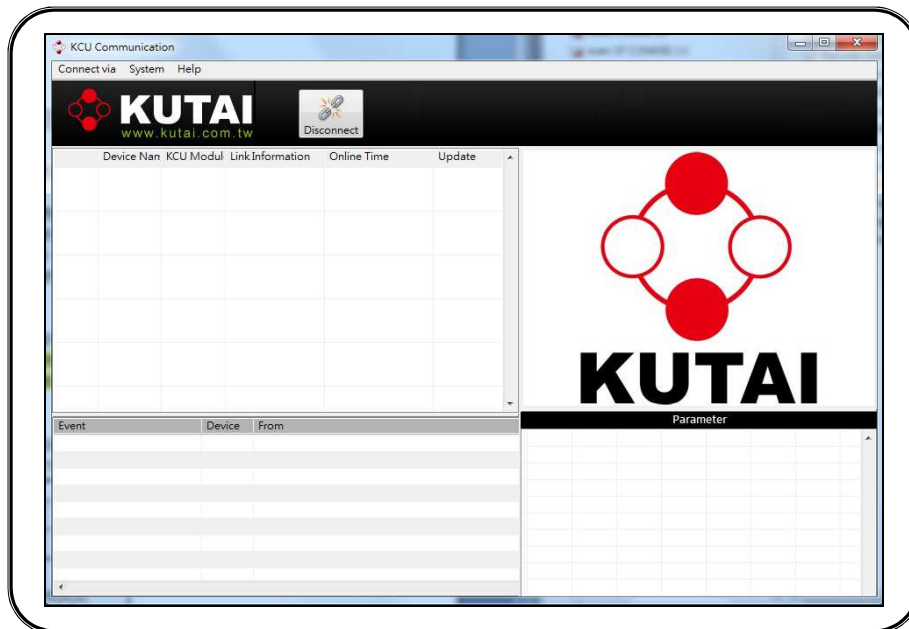


KCU Communication

PC Software Installation and User's Guide
For KCU-30 / KCU-40 / KCU-50 modules



System requirement: Windows XP or above



固也泰電子工業有限公司
KUTAI ELECTRONICS INDUSTRY CO., LTD.



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SECTION 1 : Software Installation Instructions

To download the software, follow these steps:

1. Go to Download Page : <http://www.kutai.com.tw/en/download.html>

Click on the download link named:"KCU Communication Software" (ZIP file)

Or go to Remote Monitoring, Control page for KCU-30/40/50' Download Tab Page



2. Your browser will begin to download the ZIP file
3. When the file is done downloading, unzip it and double-click on the "**setup.exe**" to run the installer.

Note: If you have previous version of "KCU Communication" software installed, please remove it before installing the new version.

Home > Remote Monitoring, Control and Annunciator System > Remote Communication Modules > KCU-30



KCU-30
Ethernet Remote Communication Module

KCU-30 is an optional expandable module which allows you to remotely monitor and control specific KUTAI ATS and Generator controllers using PC, laptop, tablet, or smartphone. Quick connection through an Ethernet cable.

[Comparison List](#)

© www.kutai.com.tw

Features Specifications **Downloads** Dimension Compatible Controllers

Documents



KCU Communication Software for PC



Windows XP or above

KCU Communication App for mobile devices




Android 4.0 or later



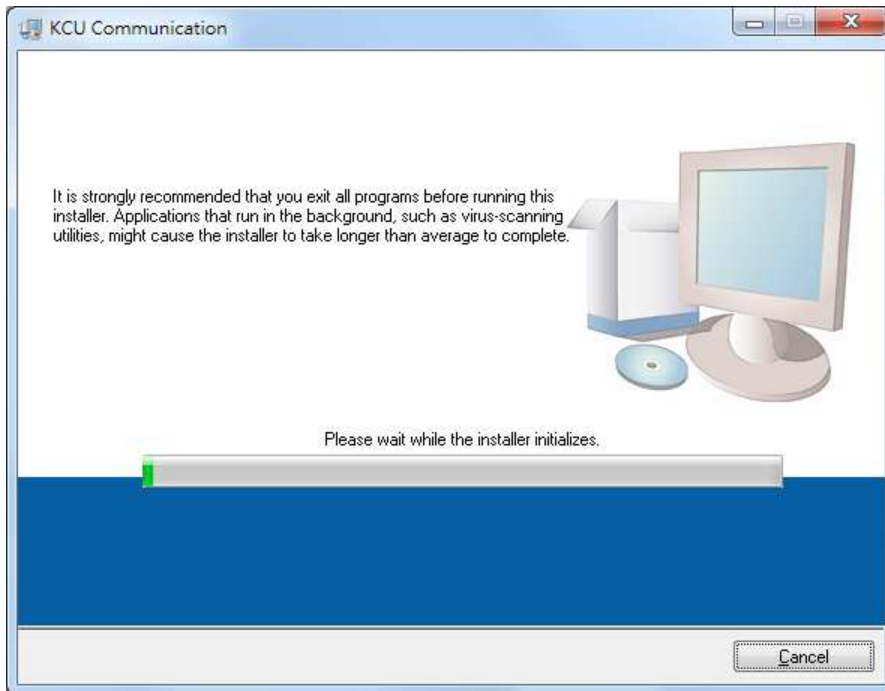
iOS 7.0 or later

How to uninstall previous version?

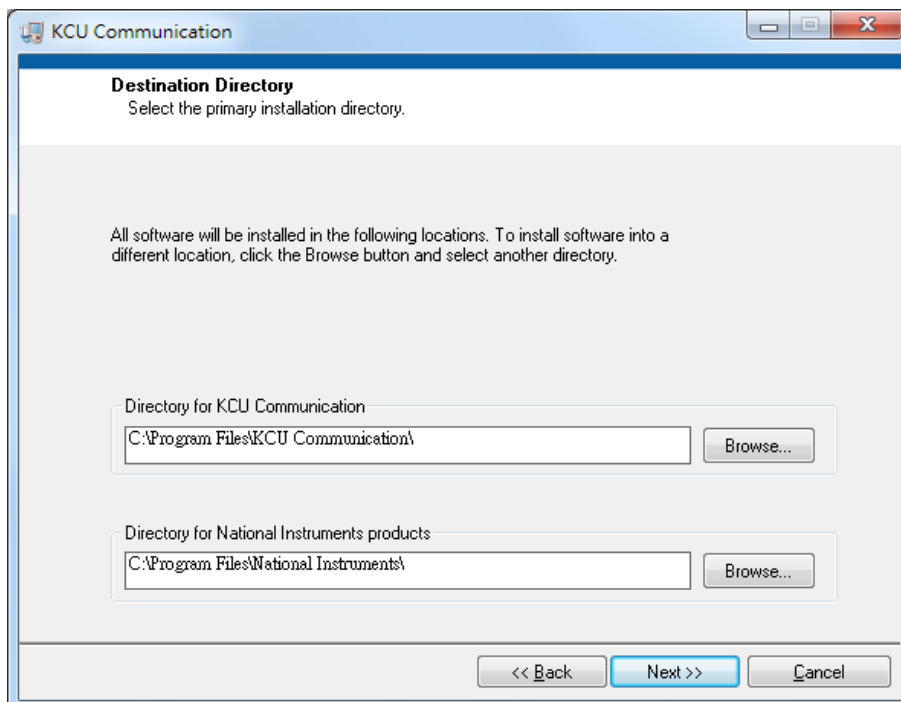
1. Click the **Start** button , and then click **Control Panel**.
2. Click **Programs**, and then click **Programs and Features**.
3. Double-click the program “KCU Communication” to uninstall.

To install the software, follow the steps below:

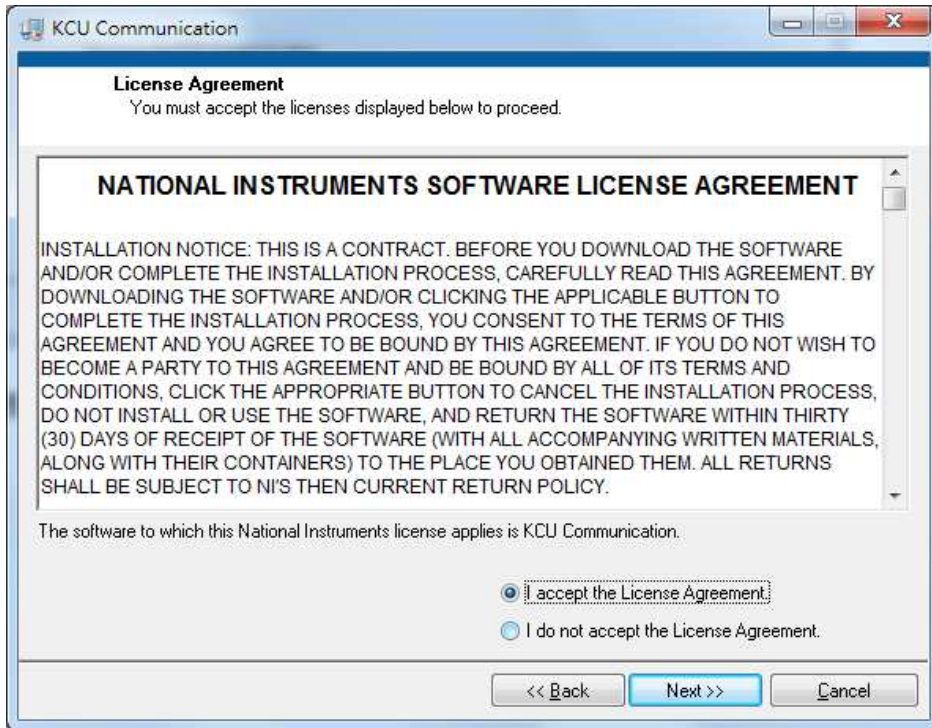
1. After you double-click the “**setup.exe**”, wait for the installer to initiate.



