

SUMAKE[®]

Professional & Industrial

DAS II FOR SCT-C1 System Operation Manual



2024/05/03

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① User Guide

This manual describes how to quickly operate the “Data Acquisition System II” and get started with the controller.

Diverse and well rounded operation interface, simple and user-friendly design allows users to get quick understanding, and this system can simultaneously work with the controller under the brand, and has the functions of report and table printing, data analysis, trend graph, parameter setting, etc. It is very convenient for users.



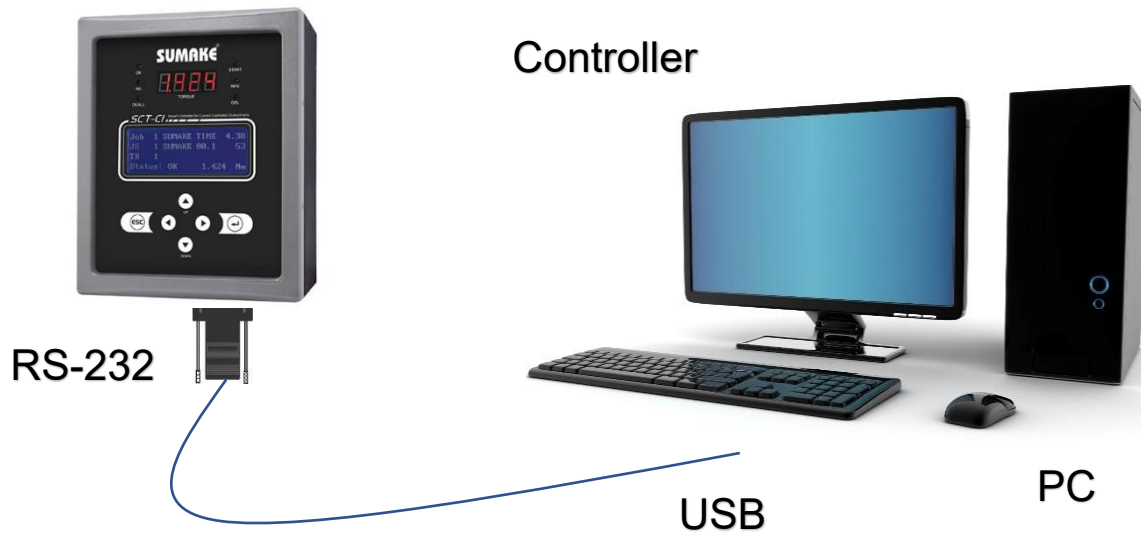
② System Requirements

- Windows 10 、 Windows 8 、 Windows 7 、 Windows XP or Windows Vista
- Hardware memory at least 768MB/2GBHz processor
- At least 2GB hard disk
- Recommended at least 16-bit color and 1024x768 screen resolution
- .NET Framework 4.0 or above must be installed

③ Hardware(Take RS-232 as an example)

Device connection as in the following diagram:

(Please refer to the controller manual for detailed connection method.)



④ Controller Preparation

(Take RS-232 as an example)

Step1: After connecting the power, press “Power On (I)”, the main screen of the controller will light up.

Step2: Press the ESC button for 3 seconds, then enter the page for verifying the password.

Step3: Input password 0000 · Press Enter “↵” to go to the next page.

NOTE: 0000 is the default password.

Step4: Output Select, please select the “RS-232”.

→Use the “up and down keys” to select “Control Setting” and press Enter “↵” to go to the next page.

→Use the “up and down keys” to select to find “Output Select” and press Enter “↵”. (At this time, the option flashes to indicate that other Output Selects can be selected.)

→Use the “up and down keys” to select “RS-232” and press Enter “↵” .
(At this time, the option does not show a blinking state, indicating that the setting is complete.)

Step5: Press the “ESC” key to return to the previous page until back to the main screen.

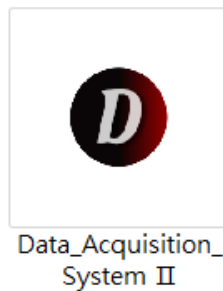
NOTE: This is RS-232 (flashing light indicates successful connection).



⑤ System Connection

Step 1: Before log in, it is required to set the date format in the computer system as “YYYY/MM/DD”.

Step 2: After downloading the compressed software, open the executable file, the company LOGO will appear first and then enter the system.



Step3: Move the mouse cursor to the brand LOGO and display the controller.



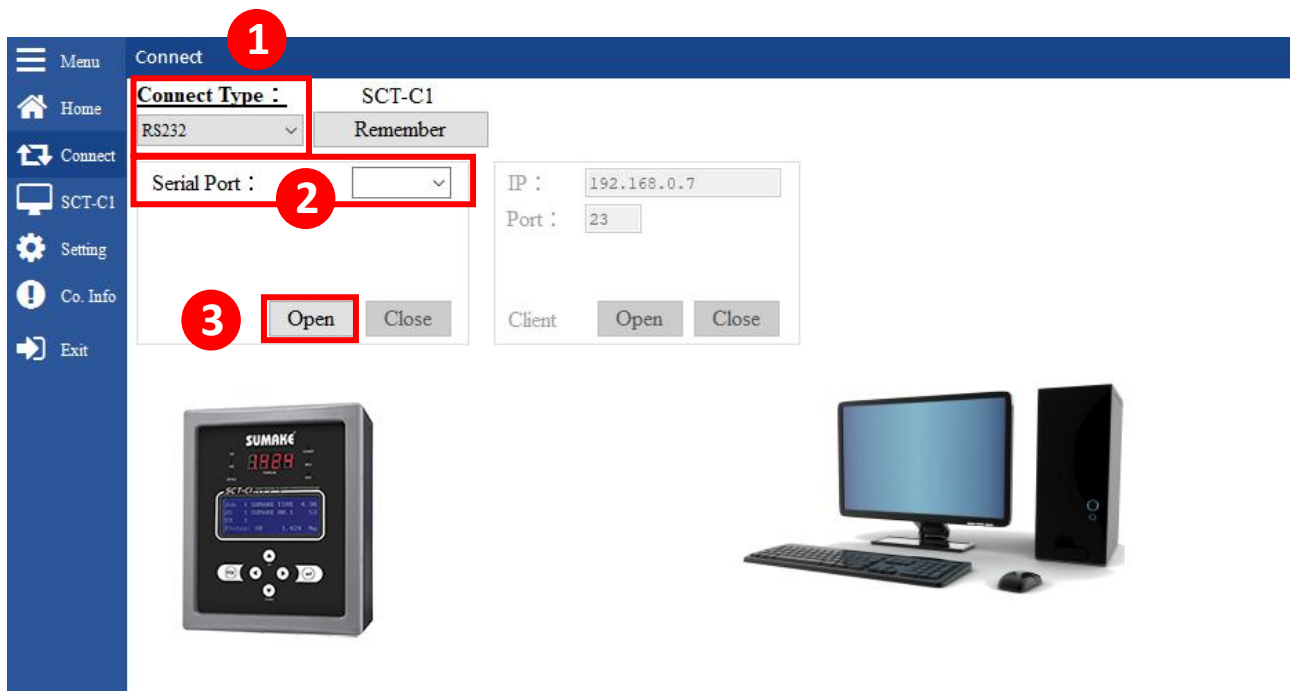
Step4: Enter the “Connect” page (take RS-232 as an example).

① Select Connect Type: RS232.

② Select Serial Port.

(Connect according to the port of the computer display device).

③ Click "Open" to enter Data Acquisition System II .



NOTE: If the connection type is selected as “Ethernet”.



