User Manual

cMT-iV5 Startup Guide



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Chapter1. Overview 1.1. Specification



Cloud Human Machine Interface

Features

- 9.7" 1024 x 768 TFT LCD, LED Backlight
- Fan-less Cooling System
- Built-in 512 MB Flash Memory
- One Gigabit Ethernet Port
- Built-in mono speaker
- Built-in Power Isolator
- Designed for connecting cMT-SVR

	Display	9.7" TFT
	Resolution	1024 x 768
	Brightness (cd/m ²)	350
Display	Contrast Ratio	500:1
	Backlight Type	LED
	Backlight Life Time	>30.000 hrs.
	Colors	262K
	Type	Tempered Glass, Capacitive Type
Touch Panel	Accuracy	Active Area Length(X)+2% Width(Y)+2%
	Flash	512 MB
Memory	RAM	1 GB
Broossor		32 bits PISC Cortox-A0 1GHz
FIOCESSOI	SD Cord Slot	
	SD Card Slot	IN/A
	USB Host	N/A
	USB Client	N/A
	Ethernet	10/100/1000 Base T x 1
I/O Port	COM Port	N/A
1/OTOIL	RS-485 Dual Isolation	N/A
	CAN Bus	N/A
	HDMI	N/A
	Audio Output	Built-in Mono Speaker
	Video Input	N/A
RTC	· · · · · · · · · · · · · · · · · · ·	Built-in
	Input Power	24±20%VDC
	Power Isolation	Built-in
	Power Consumption	900mA@24\/DC
Power	Voltage Resistance	500\/AC (1 min)
	Isolation Resistance	Exceed 50MQ at 500V/DC
	Vibration Endurance	$10 \text{ to } 25\text{Hz} (X \times Z \text{ direction } 2G 30 \text{ minutes})$
	PCB Costing	
	Enclosuro	Diastia
		FIDSILU 257.0 x 100.7 x 20.7 mm
Specification		207.2 X 199.7 X 32.7 IIIII
-	Panel Cutout	
	vveight	
	Mount	Panel mount, VESA mount 75 x 75 mm
	Protection Structure	NEMA4 / IP65 Compliant Front Panel
Environment	Storage Temperature	-20° ~ 60°C (-4° ~ 140°F)
	Operating Temperature	0° ~ 50°C (32° ~ 122°F)
	Relative Humidity	10% ~ 90% (non-condensing)
Cortificato	CE	CE marked
Certificate	UL	cULus Listed
	Display	English, French, Italian, Spanish, Russian, Simplified Chinese,
Language	Diopidy	Traditional Chinese, Korean, German
	Input Methods	English, French, Italian, Spanish, German, Russian, Pinyin, Zhuyin
Software		cMT Viewer



1.2. Dimensions



а	VESA 75 mm screw holes	С	Ethernet Port
b	Power Connector		

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1.3. Ethernet port

The unit has one 10/100/1000M Gigabit Ethernet port. The LED indicators on the Ethernet port indicate: Orange LED: LAN link status Green LED: Active communication status To connect Ethernet, please use a CAT-6 Ethernet cable.

1.4. CR1225 battery

The cMT-iV5 requires a CR1225 coin type lithium battery to keep the RTC running. Battery type: CR1225 3V lithium battery

1.5. Power connection

Power: The unit can be powered by DC power only, voltage range: $24\pm20\%$ Volts DC, compatible with most controller DC systems. The power conditioning circuitry inside the unit is accomplished by a switching power supply. The peak starting current can be as high as 500mA.



Note: Connect positive DC line to the '+' terminal and the DC ground to the '-' terminal.

1.6. Requirements

- 1. cMT Viewer: Built-in app for connecting cMT-SVR.
- 2. Supported HMI model: cMT-SVR.
- 3. One cMT-iV5 can log in and operate three cMT-SVRs simultaneously.



