

KCU-03 Monitor

Software Installation User Manual



For Windows XP and Windows 7



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SECTION 1 :

Application Installation

1. Insert the installation Disk into CD ROM drive.
2. Double click on file setup.exe to begin installation.



Figure 1-1

3. Select the primary installation directory and press Next.

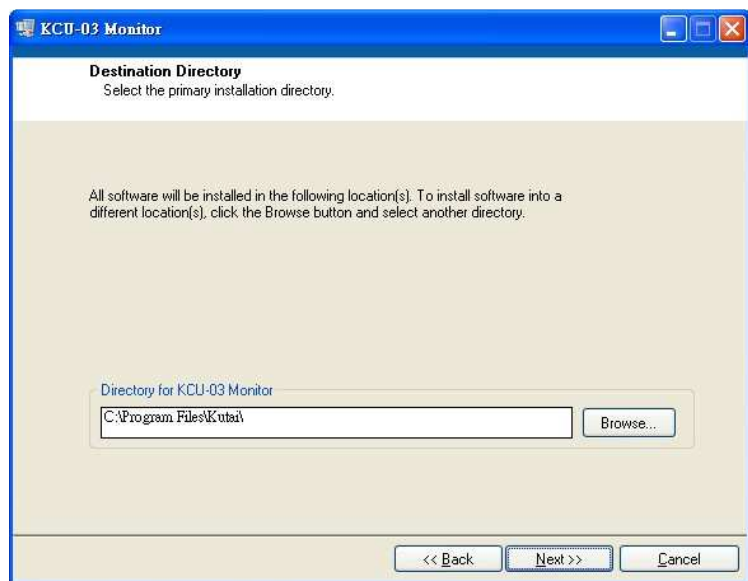


Figure 1-2

4. The Installation Wizard will display the summary of installation content, and then press Next.

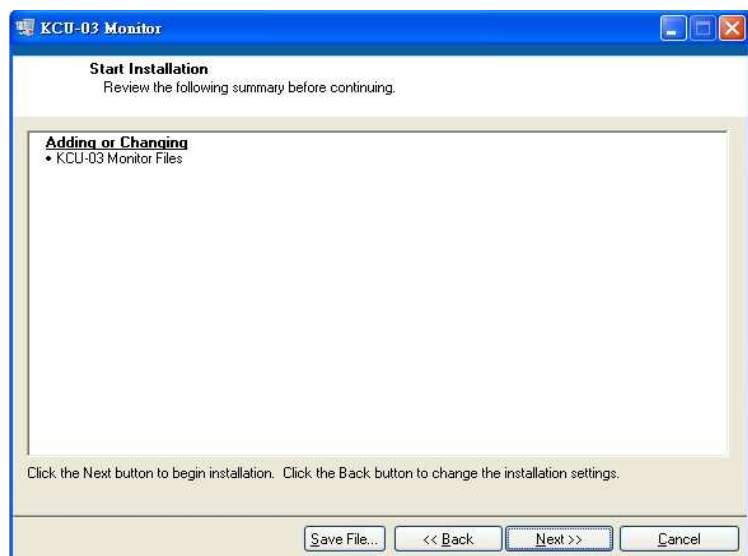


Figure 1-3

5. Software installing

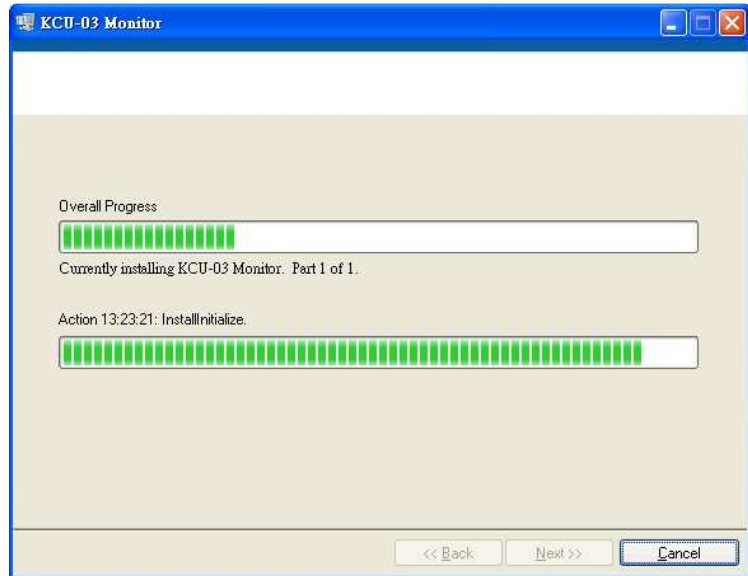


Figure 1-4

6. Installation completed. Press Next

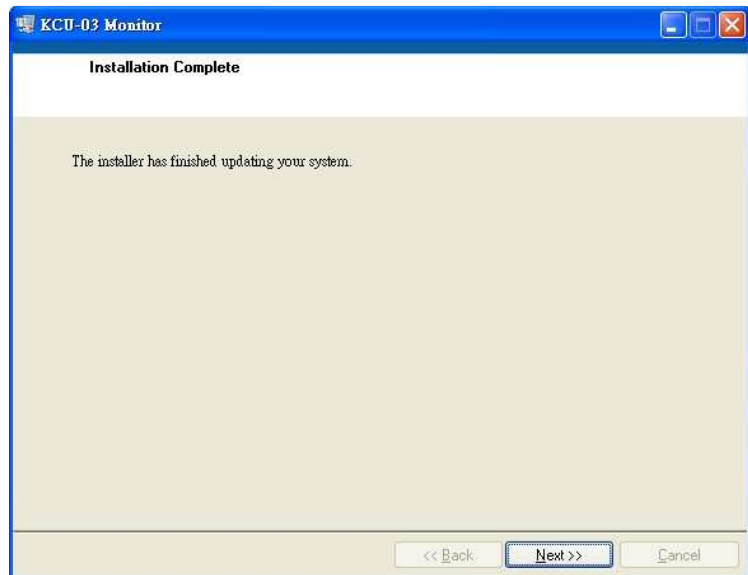


Figure 1-5

7. Install Run-Time Engine Driver software.

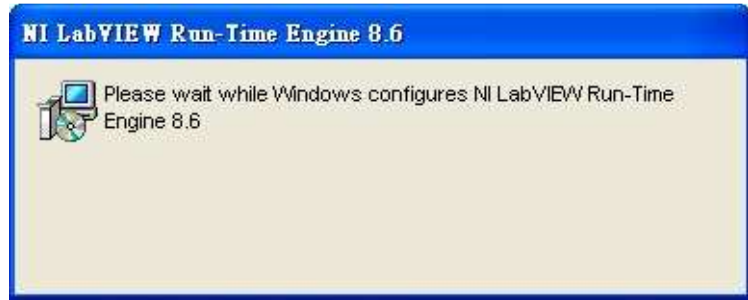


Figure 1-6

8. Click Restart to restart computer and complete installation.



Figure 1-7

SECTION 2 : System Setting

This section illustrates System Setting of KCU-03 application. Users can modify Event Log Record and Data Log Record, or relevant parameter of data acquisition and change the language setting.

Click to open KCU-03 Monitor.exe and select "Setting → Options" from the main menu as shown in Figure 2-1. Open the system setting window as displayed in Figure 2-2.

Attention : Other than Language Setting, the system must restart after modifying the System setting before the new setting will take effect.



Figure 2-1 Options Setting

Each System setting is illustrated below:

