



Weintek USA, Inc.
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User

Manual

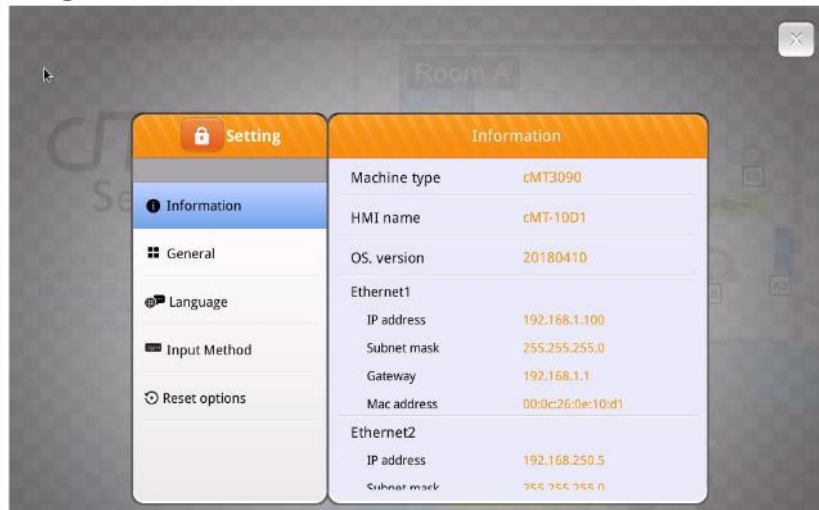
Troubleshooting: Network & Communication

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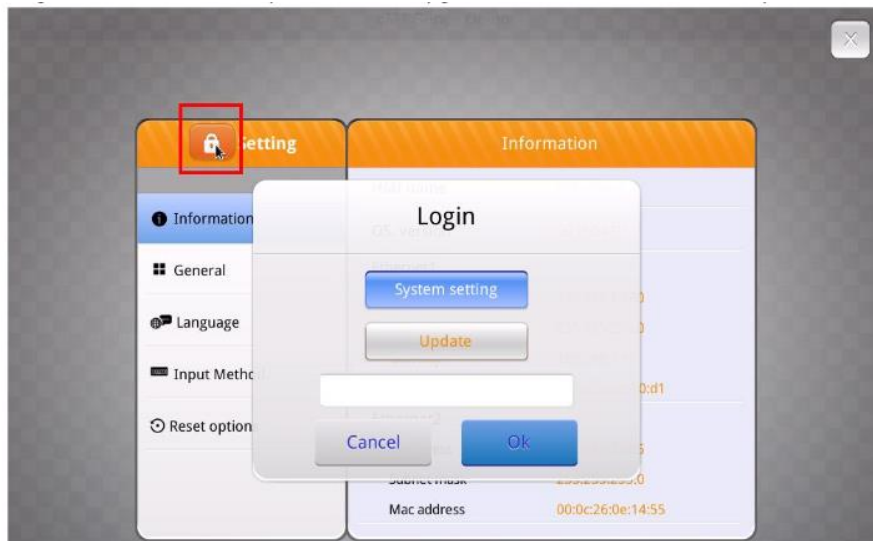
HMI Interface