2. Choose the location where you want to install. Click **Next**

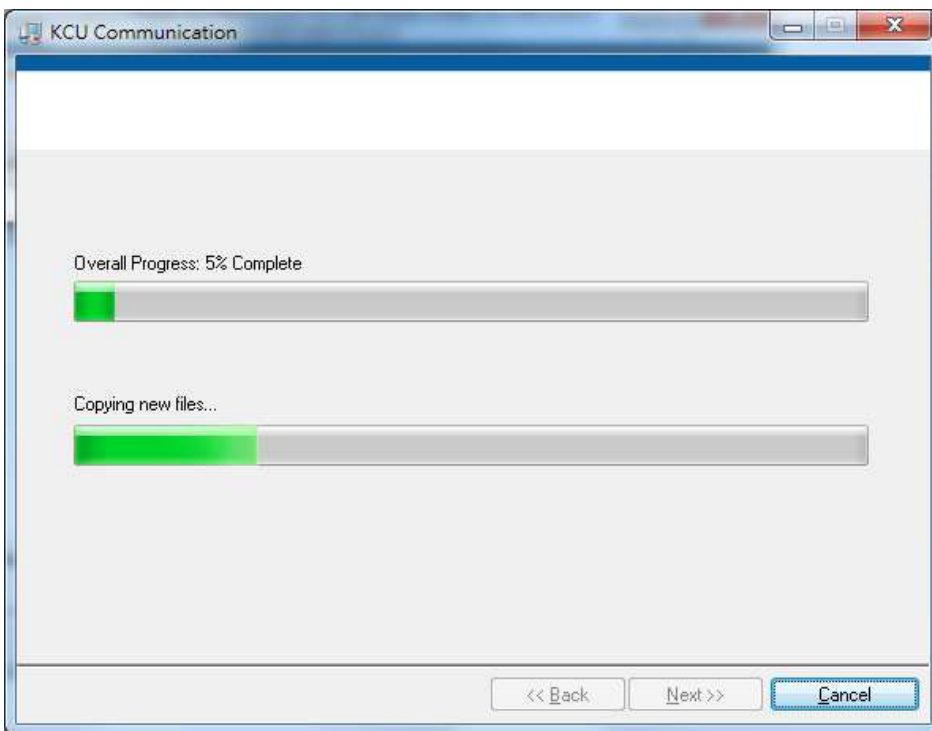


3. Read the license agreement and select “**I accept the agreement**”.
Click **Next** to start installing

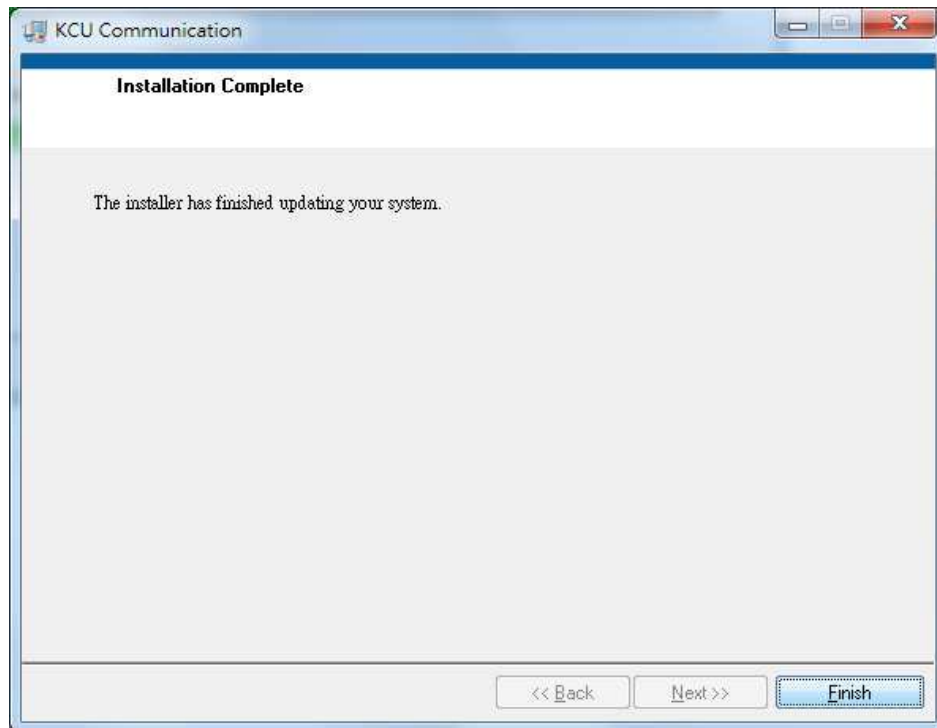


Note: If you select “I do not accept the License Agreement”, you will not be able to continue with the installation.

4. The Installing panel will appear, showing the progress of your installation.



5. The installation is completed. Click **Finish** to exit the setup.



6. Click **Restart** to complete the setup process.



SECTION 2 : KUTAI Software Account Registration

The server connection service is required for using **KCU-30**, **KCU-40**, and **KCU-50** modules with KCU Communication Software (PC or iOS and Android App), To use the server connection service you will need a valid email address to register for a software account and create a password.

Note: Communication modules model KCU-01, KCU-02, and KCU-03 does not require server connection service to operate.

How to register for a software account?

Go to KUTAI official website;
Find the main page for *Remote Monitoring, Control and Annunciator System*

Click this button



Or copy and paste below URL to your web browser.

URL: <http://kcu.kutai.com.tw:8080/KutaiWebMonitorSystem/register/StepOne>

After register, you'll receive an email titled "**Kutai Electronics Software Account Verification**" which has a verification link.

Click the link to verify your account.

Note: The verification link is only valid for 24 hours. If you didn't click the verification link within 24 hours of registration, you'll have to re-register.

Example of verification email

[Click here to verify your account](#) ↓
account:test@kutai.com.tw ↓
password:654512 ↓
↓
Once you verify, you will be able to use our remote communication software and app with the account and password you created. ↓
Please note that the activation link is only valid for 24 hours. ↓
If you didn't click this link within 24 hours, the registration will be deleted and you'll need to sign up again. ↓
↓
[Click here to sign up again.](#) ↓
↓
This is an automatically generated email, please do not reply. ↓
For question or concerns regarding your account, please contact us at kutai2010@kutai.com.tw ↓
↓
Thank you for choosing KUTAI products! ↓
↓
Sincerely, ↓
↓
The KUTAI Team ↓

SECTION 3: Getting Started

3.1 Quick Check

Quick check before using software

- Check if the “**Remote control by KCU-XX module**” function in controller is **enabled**. (Refer to the Line By Line Programming Table in controller's user manual.)
If this function is **disabled**, the software can only monitor the controller but incapable to control it remotely.
- When you use the software for the first time, you will need to login with your registered software account and password. (See Figure 3-1)