- **Event Log Record Path**

It programs the path for event log record. The system will automatically record the event when the controller sends out a Attention signal and such record will then be saved as file.

Attention : Event Log Record is not available on ATS-PLC

- **Data Log Record Path**

The system will acquire data and save as file with each period interval when monitoring is turned on. This setting can modify the content of Figure record storage file.

Models available with Data Log Record : AMF-10, GCU-100, GCU-3000

- **Data Acquisition Interval**

It is programmed to acquire data within couple of second which will save acquired data into files. The system will automatically create a new file for storage after 00:00 o'clock which is able to record up to 23:59 o'clock each day.

Attention : More frequent the recording interval is, larger the size of stored file becomes.

- **Data Storage Interval**

At the end of each connection, the system will automatically save the acquired data into file. The amount of data accumulated before saving within the acquisition interval can be adjusted here. Saving within each interval will ensure the data storage.

Attention : The efficiency of the system will be affected if the data storage is set frequent.

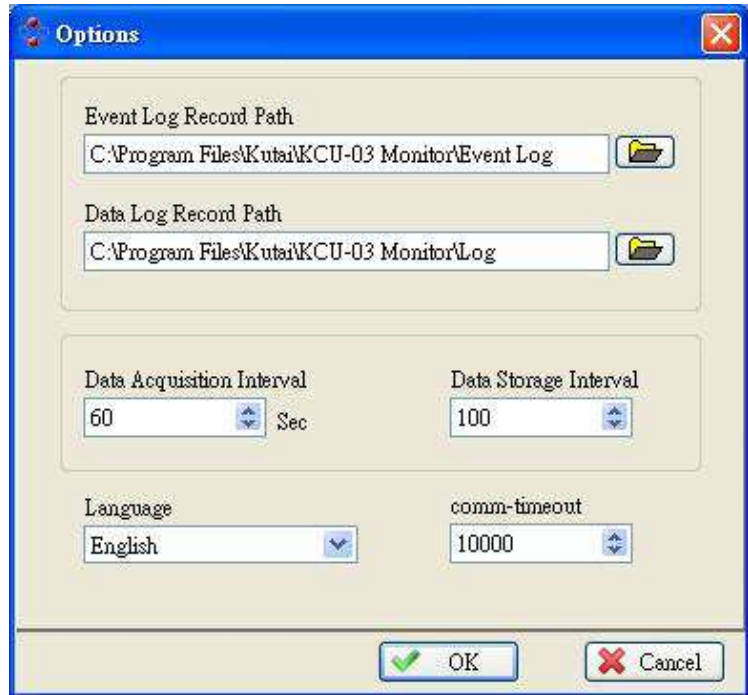


Figure 2-2 System Setting

- **Language**

It will automatically change the displayed language. Not only will modifying language setting change the display language, it will also affect the language of events log record.

