



Weintek USA, Inc.  
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# User Manual

## cMT-FHDX Startup Guide



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Rev. 24 SEP, 2020

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## 1. Supported Touch Screen

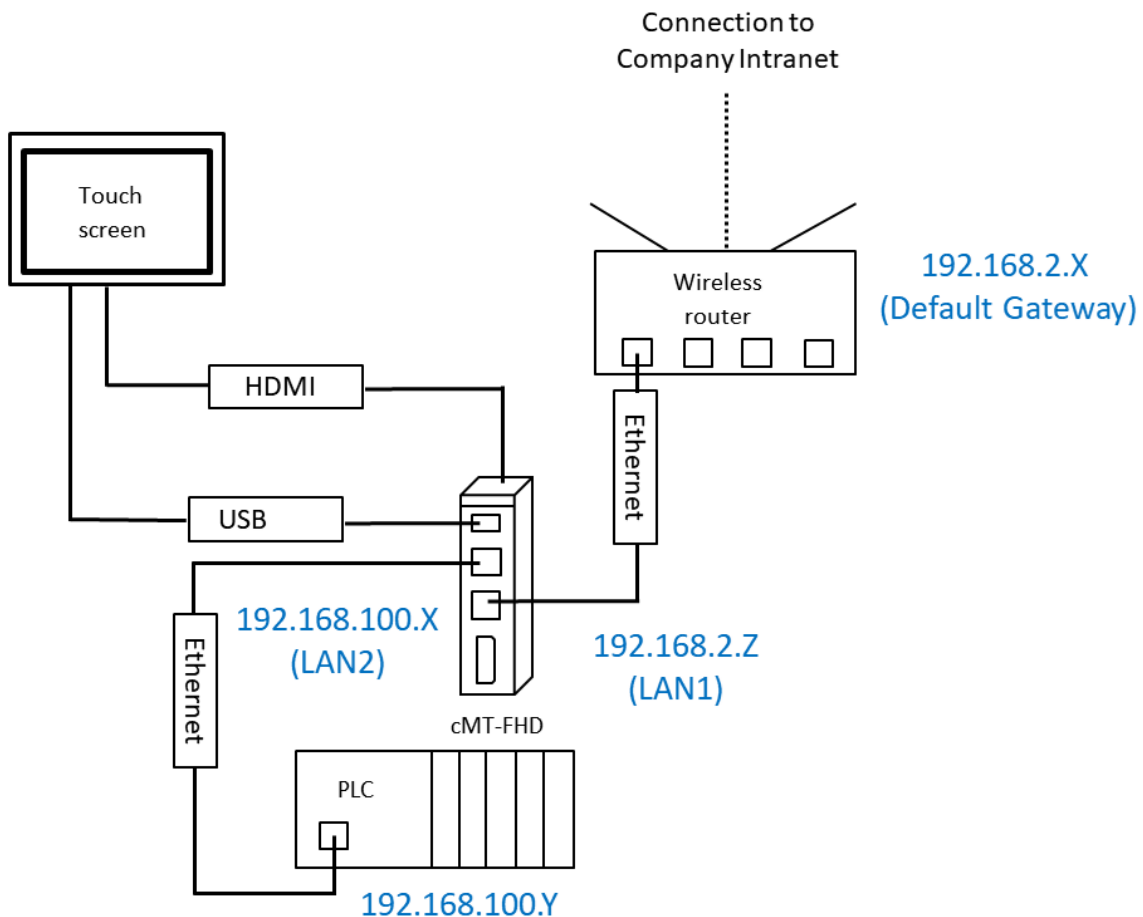
The following industrial touch screens are verified to be compatible with the cMT-FHDX.

Brand Name	Model	Touch Screen Type	Screen Size (Inch)	Requires OS Version
IEI	DM-F22A/PC-R11	USB projected capacitive touch	21.5"	20171208 or greater
Aplex	ARCDIS-121AP	USB projected capacitive touch	21.5"	20171208 or greater
Indumicro	IMD-C220PT	USB projected capacitive touch	21.5"	20171208 or greater
Hope Industrial Systems	HIS-ML19.5-CTBA	USB analog resistive touch	19.5"	20180523 or greater
ELO	ET1590L-7CWB-1-ST-NPB-G	USB AccuTouch® 5-wire Resistive Touch	15"	20180523 or greater
ELO	ET1593L-2UWB-0-MT-ZB-NPB-G	TouchPro PCAP	15.6"	20180523 or greater
ELO	ET2094L-8CWB-0-ST-NPB-G	USB IntelliTouch	19.5"	20180523 or greater
Cincoze	CV-117R/M1001	USB Resistive Touch	17"	20180910 or greater
Weintek	cMT-iM21	Capacitive touch	21.5"	20171208 or greater

## 2. Network Wiring Diagram

Connect a cMT-FHDX to a router by an Ethernet cable as the diagram shows below.

The default IP address of LAN 1 is DHCP. The default IP address of LAN 2 is static IP 192.168.100.1. The IP addresses of LAN 1 and LAN 2 must be configured to different subnets, except for the cMT-FHDX which have been activated with a Codesys license.

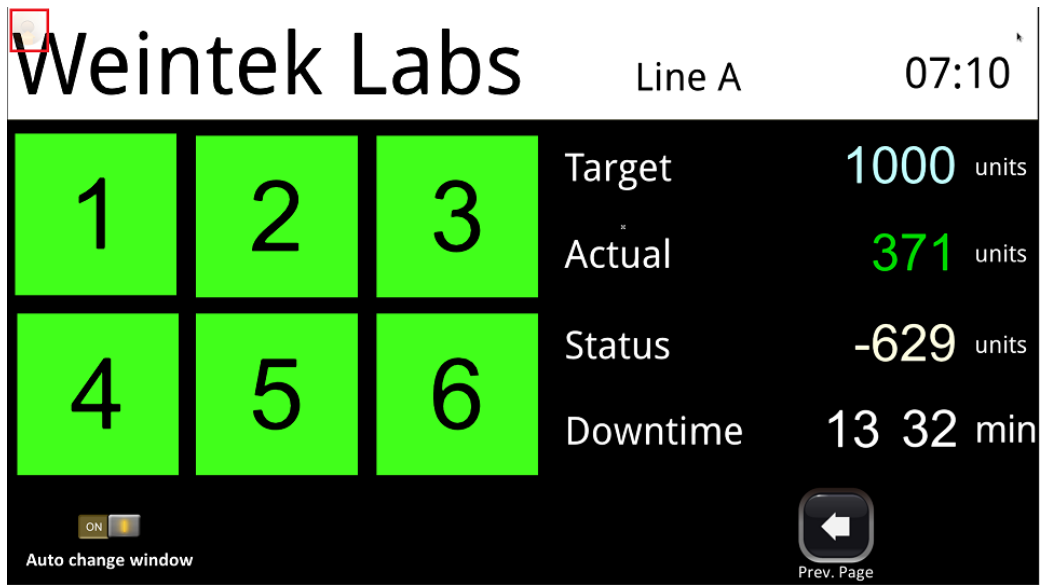


### cMT-FHDX LAN Ports:

The cMT-FHDX is equipped with two independent Ethernet ports which isolate the device network from the company/factory network. LAN1 is a WAN (Wide Area Network) port which is allowed to connect to a public network or another network via a gateway. LAN2 is a LAN (Local Area Network) port.

### 3. Setup

Press the system toolbar button in the top left of the screen to open the Setup menu.



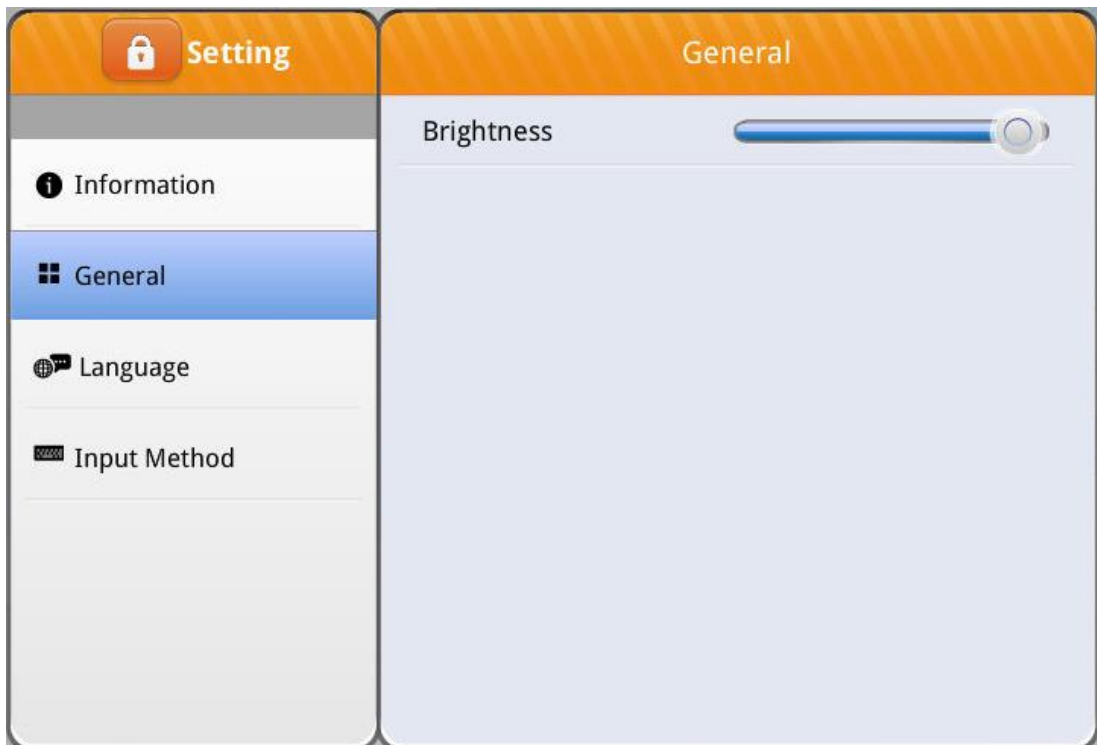
### Information

This page shows general information about cMT-FHDX and network information.



### General

Adjust the brightness of the screen and audio volume. The Audio option will be available when the connected monitor display supports **DDC /CI** (Display Data Channel/Command Interface).



### Language

Select a language for Setup. The language selected on the project of the cMT-FHDX won't be changed by this setting.



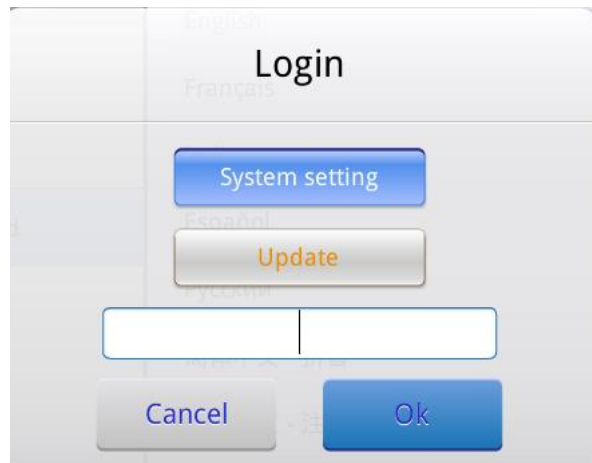
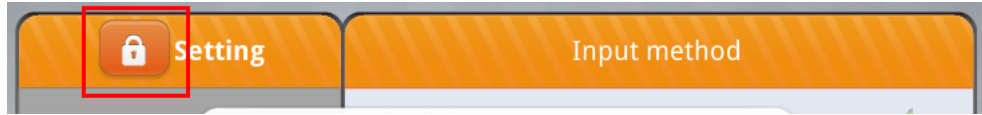
## Input Method

Select languages for system keyboard input use.



## Advanced Settings

To access more system settings, click on the lock icon in the top left corner. There are two different levels of password protection. Select [System Setting] and enter System Setting password. The default password of System Setting is 111111. The **Codesys** tab, **OS Upgrade** tab, and **Reset Option** tab will be accessible to System Setting.



After clicking on [OK], the icon will become unlocked.



## Codesys

This is a page used to activate Codesys functionality. To activate this feature on a cMT-FHDX, a Codesys activation card is required and must be purchased separately.

[Codesys Activation Code]- Enter the codes displayed on a Codesys activation card. Click [Active] to activate Codesys.

**Note: Once Codesys is activated, there is no way to remove Codesys from the cMT-FHDX.**

[Restore Codesys License]- The Codesys functionality will be restored if it is enabled. Contact Weintek USA before using this.





**General**

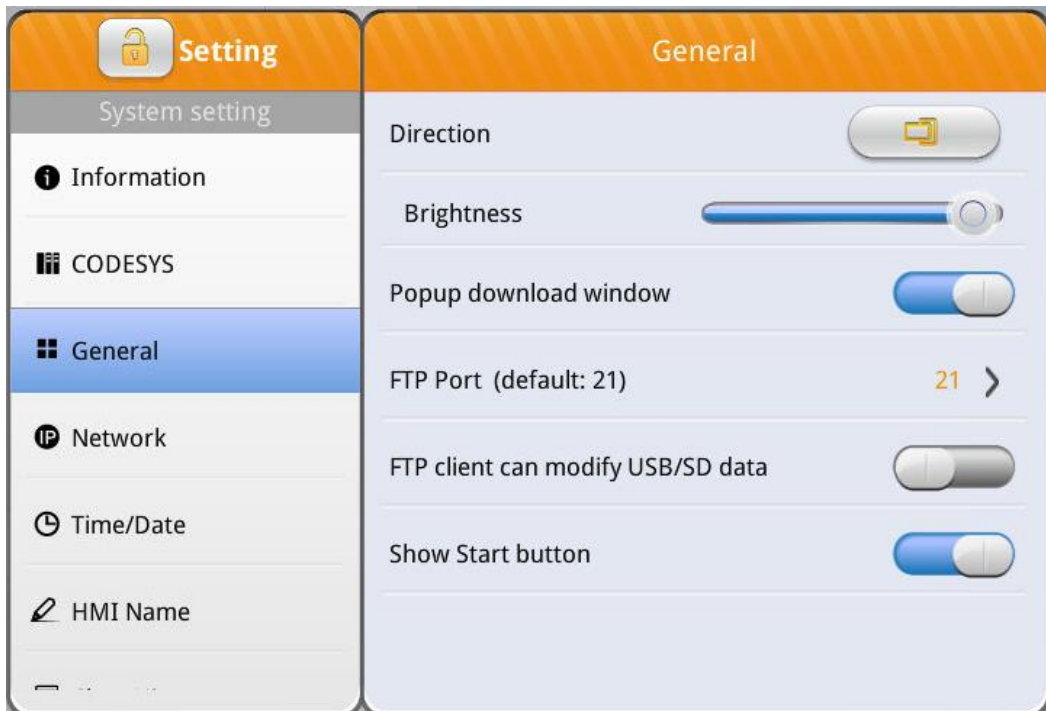
[Direction]- Click on the button to change the direction of the screen display.

[Popup download window]- If enabled, after inserting a USB drive to the USB port of the cMT-FHDX, the Upload/Download dialog window will pop up.

[FTP Port]- Click the “>” button to change FTP port number.

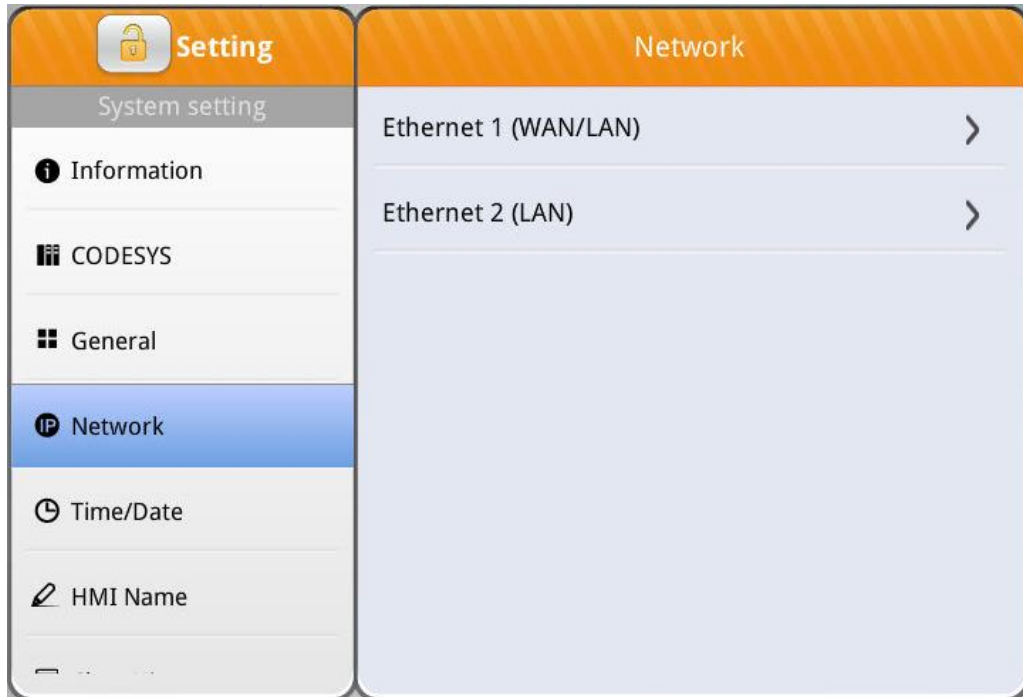
[FTP client can modify USB/SD data]- If enabled, historical data stored in USB drive can be modified via FTP(File Transfer Protocol).

[Show Start button]- If this option is turned off, the system toolbar button will be hidden.