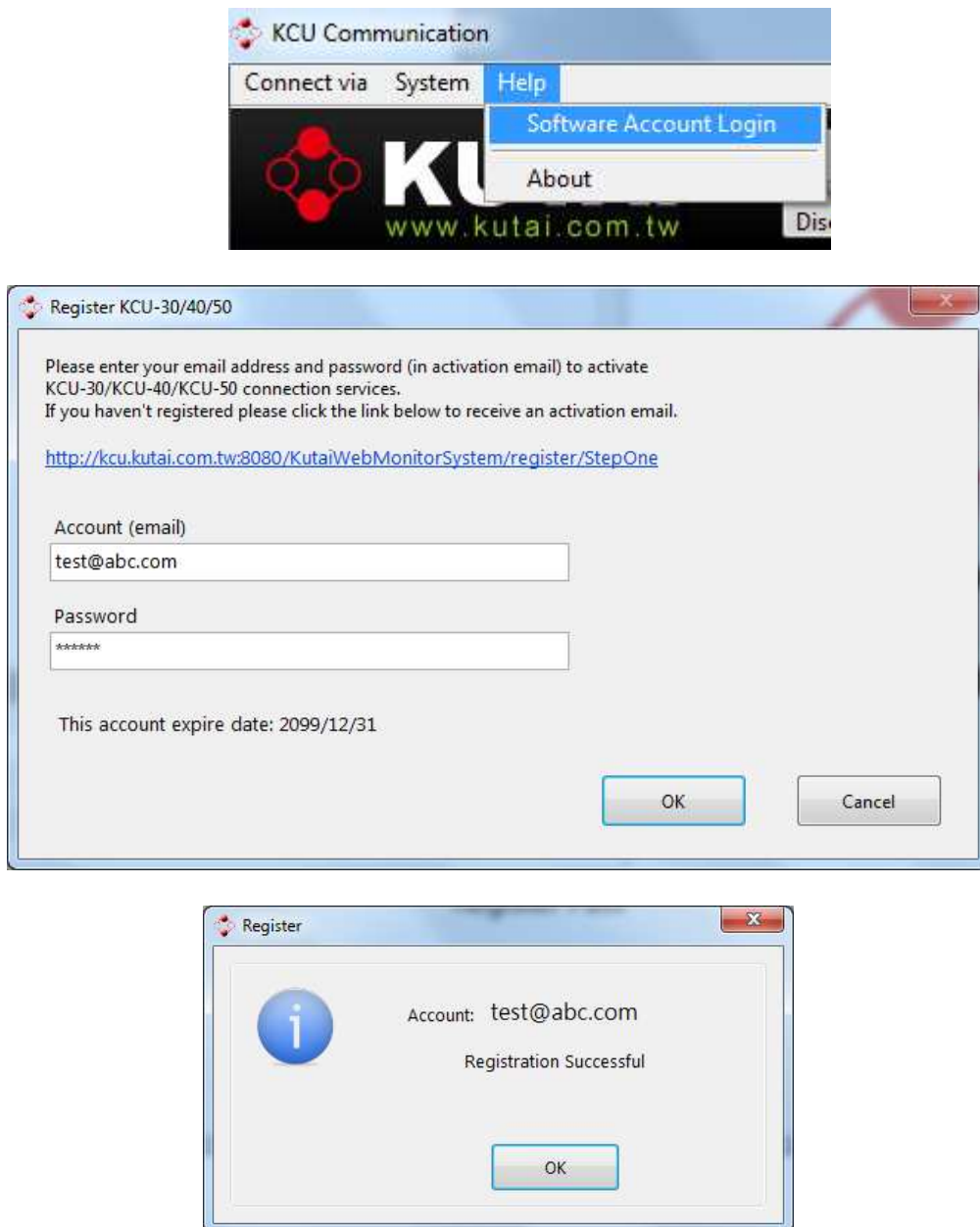
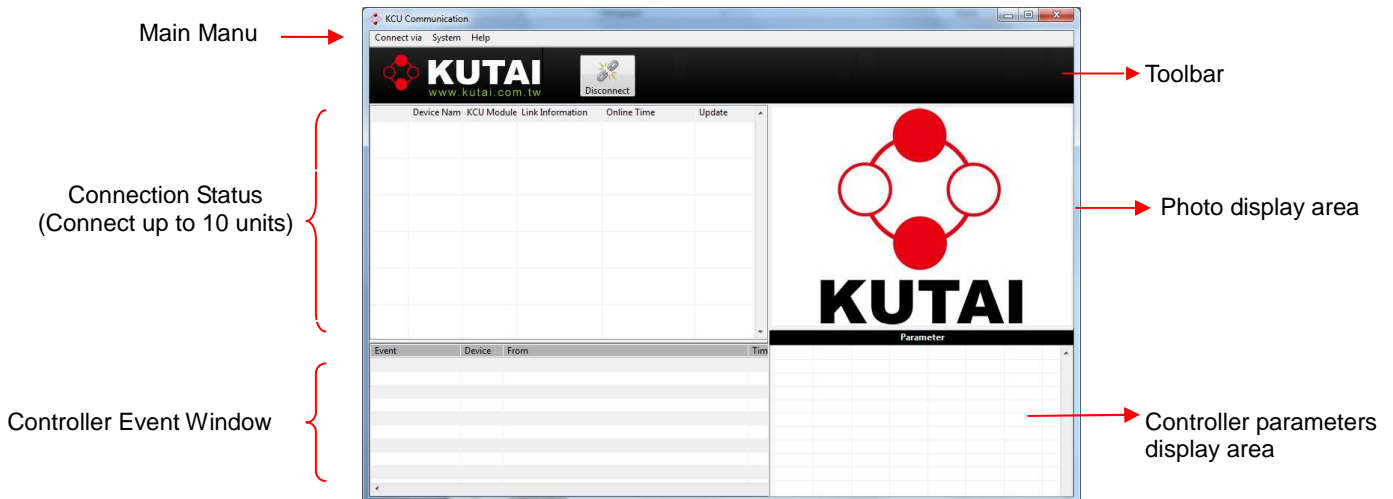


Figure 3-1 Software Account Login

Note: KCU-30, KCU-40, and KCU-50 modules can all be connected to the software at the same time. (Up to 10 units)
 If you wish to connect more than 10 units of controller simultaneously, please contact KUTAI.

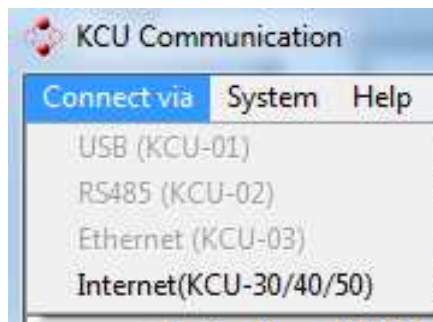
3.1.1 Main Window Overview



3.1.2 Main Menu

Most commands and features of KCU Communication can be accessed through the main menu. By clicking an item from the menu, you can perform the corresponding command.

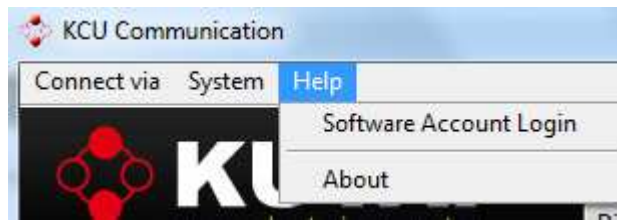
- **Connect Via** : Shows available KCU module connection methods.



- **System** : Shows system commands and features.



- **Help** : Access to login information and software version.



3.2 Connection Address Book

You can use Connection Address Book (Figure 3-3.1) to quickly connect to a controller. Click **System** in the main menu and click **Address Book**.

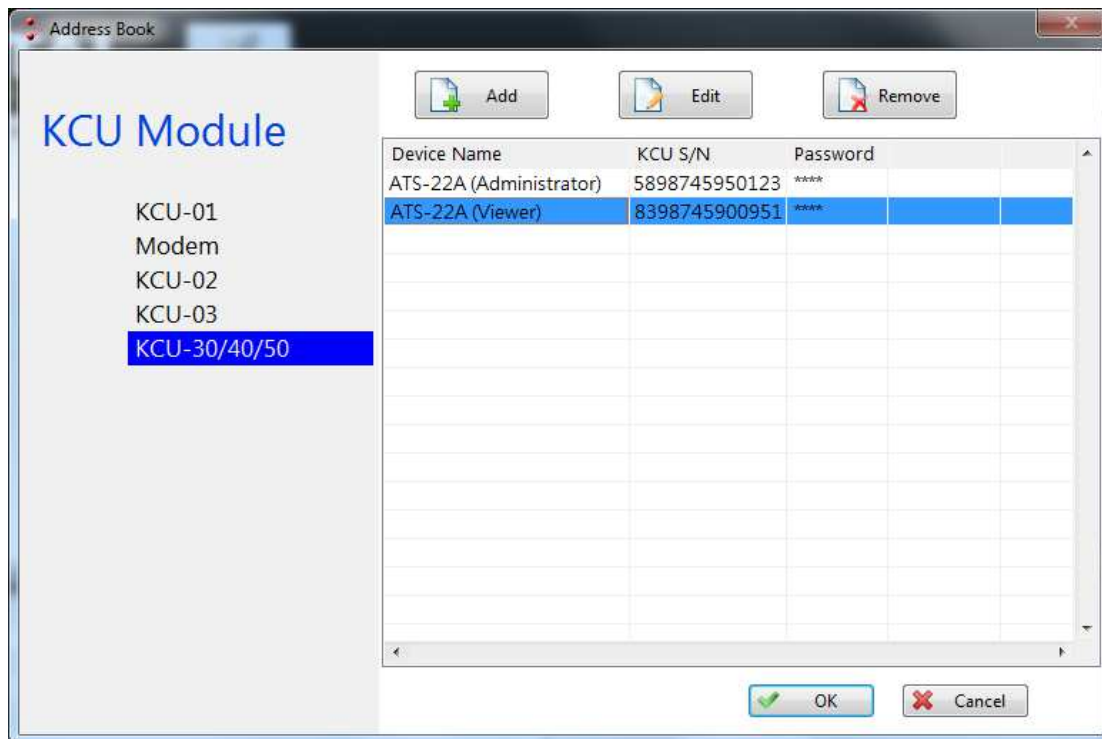

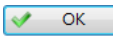


Figure 3-3.1 Address Book

3.2.1 Adding New Connections

Click  to edit the connection detail then click  to save it.

- **Name** : You can create a custom name for the controller. For example, *ATS-22A at Building F*
- **KCU Serial Number** : The serial number (mark on module) of KCU module that installed on the controller.
- **Password** : You can connect the controller as an **Administrator** or a **Viewer**.

Factory Setting Connection Passwords (4-digit):

Administrator (**0000**), Viewer (**9999**)

Attention: We strongly recommend that you change the connection passwords right after the first successful connection. (See Section 4.4)

Security Notice and Liability Disclaimer

You are responsible for keeping your connection passwords (Administrator/Viewer) safe and confidential because they are the key to access your equipments.