- **Comm-timeout**

The connection allowance response time is in milliseconds. In places with poor communication signal, increase this setting.

SECTION 3 :

Connecting to Network

Install the KCU-03 onto the expansion slot at the back of the controller. Through the HUB using network cable to the computer and make sure the controller is powered on and run "KCU-03 Monitor.exe".

Click on main menu Link and select Ethernet (Figure 3-1) to open Ethernet Connection Setting Window (Refer to Figure 3-2).



Figure 3-1

Select the device which you want to connect on the list, then click the "Connect" button.

You can also Add, Edit, Delete device on the list.

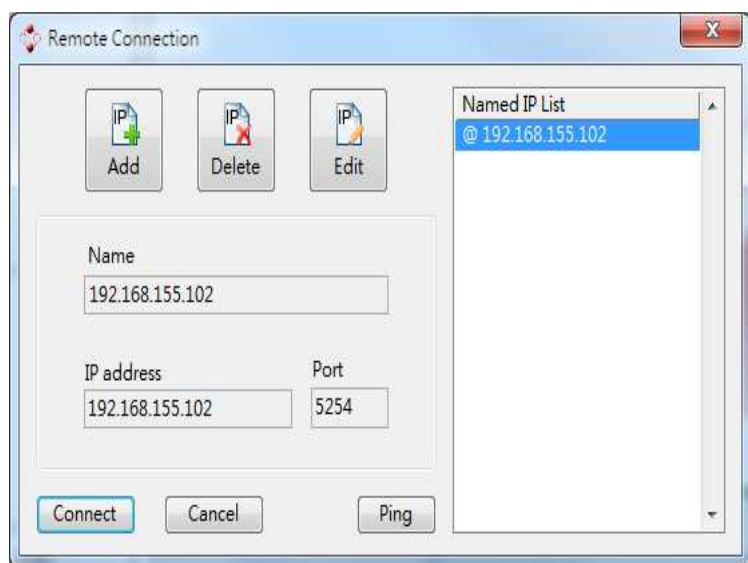


Figure 3-2 Ethernet setting

main screen will be shown as in Figure 3-3 when connection established.



Figure 3-3 Connected

Name:Choice Whatever you want.
 IP Address:192.168.155.102(default)
 Port: 5254(default)
 UserName:KuTai-1234(default)
 Password:KuTai-pswd(default)

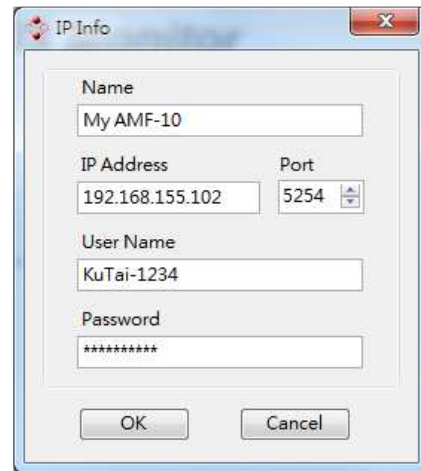


Figure 3-4 Add, Edit IP Info

Connection Timeout will be shown if the connection fails (Figure 3-4); when connection fails, please check to see if the network cable is plugged to device correctly and make sure to enter correct IP.



Figure 3-5 Connection Failed

Before connecting, user can enter IP address and click Ping to verify whether the entered IP exist or valid.



Figure 3-6 IP Not Found

The system will automatically detect the connection setting and displayed on the lower right corner.

- Link: Method of current connection.
- Device : Device of current connection.



Figure 3-7 IP Exist

SECTION 4 :

Module Parameter Setting

Module Config allows user to change module parameter settings, this function is disabled when connection is not made (See Figure 4-1)

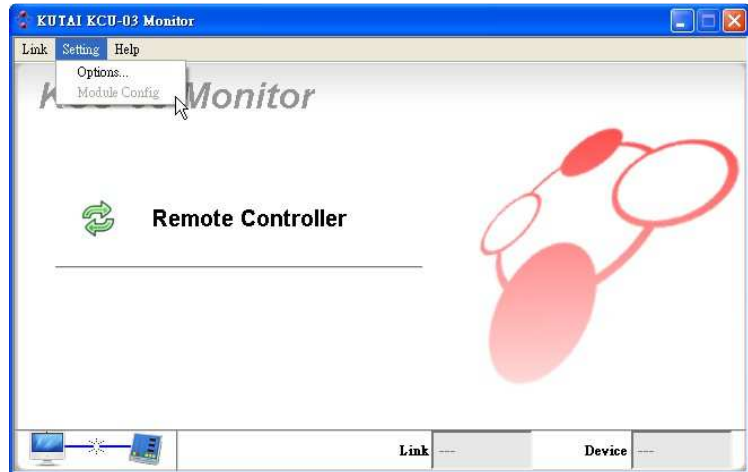


Figure 4-1 function disabled when not connected

When connection is made , Select “Setting → Module Config” to open for parameter settings (Figure 4-2)



