

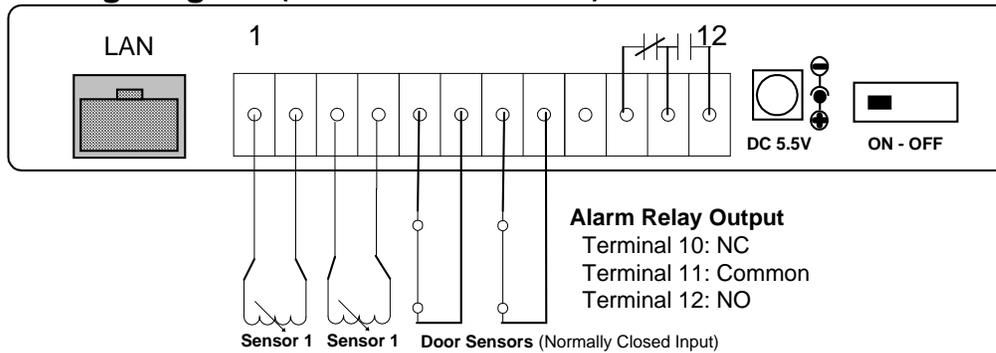
Getting Started with the M305/M306 Wireless Ethernet Monitor

The M30x can operate in either wireless Ethernet 802.11 b/g or wired Ethernet. The M30X is shipped in wired Ethernet mode with DHCP enabled, to simplify adding it to a wireless network.

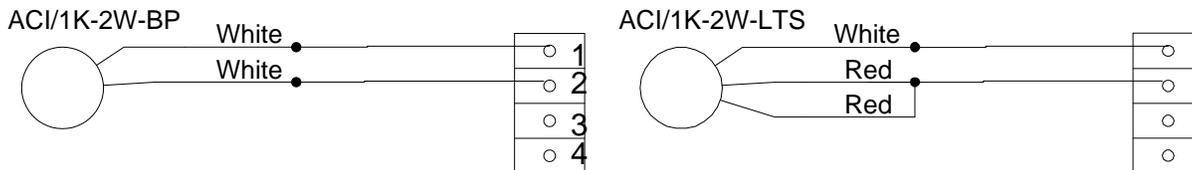
Install the M30X

Mount the M30X in a location convenient to power and the environment to be monitored. Connect temperature and door sensors as needed (see diagrams below)

Wiring Diagram (side view of enclosure)



Sensor wiring examples:



Download and install the Data Capture software

1. Download the latest version of Data Capture from <http://www.temperatureguard.com/datacapture> or <http://www.temperatureguard.com/software.html> into a temporary folder on your computer
 - a. Double click on setup.exe. Follow the instructions on the screen. IP Setup program is also installed.
2. Go to <http://www.temperatureguard.com/Manuals.html> for the latest manual.

Setting the static IP address

Before starting verify that your wireless network has:

- A DHCP server. The Temperature Guard must obtain an initial IP address from the server.
- Ports 10001 (2711h) and 30718 (77FEh) are not blocked.
- 802.11 b/g compliant.

You should have a static IP address obtained from your IT manager

Warning: Setting the M30X to an IP address already in use will render both network devices inoperable.

Powering up the Temperature Guard

1. Plug the Ethernet cable into the **LAN** jack.
2. Plug the power pack into a wall outlet and then plug the power jack into the **POWER INPUT** on the M30X.
3. Turn on the M30X by moving the power switch located on the bottom side to the On position. The display will turn on.
4. The center Activity LED on the top of the enclosure will begin to blink. The left Network LED will turn green when it connects to the network and the Activity LED will continue to blink.

How to set the static IP address in wired mode

The Temperature Guard must have a static IP address whether it is in wired or wireless operating mode. The Temperature Guard ships in DHCP mode so when you connect it to your network it will obtain an IP address automatically from your DHCP server. Once the Temperature Guard has obtained an IP address from the DHCP server, you can then set the Temperature Guard to the static IP address.

1. Run the Temperature Guard IP Setup program. Click *Start\All Programs\Temperature Guard\Data Capture\IP Setup*.
2. Click on the **Find all Temperature Guard servers on the network** button to find all of the Temperature Guard devices on your network. A list of the devices' IP address and MAC address are displayed.
3. Find the MAC address of the device you are installing in the list and click on the IP address to the left. The selected IP address will turn yellow.
4. Type in the static IP address you obtained from your IP manager in the four text boxes.
5. Click on the **Set the selected server's IP address to >>>** button to set the selected Temperature Guard's current IP address to the new static IP address. You will be prompted to confirm this change. Click OK to proceed.
6. The program will set the static IP address and will again find all Temperature Guard devices on your network. Please verify that the IP address has been changed. If not repeat the above procedure.

How to set the static IP address in wireless mode

1. Run the Temperature Guard IP Address Setup program.
2. Click on the Find all Temperature Guard servers on the network button to find all of the Temperature Guard devices on your network. A list of the devices' IP address and MAC address are displayed.
3. Find the MAC address of the device you are installing in the list. Make note of the IP address obtained from the DHCP server.
4. Open a web browser, type in **http://IP Address/secure/ltx_conf.htm**, where IP Address is the address obtained in step 3. The log in screen will be displayed. Click OK to continue. The webpage is not password protected by default.