1. Controller Setting:

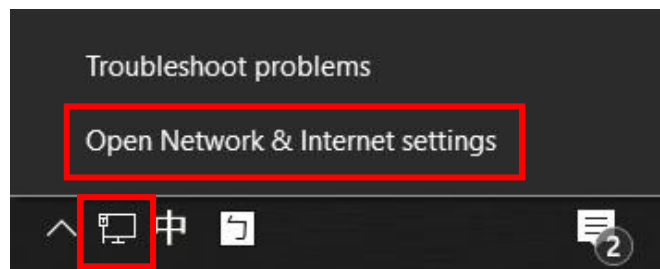
Step1: It is necessary to set the “Control Setting” of the controller to “Ethernet” at the first.(refer to [④ Controller Preparation](#) above in the text.)

Step2: In the main page of the controller, press the “up and down keys ↑ ↓” at the same time to view the tool (screw) speed/torque range and the controller version information. At this time, press the “down key ↓” twice to view the controller IP (the default is 192.168 .0.7, Based on the current IP).

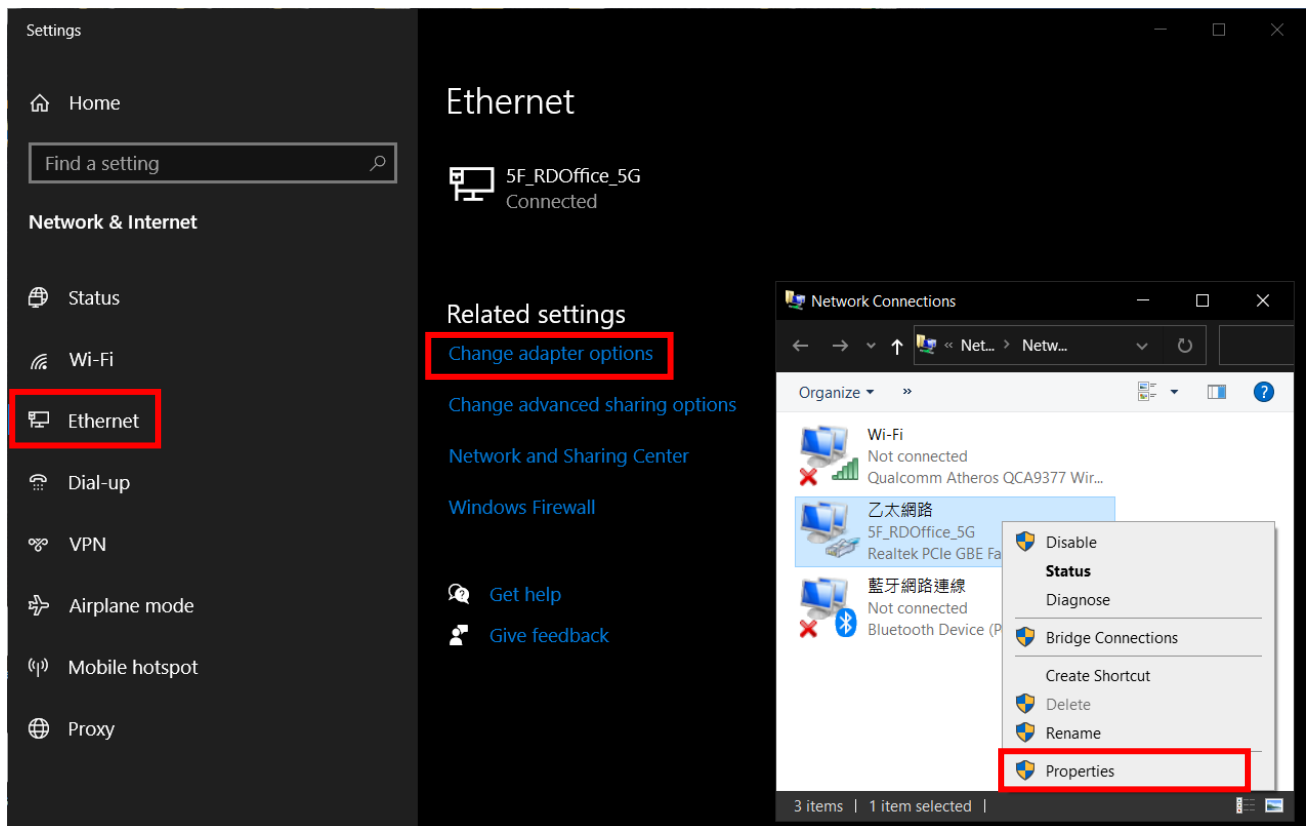
2. Set the static IP of the computer:

Enternet statuc IP of the controller: 192.168.0.7, therefor, it is necessary to change the computer IP to the same local area network first.

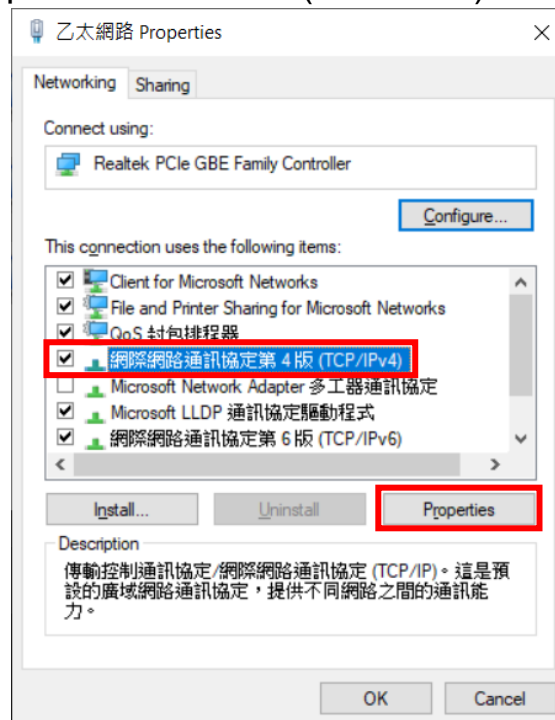
Step1: Click the network icon ( or ) →Click the mouse right button on “Open Network & Internet settings”.



Step2: Ethernet→Change adapter options→Network Connections, select "Ethernet" and click the mouse right button then click "Properties".



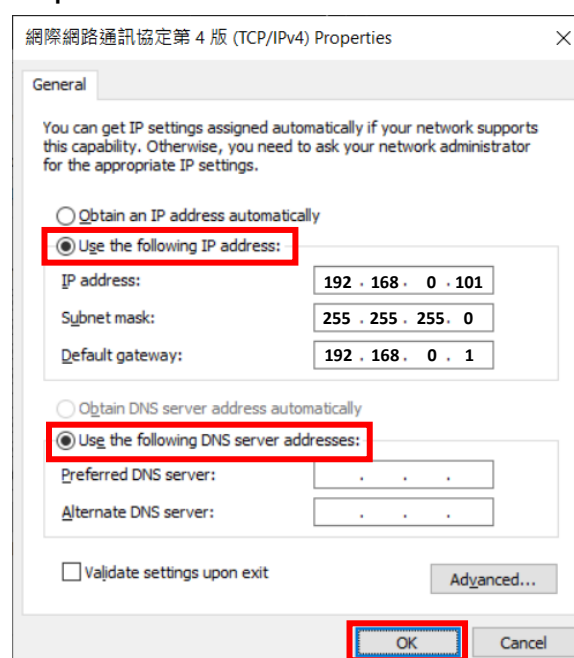
Step3: Select internet protocol version 4(TCP/IPv4) and click “Properties”.



Step4: Enter a static IP (Need to be in the same local area network 192.168.0.xxx) then click “OK”.

NOTE: If the computer is static IP, please confirm whether it is in the same local area network as the controller IP and there is no conflict, then there is no need to change the computer area network and IP location.

NOTE: Please do not connect to the network, including wireless networks, when modifying the computer IP.