Figure 4-2 Module Config

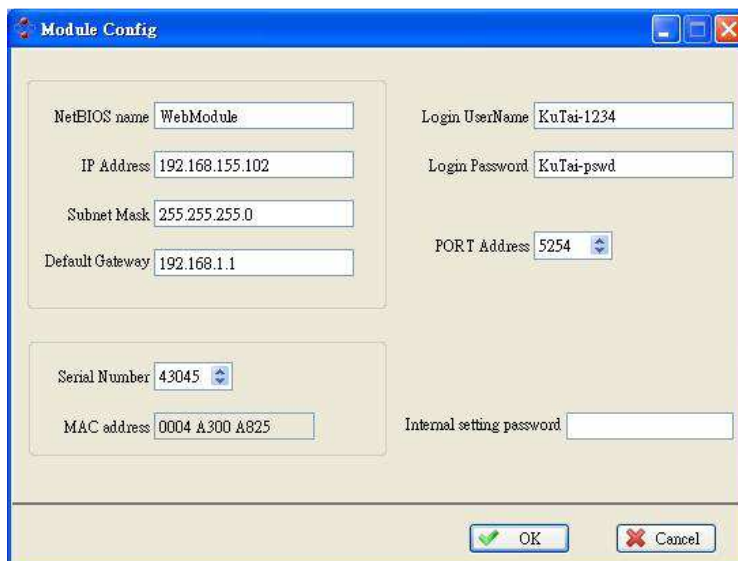
Enter password to open Module Config (Figure 4-3), if no password has been setup, then Module Config will be open without password (Figure 4-4)



Figure 4-3

4.2 USB Modem Connection

- NetBIOS name : Create KCU-03 Module name
- IP Address : Enter KCU-03 Module IP
- Subnet Mask : Enter Subnet Mask
- Default Gateway : Enter Default Gateway
- Serial Number : Enter KCU-03 Module serial number, MAC address will be automatically generated according to this serial number
- Login UserName : Create username
- Login Password : Create Password
- PORT Address : Port Setting
- Internal setting password : Create security password.. Once password is created, user will require to enter password each time to modify configuration. Leave blank to disable security function.



The screenshot shows the 'Module Config' window with the following fields and values:

NetBIOS name	WebModule	Login UserName	KuTai-1234
IP Address	192.168.155.102	Login Password	KuTai-pswd
Subnet Mask	255.255.255.0	PORT Address	5254
Default Gateway	192.168.1.1		
Serial Number	43045	Internal setting password	
MAC address	0004 A300 A825		

At the bottom right, there are 'OK' and 'Cancel' buttons.

Figure 4-4

Click OK when done, system will prompt back to main screen and system will automatically be reconnected (Figure 4.5)



Figure 4-5 System reconnecting

SECTION 5 : Monitoring

Click on the Remote Controller Button in Main Menu after successful connection (refer to Figure 5-1) to open the monitoring frame connected to KCU-03 Module. The system will automatically display corresponding monitoring frame according to the connection information. The current supportive modules include AMF-10, AMF-11, GCU-100, GCU-3000, ATS-22, ATS-33, ATS-34, ATS-PLC.

* Majority of the display content and function of the ATS-PLC, is synchronized with actual operation

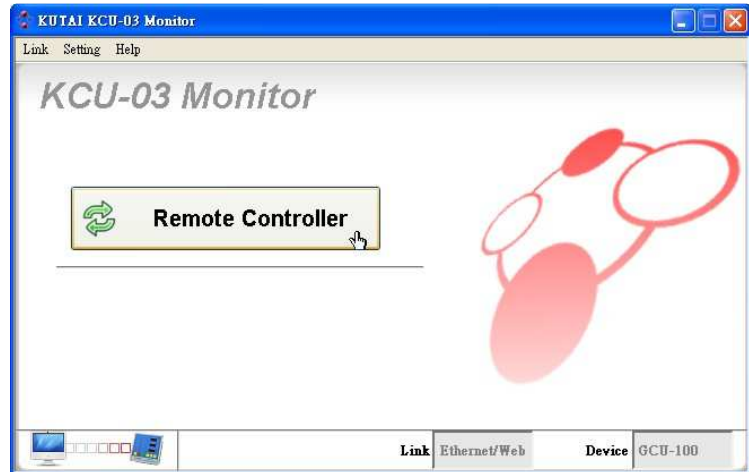


Figure 5-1 Remote Controller

This section will use AMF as example.

5.1 Virtual Operation

This is the virtual controller operation panel. All the functions and lighting of the buttons are synchronized with actual controller.

Attention: The displayed frame varies with different connected control modules.