Chapter2. System Setting

Startup cMT-iV5 and run the built-in cMT Viewer app.

Tap the Start Button

in the upper-left corner of the screen to open the setting page.

Tapping the checkerboard area returns to the previously used project screen.

2.1. Information

Tap Setting > Information to view the information about this cMT-iV5.

The information includes: Machine type, HMI name, IP address, Subnet mask, Gateway, Mac address, App. version, and OS. version.

Information	Machine type	cMT-iV5
	HMI name	Default cMT-iV5
General	IP address	192.168.1.123
Language	Subnet mask	255.255.255.0
Input Method	Gateway	192.168.1.254
	Mac address	00:0c:26:05:29:25
	App. version	1.4.1
	OS. version	20141008



2.2. General

In General tab, screen brightness and audio volume can be adjusted, and password can be changed. After entering the password, the HMI name can be viewed and changed. Tap the Direction icon to change the display direction.

Information	HMI name	Default cMT-iV5
Conoral	Change password	$(\ \)$
General	Direction	
Language	Brightness 🧲	0
Input Method	Audio volume 🧲	0
Time/Date	Backlight saver	
Network		

2.3. Language

In Language tab, select an interface language. The options are: English, French, Italian, Spanish, Russian, Simplified Chinese, Traditional Chinese, Korean, and German.

Information	English
Canaral	Français
General	Italian
Language	Español
Input Method	Русский
	简体中文
	繁體中文
	한국어



2.4. Input Method

Add in keyboards of different languages. The options are: English, French, Italian, Spanish, Russian, Simplified Chinese (Pinyin), Traditional Chinese (Zhuyin), and German.

Tap **1** icon in the upper-left corner (a cMT-iV5 password is required). Enter the password and click OK, the Time/Date and Network setting tabs will be enabled.

2.5. Time/Date

In Time/Date tab, set the current system time and date.

Information Date 2015-02-16 Image General Genera Gen	Setting	5		Time/Date	
General Image Image Image Language 15 37 42 Input Metho 17 39 44 Input Metho 17 39 44 Image 18 40 45 Image 19 41 46 Network Cancel Ok	Information	Dat	te	2015-02-16	
Language 15 37 42 Input Metho 16 38 43 Input Metho 17 39 44 18 40 45 19 41 46 Network Cancel Ok	General	Tim	⊖ Time		O
16 38 43 Input Metho 17 39 44 18 40 45 19 41 46 Network	Language	15	37	42	
Time/Date 19 41 46 Cancel Ok	Input Methc	16 17 18	38 39 40	43 44 45	
Network Cancel Ok	Time/Date	19	41	46	
	Network	Cance		Ok	

2.6. Network

In Network tab, enable [Obtain an IP address automatically] or manually enter IP address, Subnet mask, Gateway, and DNS.





2.7. cMT-SVR System Setting

The system information of cMT-SVR can be set from cMT Viewer in cMT-iV5. Tap Search, find the

cMT-SVR and tap 🧾 to open cMT

to open cMT-SVR setting page.

See <u>cMT-SVR User Manual</u> for more information.





Chapter3. cMT Viewer App

3.1. Introduction of icons

lcon	Description
0	When running cMT Viewer, tap the Start Button to configure the settings.
Project	Project tab lists the logged in cMT-SVRs. Each cMT-iV5 can control three cMT-SVRs simultaneously.
Search	Search tab lists all the cMT-SVRs on the same network.
History	History tab lists the cMT-SVRs previously logged in.
System	System tab is used to adjust the brightness and volume, or view information.
	Tap this icon to make cMT-SVR CPU LED (green) blink for identify the cMT-SVR.
GO	Tap this icon to load cMT-SVR project to cMT-iV5 and run the project.
0	Tap this icon to configure cMT-SVR system settings.
P	In Search tab, sort cMT-SVRs according to IP address.
Name	In Search tab, sort cMT-SVRs according to HMI name.
	In History tab, clear all the login records.
2	Tap this icon to understand more information about the features and operations.