Firmware Version: V6.5.0.6
MAC Address: 00-20-4A-9E-4A

Network Settings

- ⌂
- Network**
- Server
- Serial Tunnel
 - Hostlist
- Channel 1
 - Serial Settings
 - Connection
- Channel 2
 - Serial Settings
 - Connection
- Email
 - Trigger 1
 - Trigger 2
 - Trigger 3
- WLAN
- Configurable Pins
- Apply Settings
- Apply Defaults

Network Mode:

IP Configuration

Obtain IP address automatically

Auto Configuration Methods

BOOTP: Enable Disable

DHCP: Enable Disable

AutoIP: Enable Disable

DHCP Host Name:

Use the following IP configuration:

IP Address:

Subnet Mask:

Default Gateway:

Ethernet Configuration

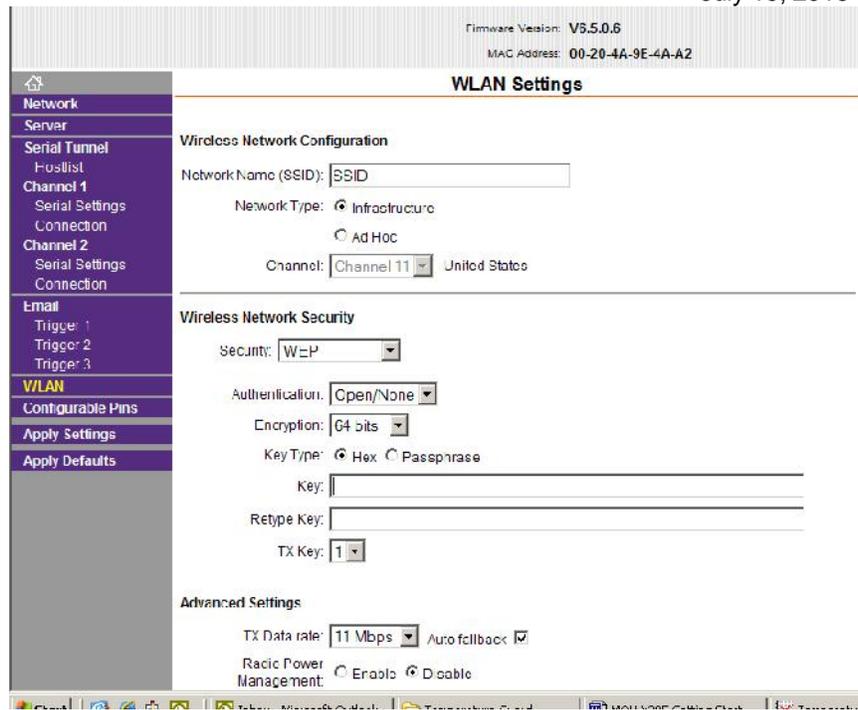
Auto Negotiate

Speed: 100 Mbps 10 Mbps

Duplex: Full Half

Network Settings

1. Click on Network Mode:
2. Choose Wireless Only from the drop down list
3. Under IP Configuration select the Use the following IP configuration option
4. Enter the static IP address, subnet mask and default gateway
5. Click the OK button



WLAN

1. Click WLAN menu item to bring up the WLAN Settings
2. Enter the network SSID
3. Set the Network type to Infrastructure
4. Configure the Wireless Network Security
5. Under Advanced Settings set the Radio Power Management to Disable
6. Click on the OK button at the bottom of the screen.

Apply the settings

Do not change any settings under the Serial Tunnel or Email menu items. Changing any of these settings may render the device inoperable.

Click on the Apply Settings menu item



The M30X is now on the network.
The Wireless LED will turn on steady. The Network and Activity LEDs will be off.

Password protecting the configuration webpage

Security settings can only be changed using the setup menu (accessed via Telnet).

Caution: We recommend setting security over a dedicated network to prevent eavesdropping.

1. Establish a Telnet connection to port 9999:
2. From the Windows Start menu, click Run.
3. In the Run dialogue box, type the following command `telnet xxx.xxx.xxx.xxx 9999` (where xxx.xxx.xxx.xxx is the IP address and 9999 is the unit's fixed network configuration port number):
I.E. `telnet 192.168.0.55 9999`
4. Click OK. The following information displays:

Figure 5-1. MAC Address

```
MAC address: 00204011FFFF
Software version V6.5.0.1RC1 (070131)
MES library version 1.0.2.1
```

5. To enter the Setup Mode, press Enter within 5 seconds.
Note: The connection fails if you do not press Enter within 5 seconds. The configuration settings display, followed by the setup menu options:

Figure 5-2. Change Setup Menu Options

```
Change Setup:
 0 Server
 1 Channel 1
 2 Channel 2
 4 WLAN
 5 Expert
 6 Security
 7 Defaults
 8 Exit without save
 9 Save and exit
Your choice ?
```

6. Type 6 for Security and press Enter.
7. Press Enter to scroll thru the security settings until Enable Enhanced Password is displayed

```
Enable Enhanced Password (Y) ? _
```

Type Y and press Enter. Type Y and press enter to change the password. Type the password and press enter. When the Web Configuration page is accessed, enter the password to enter.