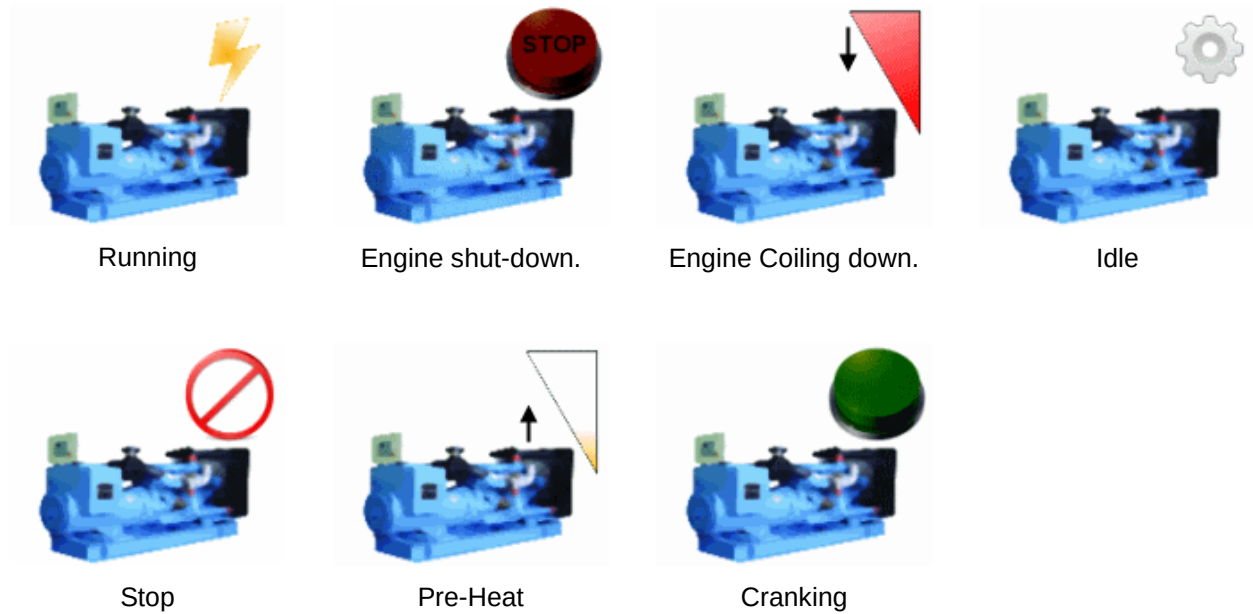
Figure 5-2 Virtual Operation

5.2 States of Generator

The current state of generator is shown in Figure 5-3. There are total of seven states listed below.



Figure 5-3 State of generator



5.3 Other Information

Shown in Figure 5-4

Attention: The displayed frame varies with different connected control modules.

- Maintain (HH:mm) : Maintain service countdown.
- Run Hr.(H:m) : Hours of operating.
- Battery : DC Voltage.



Figure 5-4 Other Information

5.4 Connection Status

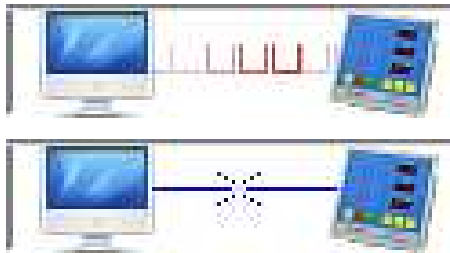
As shown in Figure 5-5 displays the current controller connection status.

- Link : There are two connection methods to KCU-01 module, USB Port Connection and Modem Connection. It will display the connection method here.
- Device : The control module of current connection.



Figure 5-5 Connection Status

Connection Status



Connecting

Disconnecting

5.5 Bearing Area

This area display the configuration monitored by the controller shown in Figure 5-6. The scale will be varied as the corresponding setting of different controller is different.

Attention: The displayed frame varies with different connected control modules.



Figure 5-6 Scale Parameter

The Figure 5-7 is emergency power meter,

Under voltage setting on 180VAC.

Over voltage setting on 250VAC

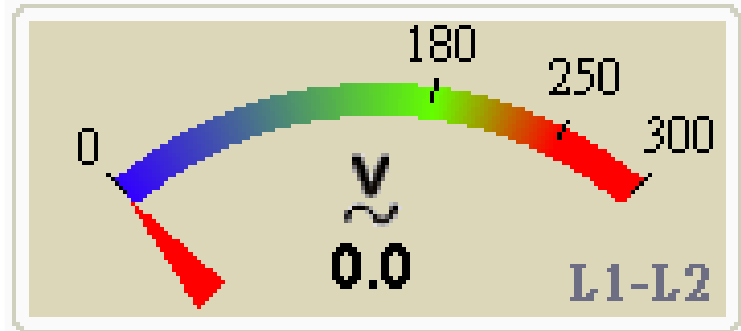


Figure 5-7

5.6 Event Record Log

All the events occurred to the generator will be recorded here as shown in Figure 5-8. The system will save the events to the programmed path when the monitoring frame is closed.