3. Go to controller settings (the default IP is 192.168.0.7)

【Controller IP query】

On the main page of the controller, press the "up and down keys ↑ ↓" at the same time to enter the tool setting value state, At this time, press the "down key ↓" to view the controller IP (the default is 192.168.0.7, mainly based on the current IP).

Step1: Login to controller settings on browser.

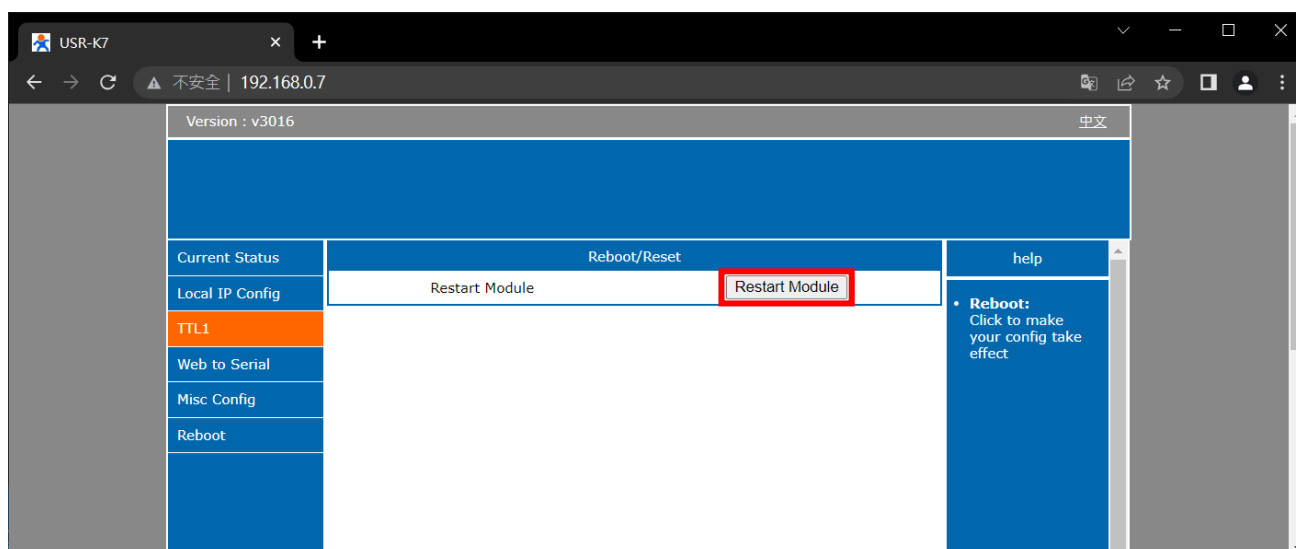
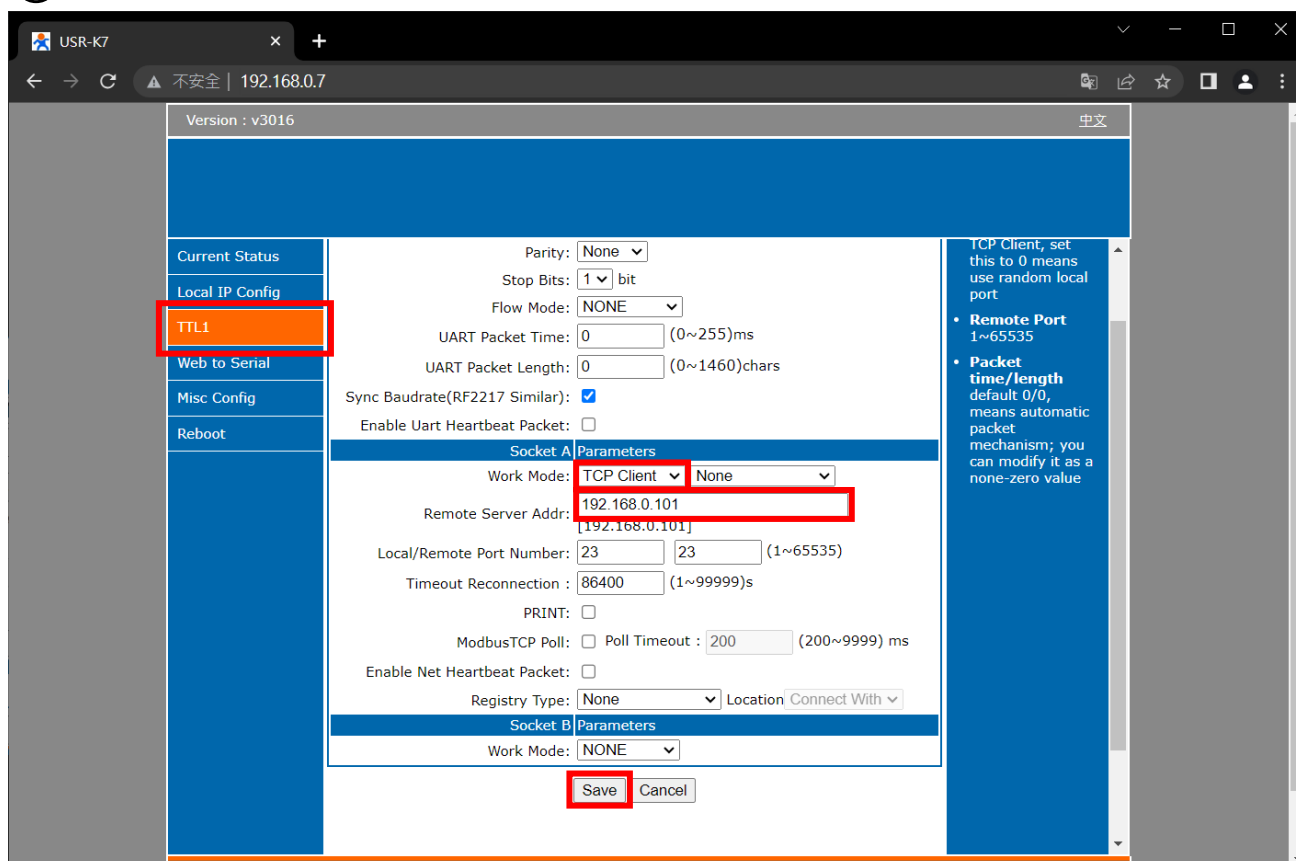
Username: admin

Password: admin



Step2: Modify controller settings

- ① Click "TTL1"
- ② Work Mode: "TCP Client"
- ③ Remote Server Address: "192.168.0.101" (Enter the IP of the computer.)
- ④ "Save"
- ⑤ "Restart Module"