1. Your HMI's system settings menu will allow you to configure the HMI's network.



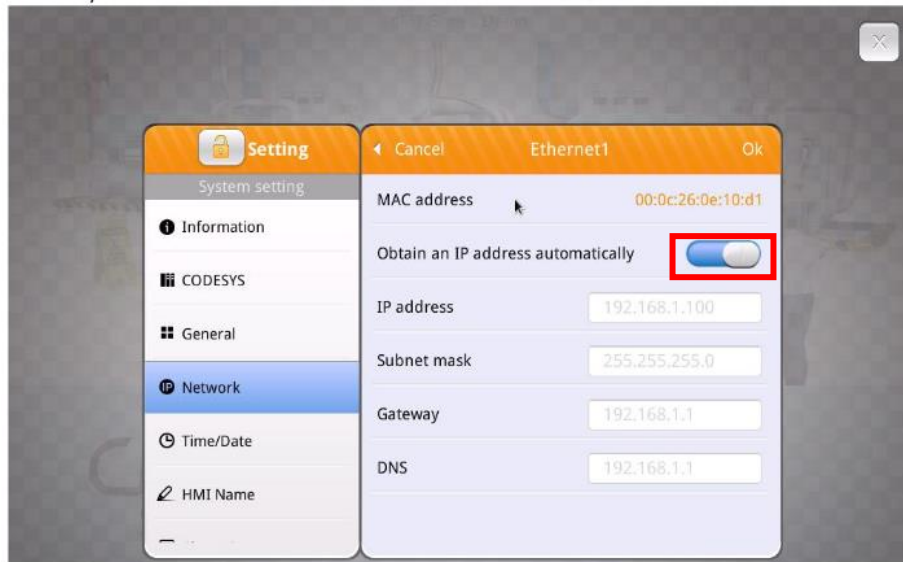
The Information tab will show your general network configuration. (cMT-3090)

2. The HMI can be configured from the network menu by logging in.

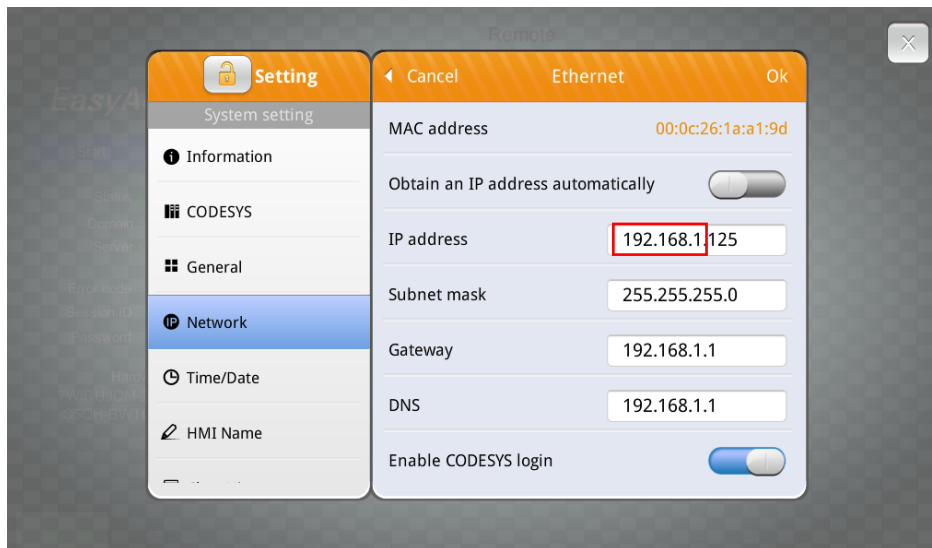


3. After logging in more configuration tabs will become visible and you will be able to change the HMI's network settings by selecting the "Network" Tab.

4. In order to change the HMI's network, you must turn off "Obtain an IP address automatically" by switching the blue button off (on cMT series).



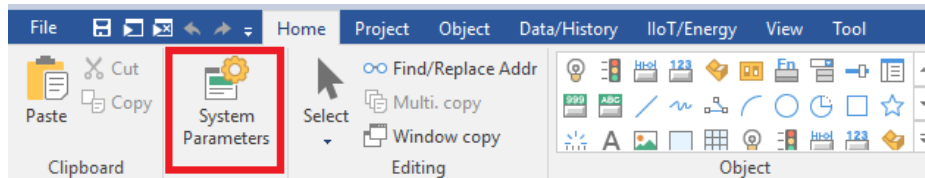
5. Once this button is switched off you can configure a static IP.