Figure 5-8 Events Record Log

Event	
Genset under voltage delay	2010/09/09 14:30:54
Engine under speed delay	2010/09/09 14:30:54
Genset under voltage delay	2010/09/09 14:30:58
Engine under speed delay	2010/09/09 14:30:58
Genset under voltage delay	2010/09/09 14:31:02
Engine under speed delay	2010/09/09 14:31:02
Emergency under voltage shutdown	2010/09/09 14:31:02

a. Contents of Events

b. Time of Event Occurring

5.7 Emergency Stop Button

This is emergency stop button shown in Figure 5-9. The system will automatically send out emergency stop command when clicked on it.



Figure 5-9 Emergency Stop Button

When controller system internal setting allow remote access, then the button will appear to be accessible status (Figure 5-10); When access is deactivated, the button will appear as un-accessible shows in (Figure 5-11).

Attention : When the remote access is cancelled, all executing button are deactivated on the virtual operation display.



Figure 5-10



Figure 5-11

If remote access is activated, when click on the emergency stop button, a pop up window will appear and requesting for confirmation of execution. Click OK and system will immediately execute emergency engine stop.



Ensure whether to activate emergency stop

The pointer will pop up when clicking on the emergency stop button with the controller switch OFF.



It will show OFF mode already

SECTION 6 :

Parameter Setting

From main screen, select "Controller → Setting" to open parameter setting. Controller must be switched to OFF status prior to programming, otherwise system will not be permitted to enter parameter setting screen (See Figure 6-1).



Figure 6-1 Can only enter setting at OFF mode

Enter password to start parameter setting (See Fig6.2), if no password has been setup, then parameter setting will be open without password.



Figure 6-2 Be for into setting mode,
Please key-in the password first.

After opening up the setting page, and changed the parameter(s), if the new setting differs from previous setting, the green markers (See Figure 6-3) on the left of the parameter will be highlighted, indicating has changed the setting and waiting to be updated.

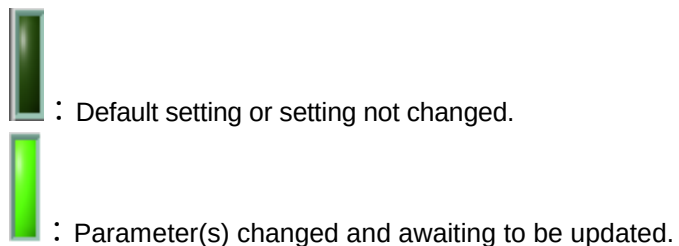


Figure 6-3

Example : In Figure 6-4, 2 parameters have been changed, after clicking on the Update button the system will execute remote update. The update process usually take a few seconds only, some updates are immediately effective and displayed (Reference from Figure 5-7)

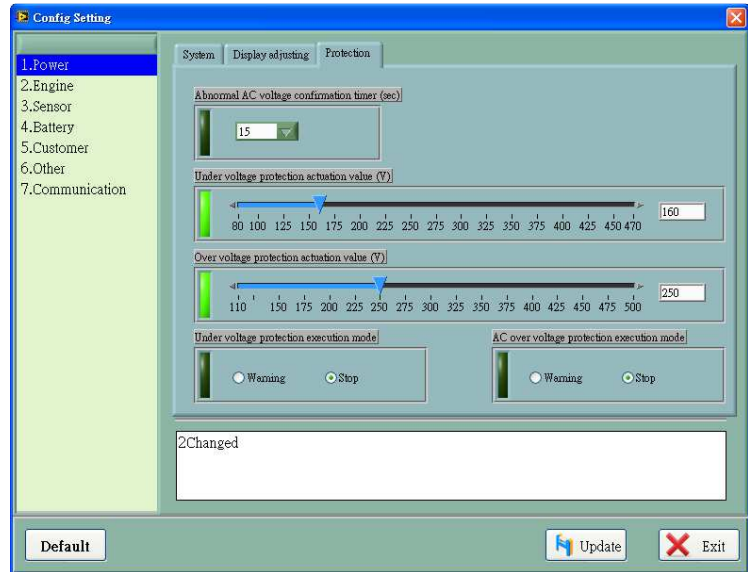


Figure 6-4 Modified Entry will be marked

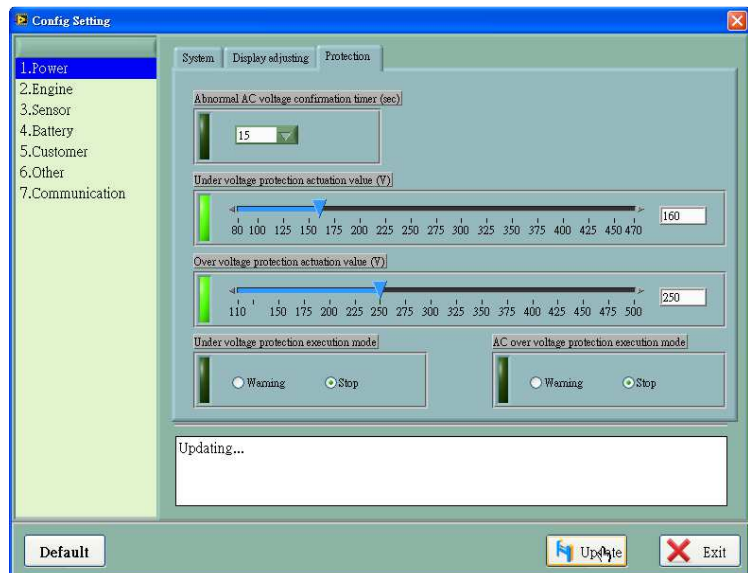


Figure 6-5 Updating

Default, in anytime, user can click on the Default key to resume to factory settings. Any setting that differs from the default, the markers will be highlighted. Click on the Update key to continue setting update.

