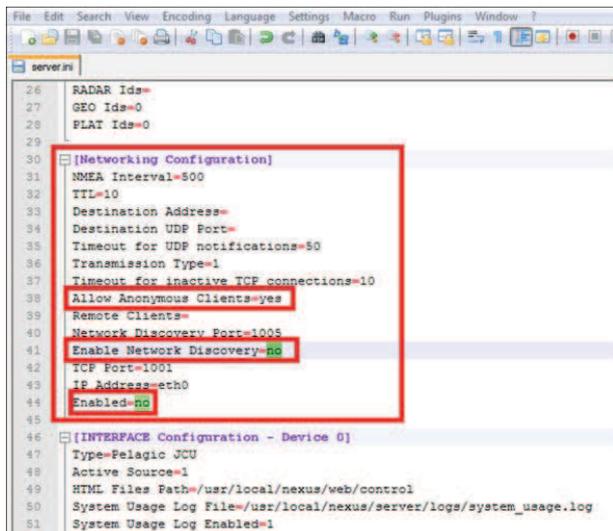


Scroll at the very bottom of the page and click on "Download Configuration File"

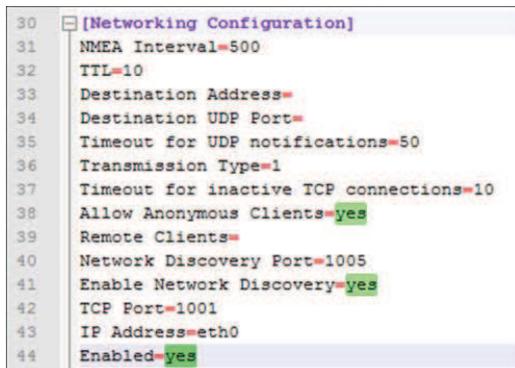


Save the file somewhere on your computer (on the desktop for example).

Open the configuration file ("server.ini") with NotePad and look for the section "[Networking Configuration]"



Set "Enable Network Discovery", "Enabled" and "Allow Anonymous Clients" to "yes":

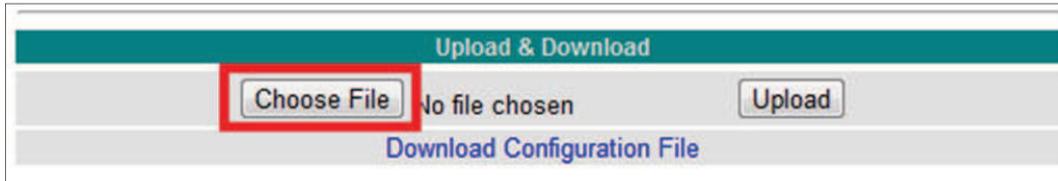


Note: You can search the text file for "Anonymous", "Discovery" and "Enabled" to find the line you need to check.

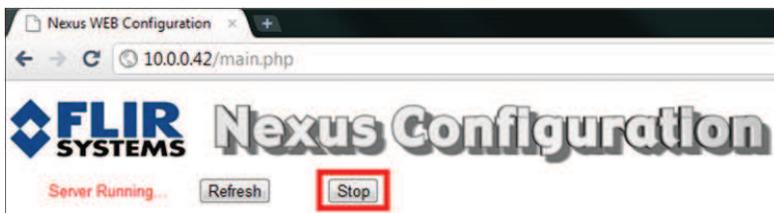
Save the file.

Note: Make sure that you don't modify anything else.

Go back to the Nexus Configuration page (you might have to log in again), select "Configuration File" and scroll down to the bottom of the page. Click on "Choose file" and select the "server.ini" file you just modified. Click on "Upload".



The FLIR M-Series Nexus server needs to be restarted to take the changes into account. Go to the very top of the page (header) and click on "Stop"



Wait until the Start button appears, and then click on it.



Your TZtouch display should now be able to detect and control the Camera.