



N-DAS FOR KL-TCG System Operation Manual



Y2F210-9-009
2022/01/26



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① User Guide

This manual describes how to quickly operate the “Data Acquisition System” and get started with the KL-TCG 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 four controllers under the **Kilews** 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

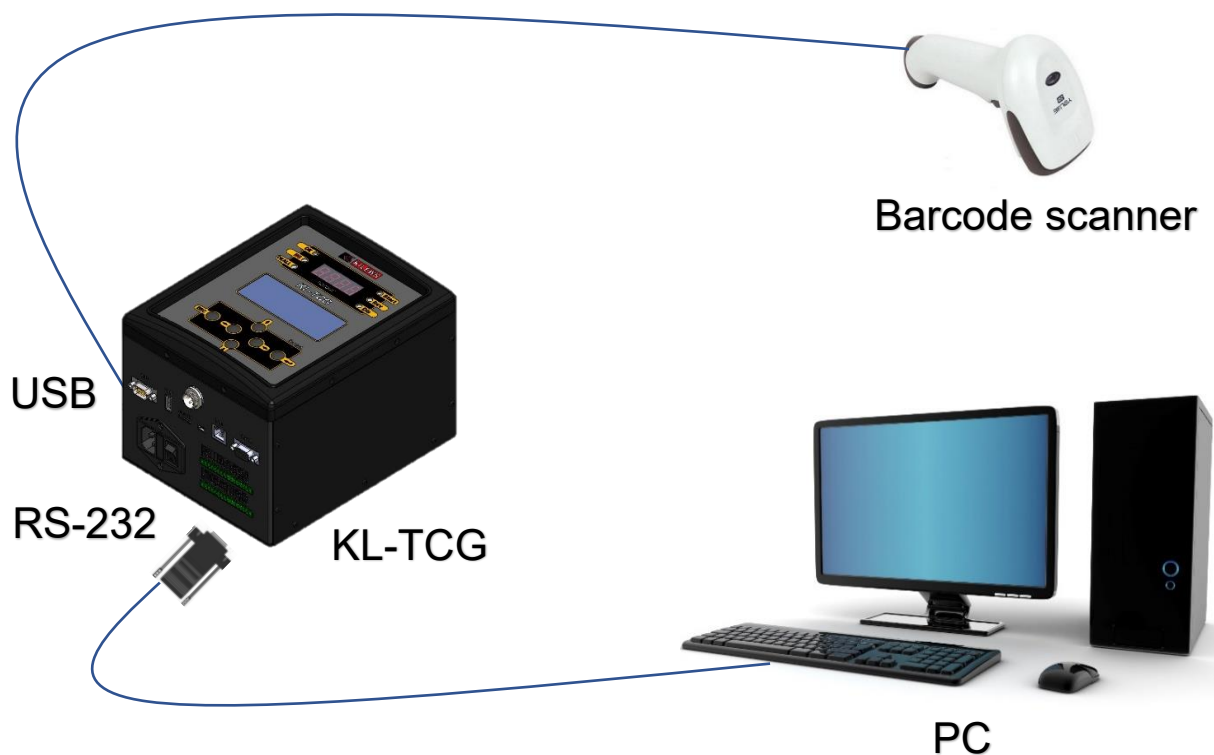


③ Hardware

1. The following must be prepared before operating this system:

- **Kilews** brand controller
(KL-CTDS, KL-MCTDS5, KL-WSCBSN, KL-TCG).
- Executable file for the operating
 Data_Acquisition_System.exe.
- One RS-232 serial port.
- One 1D(Linear) barcode scanner (*not necessary).

2. Device connection as in the following diagram:





④ Controller Preparation

Step 1: Turn ON power (I)



```
Job: 1 JS: 1 Time: 0.000
TP : 1 TR: 1 Thread: 0.0
***** 0.00 / 0.00kgc
Status:
```

Step 2: Press the ESC button for 3 seconds, enter the password
(Input Password) 0000 and press Enter to go into setup.

NOTE: 0000 as default password.