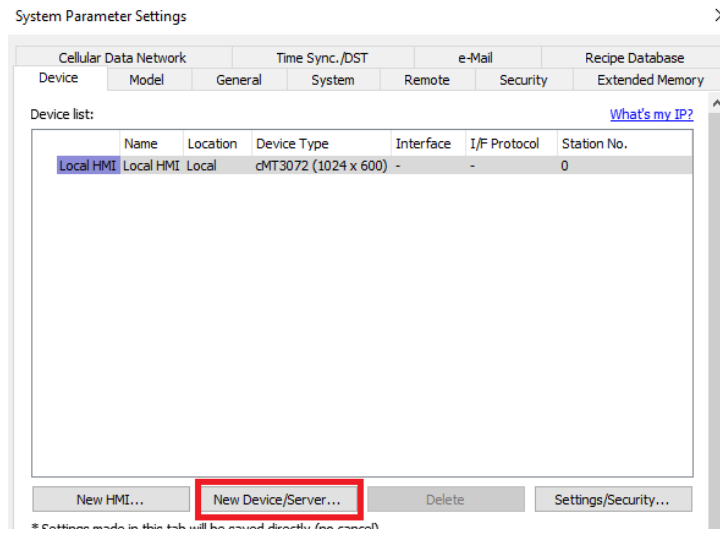
A static IP will allow you to define the HMI's IP subnet which must be the same as the PLC subnet in order for them to communicate.

EasyBuilder Pro

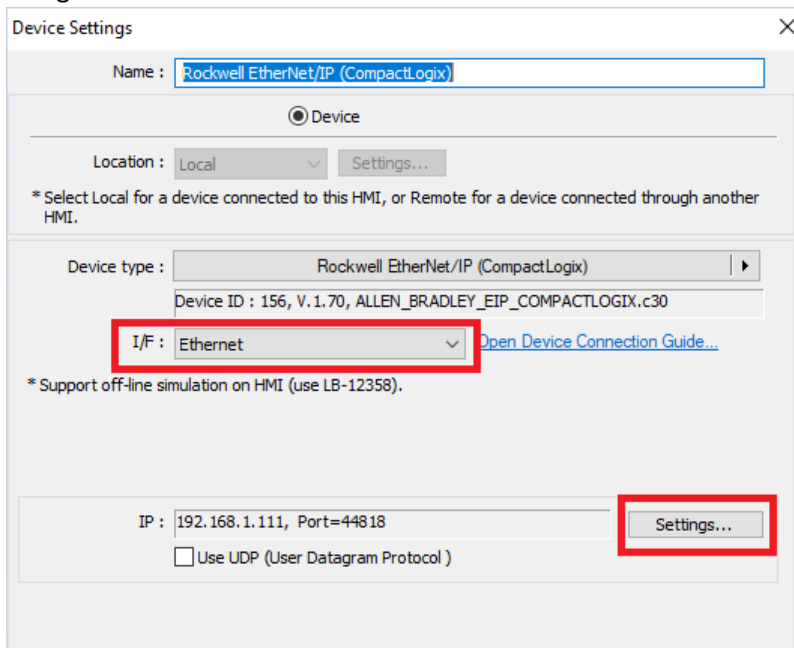
1. Before connecting to an external device such as your PLC you will need to add the correct driver and communication settings within the system parameters of your HMI's Project.
2. To do this first open your EasyBuilder Pro Project and navigate to the "Home" Tab.



3. Select “System Parameters” and you will see your device list:



4. By clicking “New Device/Server...” you can select a PLC or device driver to add to your HMI Project.
5. Within the “Device Settings” menu you can configure the PLC’s IP address and Port no. by clicking “Settings...”



6. If the driver is already listed in your device list, you can open its settings for configuration by double clicking on the driver within your list.