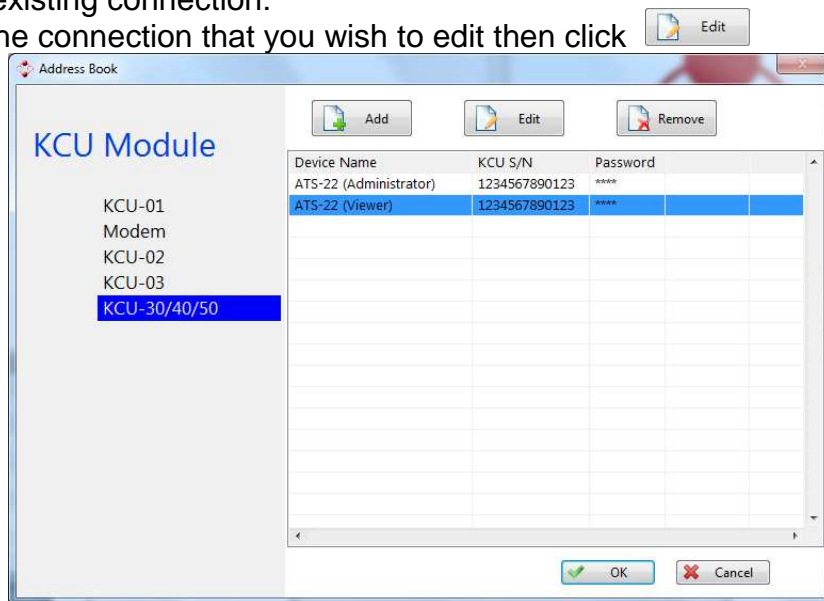
There will be potentially serious security issues if your passwords are compromised. Some of the risks of compromised security include the equipment being remotely controlled by third parties, who may have criminal intent and malicious damage to your equipments.

We are entitled to rely on any use of our connection services using that password as being use by you and authorized by you. If you know or believe that there is any unauthorized, fraudulent or unlawful use of your password, **you must reset it in the controller.** (Refer to controllers user manual for connection password reset)

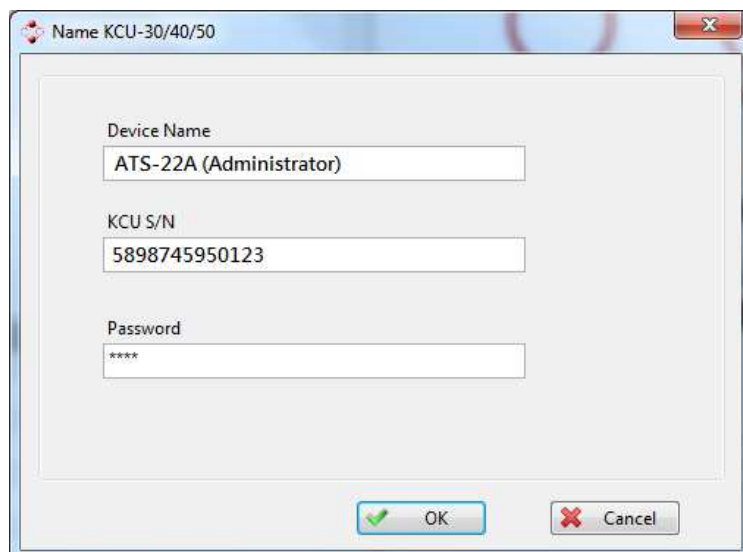
3.2.2 Editing Connections

To edit an existing connection:

1. Click the connection that you wish to edit then click




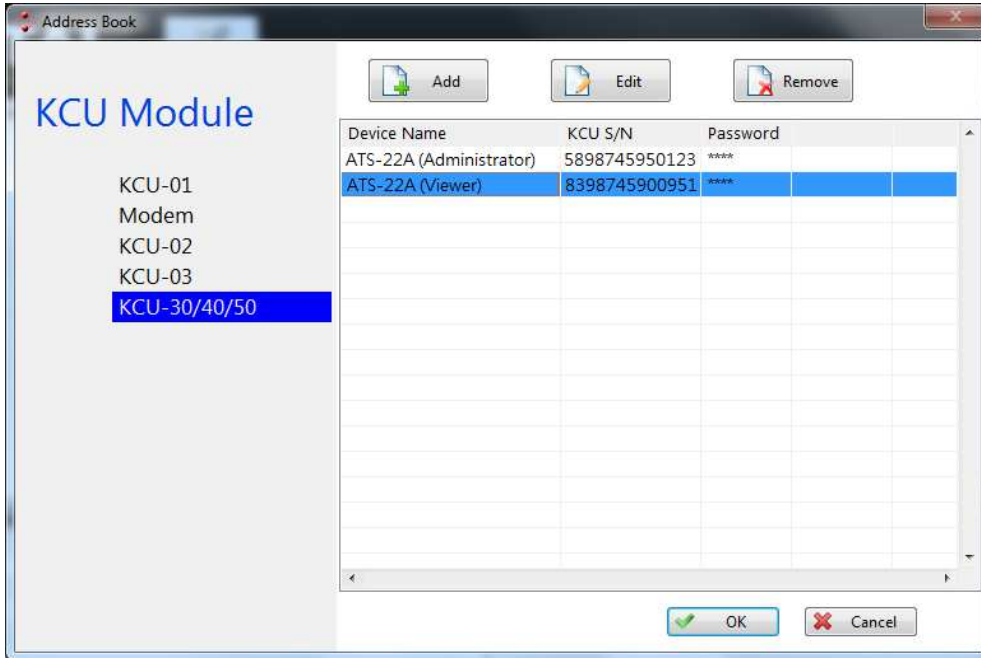
2. Edit the connection detail and click to save changes.



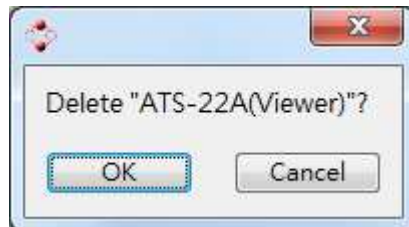
3.2.3 Removing Connections

To remove a connection:

1. Click the connection that you wish to delete and click 



2. A confirm dialogue will popup. Click  to remove the connection.



SECTION 4: Using and Configuring

4.1 Items and Function Icons in Main Window

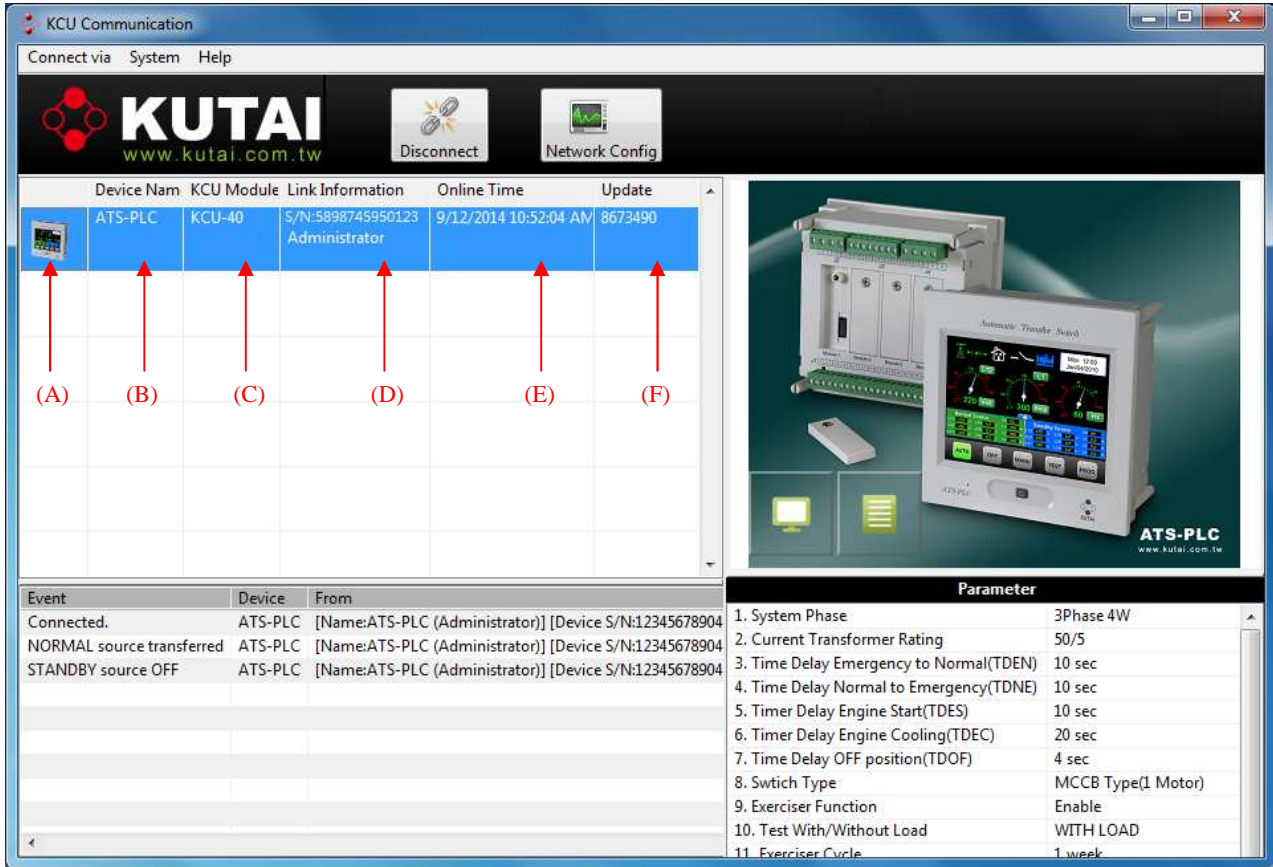






Figure 4-1 Main Window

Item	Description
A Photo	Photo of the connected controller.
B Device Name	The custom name of the controller
C KCU Module	The KCU module that used to connect the controller
D Connection Information	Shows KCU module serial number (S/N) and connection type (Administrator or Viewer)
E Online Time	Connection date and time
F Update	Connection data stream code

Icon	Description	Icon	Description
	Disconnect Disconnect a controller		Operation Panel. To monitor and control a controller
	Network Configuration Change connection passwords		Configuration Parameter. Change controller settings

4.2 Connecting to a Controller

Click "Connect via" and select "Internet (KCU-30/40/50)" to enter the connection list.