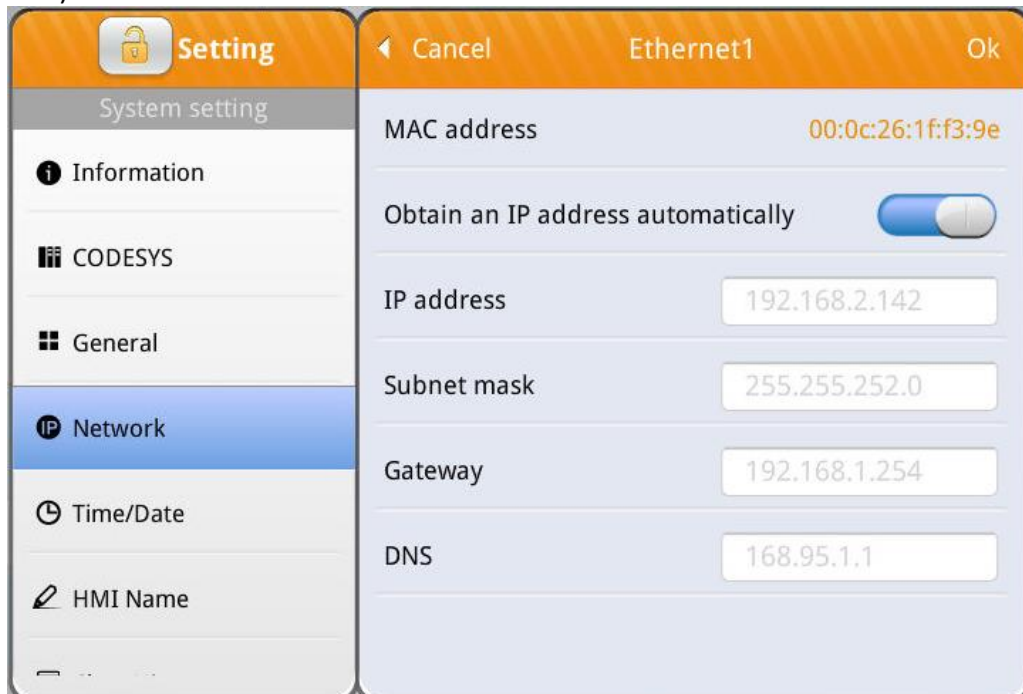


## Network

Set the IP addresses of Ethernet 1 and Ethernet 2. The default IP address of Ethernet 1 is DHCP. The default IP address of Ethernet 2 is 192.168.100.1. The IP addresses of Ethernet 1 and Ethernet 2 must be on separate subnets, except for the cMT-FHDX with activated Codesys.

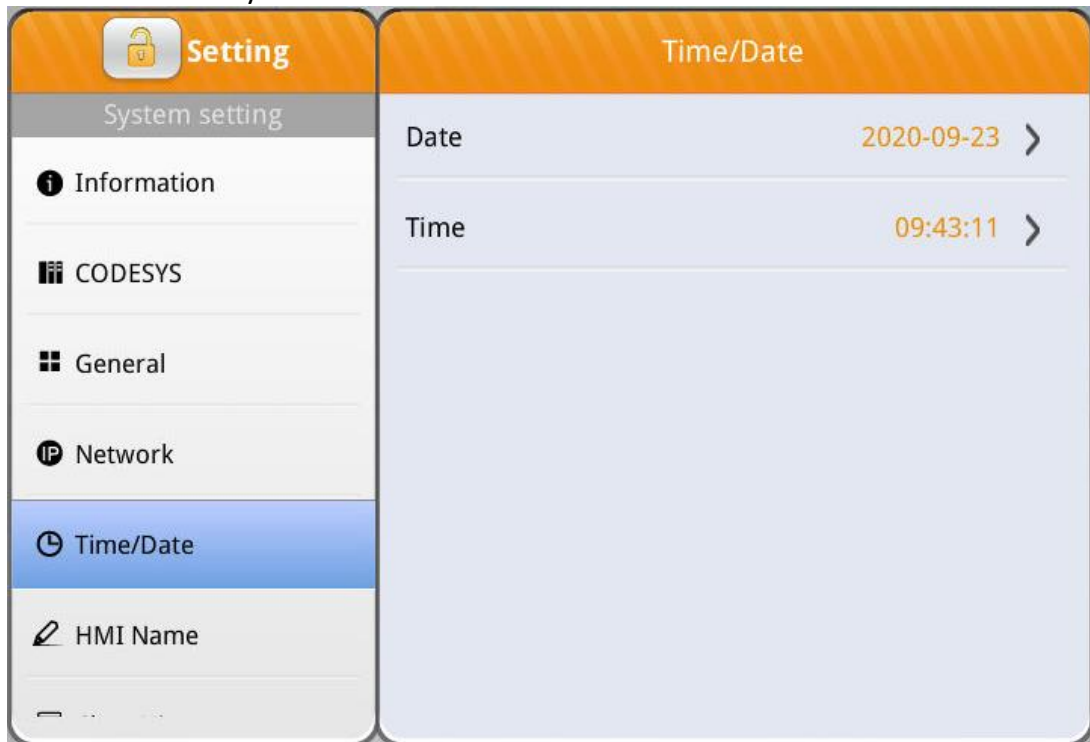


Click on one of the ">" button. Enable [Obtain an IP address automatically] (**DHCP**) or set the IP address manually (**Static IP**).



## Time/Date

Adjust cMT-FHDX RTC manually.



## HMI Name

Change the name of cMT-FHDX to identify this HMI when retrieving historical data or loading a project on a PC. This saves time remembering the IP address of each cMT-FHDX.



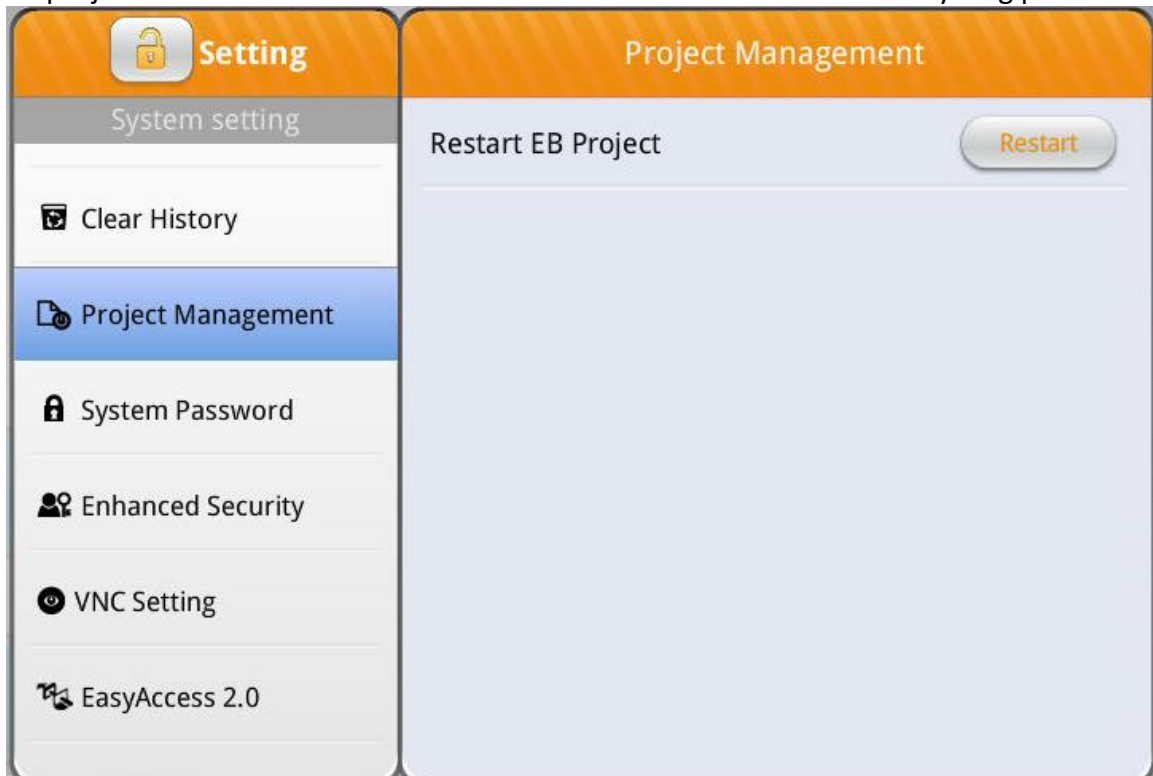
### Clear History

This page is used to clear historical data, recipe, and database information stored in the internal memory of cMT-FHDX.



### Project Management

Restarts the project of the cMT-FHDX and restores it to its initial state without cycling power.



## System Password

There are three different levels of password protection, **User**, **Update Project**, and **System Setting**.

This page is used to change the passwords for operating a project via cMT viewer, loading a project to the HMI, accessing FTP server and so on. The default passwords of the three levels are 111111.

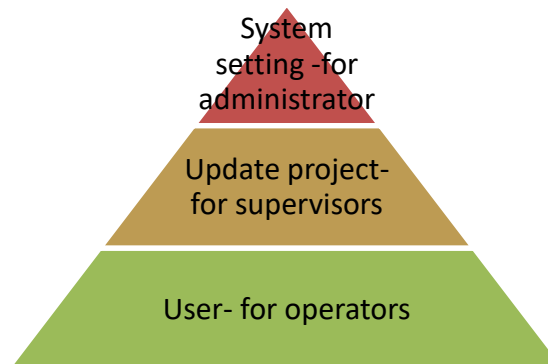
[User]- This level can operate cMT projects via cMT viewer.

[Update project]- This level can load and retrieve the HMI project, as well as retrieve historical data, such as data sampling and event log data. In addition, it can operate cMT projects via cMT viewer.

[System Setting]- This level has access to all system settings, load and retrieve the project, retrieve historical data, and operate cMT projects via cMT viewer. It is the *highest security level*.

[History]- FTP server access. The default password is 111111.

Password hierarchy -



### Enhanced Security (Objects authorized to operators in HMI project)

This function provides user passwords and security classes to prevent unauthorized operators from accessing objects that have the potential to cause damage or injury within your cMT-FHDX project. For more information, refer to section 5.6.2 **Enhanced Security Mode** in the Easybuilder pro user manual.



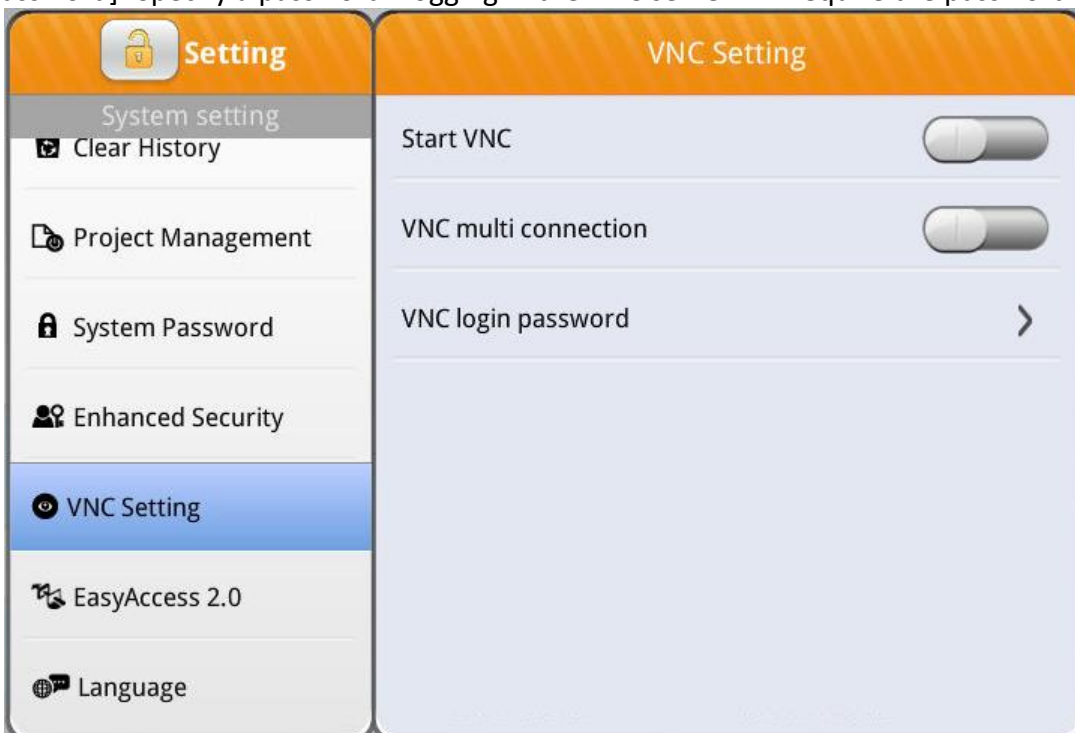
### VNC Setting

The VNC server provides remote HMI monitoring and controlling via Ethernet connection.

[Start VNC]- It allows VNC connection with only one VNC client.

[VNC multi connection]- It allows connection with multiple VNC clients. Connecting the VNC server to too many VNC clients may slow down the communication speed and HMI performance.

[VNC login password]- Specify a password. Logging in the VNC server will require the password.



### EasyAccess2.0

EasyAccess 2.0 is a tool that allows users to access and control a cMT-FHDX remotely from anywhere in the world. cMT-FHDX is NOT a pre-licensed model. To use this feature, an EasyAccess 2.0 activation card is required and must be purchased separately.

For more information, refer to **EasyAccess2.0** user manual.



### Printer

cMT-FHDX can search your intranet for a network printer and connect to the printer.



Click [Install network printer] and select a printer from the list.

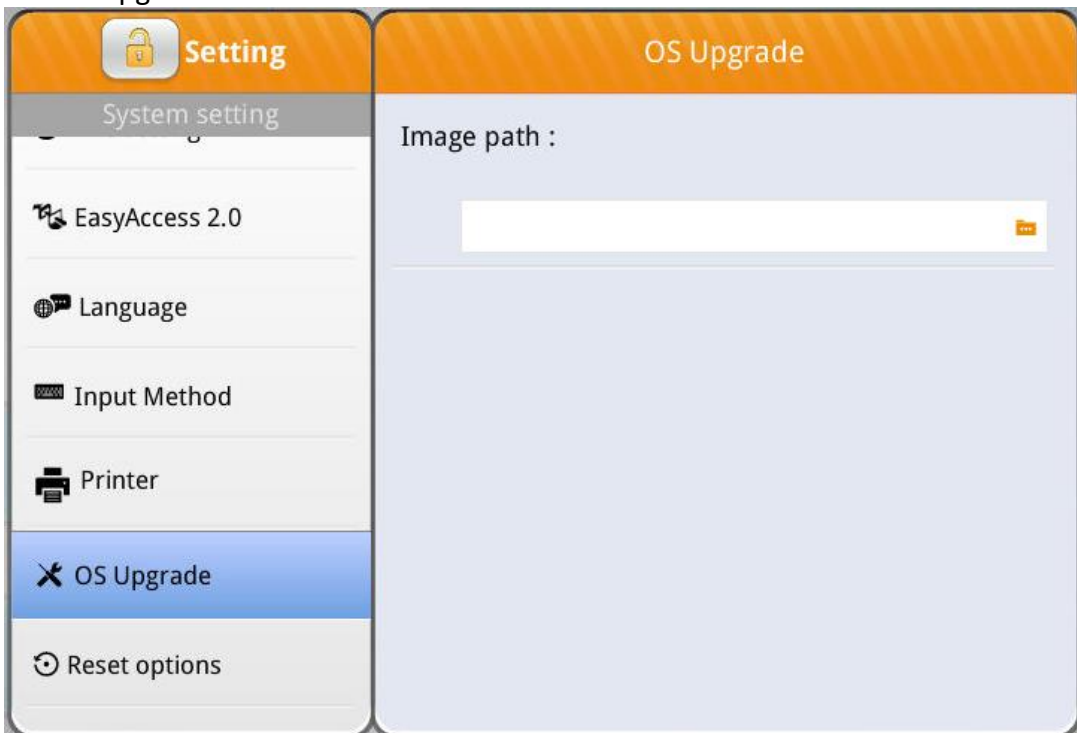


[URI]- Device URI (Uniform Resource Identifier).

[Backup PPD file]- It is used to copy the PPD file (PostScript Printer Description) of printer.

### OS Upgrade

This page is used to upgrade the OS version of cMT-FHDX.



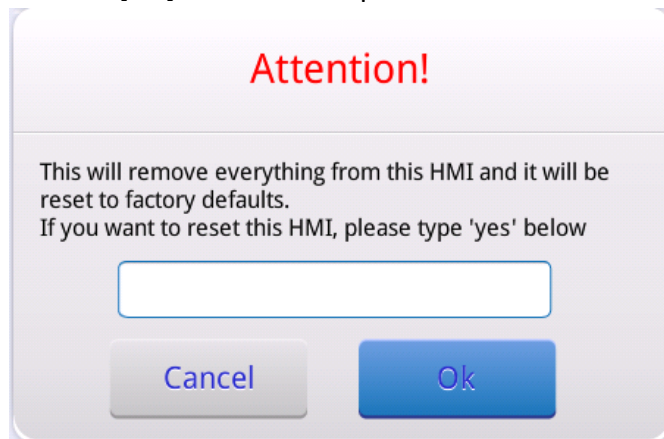


## Reset Options

This page is used to reset a cMT-FHDX to its factory default settings. Press [Start] to reset if needed.



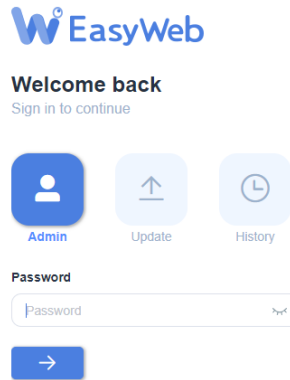
Enter "yes" into the box and click on [OK] to start reset process.