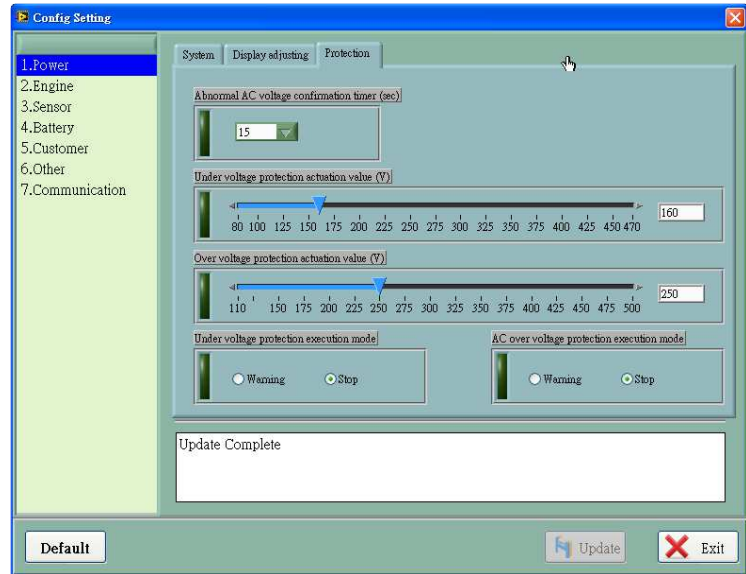


Figure 6-6 Update Complete

Section 7 : Figure Recording

The system starts recording once the monitoring window is opened. Data will be graphed into curve diagram according to the acquisition interval set by the user. Vertical coordinate of each diagram will adjust automatically. Select "Controller → Record" from the main menu to open the diagram (Refer to Figure 7-1).

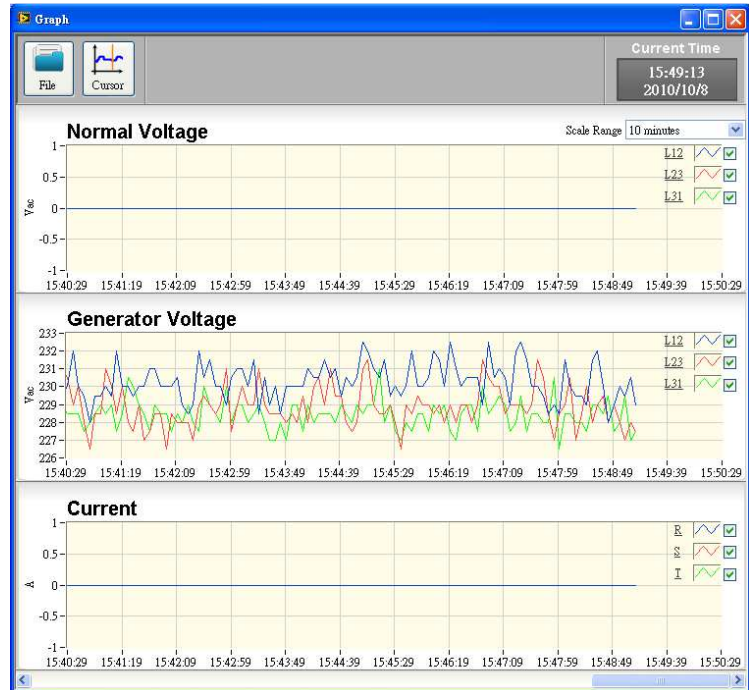
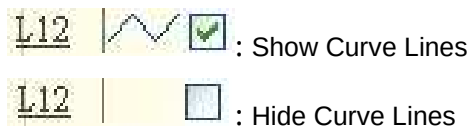


Figure 7-1 Graph Record Log

7.1 Show Curve Lines

The selection box enable user to choose whether to display curves which enables user to better observe certain curve graphic.



7.2 Drop-Down Menu Scale Range

It can adjust the length of data to be showed at once with scale range of 1 minute, 10 minute, 30 minutes, 1 hour, 5 hours, 10 hours and one day.