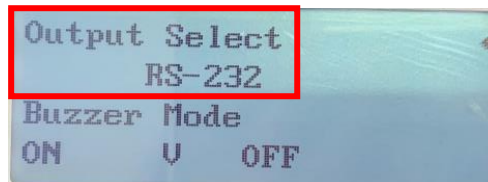
```
Input Password
0000 0 0
Left/Right:Select Number
Down(DEC)/Up(INC)
```

Step 3: Press the down arrow key (↓) to find the Control Setting and then press Enter.

```
Control Setting
Step Setting
Screw Setting
Extra function
```



Step 4: Find Output Select and then press Enter. Use the up and down arrow keys(↑ ↓) to select the RS-232 setting, and then press Enter to exit the network settings, and then press ESC to return to the previous page to complete the setup.



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





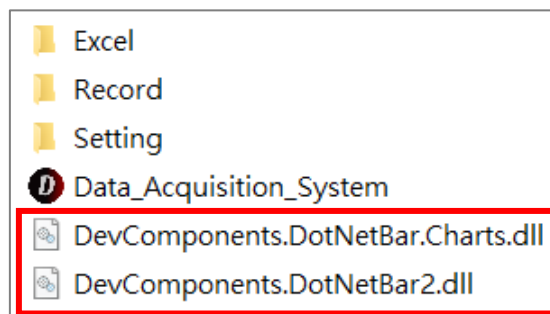
⑤ System Connection

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

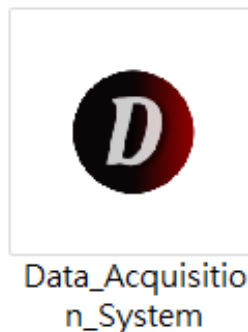
Step 2: Download the compressed software

NOTE:

For the version: 1.0.0.6 and later on, there must have 2 additional dll files in the folder(shown as below picture) after you decompressed the software. These are required files to run the software.