Configure the M30X

In the Temperature Guard program group, click on Data Capture Manual. Read and follow the documentation for the Data Capture Program.

You can view the current readings at your M30X via a standard web browser. Simply enter the IP address of the device as the URL.

Send any questions with the setup of your M30X system to support@temperatureguard.com.

How to reset a Temperature Guard from a static IP to DHCP mode

If you are moving a Temperature Guard configured with a static IP address to a network where this static IP address will not function, you should reset the Temperature Guard back to DHCP mode before the move.

If the device is in Wired or Wireless Mode

1. Turn off the M30X
2. Press and hold the Cancel Alarm button while turning the power on.
3. The M30X will ask for confirmation to reset the network parameters back to defaults (wired mode, DHCP). Use the Cancel Alarm button to toggle from No to YES.

Or if the device is currently in Wired Mode

1. Run the Temperature Guard IP Address Setup program.
2. Click the **Find all Temperature Guard servers on the network** button to find all of the Temperature Guard devices on your network. A list of their IP address' are displayed. Only Temperature Guard's IP addresses are displayed.
3. Click on the IP address of the device you want to reset back to DHCP mode. The selected IP address will turn yellow.
4. Click on the **Reset the Selected Server back to DHCP Mode** button. You will be prompted to confirm this change. Click OK to proceed.
5. The program will again find all Temperature Guard devices on your network. The program will confirm that the IP address has been reset from a static IP to DHCP mode.

A device which is not able to be found on the network or communicated with may have invalid network address settings and need to be restored to DHCP mode. This can be achieved by using the "Reset Device to DHCP" found under the advanced menu.

Advanced Tools

Under the Advanced menu option there are three advanced tools to allow you to:

- Set the IP Address, Gateway Address, and Subnet Mask via web
- Manually Set an IP Address when no DHCP server is present or when you can not locate the device on the network
- Test Communications to a Temperature Guard device

Set IP, Gateway, Subnet via Web

This feature is for IT professionals and is to be used only if it is necessary to change the subnet mask. This procedure is unnecessary for standard networks.

Verify that you have the latest version of Java before running.

1. Click on the **Server Properties** button to display the Server Properties.
2. Verify the correct IP Address setting
3. Enter the Subnet Mask
-Verify that the Subnet Mask is correct before clicking Update Settings button. If an incorrect Subnet Mask is entered the TG device will be unable to communicate.
4. Enter the Gateway Address
-Verify that the Gateway Address is correct before clicking Update Settings button. If an incorrect Gateway Address is entered the TG device will be unable to communicate.
5. Click the **Update Settings** button.
6. Close the browser window.

Manually Set IP

In networks without a DHCP server or when you are unable to find a Temperature Guard device on the network, it may be useful to set a static IP address manually.

You will need the MAC address of the device you are communicating with. This can be found on the white label on the network enabled Temperature Guard device itself.

1. Enter the MAC address of the device in the window and click OK.
2. Enter the static IP address you wish to give the device and click OK.
3. Confirm the static IP address and click OK.
4. Depending on your network configuration, the device may or may not show up in the device listing now.
5. Perform the Test Communication function to verify IP Address functionality. If Test Communication fails, utilize the ping command by opening a command prompt and entering ping xxx.xxx.xxx.xxx (where xxx.xxx.xxx.xxx is the IP address you gave the device.)

Test Communications

To verify that port 10001 is successfully opened in your firewall or to verify general data functionality of the Temperature Guard device, the Test Communication function is available.

1. Select Test Communication from the Advanced Menu
2. If you have selected a device from the list and would like to Test Communication to it click Yes to the "Test This Device?" prompt. If you would like to test communication to another IP address click No.
3. If you haven't selected a device from the list to test or selected No from the "Test This Device?" prompt, enter the IP address of the Temperature Guard device you wish to test.
4. IP Setup will attempt to communicate with the device at that address. Results will be displayed.
5. If communication fails, verify that the IP address is correct for the device.
Verify that IP address can be reached from your computer by opening a command prompt and entering ping xxx.xxx.xxx.xxx (where xxx.xxx.xxx.xxx is IP address you gave the device.)

Troubleshooting

Problem

No Temperature Guard devices are found on the network

Check the simple things first

Pull the power jack from the Temperature Guard, wait a couple of seconds, plug it back in and try to find the Temperature Guards again. If that does not work, try the items below.

Verify that the Temperature Guard is powered on from its power supply.

Verify that you connected a good Ethernet cable to the Temperature Guard.

The simple things check out OK, now refer to the document “Troubleshooting Network Communications”. A shortcut to this document is found in the Temperature Guard | Data Capture program group and on the TemperatureGuard.com website.