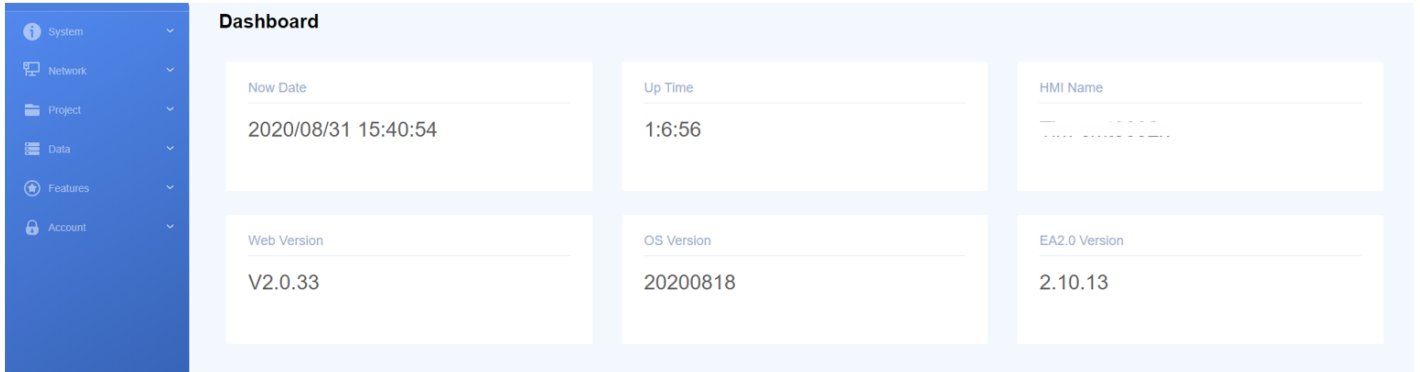
## 4. Web Interface

A cMT-FHDX's setting can also be accessed via a web browser. Before configuration, connect cMT-FHDX(LAN1) to a router via an Ethernet cable. Open a web browser (Edge, Chrome, or Firefox) and enter the IP address of the cMT-FHDX. For example, enter 192.168.1.15.

Select an identity and enter its password.



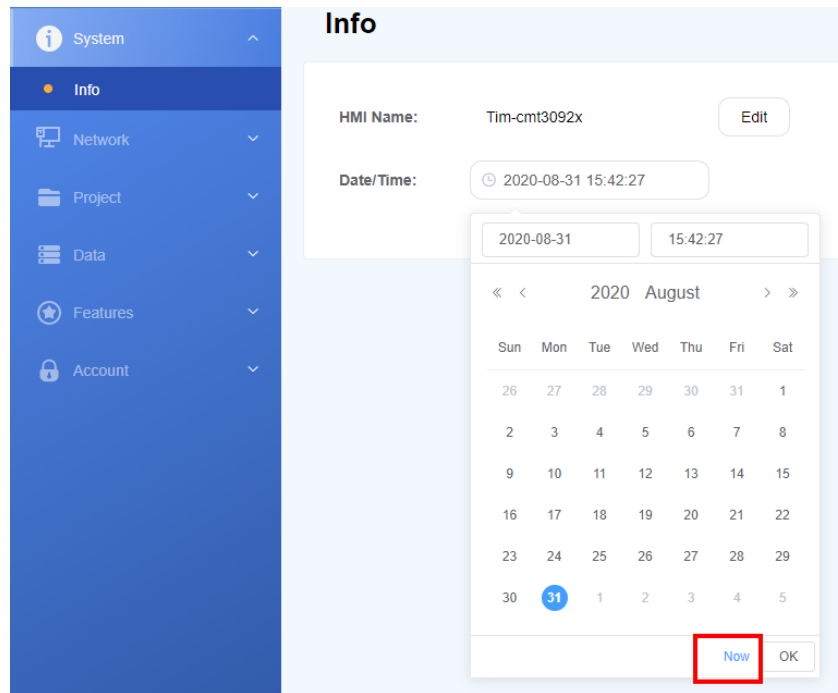
The tabs of the web interface are displayed as shown. They are **System**, **Network**, **Project**, **Data**, **Features**, and **Account**.



## Feature Introduction

### Info

[Now] - Synchronizes the HMI RTC with the PC RTC.



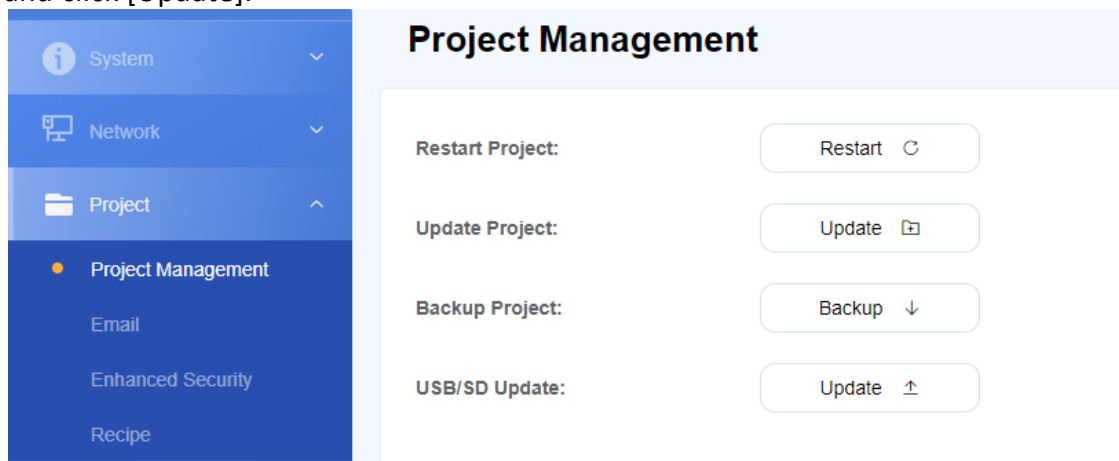
## Project Management

[Restart Project] - Restarts cMT-FHDX and restores it to its initial state.

[Update Project]- Loads a project and recipes from the PC to cMT-FHDX.

[Backup Project]- Uploads a project from cMT-FHDX to the PC.

[USB/SD Update]- Loads a project via a USB drive plugged into the USB slot of cMT-FHDX. Select the \*.cxob file and click [Update].



## Email

This page provides setup of the SMTP server and email contact lists. For more information, refer to section 5.11 e-Mail in the Easybuilder pro user manual.

**Email**

SMTP   Contacts   Upload

\* Host:

\* Port:

\* Username:

\* Password:

\* Confirm Password:

Authentication:

Encryption:  None    TLS    SSL

**Sender Information**

\* Name:

\* Address:

## Recipe

[Update]- Select a button to transfer recipe files from the PC to the cMT-FHDX.

[Backup] - Select a button to transfer recipe files from the cMT-FHDX to the PC.

[Clear]- It is used to clear recipe and database information stored in the cMT-FHDX.

**Recipe**

Item	Action		
	Update	Backup	Clear
Recipe Database	<input type="button" value="Update"/>	<input type="button" value="Backup"/>	<input type="button" value="Clear"/>
RW	<input type="button" value="Update"/>	<input type="button" value="Backup"/>	<input type="button" value="Clear"/>
RW_A	<input type="button" value="Update"/>		

## Data Log & Trend Display

This page displays data log information via a data spreadsheet or a trend chart. Data within each spreadsheet can be backed up individually by clicking [Export to Spreadsheet] or [Backup database].

[Export to Spreadsheet]- This function generates a CSV file.

[Backup database]- This function generates a compressed file of the .db files.

**Data Log & Trend Display**

Data Display | Trend Display

Object: log000

Refresh Option

#	Time	Channel 1	Channel 2	Channel 3
82	2020/09/01 12:12:27	-0.984808	0.648564	0.167008
81	2020/09/01 12:12:26	-0.996195	0.836447	-0.0837078
80	2020/09/01 12:12:25	-0.92388	0.998958	-0.37082
79	2020/09/01 12:12:24	-0.793353	1.07886	-0.6
78	2020/09/01 12:12:23	-0.608761	1.09915	-0.802957
77	2020/09/01 12:12:22	-0.34202	1.04616	-0.994845
76	2020/09/01 12:12:21	-0.0871557	0.937904	-1.11262

Export to Spreadsheet Backup database

**Data Log & Trend Display**

Data Display | Trend Display

Object: log000

Auto Refresh Refresh Option

Sep 1, 2020, 12:12:30 PM  
Channel 3: 0.863

Channel 1 Channel 2 Channel 3

X. Division 8 Y. Division 7

## Event Log

This page displays a data table in which operators can easily see important event information recorded on the HMI.

The Event Log interface features a sidebar menu on the left with categories: System, Network, Project, Data, Data Log & Trend Display, Event Log (selected), Operation Log, Features, and Account. The main content area is titled 'Event Log' and includes several filter sections: 'Time column' with a date range from 2020-08-04 to 2020-09-01; 'Category range (0 - 255)' with a range from 0 to 255; 'Keywords' with an 'Add terms' input field; and 'Select Language' with a dropdown menu set to 'Language1'. A 'Refresh' button is located in the top right corner of the table area. The table itself has columns for '#', 'Category', 'Event Message', 'Event trigger time', 'Return to normal time', 'Occurrence count', and 'Elapsed ti'. Below the table are buttons for 'Export excel' and 'Backup database'.

#	Category	Event Message	Event trigger time	Return to normal time	Occurrence count	Elapsed ti
1	1	Machine Error !!	2020/09/01 12:14:22		15	88
2	1	Flow Speed Error !!	2020/09/01 12:14:18	2020/09/01 12:14:26	6	48
3	1	Tank Error !!	2020/09/01 12:14:09	2020/09/01 12:14:19	10	95
4	1	Machine Error !!	2020/09/01 12:14:08	2020/09/01 12:14:15	14	88
5	1	Machine Error !!	2020/09/01 12:13:54	2020/09/01 12:14:01	13	82
6	1	Tank Error !!	2020/09/01 12:13:49	2020/09/01 12:13:59	9	86
7	1	Flow Speed Error !!	2020/09/01 12:13:42	2020/09/01 12:13:50	5	40
8	1	Machine Error !!	2020/09/01 12:13:40	2020/09/01 12:13:47	12	75
9	1	Tank Error !!	2020/09/01 12:13:29	2020/09/01 12:13:39	8	77
10	1	Machine Error !!	2020/09/01 12:13:26	2020/09/01 12:13:33	11	69

## Operation Log

This page allows you to back up operation log information recorded on the HMI.

The Operation Log interface features a sidebar menu on the left with categories: System, Network, Project, Data, Data Log & Trend Display, Event Log, Operation Log (selected), Features, and Account. The main content area is titled 'Operation Log' and contains a single button labeled 'Backup database' with a download icon.

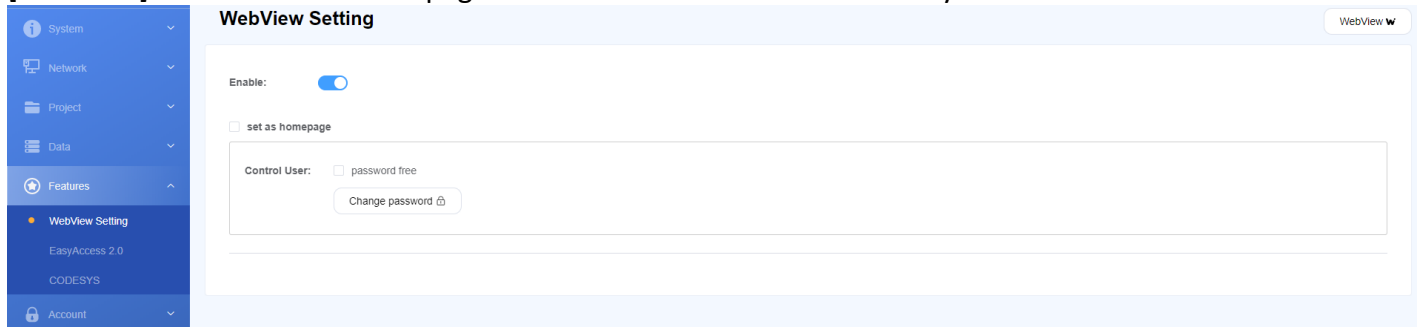
## Webview Setting

Webview offers direct control over HMI screen using a web browser.

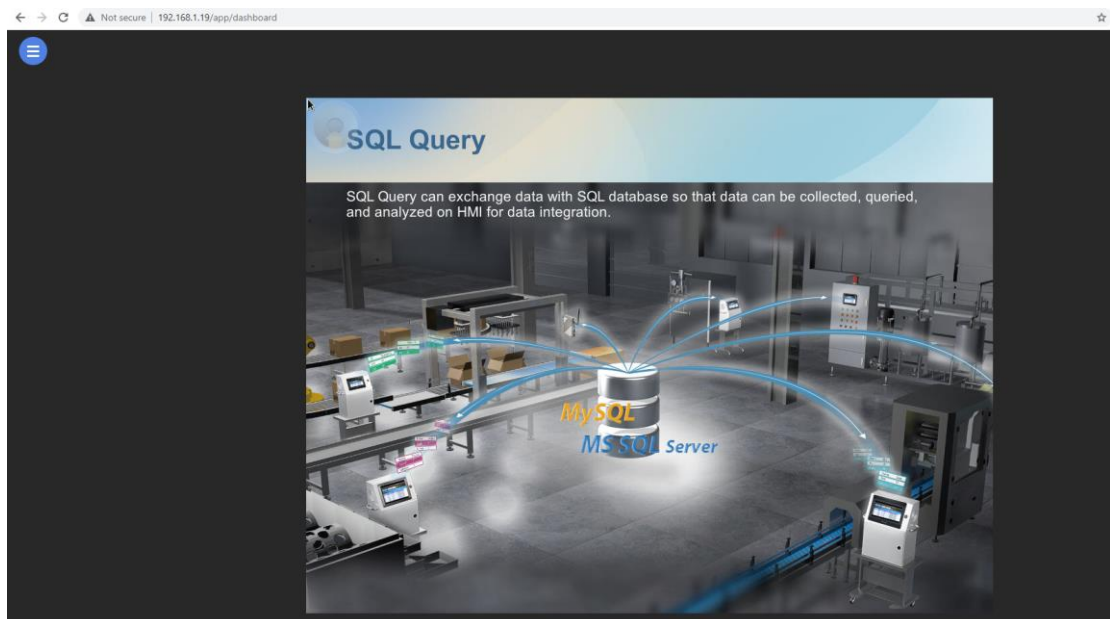
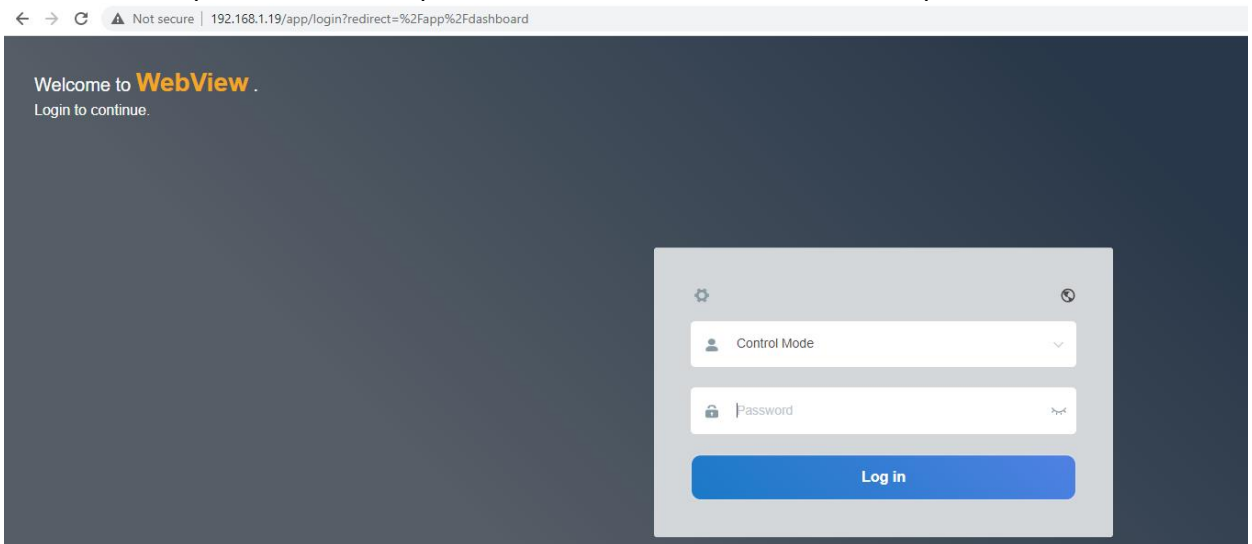
[Set as homepage] – If enabled, Webview will be the home page of the web interface.

[Change password]- Set up a password that prevent unauthorized operators from accessing Webview.

[Webview]- Go to the Webview page to control the HMI screen remotely.

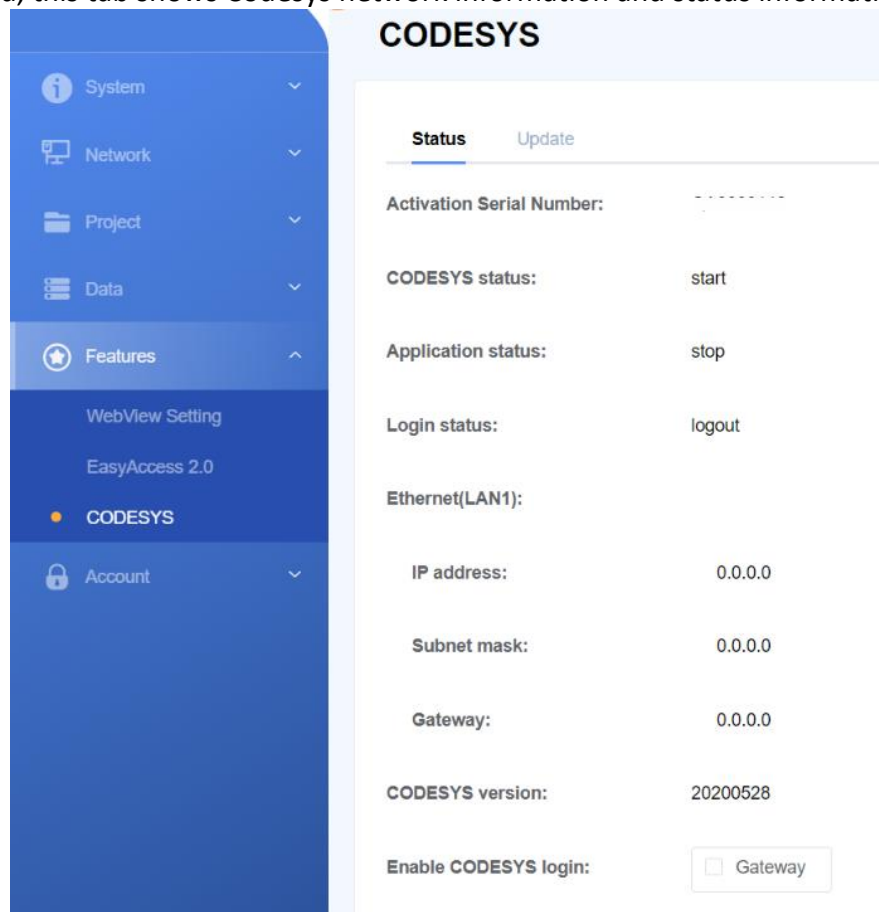


If a password is set up for **Webview**, operators will have to enter the correct password.