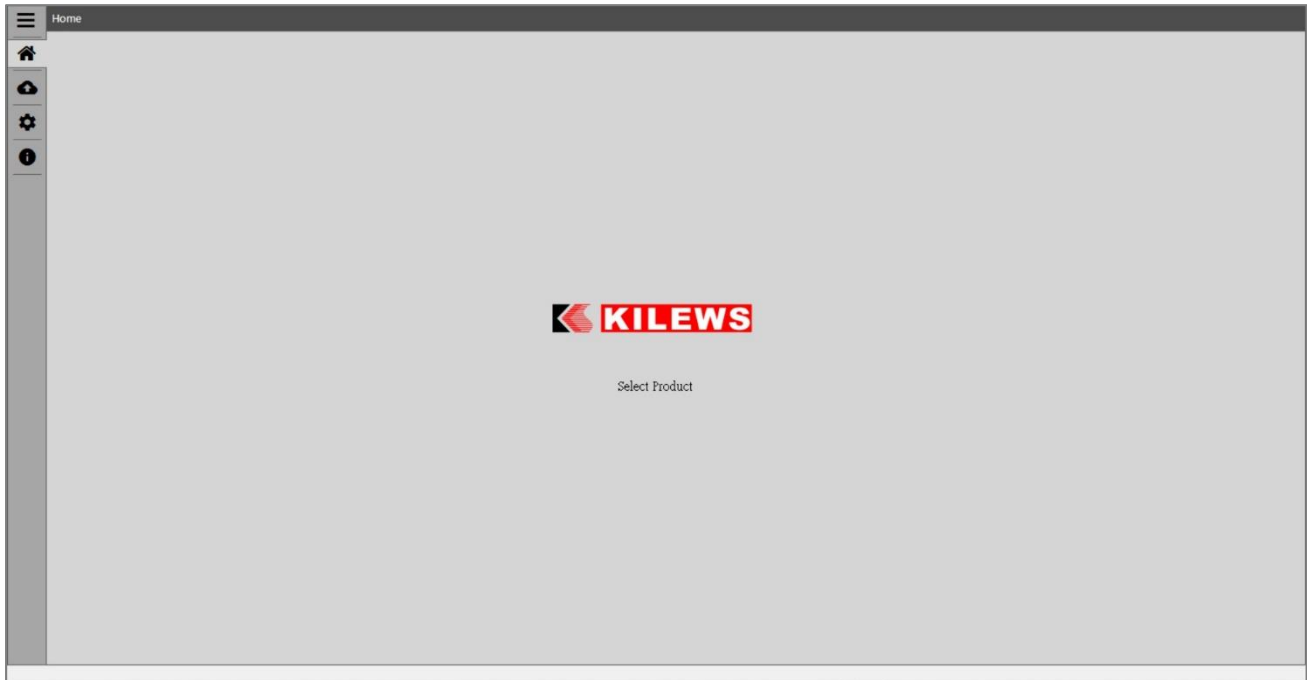


Step 3: Open the executable file  Data_Acquisition_System.exe.





Step 4: Move the mouse cursor to  and display the four controllers.

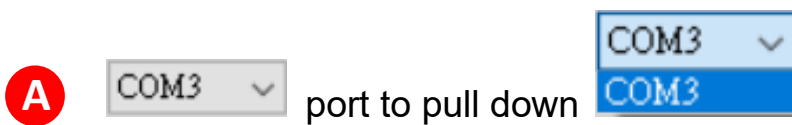
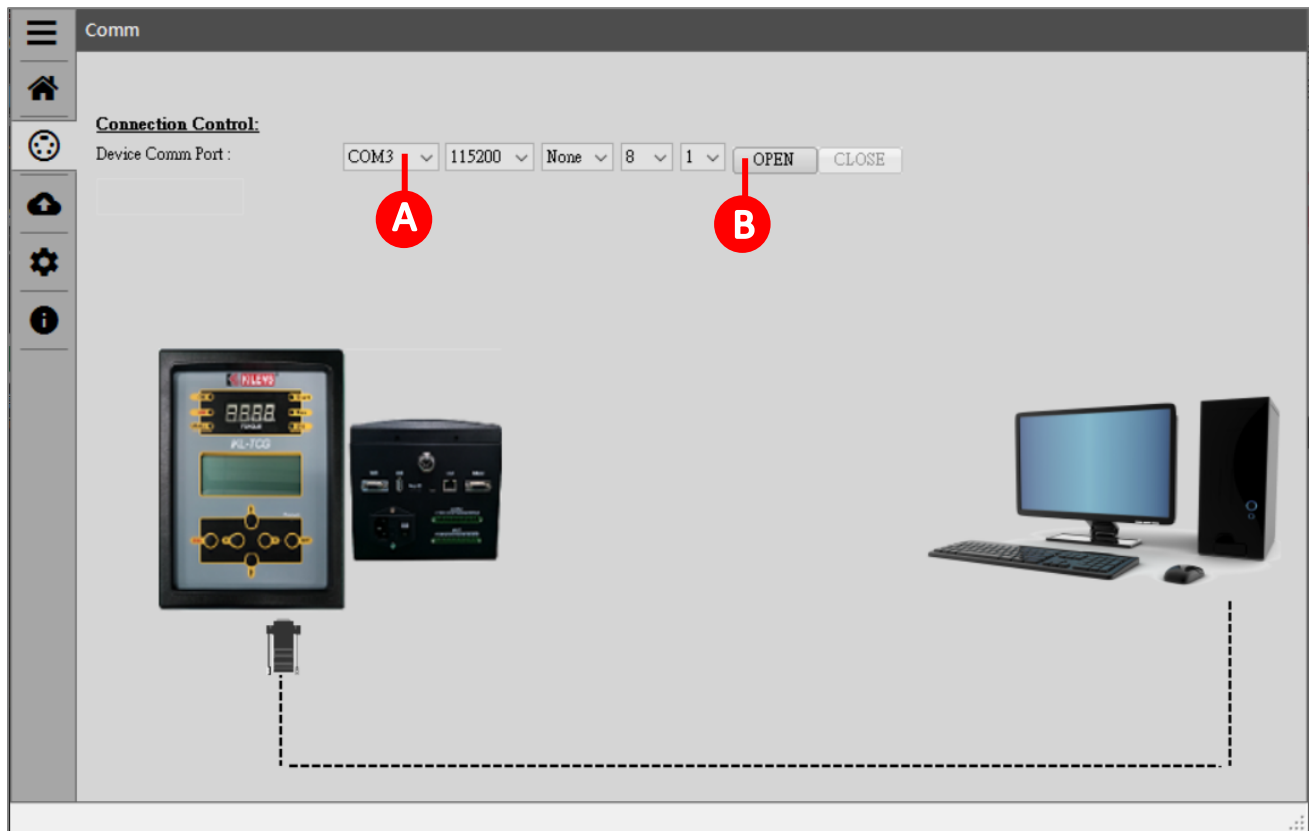


Step 5:  Controller selection (KL-TCG).