Network Example & Information



IP Subnet

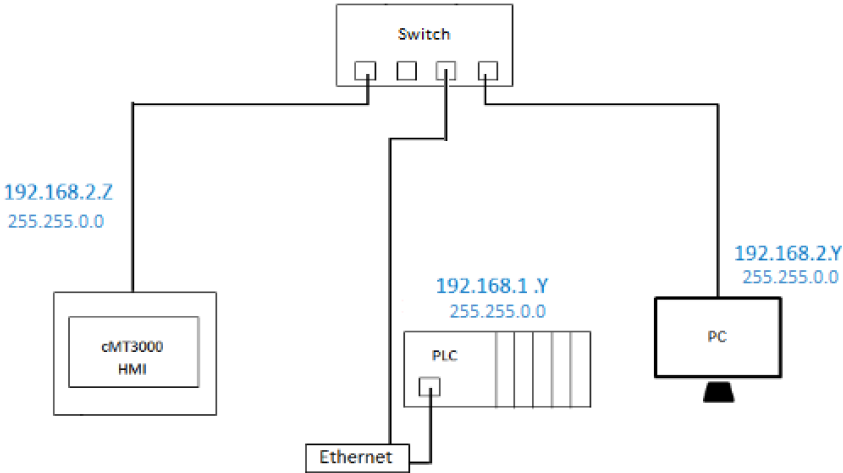
1. The IP subnet in the example above is the first 3 numbers of your IP: 192.168.1.xx
2. Each number within the IP can range from 0 – 255 but devices communicating must be on the same IP Subnet (have the same first 3 numbers i.e. 192.168.1.xx) and have a different identifier as the 4th number.

Subnet Mask

3. The Subnet Mask assists in communication by defining what the device can talk to. In the Example above any IP with the following can communicate with this device:

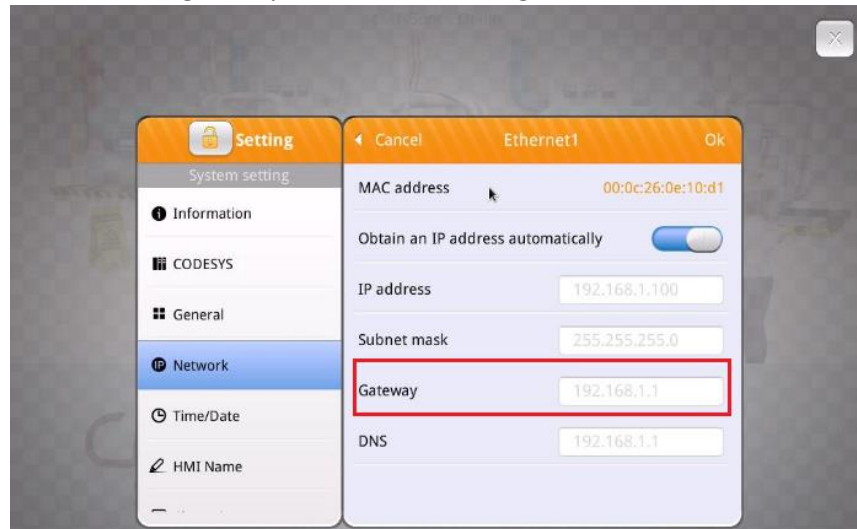
IP: 192.168. 1 . xx where xx is any number between 2-254
 Net Mask: 255.255.255.0

4. However, if you wish to add a second device with an IP of 192.168.12.xx you can enable communication by reconfiguring the IP Subnet mask to 255.255. 0 . 0