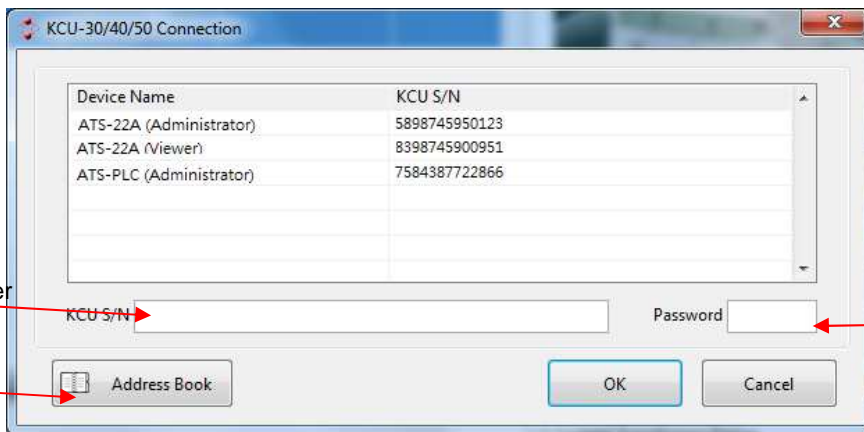
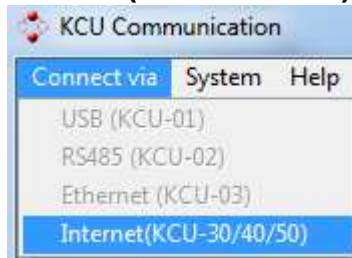


Figure 4-2 Connection List

The connection list shows all the connections that saved in the Address Book. You can either select a connection in the list or type in the KCU Module serial number and the password. Then click to connect the controller.

Note: If you type in the serial number and password in the connection list, it won't be saved in the Address Book. It's recommended to add the connection in the Address Book for quick access in the future.

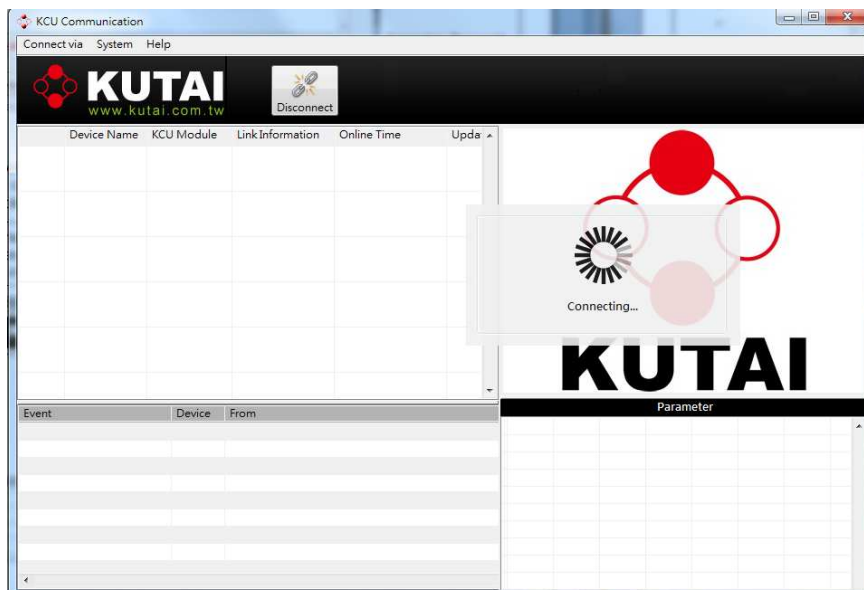



Figure 4-3 Connecting to a controller

4.3 Disconnect a Controller

To disconnect from a controller:

1. Select a controller that you wish to disconnect
2. Click **Disconnect** icon. 

4.4 KCU Module Configuration


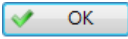
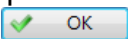
You can:

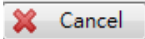
- Edit connection passwords.
- Check MAC Address of the KCU module
- Check the maximum number of connections

Note: If you connect a controller as an **Viewer**, KCU Config function is disabled. 

4.4.1 Change Connection Password

If you connect a controller as an **Administrator**, you are allowed to change connection passwords.

1. After you connect a controller successfully, click  to access Network Configuration. (See Figure 4-4)
2. Change the password and click  to save the new password. The controller will disconnect automatically after you click . You'll need to connect again with the new password.

If you do not wish to change password, click  to exit.

The controller will stay connected.

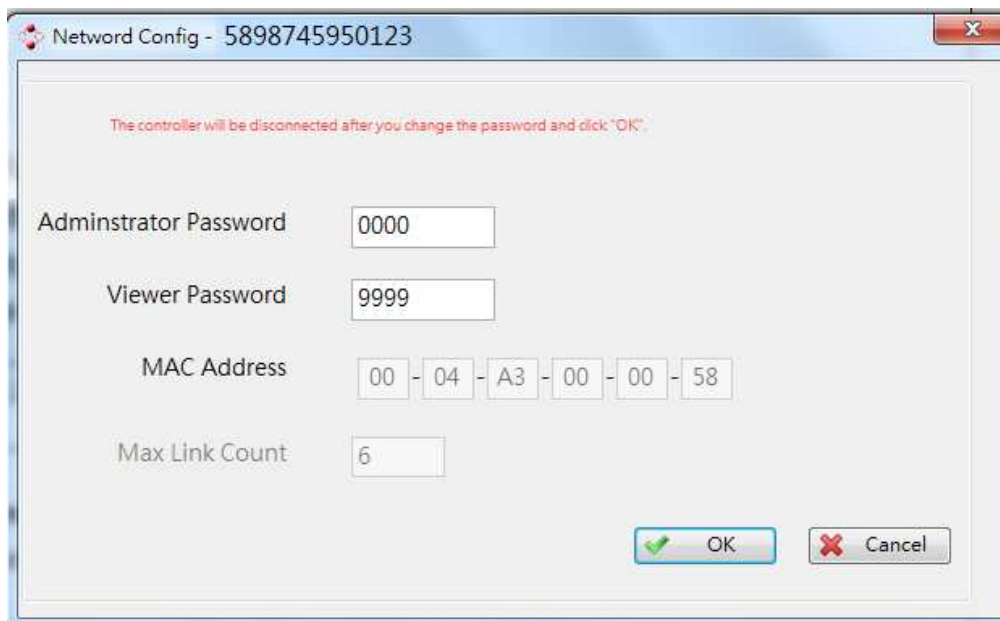


Figure 4-4 KCU Module Configuration

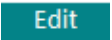
4.4.2 Connection Password Privileges

Connection Type	Privileges
Administrator	Monitor and control remotely. Change connection passwords Configure Settings Edit Address Book
Viewer	Monitor only, unable to control remotely


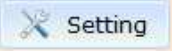


***KCU-40** WI-FI module can only monitor, unable to control remotely.


Note: If you forgot the current Administrator password, you will need to perform a password reset on the controller. Refer to the Line By Line Programming Table in controller's user manual for **KCU Remote Connection Passwords Recovery**.

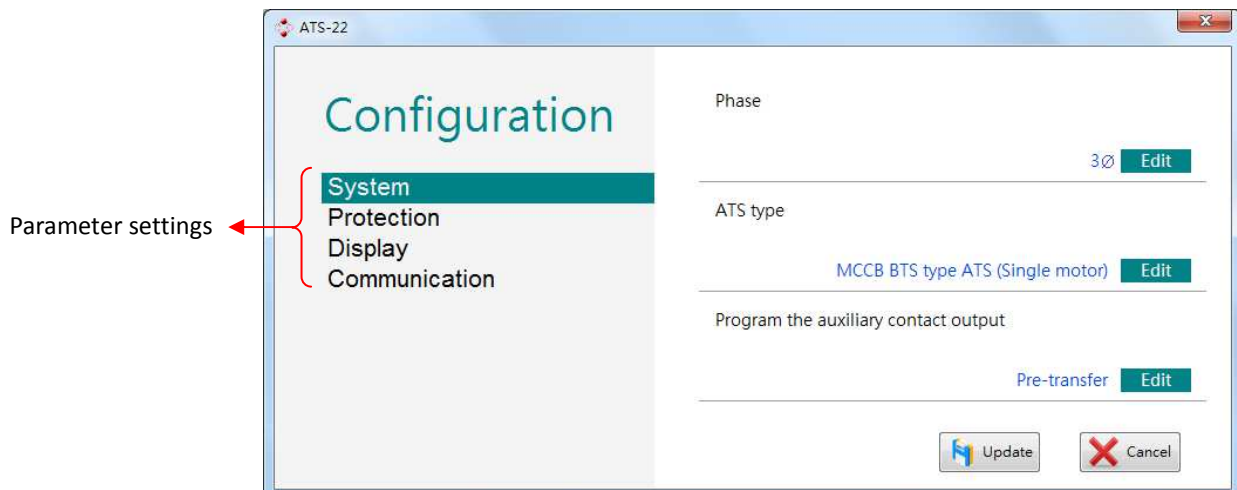
4.5 Configuration Parameter

All the controllers configuration must be done in **OFF mode**.
If you are not in OFF mode, the  button will not display.