4. The system connection page:

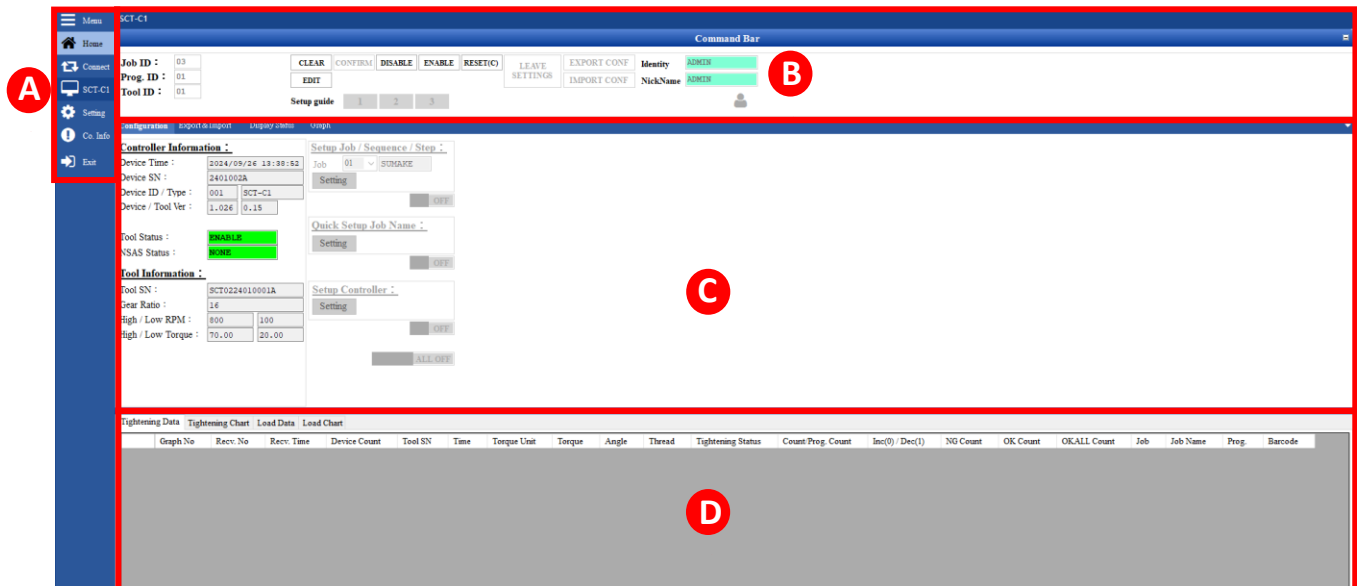
- ① Select Connect Type: "Ethernet".
- ② Input the controller IP (The picture below is the example.)
- ③ Click "Remember" to save the settings for this page.
- ④ Click "Open" to enter the system.

NOTE: If a connection failure message appears, please confirm the cable connection again and select the connection type again.

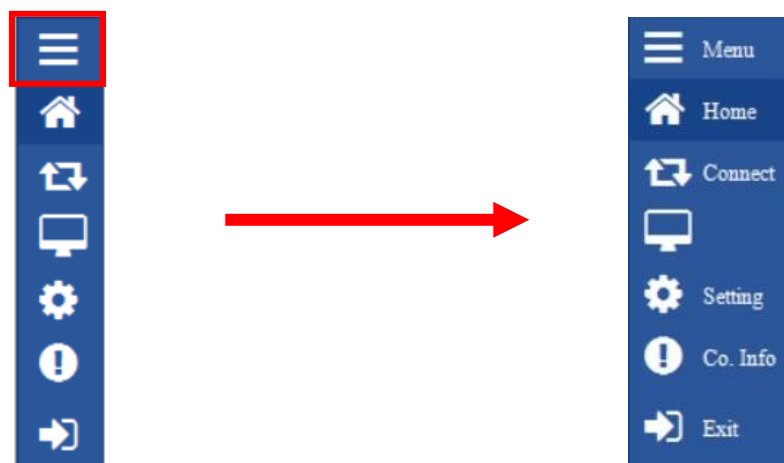


⑥ System Screen Introduction

Product setup page: divide the setup page into partitions and introduce them in order.



A Main menu: click to hide or display title.



B Command

Job ID :	03	CLEAR	CONFIRM	DISABLE	ENABLE	RESET(C)	LEAVE SETTINGS	EXPORT CONF	Identity	ADMIN
Prog. ID :	01	EDIT					IMPORT CONF	NickName	ADMIN	
Tool ID :	01	Setup guide 1 2 3 								

- Job ID: Display the current number of job (Job1 ~ 15) being used.
- Prog. ID: Display the current number of sequence (Sequence 1 ~ 15) being used.
- Tool ID: Display the current used tool's id. (Tool preset is 01)
- CLEAR: Clear the Tightening Repeat of a sequence.
- CONFIRM: (Reserved, no function temporarily.)
- DISABLE: Stop the screwdriver immediately.
- ENABLE: Allow the screwdriver to run immediately.
- RESET(C): Reset the controller and restore the factory parameters. After the reset is completed, a communication exception will appear. At this time, you need to return to the "Connect page".
- EDIT: Click "EDIT" before setting parameters.
- LEAVE SETTINGS: Click "LEAVE SETTINGS" after setting parameters.
- EXPORT CONF: Click "EDIT", then click "EXPORT CONF".
(file extension is ".CSV")
(Export the parameter settings of various functional items.)
- IMPORT CONF: Click "EDIT", then click "IMPORT CONF".
(file extension is ".CSV").
(Import the parameter settings of various functional items.)

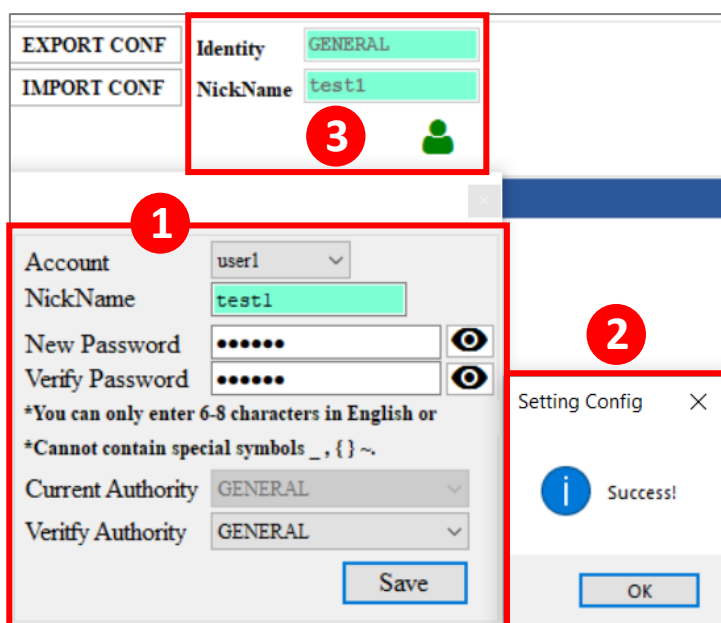
- Identity 、 Nickname : Click "EDIT" → "Character icon" → "Authority management" to log in or edit "Login Account" and "Login Password".

The image displays two screenshots of a web application interface. The left screenshot shows a user profile section with 'Identity' and 'NickName' fields, both containing the text 'ADMIN'. Below these fields is a red icon of a person, which is highlighted with a red rectangular box. The right screenshot shows the 'Authority management' login form. It includes three input fields: 'Login Identity' (empty), 'Login Account' (containing 'admin'), and 'Login Password' (containing masked characters '.....'). A red rectangular box highlights the 'Login' button, which is located below the password field. A 'Sign out' button is also visible to the right of the 'Login' button.

Input the preset Login Account: "admin"

Input the preset Login Password: "admin123"

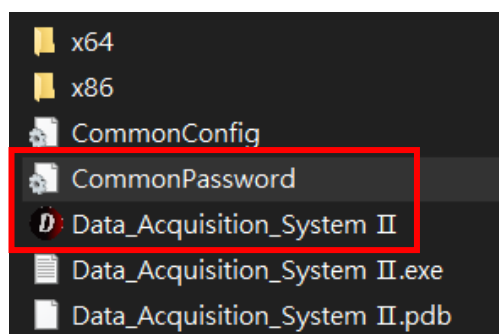
Click "Login". That is, the system administrator can log in with the highest authority and modify the NickName, New Password and Authority.



- Ⓐ Drop down option "Account" to modify "Nickname", "Password" and "Authority" , then click "Save".
- Ⓑ The successful setting window pop out, then click "OK".
- Ⓒ Change the settings automatically.

NOTE:

- ➔ To view the input password, click and hold the " 👁 " icon.
- ➔ The user1~user5 preset password is 0000.
- ➔ The highest authority "ADMIN" can read and write, "GENERAL" can read. "OPERATOR" can only read the tightening display status.
- ➔ Reset Default Password: Delete "CommonPassword" file in DAS folder.
Then restart "Data_Acquisition_System II .exe" to reset the default password.