3.2. How to load project file to cMT-iV5

Step 1. Run cMT-iV5, tap Start Button as shown in the following figure.



Step 2. Search all the cMT-SVRs on the same network.



Step 3. Select the cMT-SVR, tap and then enter password.





Step 4. The cMT-iV5 displays the project after the project is loaded



Tap Start Button to return to Search screen. To connect another cMT-SVR, repeat the preceding process to search for cMT-SVR and then load the project.





The *badge* is displayed in the icons of the successfully connected cMT-SVRs.

One cMT-iV5 can login to up to three cMT-SVRs simultaneously. Once the limit has been reached the buttons for other cMT-SVRs will be unavailable and grayed out.

3.3. How to switch between cMT-SVR projects

When multiple cMT-SVRs are connected, to switch between cMT-SVR projects, select from Project tab. To delete a project of a connected cMT-SVR, tap



Chapter4. Updating Firmware, OS

cMT Viewer (also called firmware) and OS version on cMT-iV5 can be updated via Ethernet. Launch Utility Manager, select cMT Series, and click [Maintenance] > [iV5 OS upgrade] to run the iV5 upgrade program.



4.1. Updating cMT Viewer

- Step 1. Place the cMTViewer.iv5 file into the firmware folder under the EasyBuilder Pro installation directory. (The default directory: ebpro/firmware)
- Step 2. In the iV5 upgrade program select the HMI IP and select [Runtime (firmware)]. The firmware will be downloaded and upgraded to cMT-iV5.

cMT-iV5 Firmware Update	×
IP Name <u>H</u> MI Name: Default cMT-iV5 <u>Search</u> 192.168.1.65 (Default cMT-iV5) 192.168.1.69 (Default cMT-iV5)	
Runtime (firmware) OS	
connecting HMI and checking password downloading firmware Reboot finished	
Password : ****** V Mask Upda	te

Step 3. Upon completion the updated cMT Viewer version can be found in the Setting > Information tab.

4.2. Updating OS

Please note that OS upgrade is a critical operation. Please make sure power stays on and do not disconnect before the update is completed.

Step 1. In the iV5 upgrade program select the HMI IP and select [OS]. A warning message is displayed, select [Begin firmware update procedure] check box and click OK.

Warnii	ng		×
OS Firmware upgrade is a critical ope stays on and do not disconnect befor Contact your service provider if you ar update is completed, the system will a	eration. Please ma e the update is co re not sure of this automatically rebo	ke sure power ompleted. operation. After ot l	
Begin firmware update procedure	ОК	Cancel	

Step 2. Browse for the directory of the OS file named MTFirmware_iV5.bin, and click [Update].

cMT-iV5 Firmware Update	×
IP Name HMI Name: Default cMT-iV5 v Search 192.168.1.69 (Default cMT-iV5) Search All Search All	
Runtime (firmware) OS D: \V5_firmware\fw_cmtiv5_20131120\/MTFirmware_iV5.bin	
Password : ****** Update	



Step 3. A confirmation message is displayed. Click [Yes] and the OS will be downloaded and upgraded to cMT-iV5.

	UtilityManager	×
	Do you want to start the upgrade? (Your device will be upgraded after clicking Yes. Note this operation may take a few minutes. Again, please do not turn off the power while upgrading.)	
	是① 否 ① 是	
	cMT-iV5 Firmware Update	×
<u>d</u> IP Na <u>H</u> MI Na	ame Ime: Default cMT-iV5 v Search Search All	4
Runtime (Os D:\VS	firmware) j_firmware\fw_cmtiv5_20131120\MTFirmware_iV5.bin	2
connecting HMI an downloading OS	a cheaking password	
Passwo	rd : ****** Mask	Stop

Step 4. Upon completion the updated OS version can be found in the Setting > Information tab.