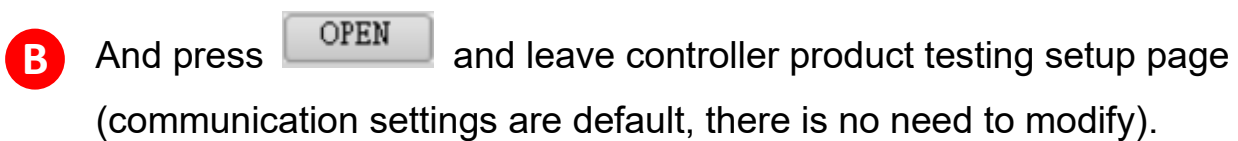




Step 6: Go to  Comm page.



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





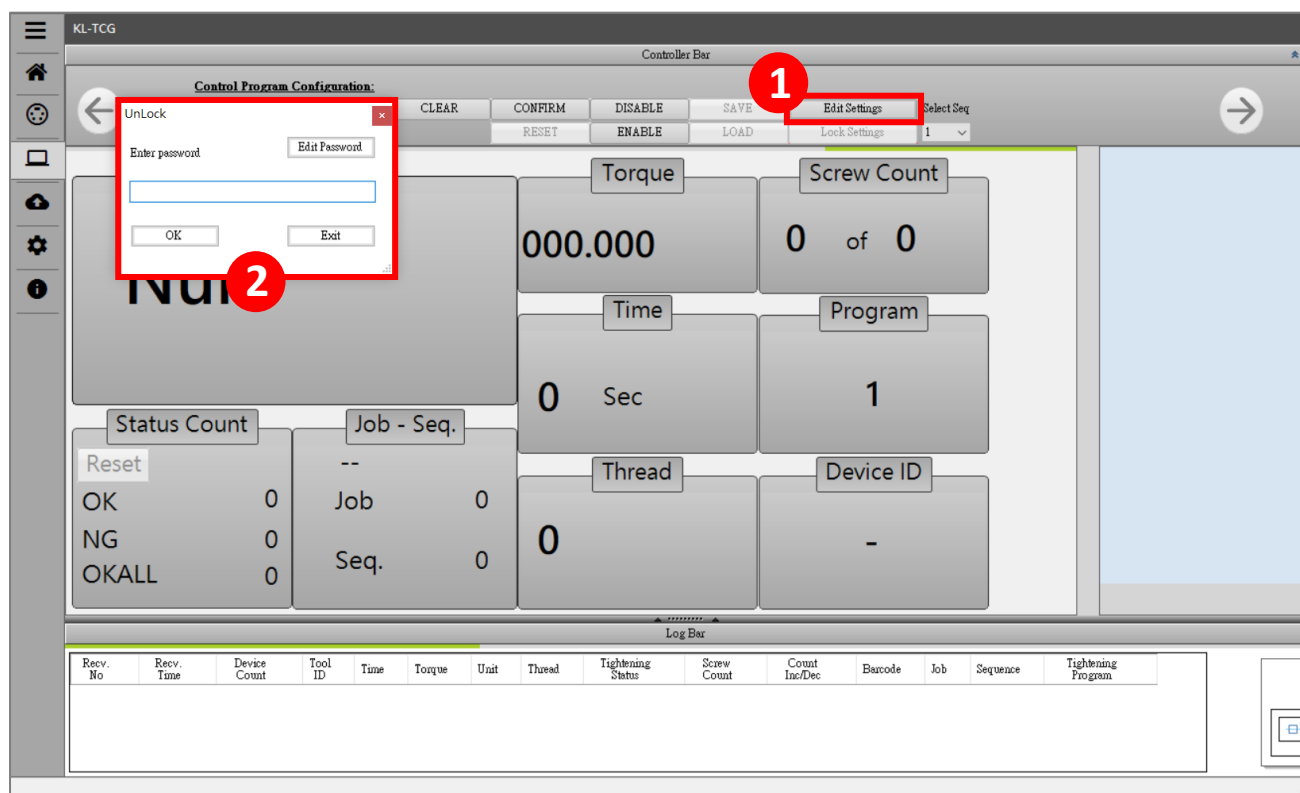
⑥ System Screen Introduction

➤ Unlock Settings

The page displayed is Instant data display after entering the screen. At this time, no operation can be performed due to locked setting. You must enter the password first if need to unlock for operation.

Step 1: After clicking the button of "Edit Settings", the unlock window will pop up.