## Codesys

[Status] - If activated, this tab shows Codesys network information and status information.

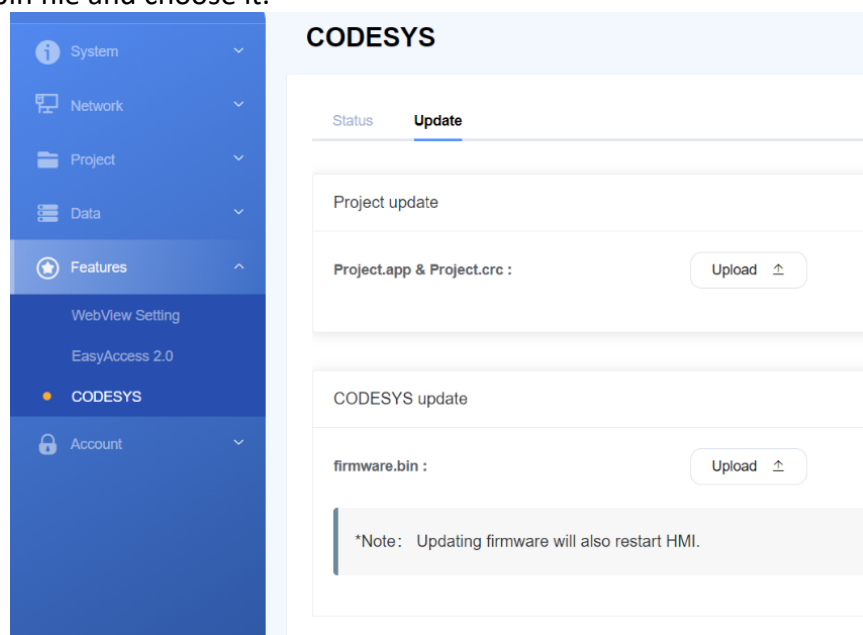


The screenshot shows the CODESYS web interface with the 'Status' tab selected. The left sidebar contains a menu with items: System, Network, Project, Data, Features (expanded), WebView Setting, EasyAccess 2.0, CODESYS (selected), and Account. The main content area displays the following information:

CODESYS	
Status	Update
Activation Serial Number:	-----
CODESYS status:	start
Application status:	stop
Login status:	logout
Ethernet(LAN1):	
IP address:	0.0.0.0
Subnet mask:	0.0.0.0
Gateway:	0.0.0.0
CODESYS version:	20200528
Enable CODESYS login:	<input type="checkbox"/> Gateway

[Project update](If activated) - Loads Codesys PLC project from the PC to the cMT-FHDX. Navigate to the folder containing \*.app file and \*.crc file and choose them.

[CODESYS update] (If activated) - Upgrade Codesys firmware from the PC to the cMT-FHDX. Navigate to the folder containing \*.bin file and choose it.



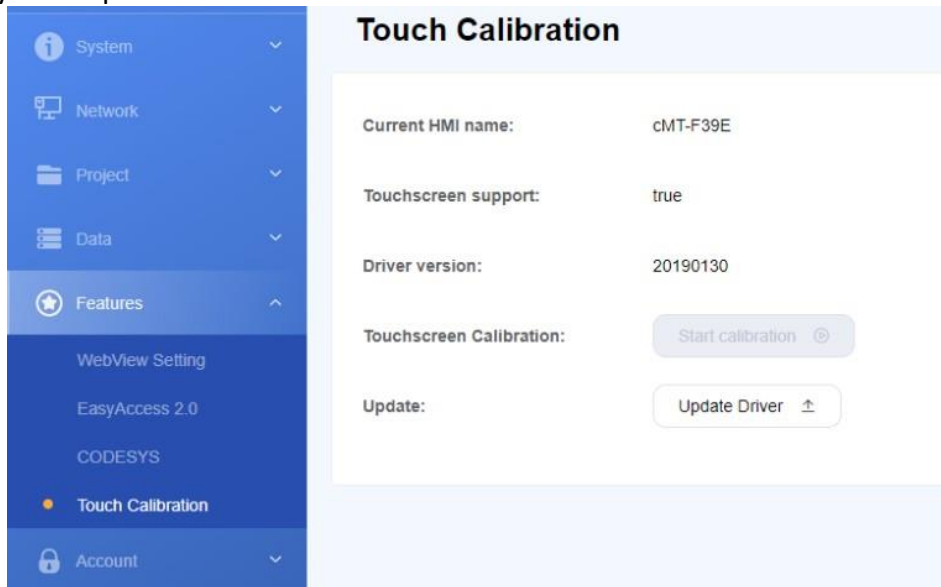
The screenshot shows the CODESYS web interface with the 'Update' tab selected. The left sidebar is identical to the previous screenshot. The main content area displays the following information:

Status	Update
Project update	
Project.app & Project.crc :	<input type="button" value="Upload"/> <input type="button" value="↕"/>
CODESYS update	
firmware.bin :	<input type="button" value="Upload"/> <input type="button" value="↕"/>
*Note: Updating firmware will also restart HMI.	



## Touch Calibration

This page allows you to update a driver for the touch screen and calibrate the resistive touch screen.



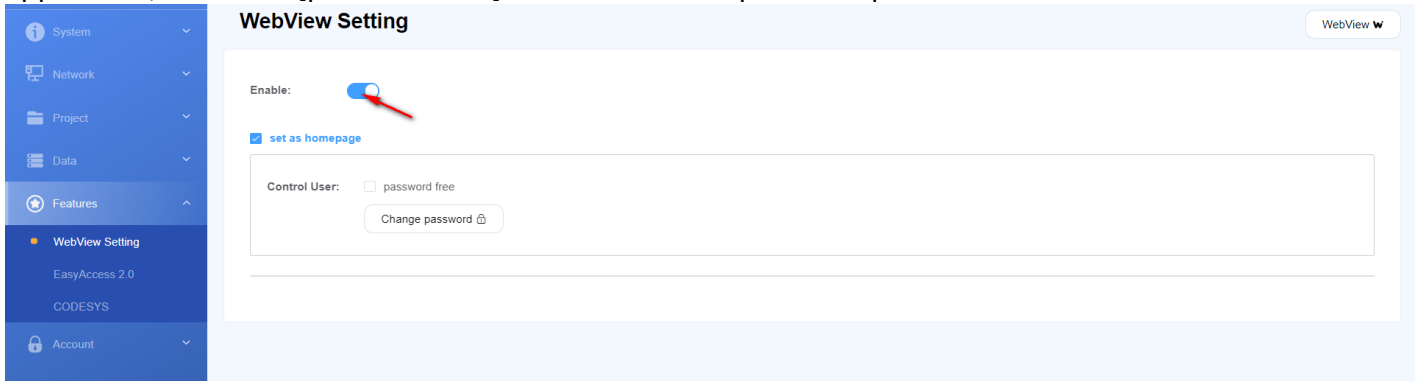
The screenshot shows a software interface with a blue sidebar on the left and a main content area on the right. The sidebar contains a list of settings categories: System, Network, Project, Data, Features, WebView Setting, EasyAccess 2.0, CODESYS, Touch Calibration (highlighted with a red dot), and Account. The main content area is titled "Touch Calibration" and displays the following information:

Current HMI name:	cMT-F39E
Touchscreen support:	true
Driver version:	20190130
Touchscreen Calibration:	<a href="#">Start calibration</a> ⓘ
Update:	<a href="#">Update Driver</a> ⬆️

## 5. How to Use WebView

Webview is used to monitor and control a CMT-FHDX on a web browser. It supports the following web browsers on a Windows PC, Chrome, FireFox, and Edge. Up to 4 users can access Webview simultaneously.

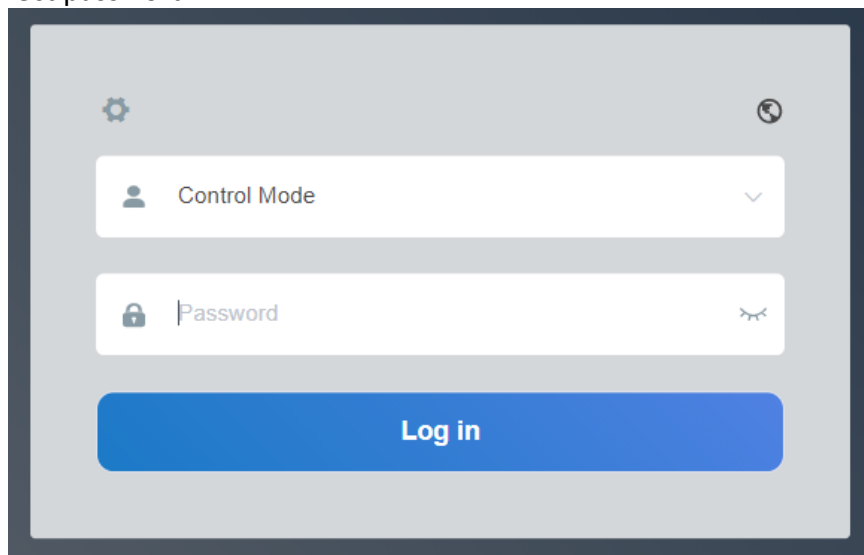
To use this feature, Webview must be enabled on the [Webview Setting]. You can set up password protection by clicking the [Change password] button. If password protection is not necessary for your application, check the [password free] button to disable password protection.



If [Set as homepage] is enabled on the [Webview Setting] tab, Webview will be the home page of the web interface.

### How to login to Webview

1. Open a web browser and enter HMI's IP address.
2. Enter the correct password.



- The HMI screen will be displayed on the web browser. Use the “square” located in the bottom right corner to **scroll** around the screen when zoom level exceeds 100%.



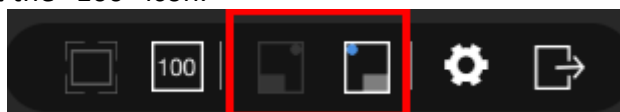
The toolbar located in the top left corner contains several menus.



The first group of tools allow you to enable or disable the zoom function. When you select the “100” icon, you can change the zoom level of the screen.



The second group of tools allow you to move the “square” to the preferred location. This group of tools will be accessible when you select the “100” icon.



The third group of tools allow you to navigate the system dashboard by clicking the “Gear” button. Clicking the “Exit” button will log out Webview.

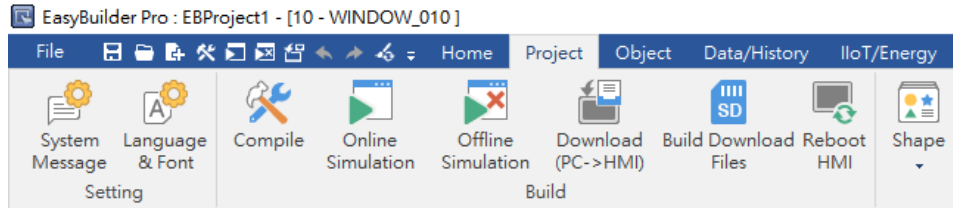


### Why won't Webview open?

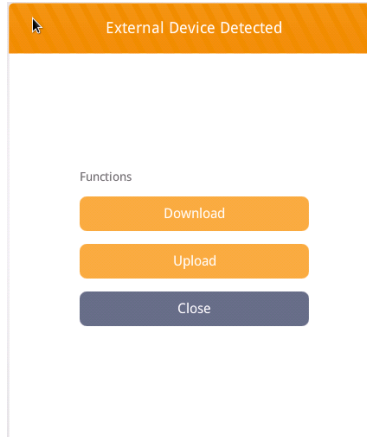
- Webview is not enabled on [Webview Setting].
- The web browser you're using is not supported by Webview.
- There are already 4 users accessing Webview simultaneously.

## 6. How to Load a Project via USB Drive (USB Drive ->HMI)

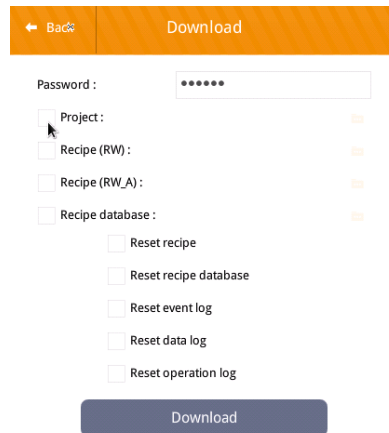
**Step 1.** Use [Build Download Files] function to build \*.cxob file into a USB drive.



**Step 2.** Plug the USB drive into to the USB slot of cMT-FHDX. When a pop-up window is displayed prompting you to download or upload to your device, click on [Download].



**Step 3.** Enter the password. The password requires the levels of **Update Project** or **System Setting**.

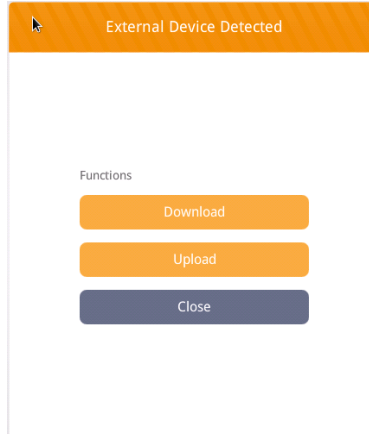


**Step 4.** Navigate to the folder containing \*.cxob file and highlight it.

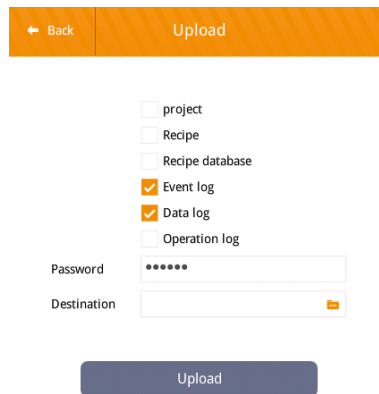
**Step 5.** Click on [Download] to start.

## 7. How to Retrieve Historical Data via USB Drive (HMI-> USB Drive)

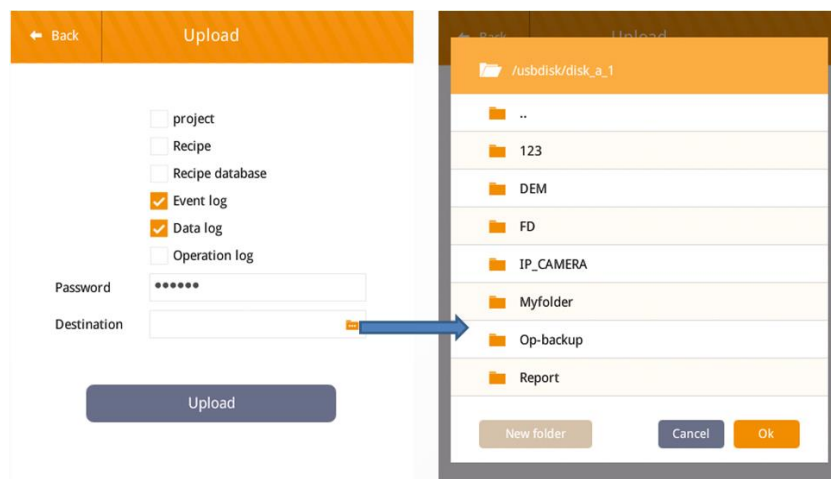
**Step 1.** Plug a USB drive to the USB port of cMT-FHDX. A pop-up window will display prompting you to download or upload to your device, and then click on [Upload].



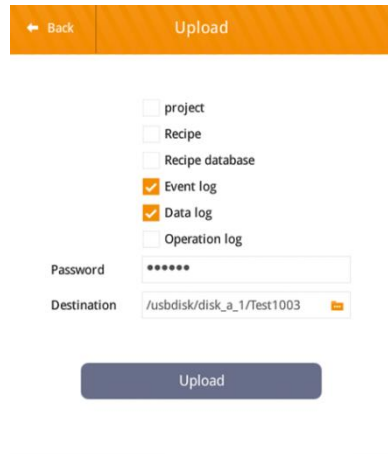
**Step 2.** Select logs and enter the password. The password requires the levels of **Update Project** or **System Setting**.



**Step 3.** Specify a folder path for storing historical data.



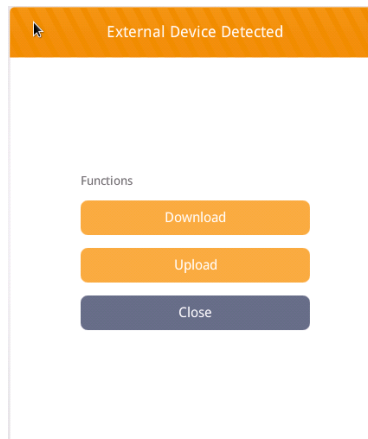
**Step 4.** Click on [Upload] to start.



The screenshot shows a dialog box titled "Upload" with a "Back" button on the left. It contains a list of checkboxes: "project", "Recipe", "Recipe database", "Event log", "Data log", and "Operation log". The "Event log" and "Data log" checkboxes are checked. Below the list is a "Password" field with masked characters and a "Destination" field containing the path "/usbdisk/disk\_a\_1/Test1003". At the bottom is a large "Upload" button.

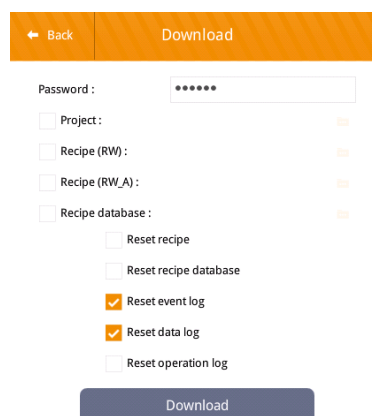
## 8. How to Delete all Historical Data

**Step 1.** Re-open the pop-up menu that will allow you to download or upload to your device and click on [Download].



The screenshot shows a dialog box titled "External Device Detected". Under the heading "Functions", there are three buttons: "Download", "Upload", and "Close".