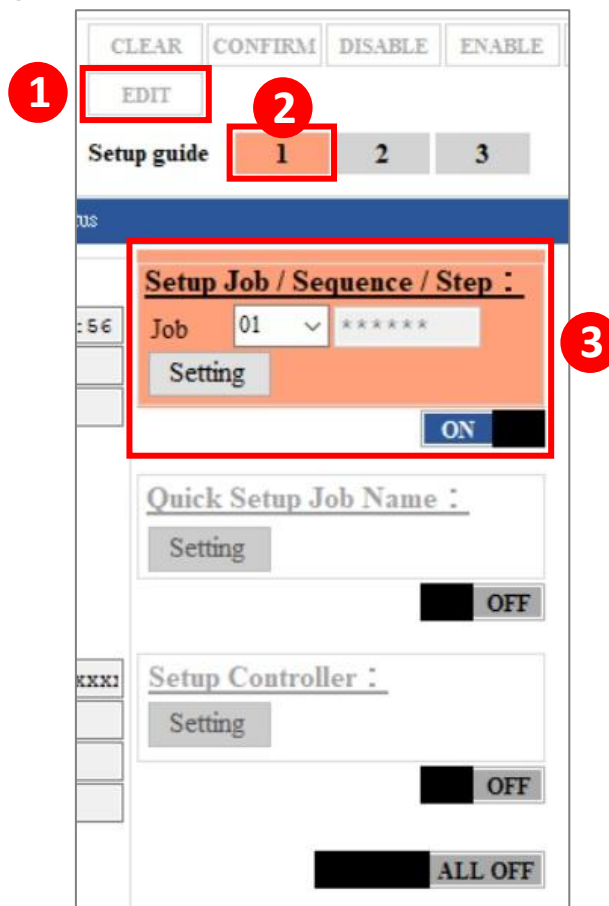


- Setup Job: Click “EDIT” to use “Setup guide” function.

➔ Click “Setup guide 1” will open the corresponding “Setup Job / Sequence / Step”.(as shown in the figure below.)

➔ Click “Setup guide 2” will open the corresponding “Quick Setup Job Name”.

➔ Click “Setup guide 3” will open the corresponding “Setup Controller”.



The screenshot shows the SUMAKE control interface. At the top, there are buttons: CLEAR, CONFIRM, DISABLE, and ENABLE. Below these is a row of buttons: EDIT (highlighted with a red box and a red circle with the number 1), and three buttons labeled 1, 2, and 3 (highlighted with red boxes and red circles with the numbers 1, 2, and 3 respectively). Below the EDIT button is a section titled "Setup guide" with three sub-buttons: 1, 2, and 3. The sub-button 1 is highlighted with a red box and a red circle with the number 1. Below the "Setup guide" section is a section titled "Setup Job / Sequence / Step :". This section contains a "Job" dropdown menu with "01" selected, a "Setting" button, and an "ON" button. The "ON" button is highlighted with a red box and a red circle with the number 3. Below the "Setup Job / Sequence / Step" section is a section titled "Quick Setup Job Name :". This section contains a "Setting" button and an "OFF" button. Below the "Quick Setup Job Name" section is a section titled "Setup Controller :". This section contains a "Setting" button and an "OFF" button. At the bottom of the "Setup Controller" section is an "ALL OFF" button.

NOTE: User may also click  or  to set parameters.



1. Configuration

Configuration	Export & Import	Display Status	Graph
Controller Information : Device Time : 2024/09/26 13:40:16 Device SN : 2401002A Device ID / Type : 001 SCT-C1 Device / Tool Ver : 1.026 0.15			Setup Job / Sequence / Step : Job 01 SUMAKE Setting
Tool Status : ENABLE NSAS Status : NONE			OFF
Tool Information : Tool SN : SCT0224010001A Gear Ratio : 16 High / Low RPM : 800 100 High / Low Torque : 70.00 20.00			Quick Setup Job Name : Setting OFF
			Setup Controller : Setting OFF ALL OFF

➤ Controller Information

- Device Time: Display the current time, when the controller is connected to the system, it will perform time calibration through the Internet.
- Device SN: Display the factory serial number of the controller.
- Device ID/Type: Display the controller number and controller product type.
- Device / Tool Ver: Display the controller and tool(screwdriver) version.
- Tool Status: Display the tool connection status.
- NSAS Status: (please refer to the controller manual).

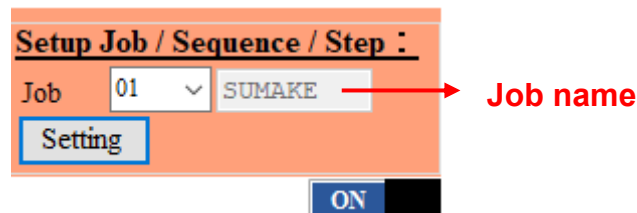
➤ Tool Information

- Tool SN: Display the factory serial number of the Tool(screwdriver).

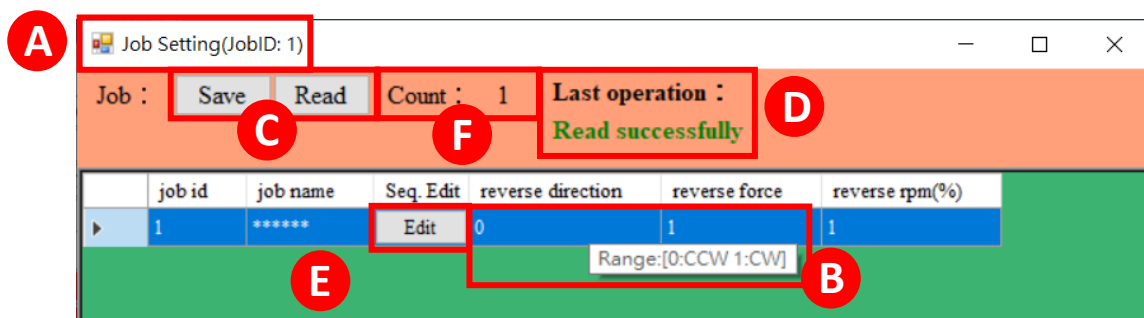
- Gear Ratio: (please refer to the controller manual).
- High / Low RPM: (please refer to the controller manual).
- High / Low Torque: (please refer to the controller manual).

➤ Setup Job / Sequence / Setup

Step1: Pull down to select the number of “JOB” you want to set → click “EDIT” to enter the setting parameters.



Step2: Job Setting: Parameter setting items are as shown in the figure below.



NOTE: Please refer to the “Controller Manual” for the description of each condition.

- A** The title bar of the window will display the current job, as shown in the figure above as “Job Setting(JobID: 1)”
- B** Move the mouse to the input parameter field and the setting parameter range value will appear (each parameter setting has this function).
- C** After the parameter setting is completed, press “Save”,
- D** If the operation is successful, it will finally display “**Saved successfully**”.
If the save fails, it will displays “**Save failed**”, please adjust the parameter value and save again.
Press “Read”, it will displays “**Read successfully**” to check whether the parameters are stored successfully.



(、 、 、 Each page of parameter settings has these functions.)

E Press Edit to enter “Seq. Edit”.

F Count: Display the number of table rows.

Step3: Sequence Setting: The parameter setting items are as shown in the figure below.

NOTE: Please refer to the “Controller Operation Manual” for the description of each condition.

Show only running: Sequences whose Tightening Repeat is not 0 will be executed.

seq_id	seq_name	Step.Edit	Tightening Repeat	Joint Type	Torque Unit	NG Stop	OKALL Stop	OK Alarm Time	OKALL Alarm Time	K Value	Offset
1	*****	Edit	0	0	0	0	0	0.0	0.0	+000	+000
2	*****	Edit	0	0	0	0	0	0.0	0.0	+000	+000
3	*****	Edit	0	0	0	0	0	0.0	0.0	+000	+000
4	*****	Edit	0	0	0	0	0	0.0	0.0	+000	+000
5	*****	Edit	0	0	0	0	0	0.0	0.0	+000	+000

Step 4: Step Setting: The parameter setting items are as shown in the figure below.