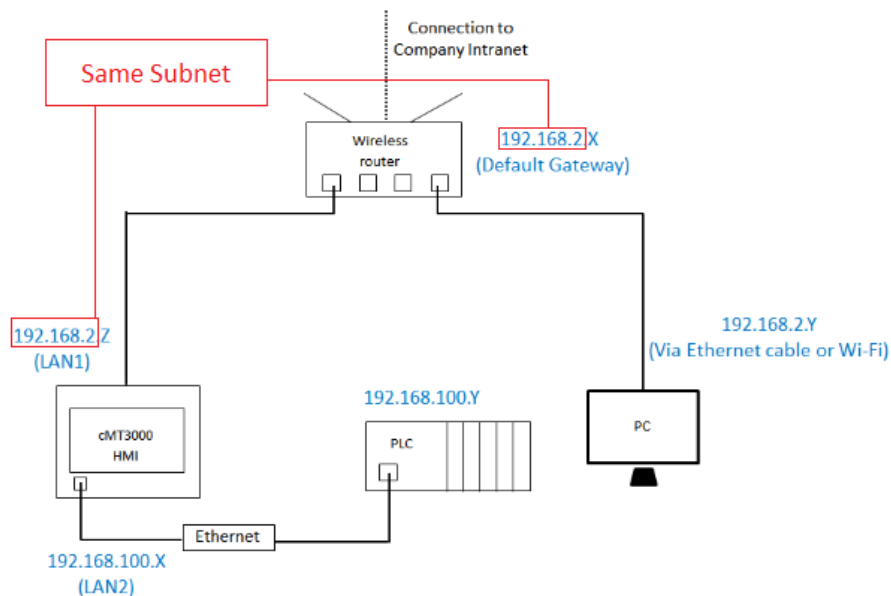
EasyAccess 2.0

1. As a simplified explanation, to enable connection to EasyAccess 2.0 your HMI's configuration must have the correct gateway and IP subnet configured:



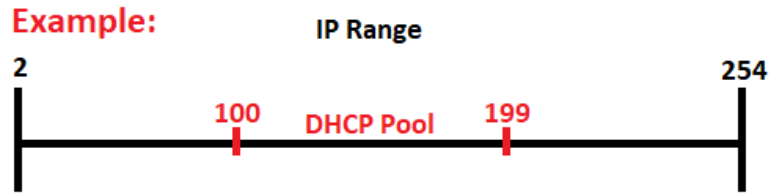
Gateway & DNS address

2. The default gateway is the communication endpoint and will allow your HMI to connect to the internet. The DNS server converts domain names to a corresponding IP address. Both gateway and DNS addresses must be valid to connect the HMI to our EasyAccess servers.
3. If DHCP is enabled the gateway address and DNS address will often be identical (depending on your routers configuration) and typically do not need to be changed when configuring a static IP.



IP of your device and the IP of the gateway should be on the same subnet

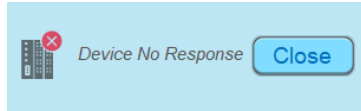
4. If you have attempted to set a static IP with the correct gateway address and it is on the correct IP subnet and have no communication to EasyAccess 2.0 you may have used an invalid IP address. This can occur if the IP you have selected is already in use on your network.



The chosen IP address should be outside of the DHCP pool to prevent communication error.

Device No Response

There are two common reasons why you might receive the “PLC Device No Response” message. The following methods may be used to diagnose and correct the problem:



Cause – Network

The incorrect network configuration within your project, HMI settings or Device.

Indications

In this scenario no objects with PLC tags will show on screen and you will receive our PLC device no response error message. To troubleshoot your connection, proceed as follows:

Troubleshooting

- a. Check withing EasyBuilder Pro to make sure you’ve defined the correct IP and Port. configuration for your device (see “[EasyBuilder Pro](#)”).
 - i. Port information can be found by within the PLC connection guide created for your selected driver. Click the following link:
<http://www.weintekusa.com/globalw/Software/EasyBuilderPro.aspx>
 - ii. Then select “PLC” on the lower left and search for your device driver.



- b. If the device IP is correct within your project you may want to check the device itself to confirm the device IP is correct.
- c. After confirming the PLC’s IP address, you will need to make sure that both devices are on the same IP Subnet (see “[Information and Examples](#)”).
- d. The next step is to check if your HMI is Codesys enabled (cMT models)
 - i. If your cMT has been licensed with Codesys the Lan ports may have different functionality as Codesys requires its own dedicated Lan port.
 - ii. If this is the case, make sure you are using the correct Lan port by clicking the network tab in your device settings menu. (see “[HMI Interface](#)”)
- e. Additionally feel free to check the “[Datasheets](#)” section of our website for network information within the user manual or data sheet of your device or others.