**Step 2.** Enter the password and select logs you want to delete. The password requires the levels of **Update Project** or **System Setting**. Click on [Download] to start.




The screenshot shows a dialog box titled "Download" with a "Back" button on the left. It contains a "Password" field with masked characters. Below it is a list of checkboxes: "Project:", "Recipe (RW):", "Recipe (RW\_A):", and "Recipe database:". Under "Recipe database:", there are sub-checkboxes for "Reset recipe", "Reset recipe database", "Reset event log", "Reset data log", and "Reset operation log". The "Reset event log" and "Reset data log" checkboxes are checked. At the bottom is a large "Download" button.


## 9. OS Upgrade

**Step 1.** Copy the new OS image to a designated folder within a USB drive. In this demonstration, I create a folder named “OS\_cMT\_FHDX,” and place the OS image onto the folder. The OS image takes the form of a \*.bin file.



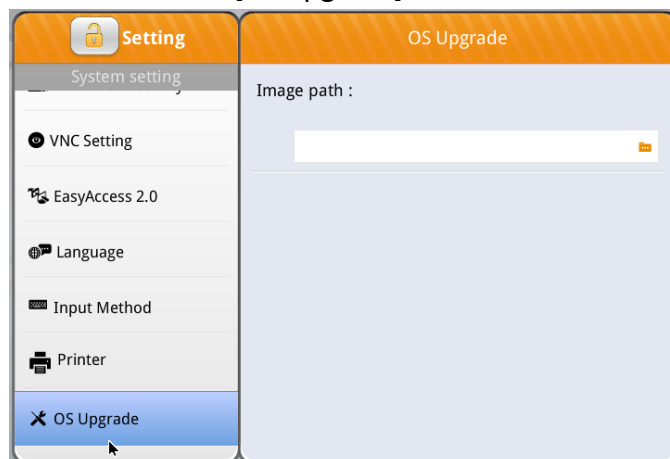
**Step 2.** Plug the USB drive into the USB port of cMT-FHDX. If a window pops up and prompts you to download or upload, click close to dismiss it.


**Step 3.** Press on the button  on the screen.

**Step 4.** Press on the lock icon  and choose [System Setting]. Enter the correct password to gain access. The default password is 111111.



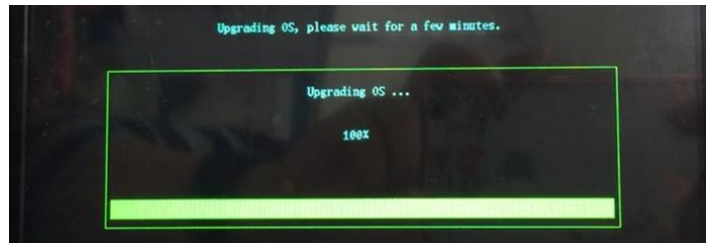
**Step 5.** Scroll through the menu and find the [OS upgrade] tab.



**Step 6.** Click on the folder symbol , and then navigate to the folder containing the OS image. In this demonstration, I'll locate the folder OS\_cMT\_FHDX, highlight the image, and then click [OK].

**Step 7.** Click the [Upgrade] button in the top right corner.

OS upgrade will begin, which may take a some time. **Do not** unplug the power cable during OS upgrade. It may result in all data being lost. The progress bar indicates the progress of the OS upgrade. Reboot the HMI by following the instructions shown on the screen.





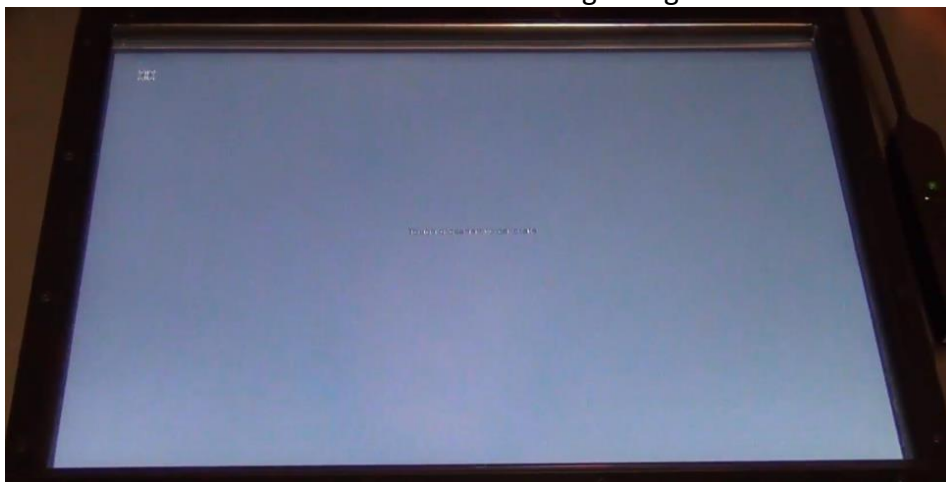
## 10. How to Calibrate Resistive Touch Screen

1. Connect the touch screen to the USB port of the cMT-FHDX via USB cable.
2. Open a web browser on a laptop. Make sure the laptop and the cMT-FHDX have connected to the router via Ethernet cables.
3. Login to the web interface with the correct password. The default password is 111111.
4. Go to the [Touch Calibration] tab.
5. Click on the [Start calibration] button to start calibration process.

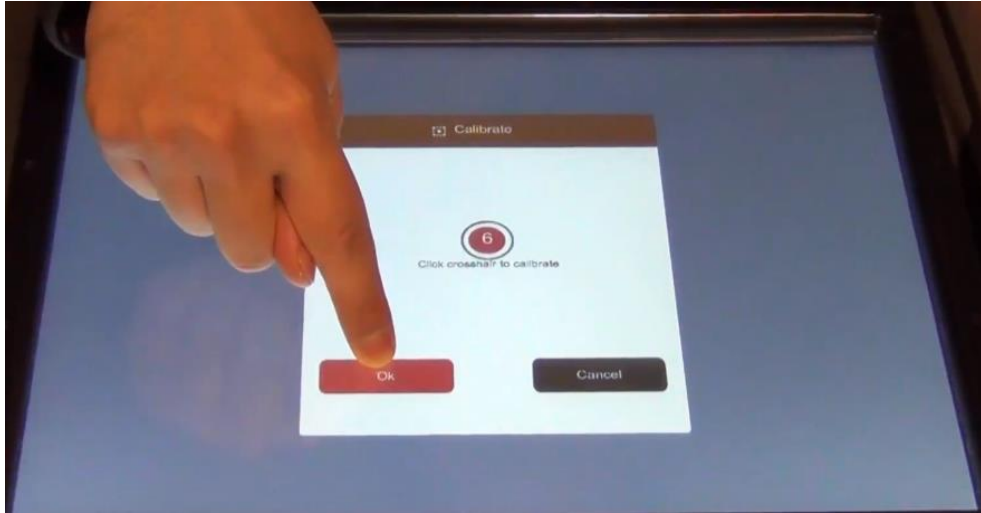
Note: If you are required to update the driver of the touch screen, click on the [Update Driver] button. The pop-up window will prompt you to select a \*.bin file.



6. The touch screen will enter calibration mode. Press the "target" sign shown in the corner of the screen.



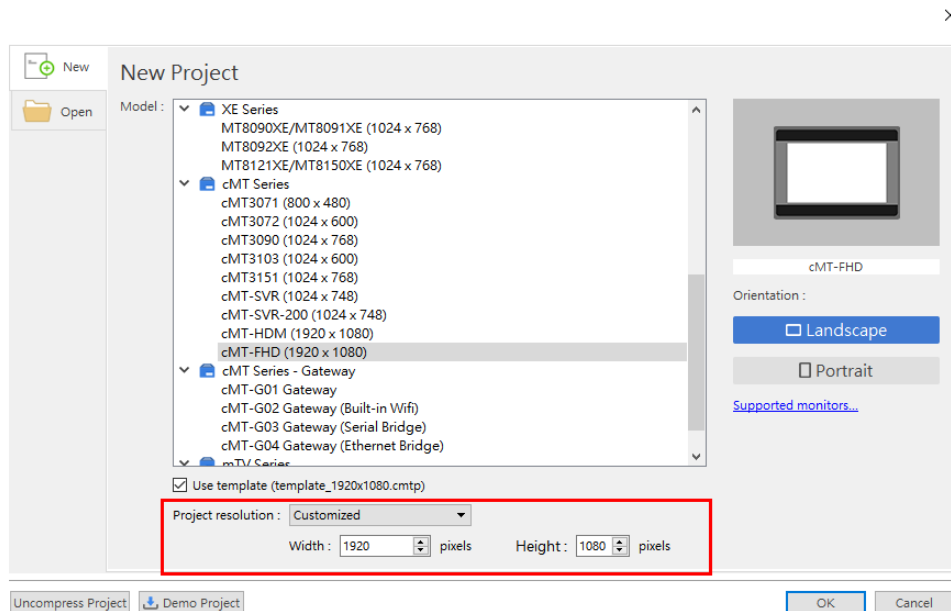
7. When the window pops up, drag the sign into [OK] box in ten seconds to finish the process.



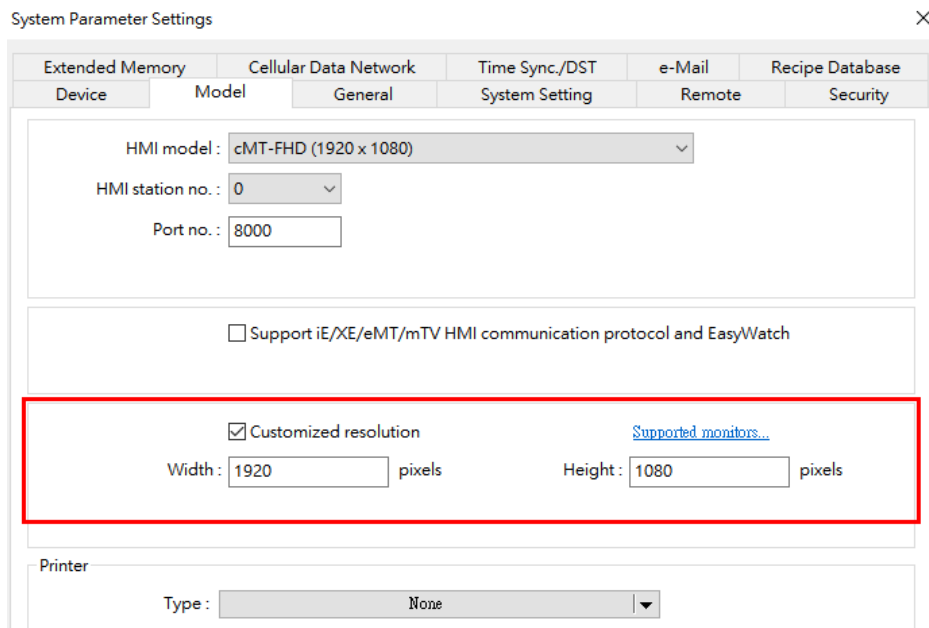
## 11. How to Adjust the Resolution of cMT-FHDX

Note: The cMT-FHDX supports 1920x1080 and 1280x720. For other resolutions supported by the cMT-FHDX, please contact Weintek USA to get the latest supported resolutions for the CMT-FHDX.

1. Launch Easybuilder pro software.
2. Select the cMT-FHDX and select “customized” within [Project resolution]. Enter a resolution. The cMT-FHDX supports resolutions up to 1920x1080.



3. If you want to adjust the resolution during programming, go to the [Home] tab on the toolbar » [System Parameters] » [Model] tab.
4. The resolution setting will be displayed as shown.



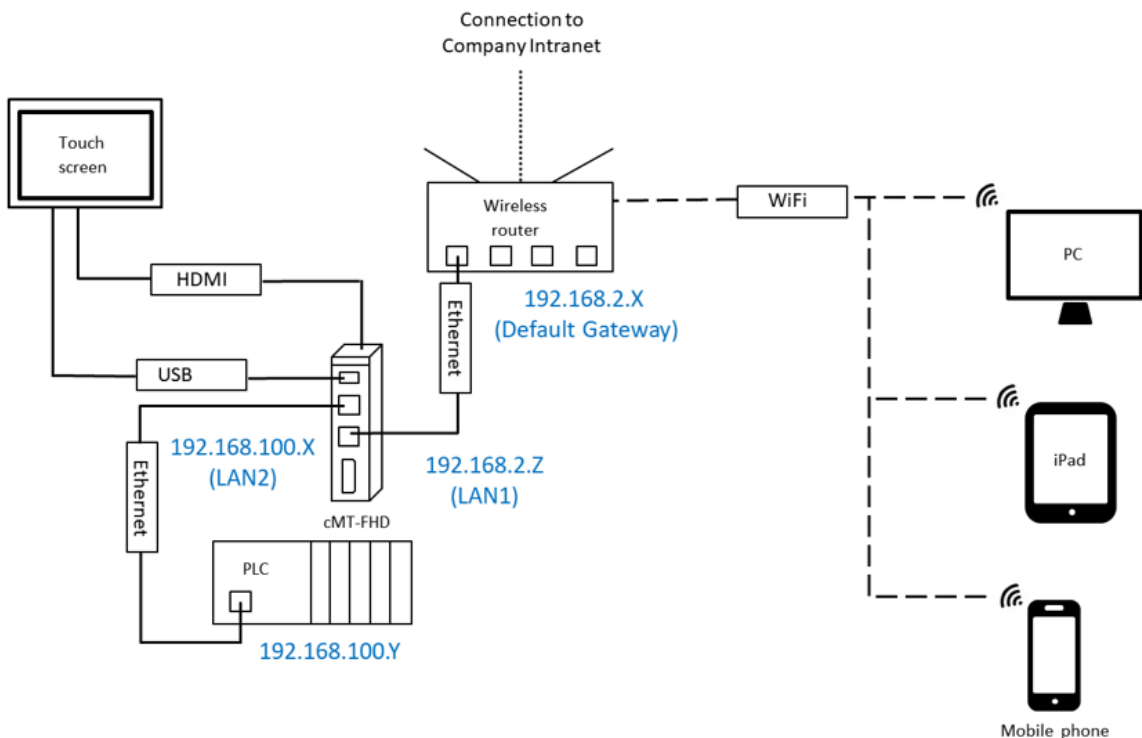
## 12. cMT-Viewer

cMT-Viewer is a free client application, which can remotely access the screen of the cMT-FHDX located on the LAN (Local Area Network) via Wi-Fi connectivity or Ethernet cable connection. To use cMT-Viewer you need to download and install the cMT-Viewer App on a mobile devices or PC. When the cMT-Viewer App runs on a device and connects to the cMT-FHDX, only data is exchanged between the device and the cMT-FHDX. Three client devices can remotely view and control the project of a cMT-FHDX simultaneously by default.

Supported Operating System	Where to download	Compatibility
Android phones or tablets	Google Play store	V4.1 or greater
iOS devices	App Store	V6 or greater
Windows PC	Weintek USA official website (Stand-alone App. or Easybuilder pro )	Windows 7 or Windows 10

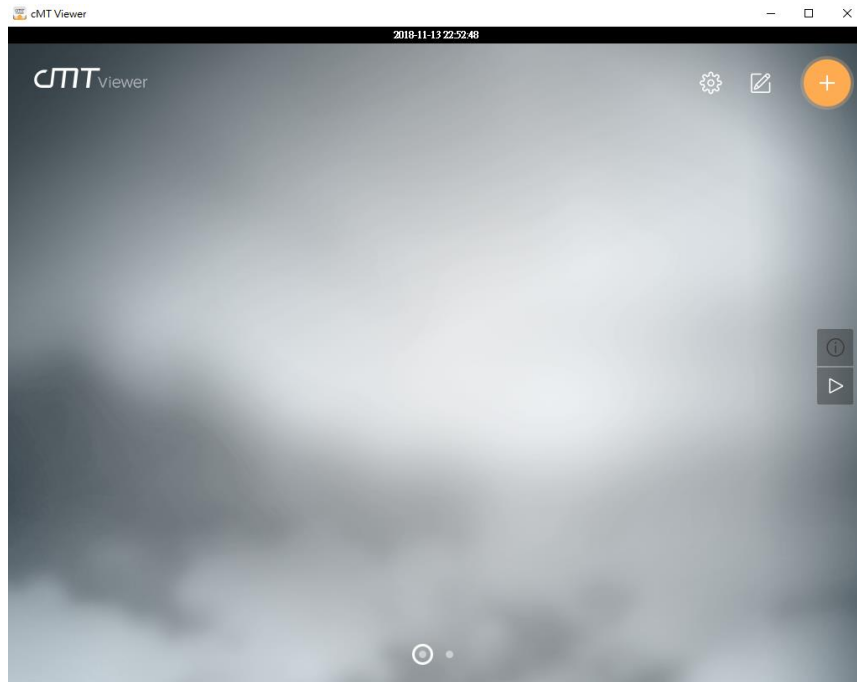
Note: cMT-Viewer is installed with the Easybuilder pro package on a PC. To find it, launch the Utility Manager » Select [cMT Series] model » [Maintenance] tab » [cMT-Viewer].

### Typical Application Diagram



## cMT-Viewer App Interface

Some operation options of the cMT-Viewer App opened on different operating systems may vary. This document discusses how to operate the cMT-Viewer App running on a PC. First, launch cMT-Viewer App.