NOTE: Please refer to the “Controller Operation Manual” for the description of each condition.

+ **-** : Steps can be added and deleted.

step id	target option	rpm	target angle	target torque	direction	delay time	high angle	low angle	high torque	low torque	threshold enable	threshold torque	downshift torque	downshift rpm
1	2	100	30	000.0100	1	0.0	9999	0	350.0000	000.0000	0	000.0000	000.0000	0

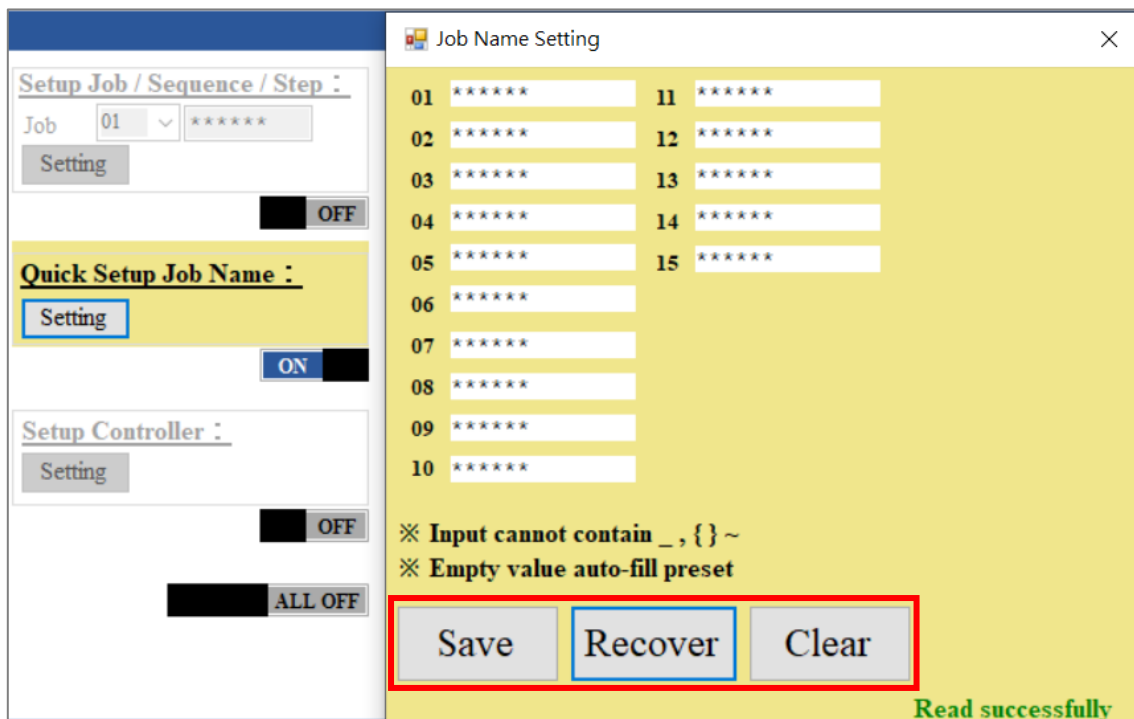
NOTE:

➔ When setting parameters, please follow the format of the setting range. For example: The maximum torque range is 000.0000-999.9999, please input

“three digits to the left of the decimal point and the four digits to the right of the decimal point”.

(Please refer to the torque range of the screwdriver for the target torque.)

- ➔ Threshold enable is turned on (when set to 1), only one step can be used (other steps cannot be added).
- ➔ When Threshold enable is turned on, please set the fastensing target to torque, not to target angle.
- ➔ To close the window, press “ESC” on the keyboard.
- Job Name Setting: Job Name can be set, please refer to the system prompt for input conditions.
 - Save: When setting is completed then click “Save”.
 - Recover: If the value is entered and has not been saved, the original setting of the previous step can be restored.
 - Clear: To clear all of the Job Name.



Setup Job / Sequence / Step :

Job 01 *****

Setting

OFF

Quick Setup Job Name :

Setting

ON

Setup Controller :

Setting

OFF

ALL OFF

01	*****	11	*****
02	*****	12	*****
03	*****	13	*****
04	*****	14	*****
05	*****	15	*****
06	*****		
07	*****		
08	*****		
09	*****		
10	*****		

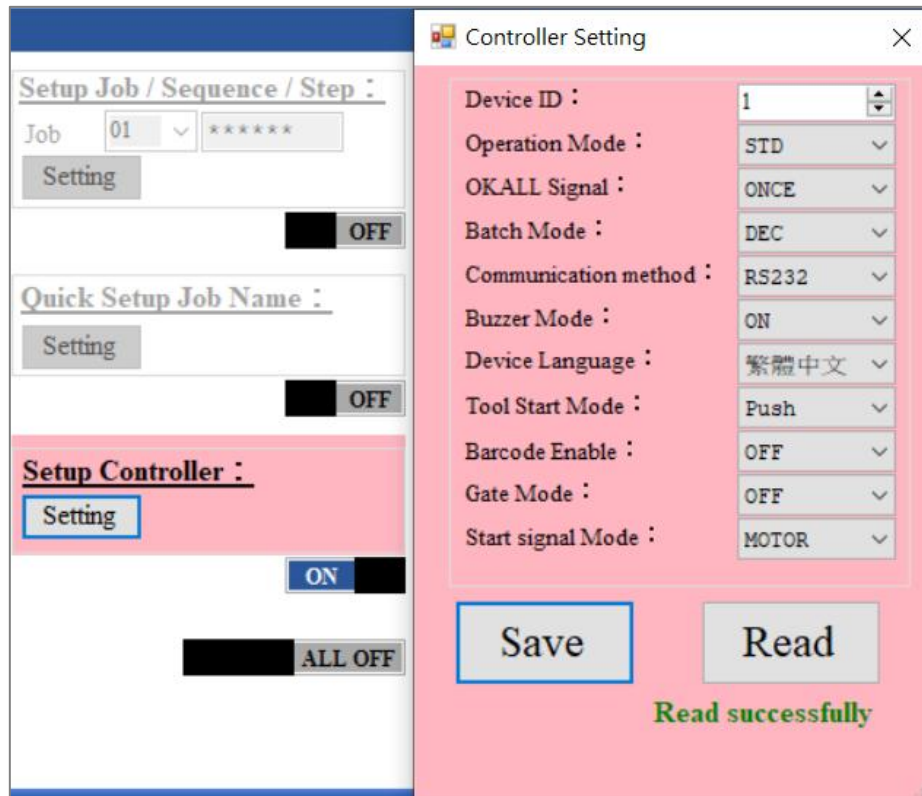
※ Input cannot contain _ , { } ~

※ Empty value auto-fill preset

Save Recover Clear

Read successfully

- Controller Setting: (please refer to the controller manual).