Cause – Tag Issue

The incorrect PLC tags imported into your project or a change in PLC programming.

Indications

In this scenario some objects with PLC tags will show and others may not. Additionally, you might only receive this notification on certain pages that contain affected objects.

Troubleshooting

- a. Check within your HMI project to make sure that you have imported the correct and most recent Tag file that corresponds with your PLC program. (Free Tag Names)
 - i. If you need to update your tag file you can do so within the system parameters of your HMI project.
 - ii. Once you have opened your system parameters select your PLC by clicking on it once.
 - iii. After this select the “Import Tags” button below the “New Device/Server...” button.
 - iv. Import your PLC Tag file (the file extension will vary depending on your PLC software) ... Example: .CSV, .XML or .L5X (for Alias tags “Rockwell”)
 - v. Make sure each object within your HMI project has the correct PLC tag.
- b. Additionally, if your PLC program was changed after you’ve imported the tag file you may need to import a new tag file.
- c. If PLC tags are a non-issue, please proceed to the following steps:
- d. Take into consideration which objects do not show on your HMI and what page they are on; These objects likely use an incorrect tag name.
- e. To troubleshoot PLC tag issues it is recommended that you use cMT-Diagnoser for cMT models or EasyDiagnoser for non-cMT models (EasyDiagnoser cannot troubleshoot Tag based PLC’s).
- f. By using cMT Diagnoser for cMT models you can quickly search your project for objects that receive no response from the PLC and may be actively polling for data or have an error message. Tutorials for cMT Diagnoser:
 - i. <https://www.youtube.com/watch?v=mtJi0U5IAsU>
- g. If you have a non-cMT model it is recommended that you use EasyDiagnoser which will allow you to scan your project to quickly find communication errors and present, you with a corresponding error code that provides more information. Tutorials for EasyDiagnoser:
 - i. https://www.youtube.com/watch?v=s2I39Yf_zLY (3:50)
- h. More information about these programs can also be found within the EasyBuilder Pro User Manual.

EasyAccess 2.0 Trouble shooting

If you receive an error code it is always recommended that you check within the EasyAccess 2.0 User Manual to look for more information. Prior to troubleshooting if you receive Error Code (3) or (6) please contact your distributor for more information.

Error Code (1)

1. If you receive Error Code (1) "Not Activated" check if your HMI is a Pre-Licensed model or if it requires activation.
 - a. If your HMI requires activation please watch the following tutorial:
<https://www.youtube.com/watch?v=CkwCTZ40b1I>
 - b. If the HMI is Pre-Licensed and you receive this notification, please attempt to stop the connection by pressing "Stop".
 - c. Once the connection is stopped "Not Running" please attempt to restart the connection by pressing "Start" and the error code should clear.

Error Code (2)

2. If you receive Error Code (2) "Log-in Timeout!" Please check your network settings.
 - a. This is typically attributed to your network firewall settings and might be fixed by creating an exception.
 - b. In rare cases this error code will also signal a loss in server function, if your firewall settings are correct and you receive this error please contact: support@weintekusa.com for more information.

Error Code (3)

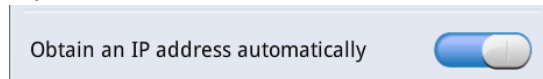
3. If you receive Error Code (3) your license key has expired, please contact your distributor for more information.

Error Code (6)

4. If you receive Error Code (6) There is either an OS issue or the EasyAccess client is damaged, please contact your distributor for more information.
 - a. An OS upgrade may be required.