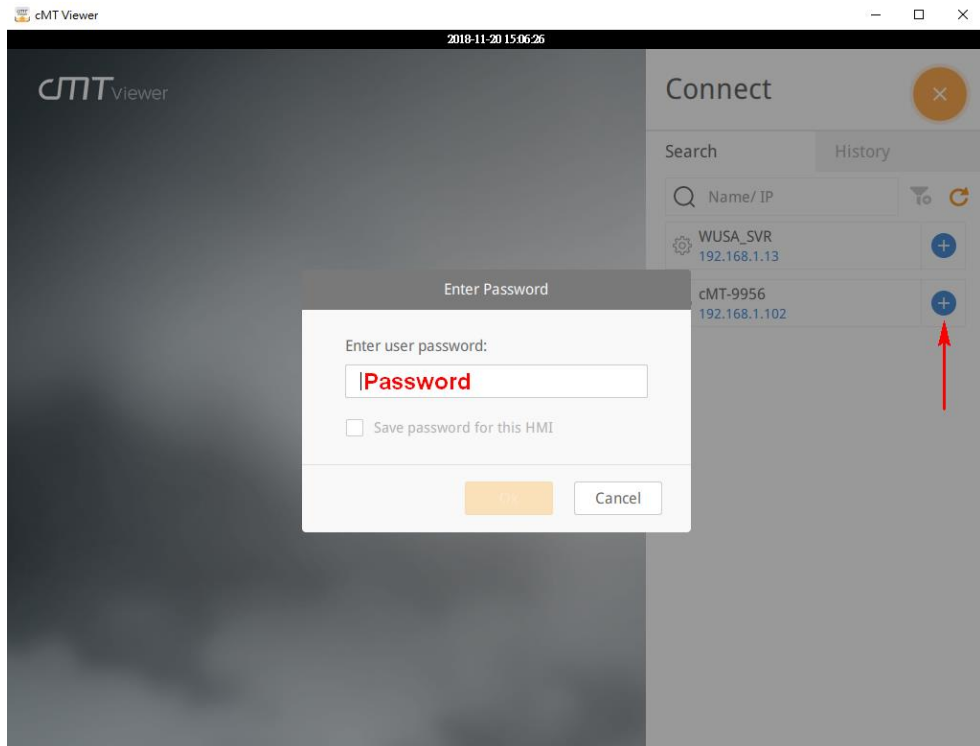


Icon	Name	Function
	Connect	Allows to open cMT3000 Devices List
	Edit	Allows to open page editor
	Settings	Allows to open system settings page
	Device Information	Allows to view device information
	Auto Play	Allows to auto page switching
	Page Indicator	Allows to switch page manually

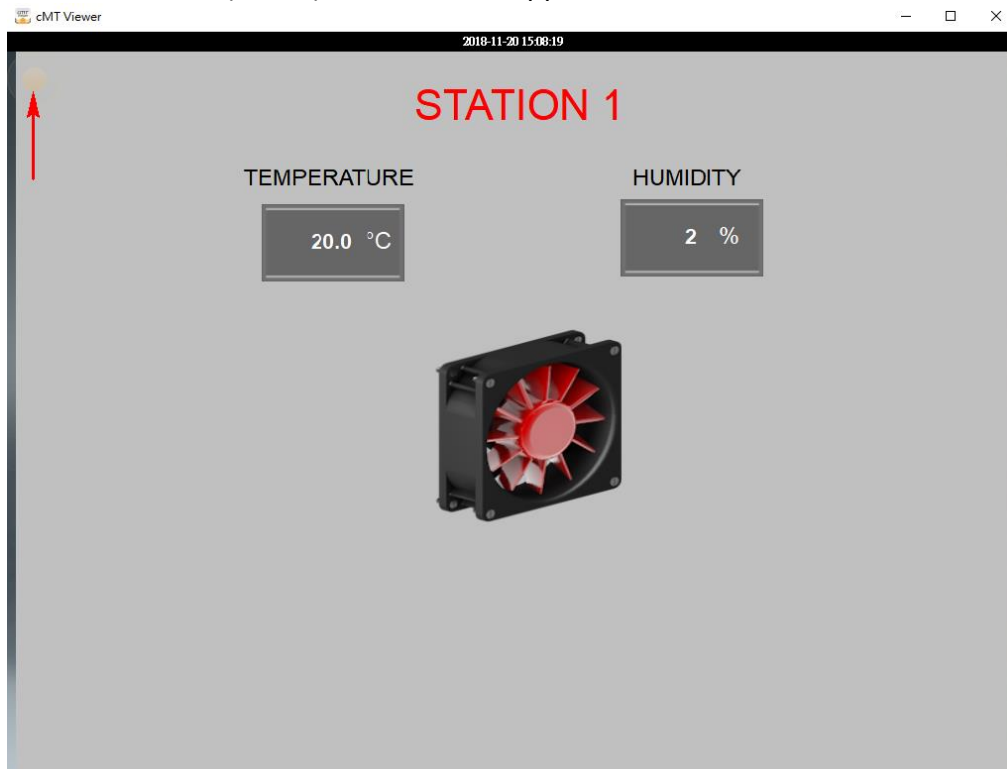
Note: 1. In this demonstration, version 2.6.38 of cMT-Viewer is used.

2. Edit, Auto Play, and Page Indicator icons are only present when “Monitor Mode” functionality is enabled in the [Settings] page.

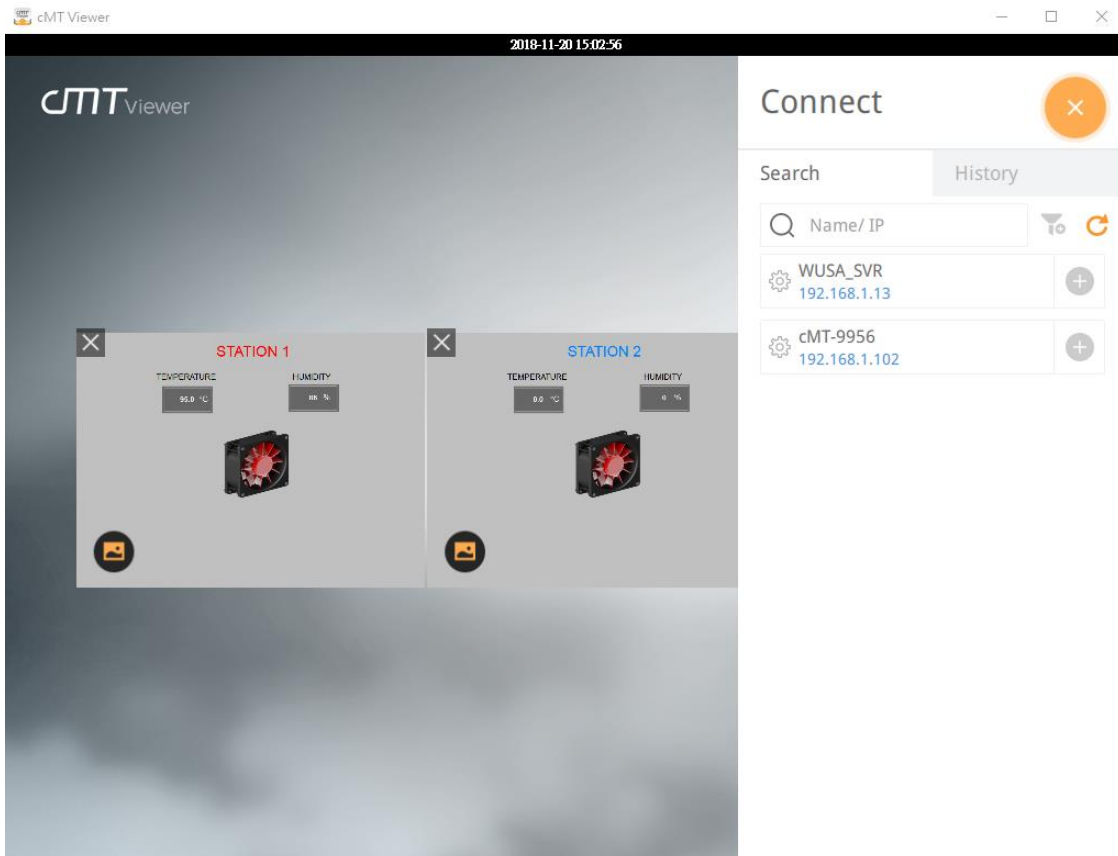
- **Connect Menu-** Click the Connect button and search for cMT-FHDXs in the [Search] tab. The available cMT-FHDXs will be shown as below when they exist on your local network. Tap an Add icon on the desired cMT-FHDX, and it will bring up a window requiring a password.



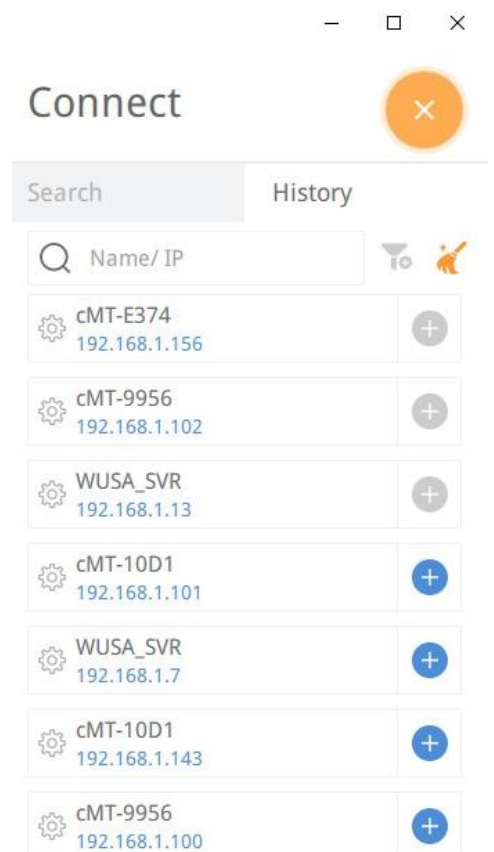
After that, the corresponding project will be loaded. If you want to go back to Connect menu, click on the Start (Home) button at the upper left corner.



Add a second project to the cMT-viewer App to switch and view different projects. The small pictures of the images as shown below are images of the cMT-FHDX projects before leaving the projects.

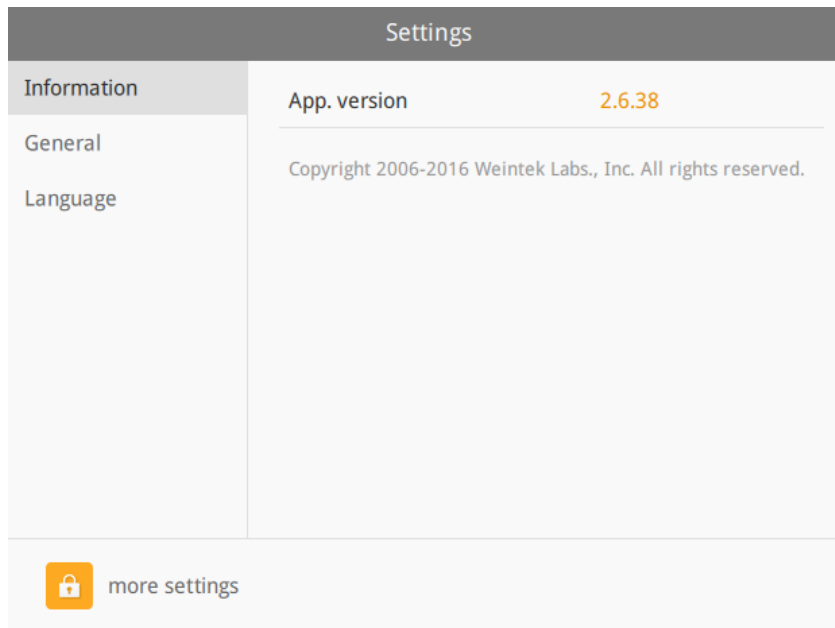


On [History] tab, you can connect the recently accessed projects. If the cMT-FHDXs are configured to DHCP, the history records may not be usable anymore since the IP addresses are dynamic. Click “clear” button to delete history records if needed. The “gear” buttons nearby each cMT-FHDX will open its web interface, allowing you to change the settings of the cMT-FHDX.



- **Settings Menu -**

[Information] tab: Displays the current version of the cMT-Viewer application.



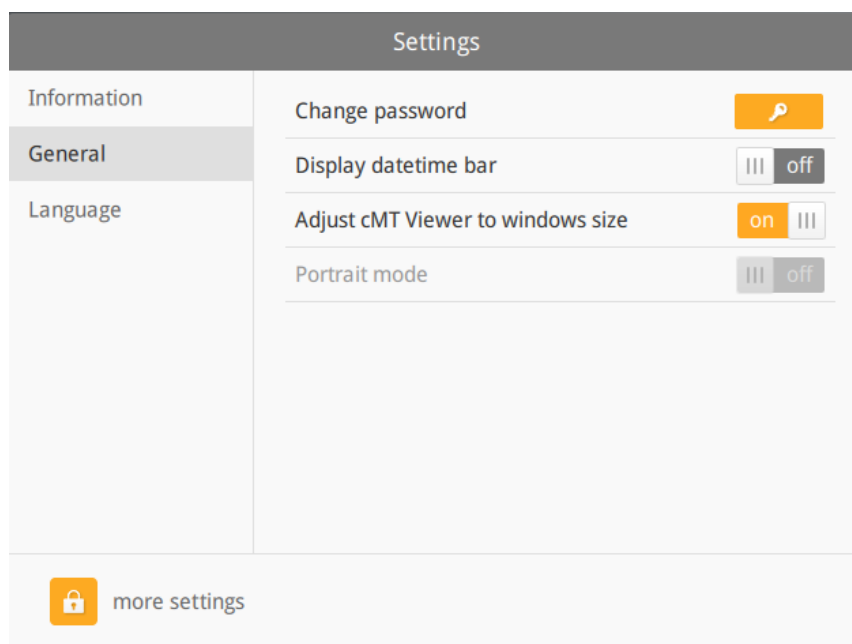
[General] tab: Provides general settings.

**Change password**- Allows users to change the password of “more settings” at the bottom left corner.

**Display datetime bar** - Determines if the time bar will be displayed at the top of cMT-Viewer application.

**Adjust cMT Viewer to windows size** - Adjusts cMT-Viewer to fit the window when users maximize the window of cMT Viewer App.

**Portrait mode**- Allows you to switch cMT Viewer to Portrait mode.

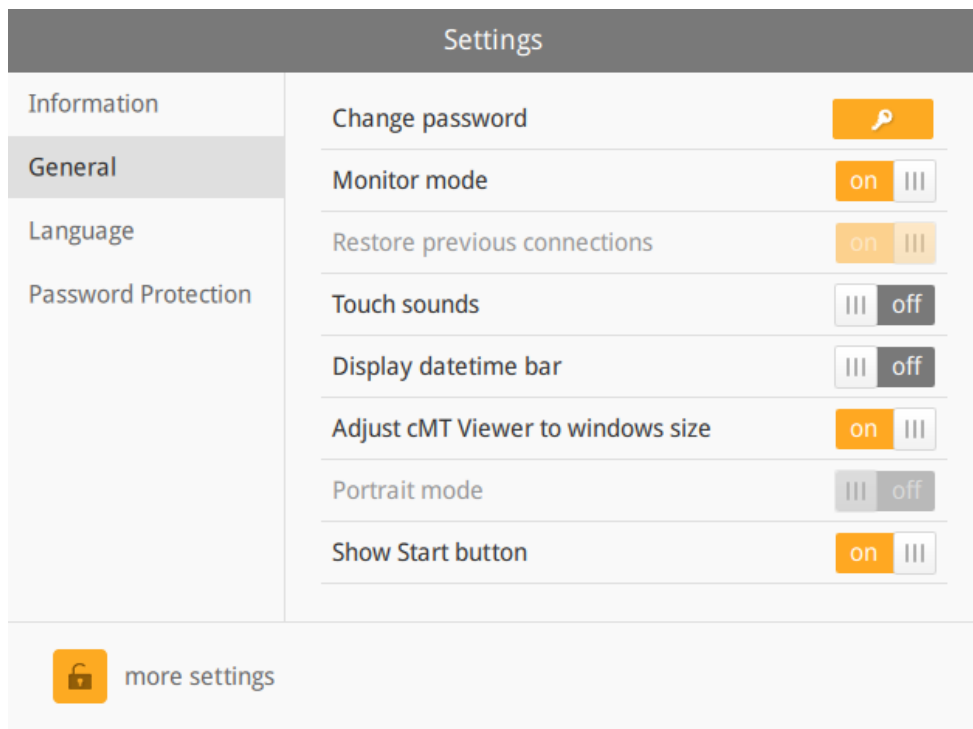




[Language] tab: Select a language for cMT-Viewer menus. The language selected on the project of the cMT-FHDX won't be changed by this setting.

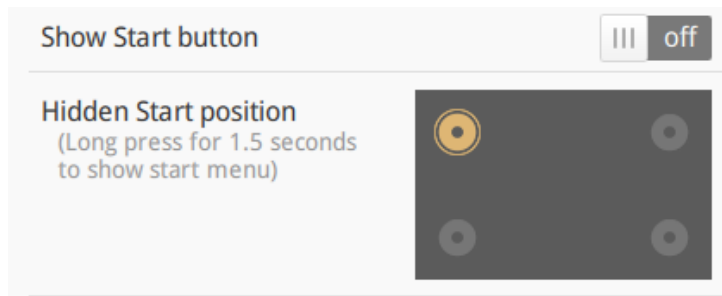


To enable Monitor Mode and use Password Protection functionalities, click on “more settings” icon and log in with the password set on “Change password.” The default password is 111111. There are more options available on the **General** tab and the **Password Protection** tab.

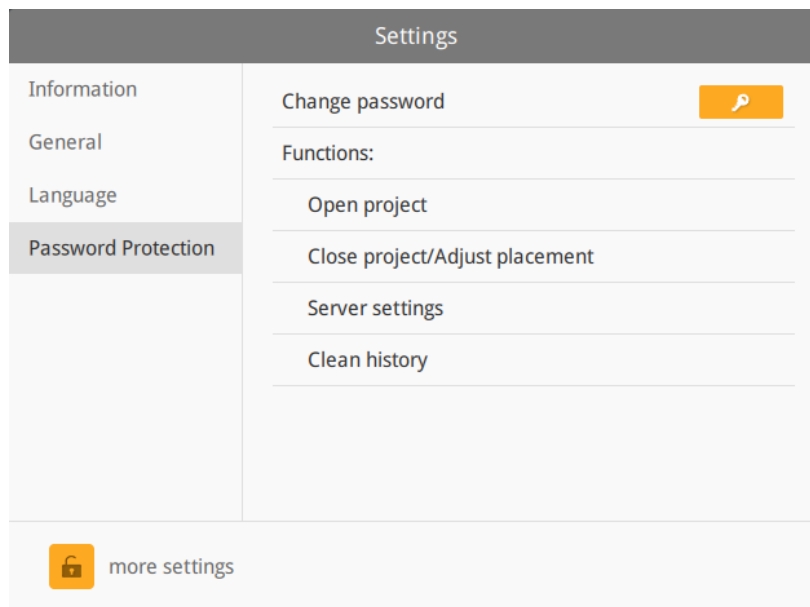


[Monitor mode]- Allows you to display multiple projects on cMT-Viewer and show important real-time data for the projects of each cMT-FHDXs.