How to access controller settings?


1. Click  in Main Window to access operation panel.
2. Click **OFF** button to switch the controller to OFF mode.
3. Click  at the upper left corner in operation panel
4. Click  to change the setting. (See Figure 4-5 and 4-6)
5. After you finish all the editing, click  to save the changes and exit.

Or Click  to exit without saving any changes.



Types of parameter Settings

■ Drop-Down List

Click  to select an item in the drop-down list

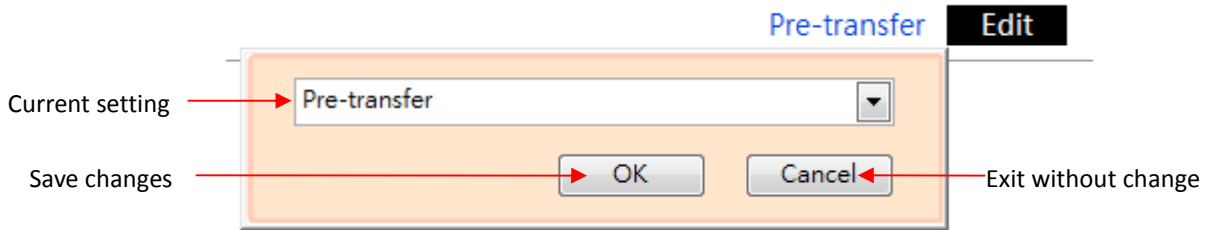


Figure 4-5 Drop-Down List

■ Slider bar

Drag slider button to change values.
Or type in a value in the input box directly.

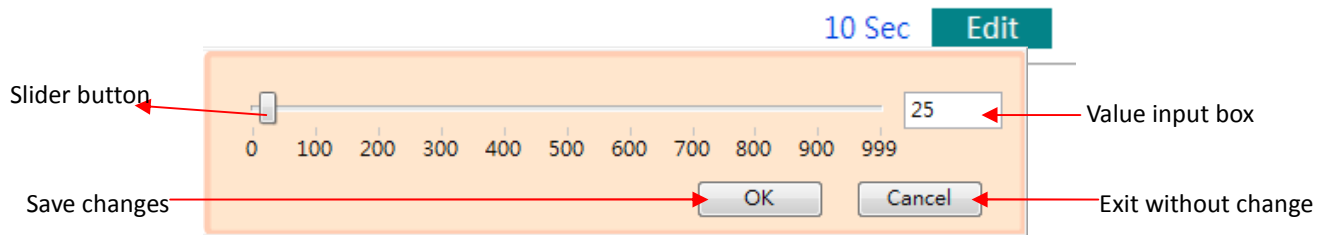


Figure 4-6 Slider bar

4.6 ATS-22A Operation Panel

The screenshot displays the ATS-22A software interface. At the top, the 'Setting' tab is active, showing 'Link: KCU-40' and a connection status icon. An 'Event' window lists recent events such as 'Connected', 'NORMAL source transferred', 'OFF Mode', and 'STANDBY source OFF'. The main panel is divided into 'Normal' and 'Standby' sections. The 'Normal' section shows three voltage gauges (L1-L2: 221.6, L2-L3: 223.3, L3-L1: 222.2) and a central frequency gauge (59.8 Hz). The 'Standby' section shows three voltage gauges (L1-L2: 170, L2-L3: 0, L3-L1: 0) and a central frequency gauge (0 Hz). A central control area includes 'V↑', 'Hz↑', 'Hz↓', 'V↓' indicators and 'AUTO', 'OFF', 'TEST' buttons. A 'Fail' indicator is visible in the standby section.

Configuration Parameter → Setting
 KCU module used for connection → Link: KCU-40
 Connection status → [Icon]
 Event Window → [Event List]
 Operating Status → [Normal/Standby]
 Normal Source Readings → [Voltage Gauges]
 Standby Source Readings → [Voltage Gauges]

This close-up shows the 'Mode Selection Buttons' (AUTO, OFF, TEST) and a 'Fail' indicator. A red arrow points to the 'Fail' indicator with the text 'Glows red for Alarm'. Another red arrow points to the 'Fail' indicator with the text 'Standby Source transfer failed'. The 'AUTO' button has a green progress bar, 'OFF' has a red progress bar, and 'TEST' has a green progress bar.

Glows red for Alarm → [Fail Indicator]
 Standby Source transfer failed → [Fail Indicator]
 Mode Selection Button → [AUTO, OFF, TEST]

Operating Mode Selection Buttons

The legend shows three buttons with their corresponding progress bar colors: 'AUTO mode' with a green bar, 'OFF mode' with a red bar, and 'Bypass mode' with a green bar.

AUTO mode OFF mode Bypass mode

Note: For the detail settings of the controller, please refer to ATS-22A user manual.

4.7 ATS-33 Operation Panel

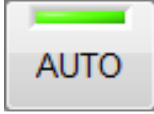
The screenshot displays the ATS-33 software interface with the following components labeled:

- Configuration Parameter:** Points to the 'Setting' tab in the top left.
- Link:** Shows 'KCU-30' in the top right.
- Connection status:** Points to a network icon in the top right.
- Event Window:** Points to the 'Event' window on the right side.
- Operating Status:** Points to the central control area.
- Genset-1 Readings:** Points to the three voltage gauges on the left (L1-L2: 227.5, L2-L3: 226.5, L3-L1: 231).
- Genset-2 Readings:** Points to the three voltage gauges on the right (L1-L2: 229, L2-L3: 232.5, L3-L1: 232.5).
- Remaining run time of current generator (minutes):** Points to the '703' value under GEN 2.
- Current operating genset:** Points to the 'GEN 2' label.
- Duty Cycle of current operating genset (minutes):** Points to the '12' value.


This close-up view of the operating status panel includes the following labels:

- Glows red for Alarm:** Points to a red bar above the frequency control section.
- Mode Selection Button:** Points to the 'AUTO', 'OFF', and 'Bypass' buttons at the bottom.
- Genset-2 Connected:** Points to a green bar above the frequency control section.

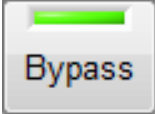
Operating Mode Selection Buttons



AUTO mode



OFF mode



Bypass mode

Note: For the detail settings of the controller, please refer to ATS-33 user manual.

4.8 ATS-34 Operation Panel

KCU module used for connection

The screenshot displays the ATS-34 software interface with the following components and labels:

- Configuration Parameter:** Points to the 'Setting' tab in the top left.
- Link:** Shows 'KCU-30' in the top right.
- Event Window:** A dark grey area on the right side.
- Operating Status:** A central panel showing Genset-1 and Genset-2 status, including voltage (V) and frequency (Hz) indicators.
- Genset-1 Readings:** Three gauges on the left for GEN 1 (L1-L2: 240.5, L2-L3: 239, L3-L1: 241).
- Genset-2 Readings:** Three gauges on the right for GEN 2 (L1-L2: 244, L2-L3: 239, L3-L1: 243).
- Remaining run time of current generator (minutes):** A field showing '479' minutes.
- Current operating genset:** A field showing 'GEN 2'.
- Duty Cycle of current operating genset:** A field showing '8'.
- Action:** A lightning bolt icon with '59.9 Hz' below it.

This close-up view of the control panel includes the following elements:

- Glows red for Alarm:** A red bar above the Genset-1 voltage indicator.
- Mode Selection Button:** A red dashed box around the 'AUTO', 'OFF', and 'Bypass' buttons.
- Genset-2 Connected:** A green bar above the Genset-2 voltage indicator.

Operating Mode Selection Buttons

The legend shows three buttons with their corresponding indicator colors:

- AUTO mode:** Represented by a green bar above the button.
- OFF mode:** Represented by a red bar above the button.
- Bypass mode:** Represented by a green bar above the button.

Note: For the detail settings of the controller, please refer to ATS-34 user manual.

4.9 ATS-PLC Operation Panel

ATS-PLC software interface is synchronized with the actual ATS-PLC controller. Therefore the operation on communication software or directly on ATS-PLC is almost the same except for some parameter settings.

4.9.1 OFF Mode

KCU module used for connection

Configuration Parameter

Move your mouse here to show the Connection Information

ATS-PLC
ATS-PLC(Administer)
ID: 1234567890306
Login: Admin User

Clock

Mode Selection Button

Module: KCU-40

Connection status

Current Date and time

Warning Message Display

4.9.2 AUTO Mode

Normal source connected

Gauge display


Normal Source Readings


Warning Message Or Current Date and Time display

Standby Source Readings

Normal Source			Standby Source		
Hz	KVA		Hz	KVA	
L12 234.5 V	L1N 122.0 V	L1 0.0 A	L12 ---- V	L1N ---- V	L1 ---- A
L23 237.0 V	L2N 163.0 V	L2 0.0 A	L23 ---- V	L2N ---- V	L2 ---- A
L31 236.5 V	L3N 122.0 V	L3 0.0 A	L31 ---- V	L3N ---- V	L3 ---- A

How to change the settings in Gauge display.