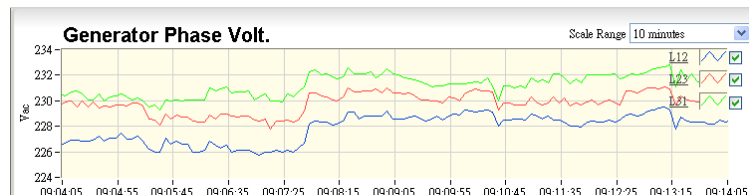


Figure 7-2 Within 10 minutes Range

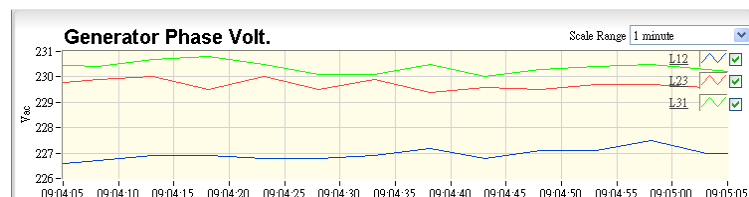


Figure 7-3 Within 1 minute Range

7.3 History Record

To view history files, click File button and select history file of which the file names shows the file currently being reviewed. Furthermore, the data acquisition will continue processing while files are being opened and reviewed. Click on Close File to return to data acquisition menu.

Attention : The record file can only be selected according to the current monitoring module. If the current monitoring module is GCU-3000, then only GCU-3000 record file can be selected.

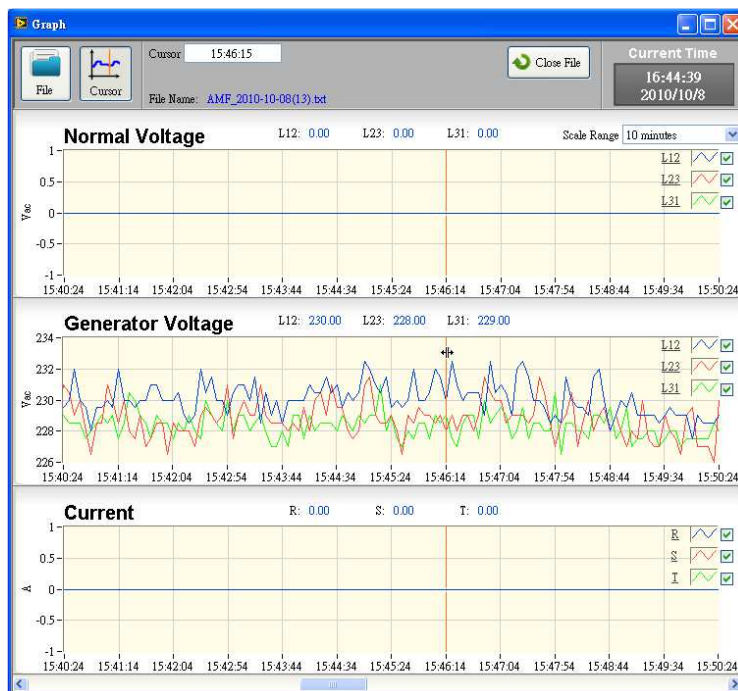


Figure 7-4 History File Record Log

7.4 Function of Cursor

Click on Cursor button to activate the coordinate axis on each diagram. The coordinate axis on the diagrams will move along with the motion of mouse simultaneously (See Figure 7-5) and display the time period of cursor position (See Figure 7-6).

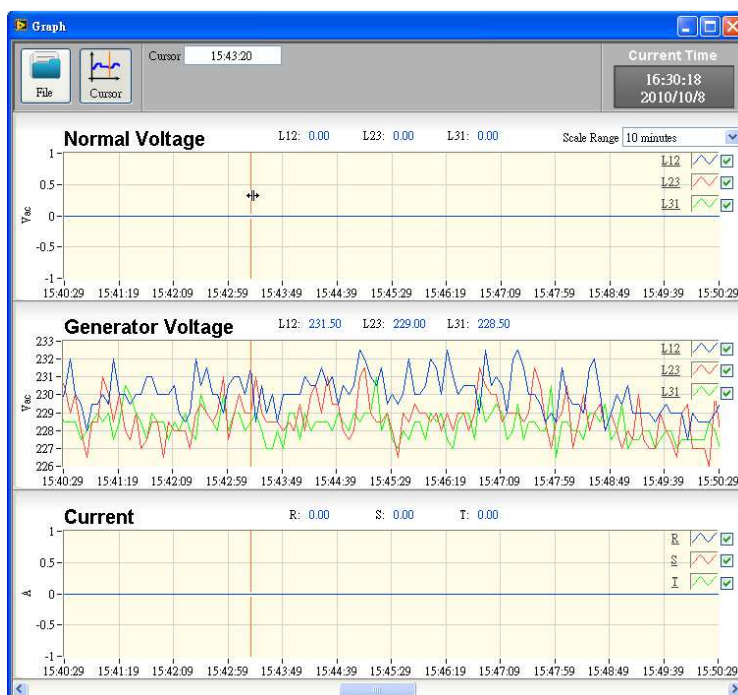


Figure 7-5 Cursor moves with the mouse

Current time of the cursor

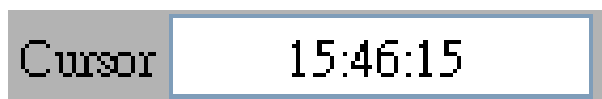


Figure 7-6 Shower the current time