Controller Setting

Setup Job / Sequence / Step :

Job: 01 *****

Setting

OFF

Quick Setup Job Name :

Setting

OFF

Setup Controller :

Setting

ON

ALL OFF

Device ID : 1

Operation Mode : STD

OKALL Signal : ONCE

Batch Mode : DEC

Communication method : RS232

Buzzer Mode : ON

Device Language : 繁體中文

Tool Start Mode : Push

Barcode Enable : OFF

Gate Mode : OFF

Start signal Mode : MOTOR

Save **Read**

Read successfully

2. Export & Import

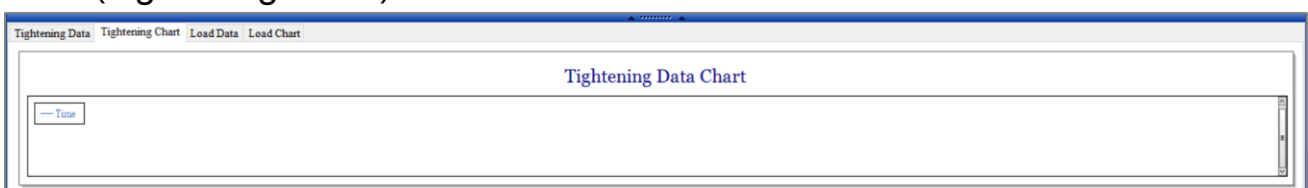
➤ Tightening Data List(Tightening Data 、 Tightening Chart):

- The data forms are “Data” and “Chert“. After clicking any of them, the log bar at the bottom of the screen will display the corresponding data form.
- Clear: Click ”Clear” to clear fastening data in the log bar.

Data(Tightening Data):

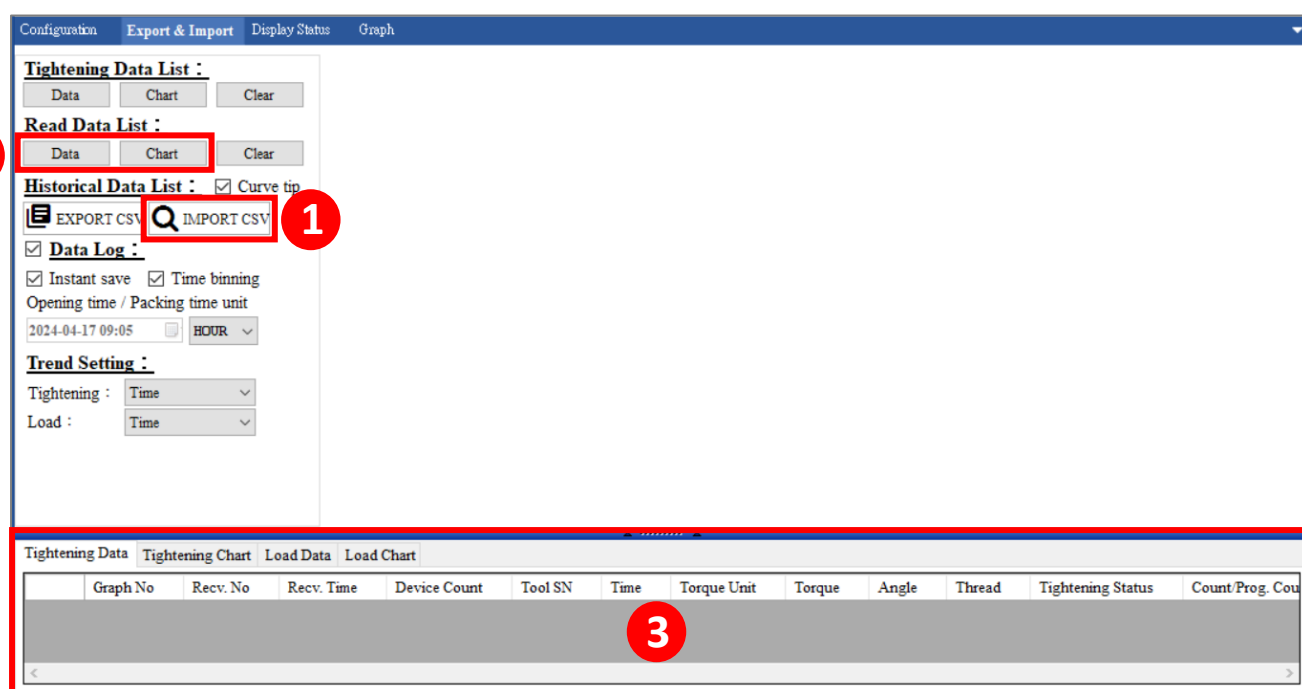
Recv. No	Recv. Time	Device Count	Tool SN	Time	Torque Unit	Torque	Angle	Thread	Tightening Status	Count/Prog. Count	Inc(0) / Dec(1)	NG Count	OK Count	OKALL Count	Job

Chert(Tightening Chart):



➤ Read Data List (Load Data 、 Load Chart):

- ① Click "IMPORT CSV".
- ② User may choose to display the fastening data as "Data (Load Data)" or "Chart (Load Chart)"
- ③ The log bar at the bottom will display the corresponding data form.



➤ Historical Data List:

EXPORT CSV: Export the Excel report to the specified location.

IMPORT CSV: Import Excel (file name needs to be .csv).

☒ Curve tip: When checked, it will remind you to import the curve graph.

Example: Check ☒ "Curve tip" → "IMPORT CSV", and select from the **Fasten Data** folder. After importing the data, you will be prompted whether to import the graph. Then select the **Graph Data** folder to import the data.

NOTE: Fasten Data 、 Graph Data The folder is automatically generated after tightening, and the folder location is at the same level as the system execution file.

NOTE: .csv File naming rules

Fasten Data: Controller Name_System Language_AD Year, Month, Day_Hour (time).csv

Graph Data: Controller name_Graph_AD year month day_hour (time).csv

➤ Data Log:

When Data Log ☒ is checked, there are “Instant save” and “Time binning” in the automatically exported Excel report.

- Instant save: Any fastening data will be in the same .CSV file and will be automatically exported to the “Fasten data” folder.
- Time binning: The fastening data will be recorded in units of “HOUR” (one .CSV file per hour) or “DAY” (one .CSV file per day) and the report will be exported to the “Fasten data” folder.
- Opening save: Display the time when the system is turned on this time (YYYY-MM-DD hh-mm).
- Packing time unit: Select “HOUR” or “DAY” and it will automatically export to Excel (.CSV).

➤ Trend Setting:

Time, Torque, Angle can be selected from the drop-down menu and displayed according to the selected conditions.

3. Display Status

Job / Seq.	
Job ID/Name	Seq. ID
Job01/SUMAKE	Seq01
Job02/*****	Seq02
Job03/*****	Seq03
Job04/*****	Seq04
Job05/*****	Seq05
Job06/*****	Seq06
Job07/*****	Seq07
Job08/*****	Seq08
Job09/*****	Seq09
Job10/*****	Seq10
Job11/*****	Seq11
Job12/*****	Seq12
Job13/*****	Seq13
Job14/*****	Seq14
Job15/*****	Seq15