Step 2: Enter the default password "admin123" and click confirm button.

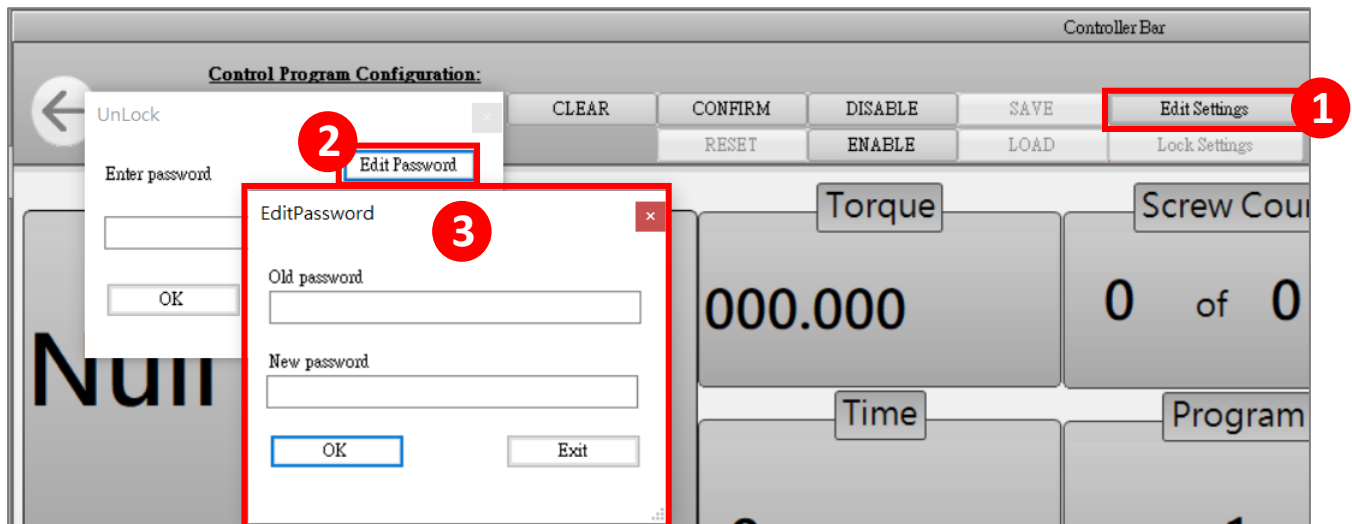




➤ Password change setting method

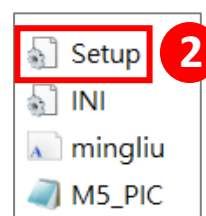
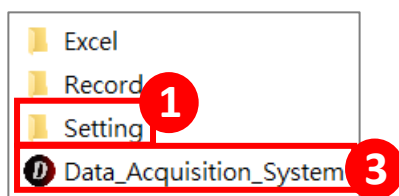
Click "Edit Settings" button → "Edit Password" to enter the old password and the new password, and then click OK button to complete the setting.

NOTE: New password setting: Six to eight characters in length, including English uppercase and lowercase, numbers.