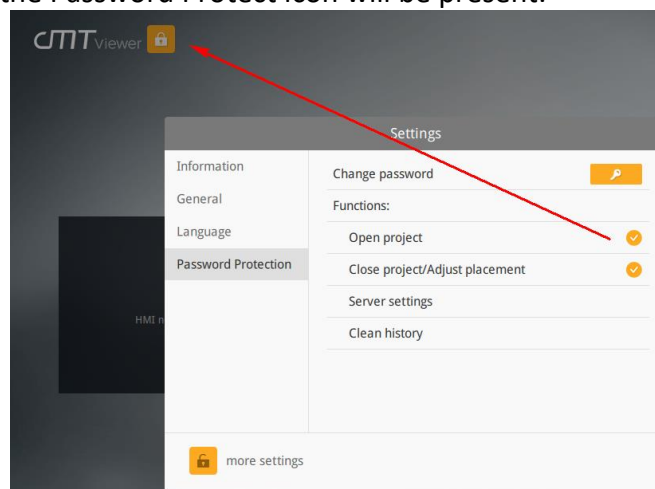
[Show Start button] - If disabled, the “Home” icon on the project will be hidden.



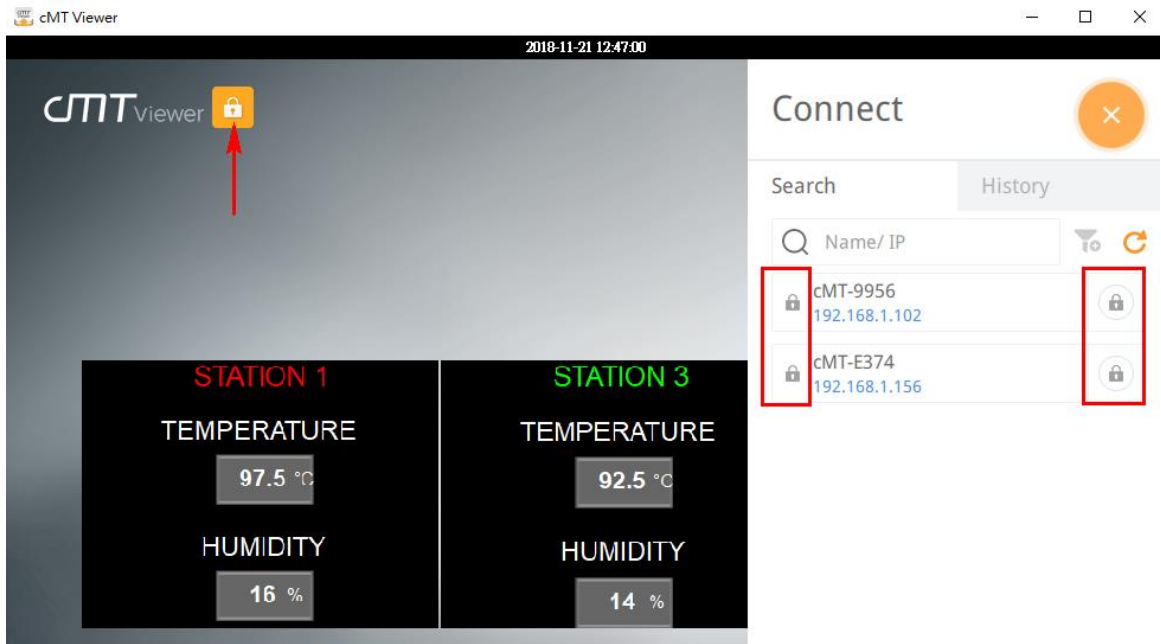
[Password Protection] - Accessing the *protected actions* will require a password if actions are selected below. Specify a password on [Change password] of this page.  
 Open Project: The action to connect to cMT-FHDX and load its project.  
 Close Project: The action to close projects on cMT-Viewer.  
 Server Settings: The action to go to web interface of cMT-FHDXs.  
 Clear History: The action to clear recently accessed projects on the History tab of the Connect menu.



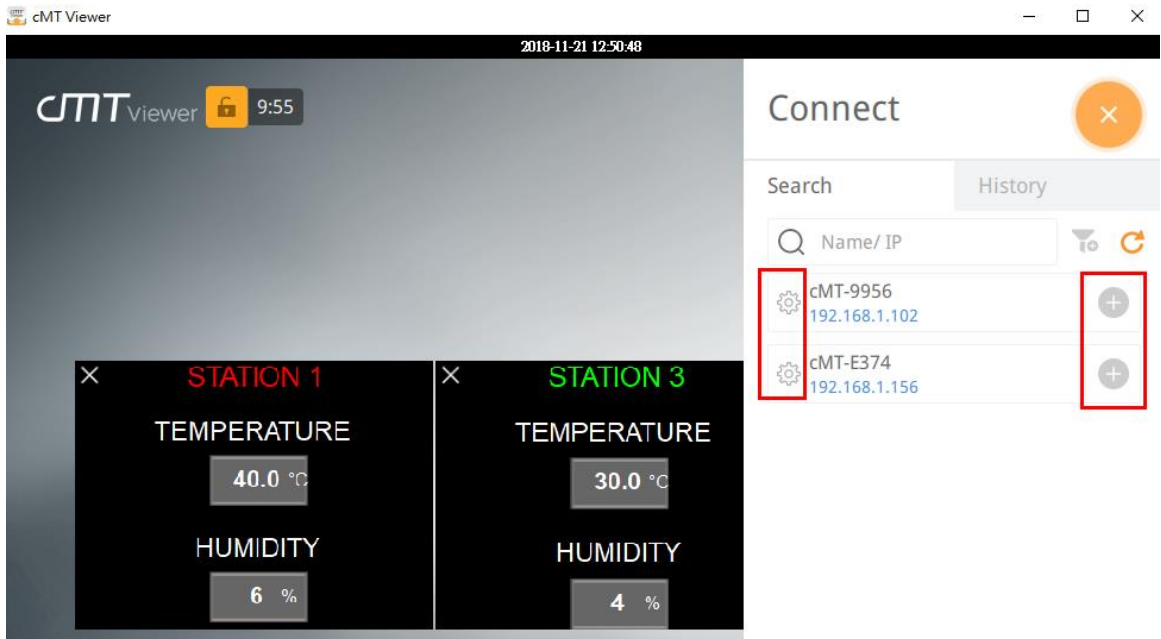
When selecting actions, the Password Protect icon will be present.



In Password Protection mode, *protected actions* are locked. To access them, click on the Password Protect icon and enter the corresponding password.



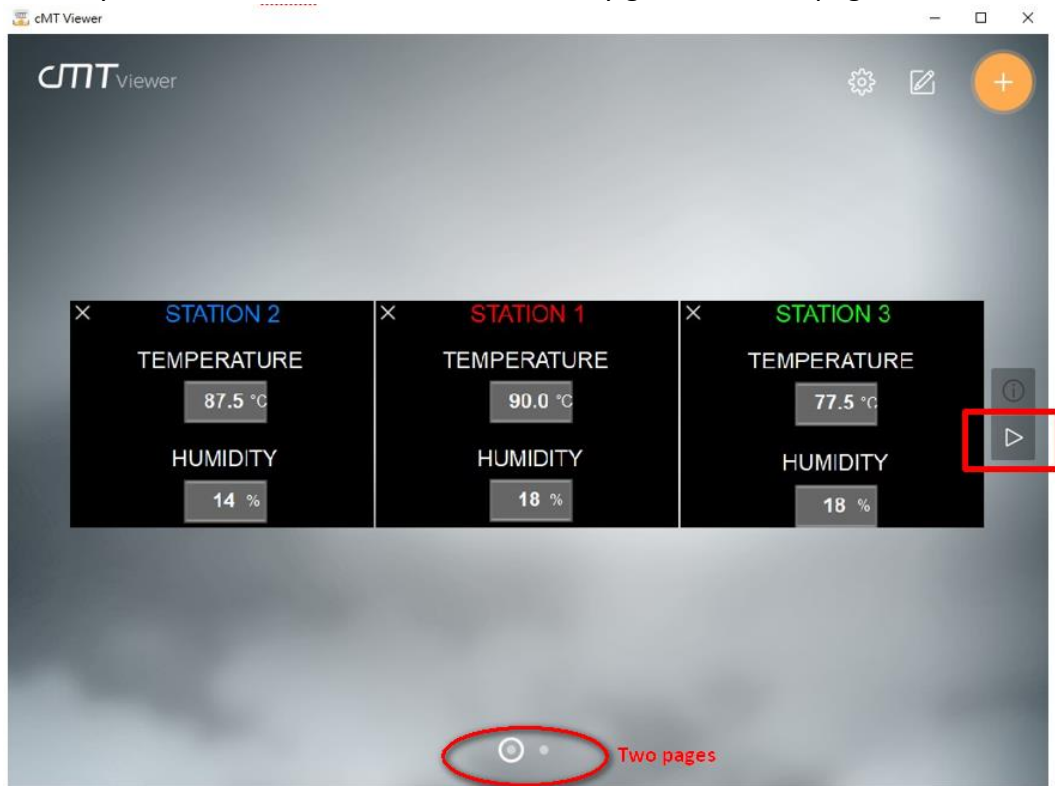
The *protected actions* are accessible to users with knowledge of assigned password. There is a countdown timer displayed as shown below. When the time runs out, the Password Protection mode will be activated.



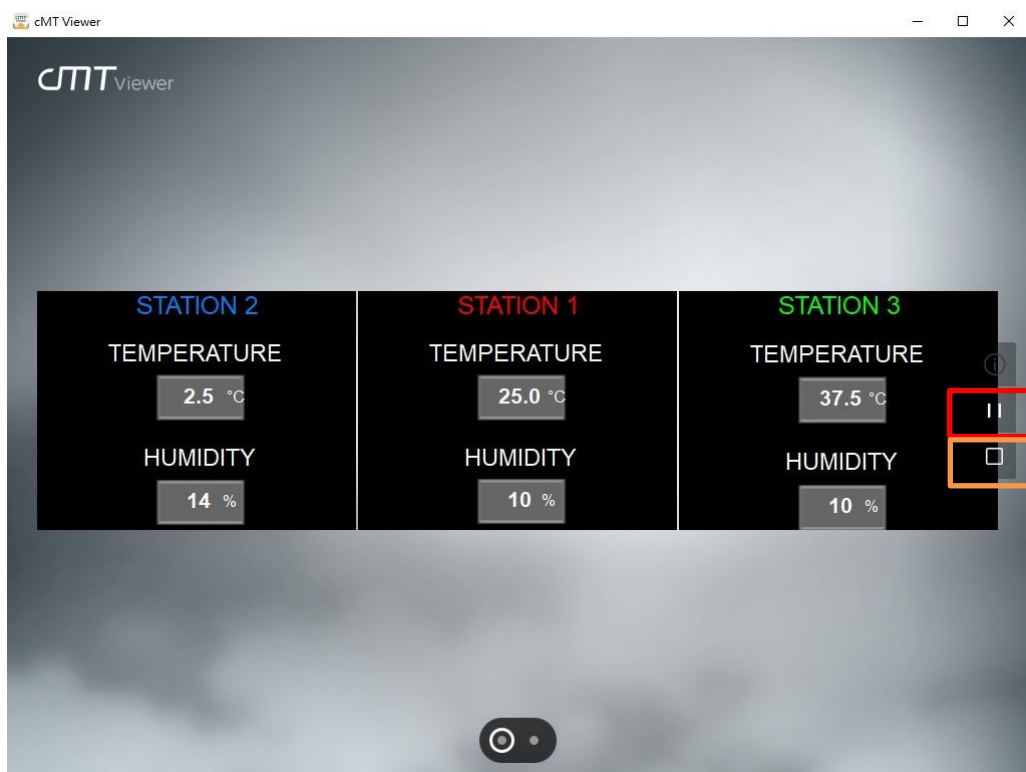
### 13. Monitor Mode

The small images of the cMT-FHDX project as shown below will be updated automatically, so users will see the latest data without entering each cMT-FHDX project.

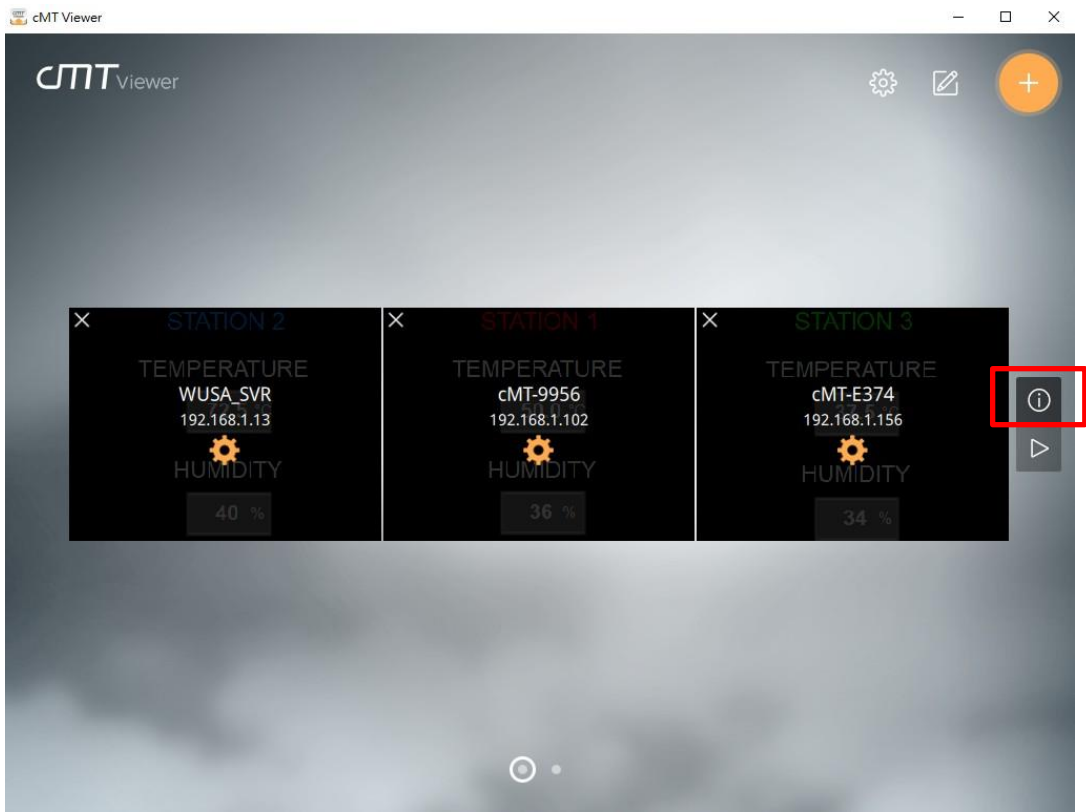
Click on the Auto Play button. cMT-Viewer will automatically go to the next page.



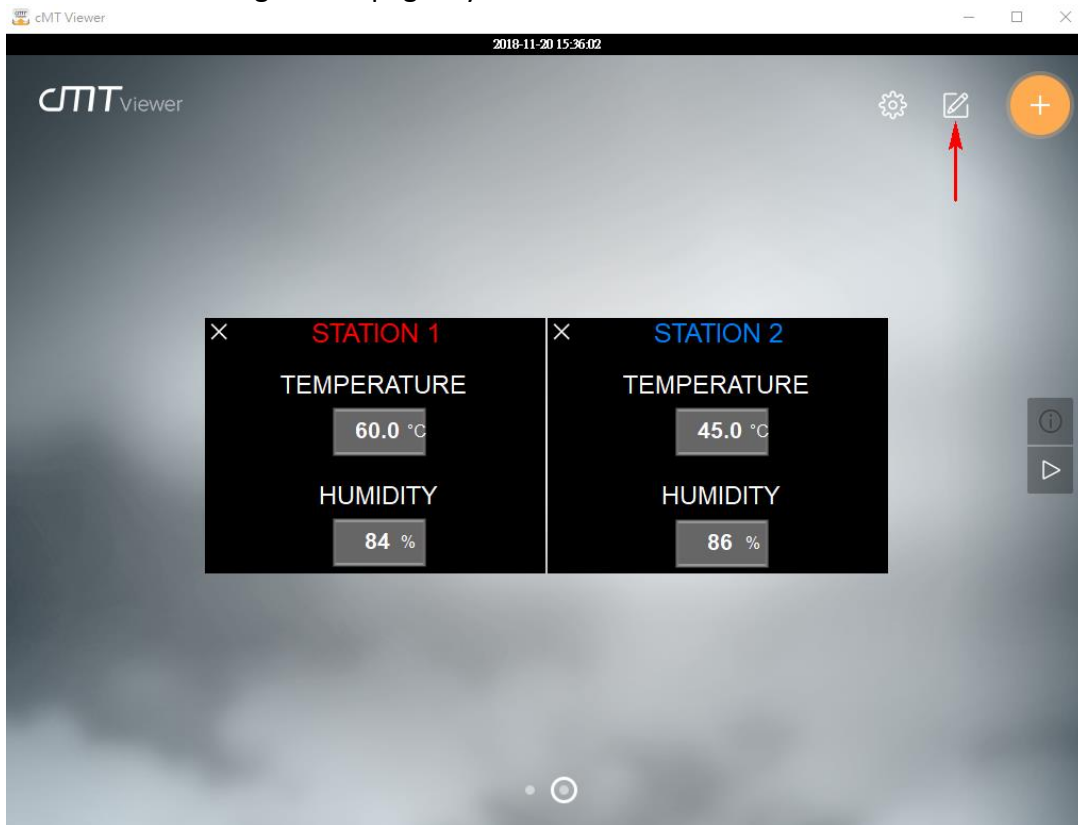
To pause Auto Play mode, click the Pause button highlighted in red. To leave Auto Play mode, click the Stop button highlighted in orange.