Normal source value in green box 

Standby source value in blue box 



Click to change between different phases. **(Remark)**

Normal range area (Green)
Caution range area (Red)

Click to change the display sequence
Volt → Current → Frequency

Remark

3 Phase 3 Wire	3 Phase 4 Wire	電流
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
L12	L12	L1
L23	L23	L2
L31	L31	L3
	L1N	
	L2N	
	L3N	

4.9.3 MANU Mode

Normal Source Manually Start button

Engine Start / Stop Button

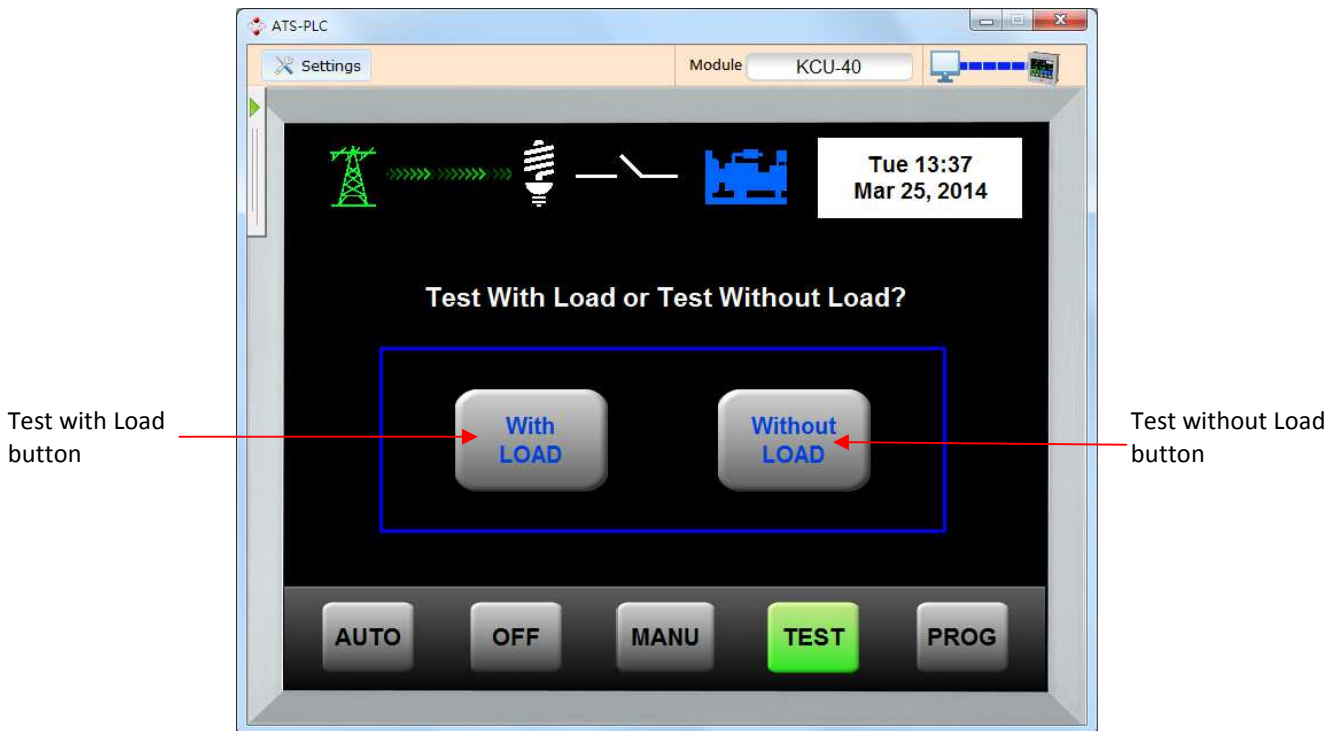
Standby Source Manually Start button

Normal Source Readings

Standby Source Readings

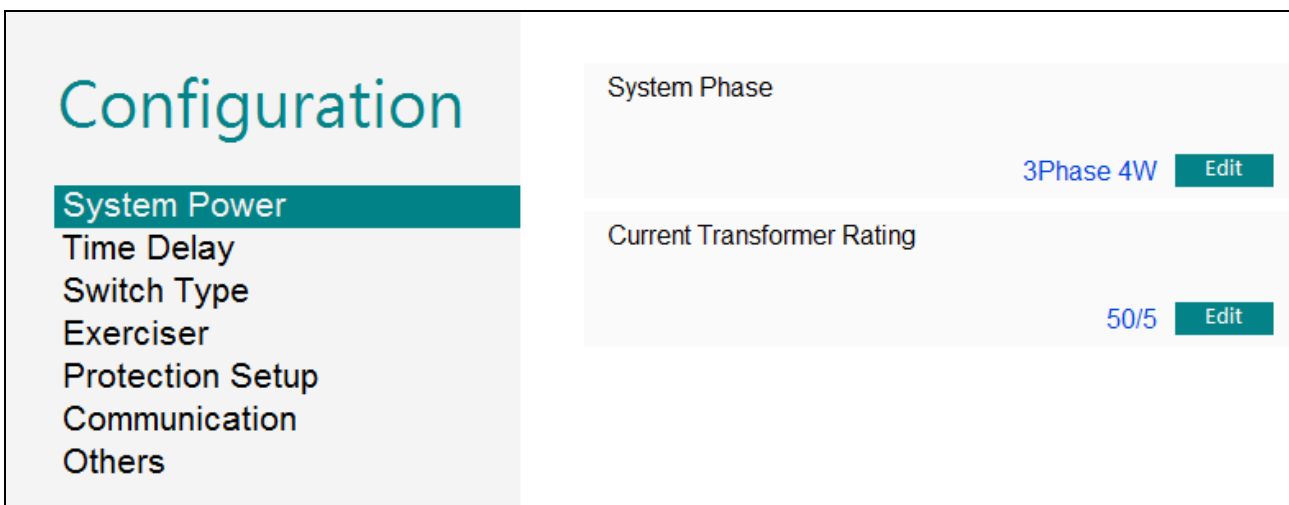
4.9.4 TEST Mode

Test with or without load selection



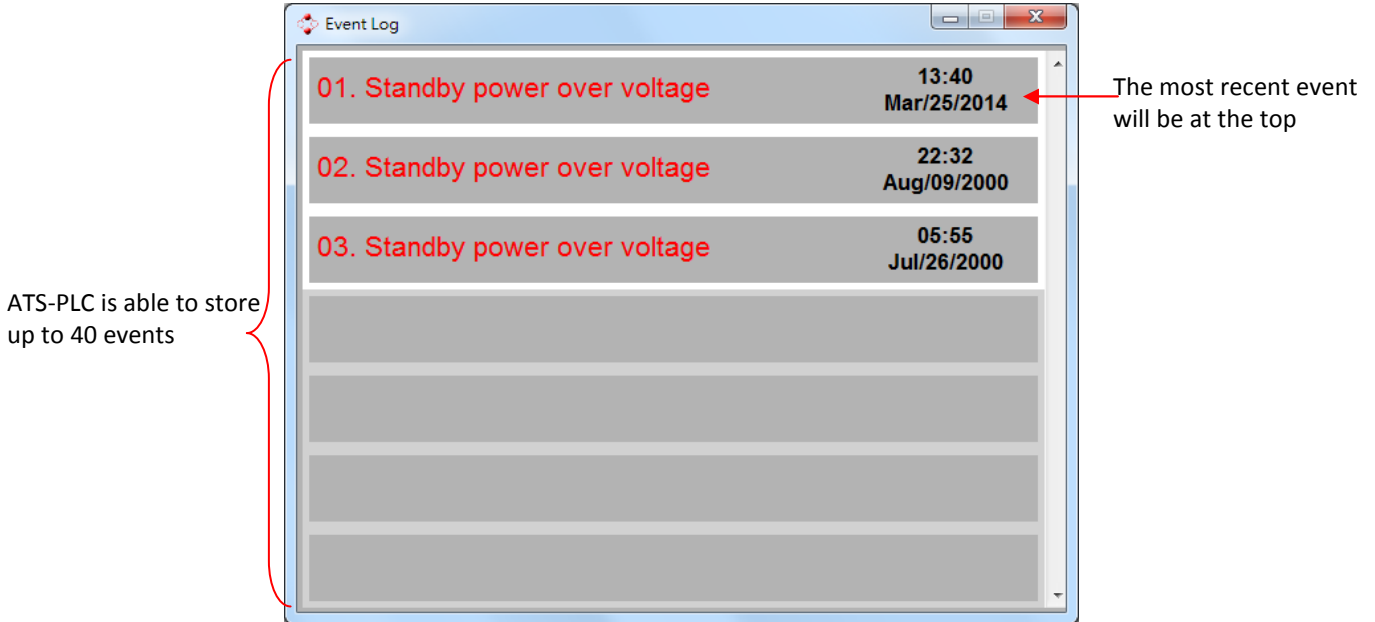
4.9.5 PROG Mode

To configure the system parameter, you must switch to **OFF Mode** before entering Program Mode (**PROG**). Fail to do so the **Edit** button will not display and you won't be able to change the settings.



4.9.6 EVENT LOG

When you click **EVENT LOG** button in OFF mode, it'll popup a history of events



4.9.7 Passcode Protection of System Parameter

Switch to OFF Mode and then click **PROG** button to enter Program Mode.

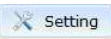

ATS-PLC provides the passcode protection to prevent unauthorized people to change system parameters. It will not affect the operation of the controller.