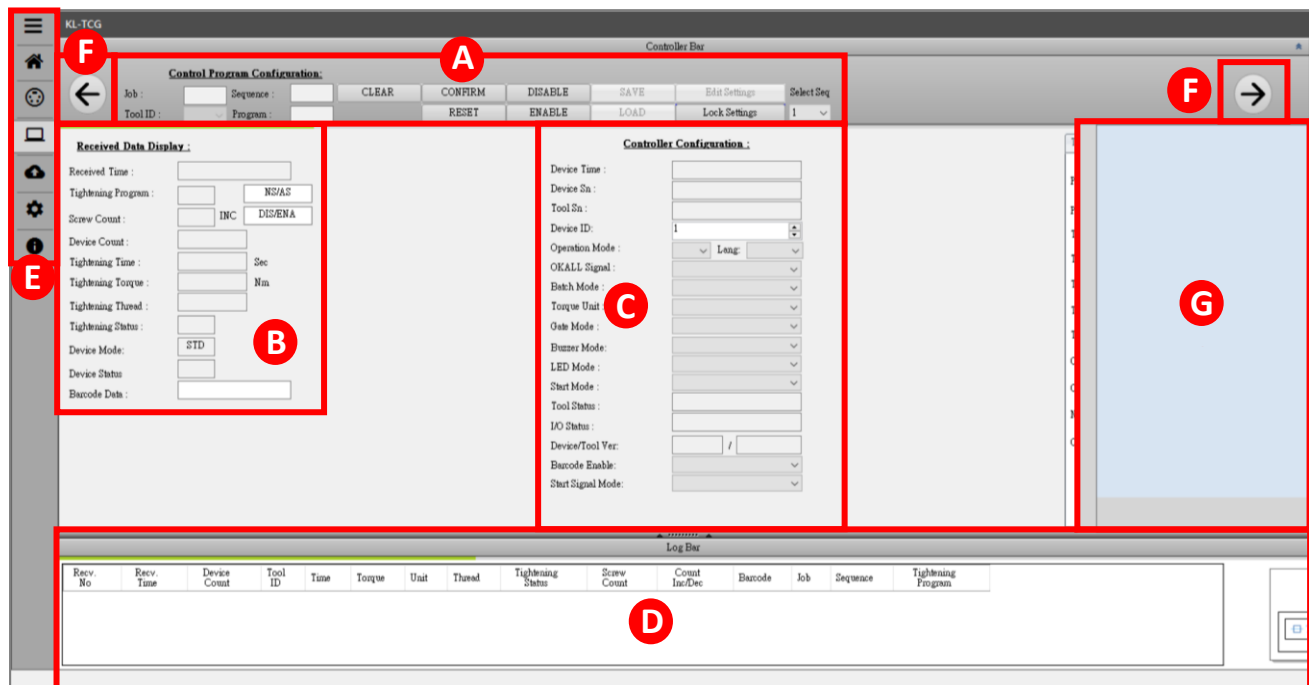
➤ Restore default password

Select to enter the **1** Setting folder, delete the file named **2** Setup and Reopen it **3** Data_Acquisition_System can restore the default password (admin123)





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



NOTE: The pages of the system can be operated by sliding left and right  , so the software can be operated on the touch screen.

A Control Program Configuration

NOTE: Before setting the KL-TCG controller, please connect the screwdriver to the controller first

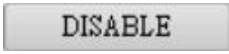
Control Program Configuration:									
Job :		Sequence :		CLEAR	CONFIRM	DISABLE	SAVE	Edit Settings	Select Seq
Tool ID :		Program :		RESET	ENABLE	LOAD	Lock Settings	1	

- Job: Display the current number of job (Job1 ~ 50) being used.
- Sequence: Display the current number of sequence (Sequence1 ~ 50) being used.



- Tool ID: Display the current used tool's id.
- Program: Display the current number of Program (Program 1 ~ 99) being used.
- CLEAR: Click  to reset counting.
- CONFIRM: Click  to dismiss controller C3 status.

(refer to KL-TCG User Manual for C3 function introduction).

- DISABLE: Click  to immediately stop screwdriver operation.
- SAVE: Click  to save the settings into controller.
- RESET: Click  to restart the controller and restore factory parameters.