When clicking on the Device Information button, the names of each cMT-FHDX, as well as their IP address, will be displayed as shown below. Tap the “Gear” (Setup) buttons to go to the web interface of each cMT-FHDX.



Click the Edit button to configure the page layout.



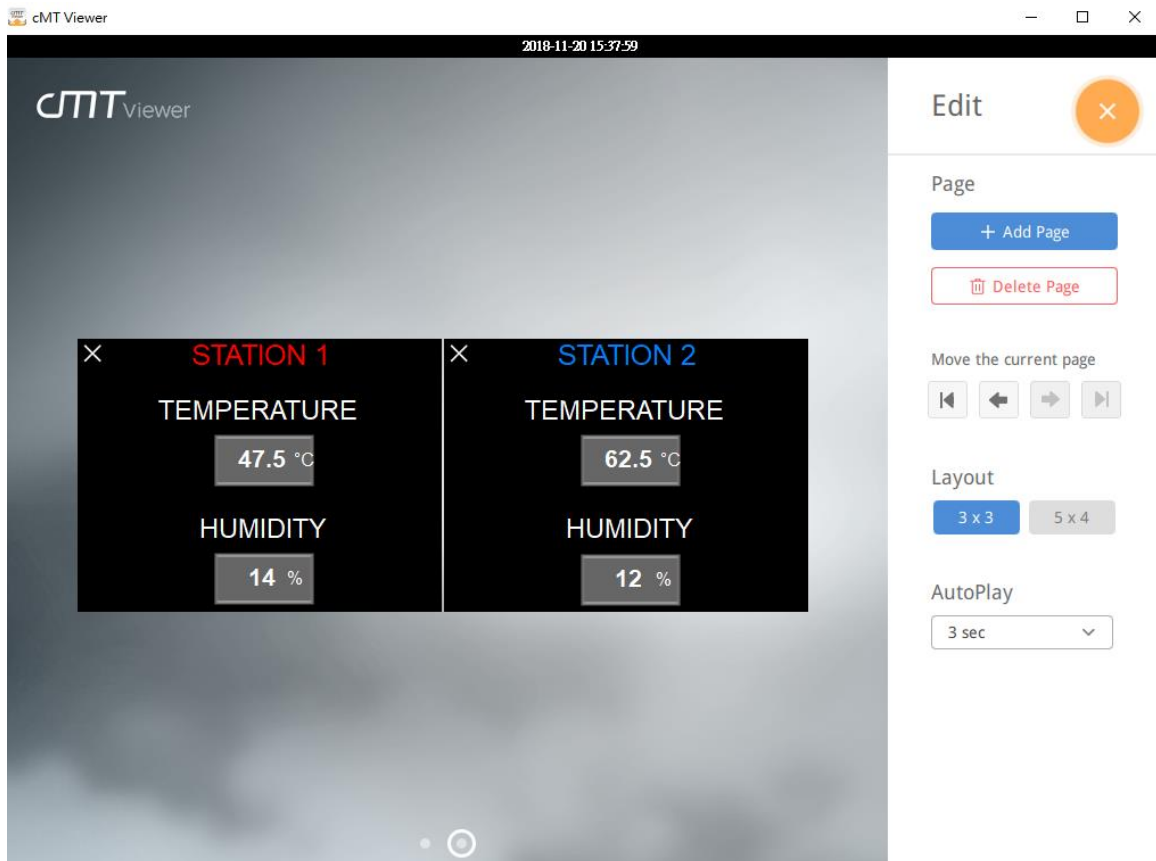
- **Edit Menu -**

[Page] - Click the Add button to create a new page or delete the current page with the Delete button. Up to 9 pages can be created in each instance of cMT-Viewer.

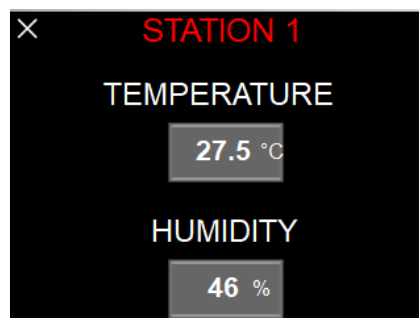
[Move the current page] - Switch to the first page, the previous page, the next page, or the last page.

[Layout] - Set up the maximum number of projects in each page. It provides 3x3(9) format and 5x4(20) format.

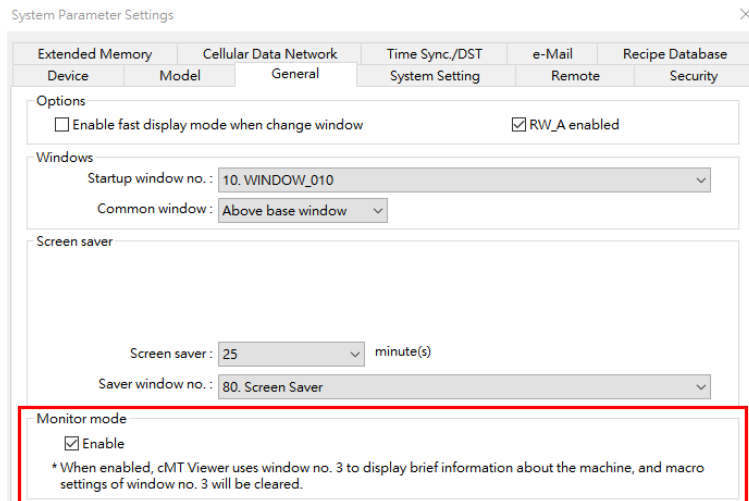
[AutoPlay] - Set up the time interval for Auto Play mode to go to the next page after the given time interval.



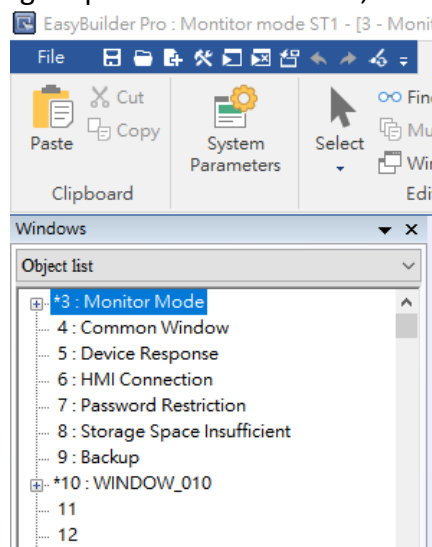
Note: To show real-time data for the project of a cMT-FHDX like below, you must enable Monitor Mode in Easybuilder pro and create a screen for visualization. Here are steps to configure.



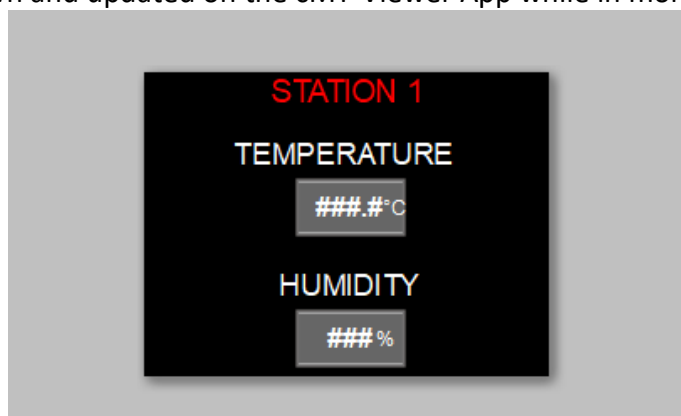
4. Launch Easybuilder pro software v6.01.01 or greater.
5. Create a project of cMT-FHDX.
6. Go to the [Home] tab» [System Parameters].
7. In the [System Parameters], click on [General] tab.
8. Enable Monitor Mode checkbox. This option is turned off by default.



9. Close [System Parameters] settings. Open the window no.3, titled Monitor Mode.



10. Place Text object, Bit Lamp object, Word Lamp object, Numeric Display object, ASCII Display object, Bar Graph object or Alarm Display object to show up-to-date data on this screen, so you can see the data shown and updated on the cMT-Viewer App while in monitor mode.



8. Download this project to a cMT-FHDX.

## 14. cMT-Viewer Limitations

### Feature Limitation

Some features do not work on a cMT Viewer client (PC, iOS, Android, cMT-iV5), even if they work on the local cMT HMI. Please take this into consideration when programming projects.

Features (Objects) that do not work remotely on cMT Viewer App are listed below.

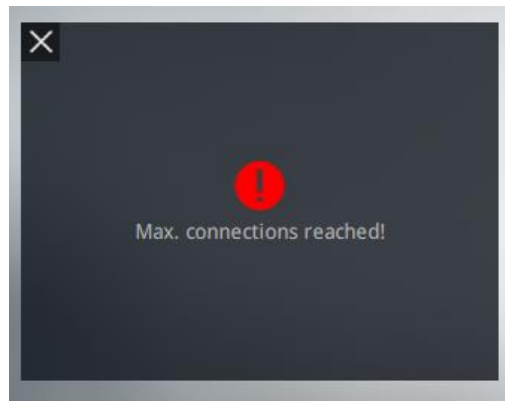
- File Browser
- Media Player
- Video In: USB Camera
- Video In: IP Camera
- Video In: Video Input (analog)
- Picture View
- PDF Reader
- VNC Viewer
- Selected features of Function Key: Screen hardcopy, Import user data/User [USB Security Key]
- Selected features of PLC Control
  - i. Screen hardcopy: Files are saved in the external drive on HMI
  - ii. Backlight: Backlight control of HMI screen
- Selected features of Operation Log
  - i. Operation Log printing: Logs are saved in the external drive on HMI

Above objects won't be displayed on a cMT Viewer App, but can be accessed via a VNC client.



## Maximum Connect Count

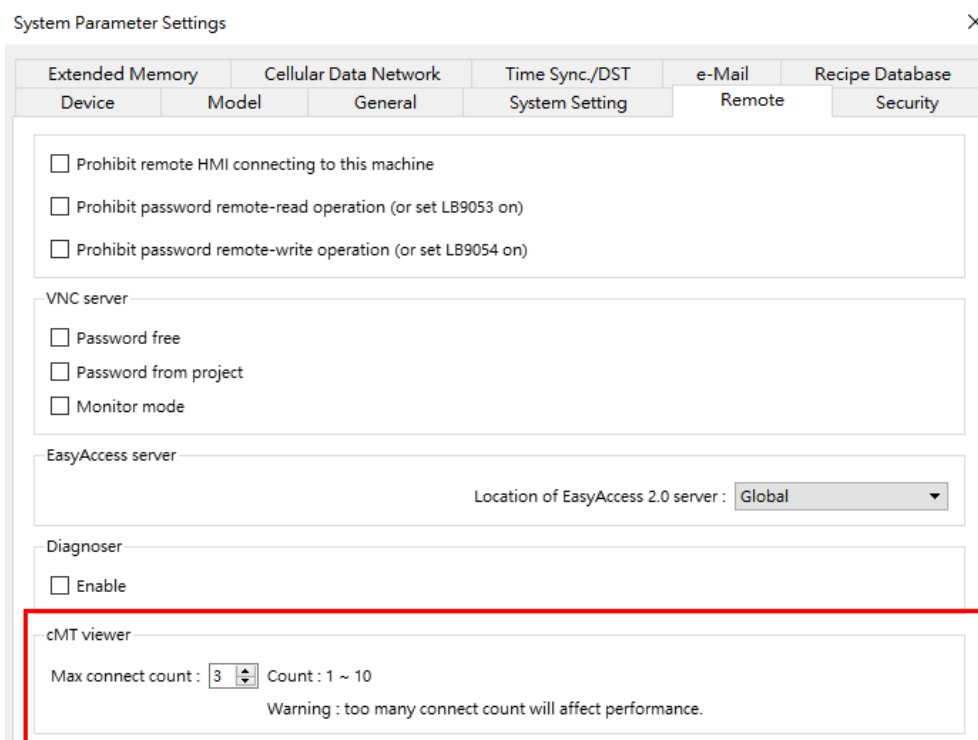
Three cMT-Viewer clients are allowed to remotely view and control the project of a cMT-FHDX simultaneously. When the fourth cMT-Viewer client connects to the cMT-FHDX, the warning message as shown below will pop up and reject the connection.



The maximum capacity can be adjusted in Easybuilder pro software. Here are the steps.

1. Launch Easybuilder pro v6.01.01 or greater.
2. Go to [Home] tab » [System Parameters].
3. Click on [Remote] tab.
4. Within cMT-Viewer, set up a number of cMT-Viewer max connections. Up to 10 cMT-Viewer clients are allowed to connect to one cMT-FHDX.

**Warning: Allowing a number of cMT-Viewer connections up to 4 or over will affect HMI performance. Please take this into consideration when programming projects.**



## 15. cMT-FHDX Gestures Operation

Tap: This is the most common gesture. Briefly touch HMI screen with fingertip.

Drag: Move fingertip over HMI screen without losing contact.

Press: Touch HMI screen for extended period of time.

Pinch: Touch HMI screen with two fingers and bring them closer together.

Spread: Touch HMI screen with two fingers and move them apart.

Gestures may vary when operating project on different touch screens.

On resistive touch screen:

Gestures	Supported Objects (Features)
Tap	All "Input" objects
Drag (Scroll horizontally, scroll up, and scroll down on the object to view more data)	Data log: Trend Display, History Data Display Event log: Event Display, Event Bar Chart(Gantt) Operation log: Operation Log View Recipe: Recipe View SQL: SQL Query Result Viewer Others: Option-List, Data Block Display
Press	This gesture can be configured on the property of the object in HMI program if needed.

On capacitive touch screen:

Gestures	Supported Objects (Features)
Tap	All "Input" objects *1
Drag (Scroll horizontally, scroll up, and scroll down on the object to view more data)	Data log: Trend Display, History Data Display Event log: Event Display, Event Bar Chart(Gantt) Operation log: Operation Log View Recipe: Recipe View SQL: SQL Query Result Viewer Others: Option-List, Data Block Display
Press	This gesture can be configured on the property of the object in HMI program if needed.
Pinch	Data log: Trend Display
Spread	Data log: Trend Display

\*1 Input objects refers to objects that are allowed operators to open a window as well as pop-up window, press a button to turn bit ON/OFF, or enter a value to a word register.

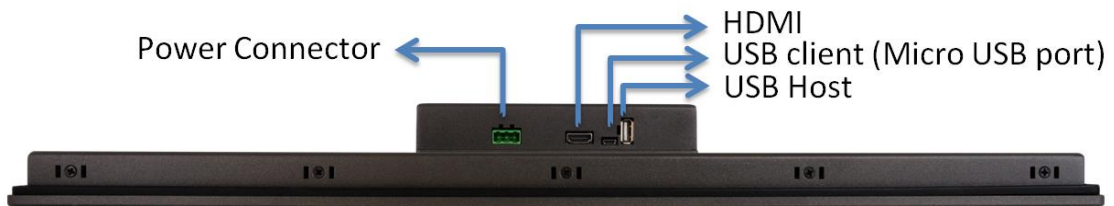
Note:

1. For more information about *Press*, refer to section 10.5 **Object Security Settings** in Easybuilder pro user manual and see "Min. press time (Sec)."

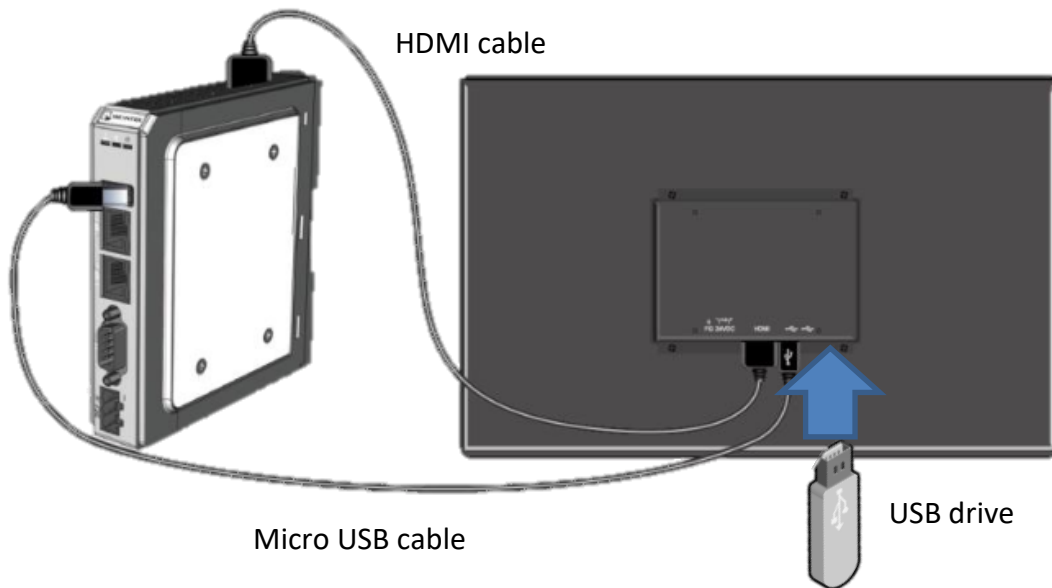
## 16. cMT-iM21 Touch Screen

The cMT-iM21 is a capacitive touch screen monitor exclusively designed for cMT-FHDX. The resolution of the cMT-iM21 supports up to 1920 x 1080. The USB client port is used to connect to the cMT-FHDX for touch signal transmission. The recommended length of USB cable and the HDMI cable are less than 5 meters for common practice. If you consider using the cables whose length exceed 5 meters, please choose a device or cable that can strengthen the signal. The cMT-iM21 is equipped with a USB host port. This allows users to plug in a USB drive for storing data logs, event log, recipes, and videos that can be accessed by the cMT-FHDX.

### The bottom view of cMT-iM21



### The wiring diagram for cMT-iM21 and cMT-FHDX



The cMT-iM21 is not equipped with audio output and speaker. Please consider using **HDMI2HDMI+Audio** converter to connect the cMT-FHDX to an external speaker if needed.

**Reference Link:**

Weintek Labs website: <http://www.weintek.com>



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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