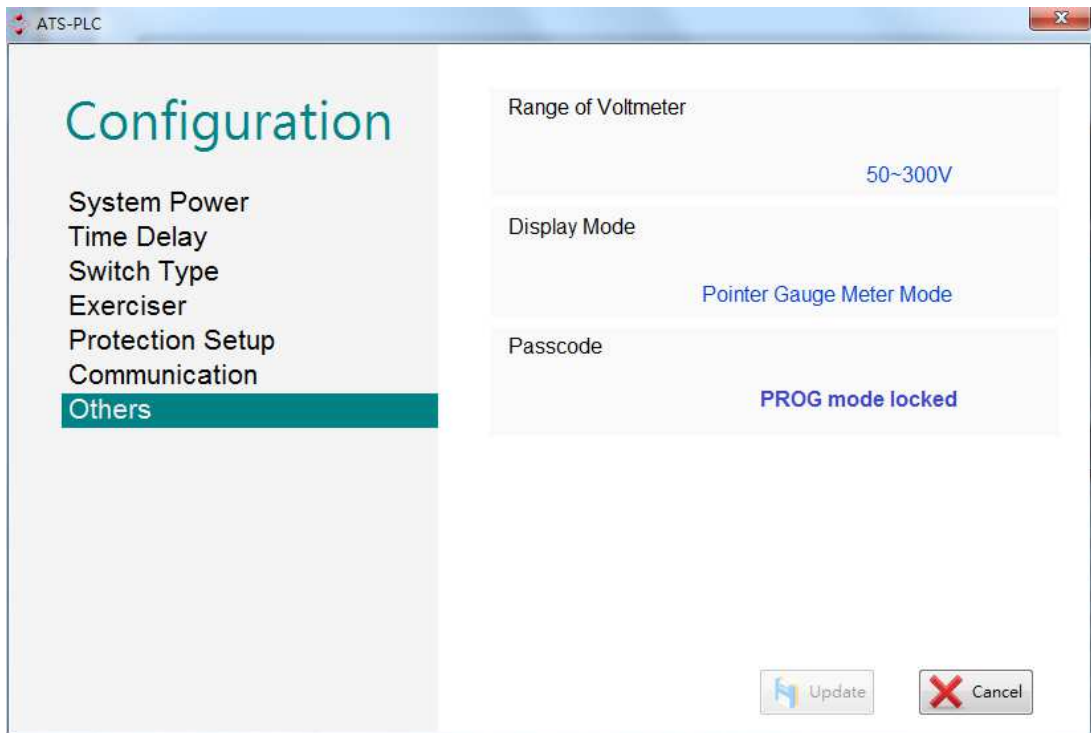
If you enable the passcode protection function, you're required to enter the passcode every time you wish to enter Program Mode to system parameters.

ATTENTION!

If you enter incorrect passcode 3 times, the Program Mode will be locked and you'll have to contact KUTAI for an unlock code.

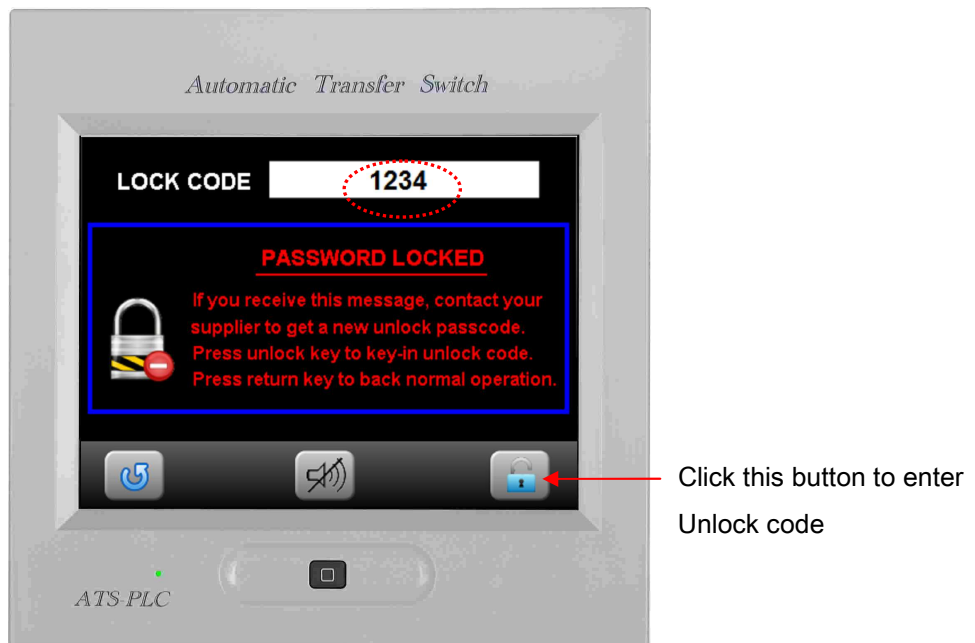
How do I know the PROG Mode is already locked?

1. Click  in ATS-PLC Operation Panel or click  to enter Program Mode.
2. Click “Others”. If it’s locked, the Passcode field will show “**PROG mode locked**”.



How to unlock PROG mode?

When the PROG mode is locked, it'll display an error message with a 4-digit Lock Code. Contact KUTAI about this lock code to get an unlock code.




Note: For the detail settings of the controller, please refer to ATS-PLC user manual.

4.10 GCU-100 Operation Panel


The screenshot shows the GCU-100 software interface. At the top, there is a title bar with 'GCU-100' and a window title 'Setting'. Below this, there is an 'Emergency Stop' button and a 'Link' field showing 'KCU-30'. The main area is divided into several sections:

- Configuration Parameter:** Points to the 'Setting' window title.
- Emergency Stop Button:** Points to the red button with a power symbol.
- KCU module used for connection:** Points to the 'Link' field.
- Connection status:** Points to the computer icon.
- Event Window:** Points to the 'Event' window on the right.
- AC Frequency:** Points to the '0.0 Hz' display.
- Controller Alarm status:** Points to the 'ALARM' section with various icons.
- Mode Selection Button:** Points to the 'AUTO', 'OFF', and 'MANU' buttons.
- Genset Status:** Points to the central 'Action' area.
- (Top) Maintenance Interval:** Points to the 'Maintain(H:m)' display.
- (Middle) Run Time:** Points to the 'Run Hr.(H:m)' display.
- (Bottom) Battery Voltage:** Points to the '0.0 VDC Battery' display.
- Voltmeter:** Points to the three voltage gauges (L1-L2, L2-L3, L3-L1).
- Ammeter:** Points to the three current gauges (R, S, T).


Operating Mode Selection Buttons



AUTO mode



OFF mode



Manual mode

Alarm Status LED Indicator :



High Temperature shutdown
(LED remains illuminated)

LED remains illuminated : Alarm active and engine shutdown
LED blinking: Warning ONLY. Engine will not shutdown

Note: For the detail settings of the controller, please refer to GCU-100 user manual.

4.11 GCU-3000 Operation Panel

Emergency Stop Button

KCU module used for connection

Configuration Parameter

Link: KCU-40

Connection status

GCU-3000

Controller Status

Event Window

Run Time

Maintenance Interval

Battery Voltage

Genset Status

Coolant Temperature Meter

AC Frequency

Oil Pressure Gauge

KVA Meter

Phase Voltage Meter

Ammeter

Line Voltage Meter

Operating Mode Selection Buttons



AUTO Mode

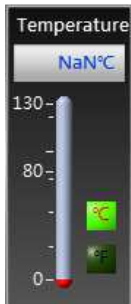


OFF Mode



Manual Mode

Engine Coolant Temperature °C or °F



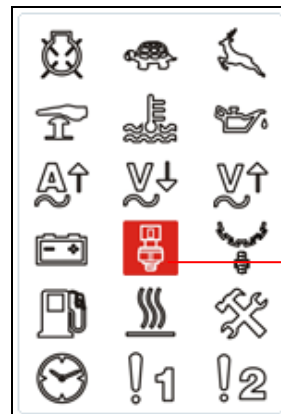
Oil pressure Reading psi or bar



Alarm Status LCD Indicator

LCD remain illuminated : Alarm active and engine shutdown

LCD blinking: Warning ONLY. Engine will not shutdown



Sensor Failed (LCD illuminates)

Note: For the detail settings of the controller, please refer to GCU-3000 user manual.

4.12 AMF-10 Operation Panel

Emergency Stop Button KCU module used for connection

Configuration Parameter Link: KCU-30 Connection status

AMF-10
AMF-10
KCU S/N:1859047858987
Login: Administrator

Event Window

Mode Button

Run Time

Service Time: 89:59 (Maintain(H:m)) 0:02 (Run Hr. (H:m))

Battery Voltage: 12.7 VDC

Genset Status

Source Selection button and LED indicator

Controller Status

Mains Source Voltage Frequency Meter

Gen Source Ammeter

Gen Source Voltage Frequency Meter

Operating Mode Selection Buttons

AUTO mode OFF mode Manual mode In TEST mode Engine Start Engine Stop

Connection Buttons and Status LEDs

Mains Source available

Mains Over Voltage

Mains Under Voltage

Mains Source Connection Status LED (Illuminates: connected)

Mains Source Connect button

Gen Source Connection Status LED (Not illuminated: Not connected)

Gen Source Connect button

Automatic Mains Failure Controller

Controller Status LEDs



Emergency Stop Shutdown
(LED remains illuminated)

LED remains illuminated : Alarm active and engine shutdown

LED blinking: Warning ONLY. Engine will not shutdown

Note: For the detail settings of the controller, please refer to AMF-10 user manual.