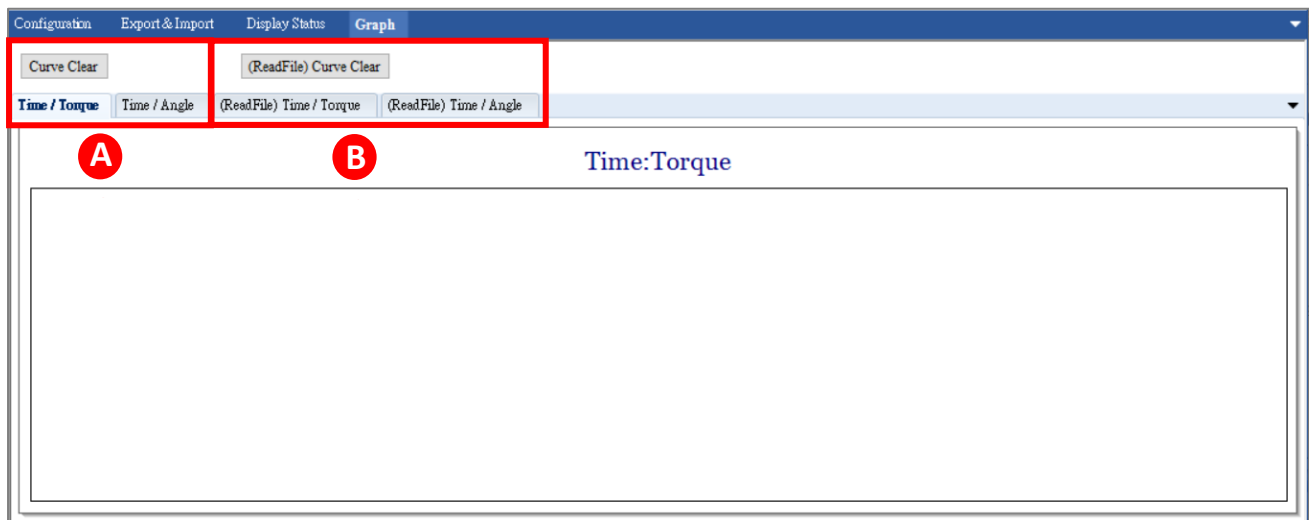
- Fastening Status: Display current complete status of fasten process (OK、NG、OKALL).
- OK Count: Display the cumulative number of OK counts.
- NG Count: Display the cumulative number of NG counts.
- OKALL Count: Display the cumulative number of OKALL counts.
- Screw Count: Display current screw fastening status.
- Torque: Display fastening torque.
- Angle: Display fastening angle.
- Time: Display screw fastening time.
- Barcode: Display the barcode number scanned by the barcode scanner.
- Job: Display the current Job.
- Seq.: Display the current Seq.

NOTE: The job list (Job ID/Name, Seq. ID) is on the right side of the screen, and the execution sequence can be specified.

Example: Click “Job03/*****, Seq02” in the right job list, the selected sequence will be displayed on the left Job, Seq.

Job / Seq.	
Job ID/Name	Seq. ID
Job01/*****	Seq01
Job02/*****	Seq02
Job03/*****	Seq03
Job04/*****	Seq04
Job05/*****	Seq05
Job06/*****	Seq06
Job07/*****	Seq07

4. Graph



Ⓐ

Time/Torque: Show instant tightening curve graph.

Time/Angle: Show instant tightening curve graph.

Curve Clear: Clear the instant curve graph, which had been displayed.


Ⓑ

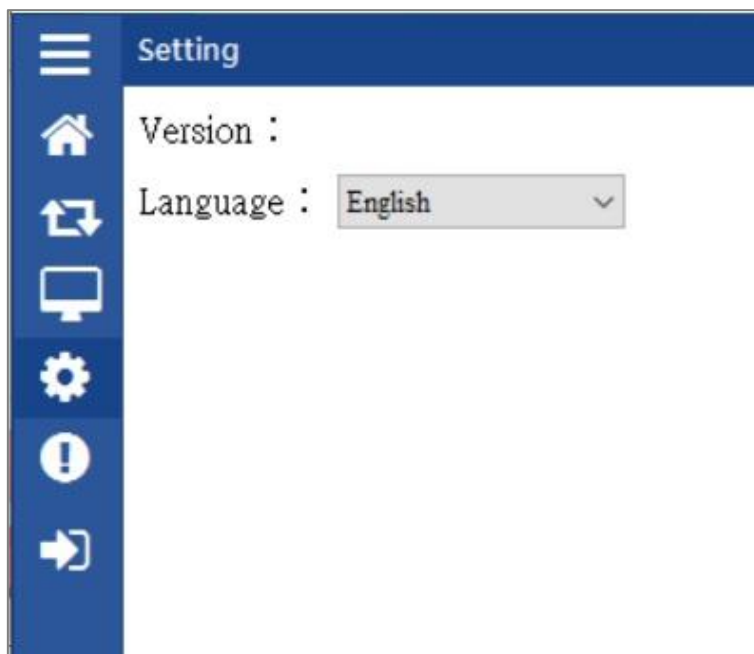
(ReadFile)Time/Torque: Displays the imported tightening curve graph.

(ReadFile)Time/Angle: Displays the imported tightening curve graph.

(ReadFile)Curve Clear: Clear the imported tightening curve graph.

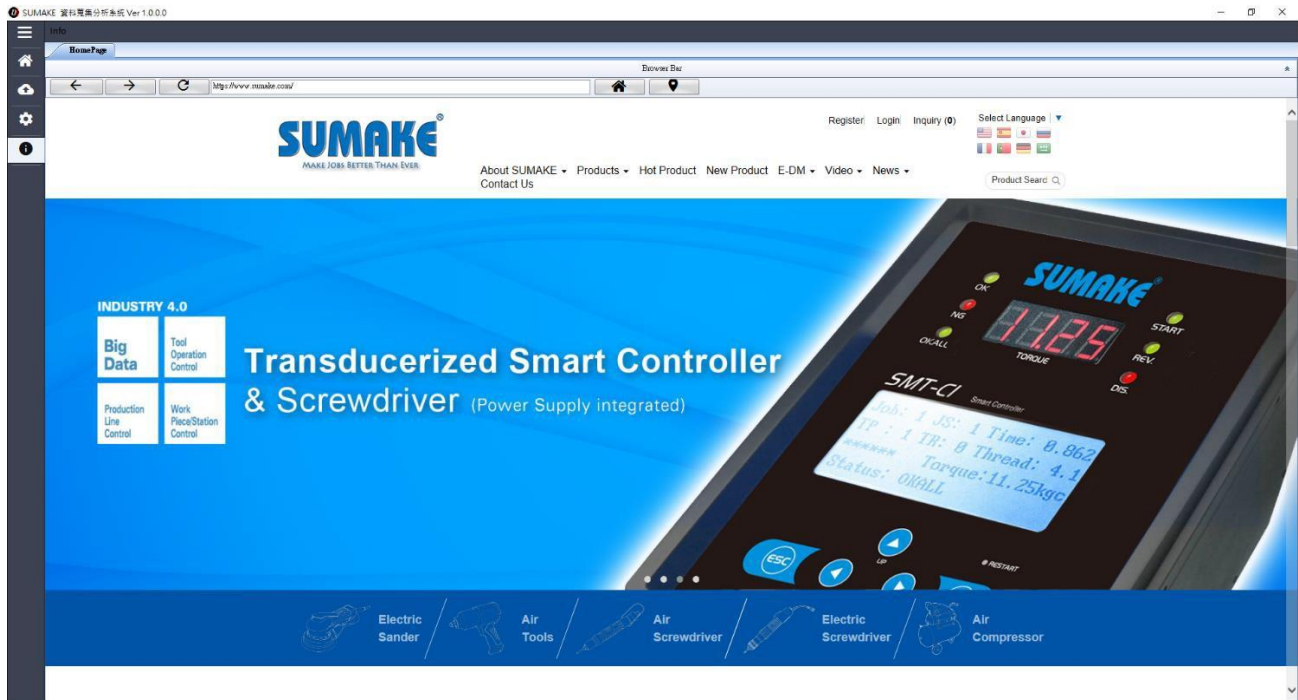
⑦ Setting

Switch to the  Setting page to set other languages.




⑧ Co. Info

Switch to the  Co. info to browse the company's official website.



⑨ Exit

Click the  Exit icon on the left menu, and a message on whether to exit the system will pop up.

⑩ Statement

Reminder again, please follow the relevant regulations and the international practice of the Internet. Never do anything illegal or harm to the company in any illegal way. You may not use this service to engage in violations of other's rights or illegal activities: Please acknowledge you have ownership for all your photos and texts. Do not post or transmit any files that are defamatory, insulting, threatening, offensive, indecent, defamatory, false, in violation of public order or good customs or other unlawful words, pictures or files in any form, nor infringe on the reputation or privacy of others, business secrets, trademarks, copyrights, patents, other intellectual property rights and other rights, and other acts that are deemed improper.