Error Code (201)

5. If you receive Error Code (201) "NetworkGatewayError" Please check your gateway and IP settings.
 - a. Please check to make sure that your gateway address is correct if this setting is correct proceed.
 - b. Check that the IP is on the correct subnet (the same subnet as your gateway address) if this is correct proceed.
 - c. If your HMI has two ethernet ports or is Wi-Fi capable and has one Lan port and is not Codesys activated, please make sure that Lan-1 and Lan-2 or the Wi-Fi and Lan-1 IPs are on separate IP subnets.
6. Please check if the IP address can be detected when you ping the HMI's IP. (If the HMI cannot be detected, you will most likely receive "Destination host unreachable" after pinging.)
 - i. Switch your device to DHCP



- ii. Ping the selected IP while on the same network
Example:

```
Command Prompt
Microsoft Windows [Version 10.0.17763.914]
(c) 2018 Microsoft Corporation. All rights reserved.
C:\Users\Brend>Ping 192.168.1.105
```

- iii. If the IP is available, you will most likely receive "Destination host unreachable"
Example:

```
Pinging 192.168.1.105 with 32 bytes of data:
Reply from 192.168.1.104: Destination host unreachable.
Reply from 192.168.1.104: Destination host unreachable.
Reply from 192.168.1.104: Destination host unreachable.
Reply from 192.168.1.104: Destination host unreachable.

Ping statistics for 192.168.1.105:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
```

Error Code (202)

7. If you receive Error Code (202) "NetworkDNSError" Please check your network DNS settings, they may be incorrect.
 - a. DHCP as mentioned will automatically select the DNS address and it will typically match your gateway settings (Unless the network itself is configured differently).
 - b. If a static IP is selected, you have the ability to reconfigure your DNS Server to an available server of your choosing which may correct the problem.

Error Code (203)

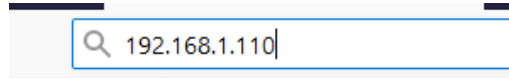
8. If you receive Error Code (203) "ProxyError" Please check your proxy settings. if you don't use proxy, please keep the Proxy settings Disabled.

Error Code (205)

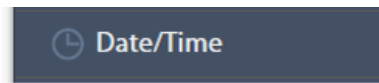
1. If you receive Error Code (205) "SSLCertificateError" Please check and calibrate the Date/ Time settings within the HMI.

- a. Easily calibrate the Time and Date on cMT Models:

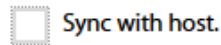
- i. With your HMI connected to your network, navigate to your browser and enter in your cMT's IP... Ex:



- ii. The following page should prompt you to log into your cMT device. Enter in your "System settings password" and click "Login".
- iii. Select the Date/Time Tab:

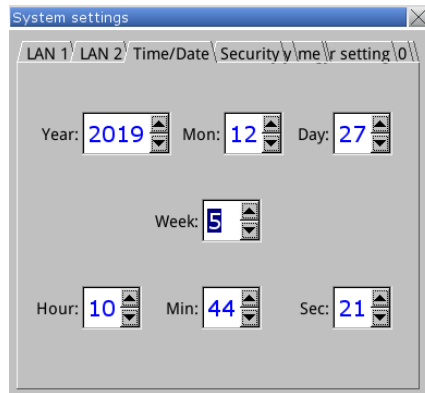


- iv. At the bottom of the Screen select "Sync with Host" and when prompted click "Save"



- b. Date/ Time calibration for non-cMT models:

- i. On your HMI open the system settings menu (make sure the setting's menu is enabled within your EasyBuilder project).
- ii. Enter the "System settings password" and click "Ok"
- iii. Navigate to the Time/ Date tab:



- iv. Enter the appropriate date and time and click "Apply" and then "Ok".



Founded in 1996, WEINTEK LABS is a global-leading HMI manufacturer and is dedicated to the development, design, and manufacturing of practical HMI solutions. WEINTEK LAB's mission is to provide quality, customizable HMI-solutions that meet the needs of all industrial automation requirements while maintaining customer satisfaction by providing "on-demand" customer service. WEINTEK LABS brought their innovative technology to the United States in 2016, WEINTEK USA, INC., to provide quality and expedient solutions to the North American industrial market.

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