(If the "Reset" button is inactive, please refer to ["Unlock Settings"](#))

- ENABLE: Click  to immediately allow the screwdriver to run.
- LOAD: Click  to load the settings from the controller.
- Edit Settings : After entering the system, you must click 
and enter the password to unlock the screen and switch to other pages.

(Please refer to ["Password Change Setting Method"](#))

- Lock Settings : Click  to automatically jump to the "Instant data display" screen, and no operation can be performed. The lock settings must be unlocked.

(Please refer to ["Instant data display"](#) , ["Unlock Settings"](#))

- Select Seq: The specified Seq (Sequence 1 ~ 50) can be executed immediately.



- B** Received Data Display: All fastened data can be displayed instantly.

Received Data Display :

Received Time :			
Tightening Program :		NS/AS	
Screw Count :		INC	DIS/ENA
Device Count :			
Tightening Time :		Sec	
Tightening Torque :		Nm	
Tightening Thread :			
Tightening Status :			
Device Mode:	STD		
Device Status			
Barcode Data :			

- Received Time: The time to fasten the data.
- Tightening Program: This fastened program group.
- Screw Count: The number of fastened units.
- Device Count: The total number of times the device is fastened.
- Tightening Time: How long driver ran before clutch tripped. (Sec)
- Tightening Torque: the torque for the fastening.
- Tightening Thread: Number of rotations at output shaft.
- Tightening Status: shut off status (OK, NG, OKALL, REV).
- Device Mode: STD mode, ADV mode (**please refer to manual**).
- Device Status: (**Refer to the “Display Status Code Description” in User Manual**).
- Barcode Data: Display the barcode data which is from a barcode scanner.



C Controller Configuration: Click or to Save / Load settings to / from the controller.

<u>Controller Configuration :</u>	
Device Time :	
Device Sn :	
Tool Sn :	
Device ID:	1 ↑ ↓
Operation Mode :	v Lang: v
OKALL Signal :	v
Batch Mode :	v
Torque Unit :	v
Gate Mode :	v
Buzzer Mode:	v
LED Mode :	v
Start Mode :	v
Tool Status :	
I/O Status :	
Device/Tool Ver:	/
Barcode Enable:	v
Start Signal Mode:	v

NOTE: Refer to manual for condition parameters.



D Data collection: When the fasten tool is started, the data will be displayed in the Log Bar field at the bottom of the page (Fasten data sheet, TQC Trend Setting).

- Fasten data sheet

- Depress the scroll bar and swipe to the next page to display TQC Trend Setting (Please refer to [“Trend Setting”](#) for the TQC setting)



Controller Bar

Control Program Configuration:

Job : Sequence : CLEAR CONFIRM DISABLE SAVE Edit Settings Select Seq
Tool ID : Program : RESET ENABLE LOAD Lock Settings 1

Received Data Display :

Received Time :
Tightening Program : NS/AS
Screw Count : INC DIS/ENA
Device Count :
Tightening Time : Sec
Tightening Torque : Nm
Tightening Thread :
Tightening Status :
Device Mode : STD
Device Status :
Barcode Data :

Controller Configuration :

Device Time :
Device Sn :
Tool Sn :
Device ID :
Operation Mode : Lang :
OKALL Signal :
Batch Mode :
Torque Unit :
Gate Mode :
Buzzer Mode :
LED Mode :
Start Mode :
Tool Status :
IO Status :
Device/Tool Ver : /
Barcode Enable :
Start Signal Mode :

Log Bar

Data Log Chart

- Depress the scroll bar and swipe to the next page to display Torque Trend Setting (Torque Trend from a single screw fastening)

Controller Bar

Control Program Configuration:

Job : Sequence : CLEAR CONFIRM DISABLE SAVE Edit Settings Select Seq
Tool ID : Program : RESET ENABLE LOAD Lock Settings 1

Received Data Display :

Received Time :
Tightening Program : NS/AS
Screw Count : INC DIS/ENA
Device Count :
Tightening Time : Sec
Tightening Torque : Nm
Tightening Thread :
Tightening Status :
Device Mode : STD
Device Status :
Barcode Data :

Controller Configuration :

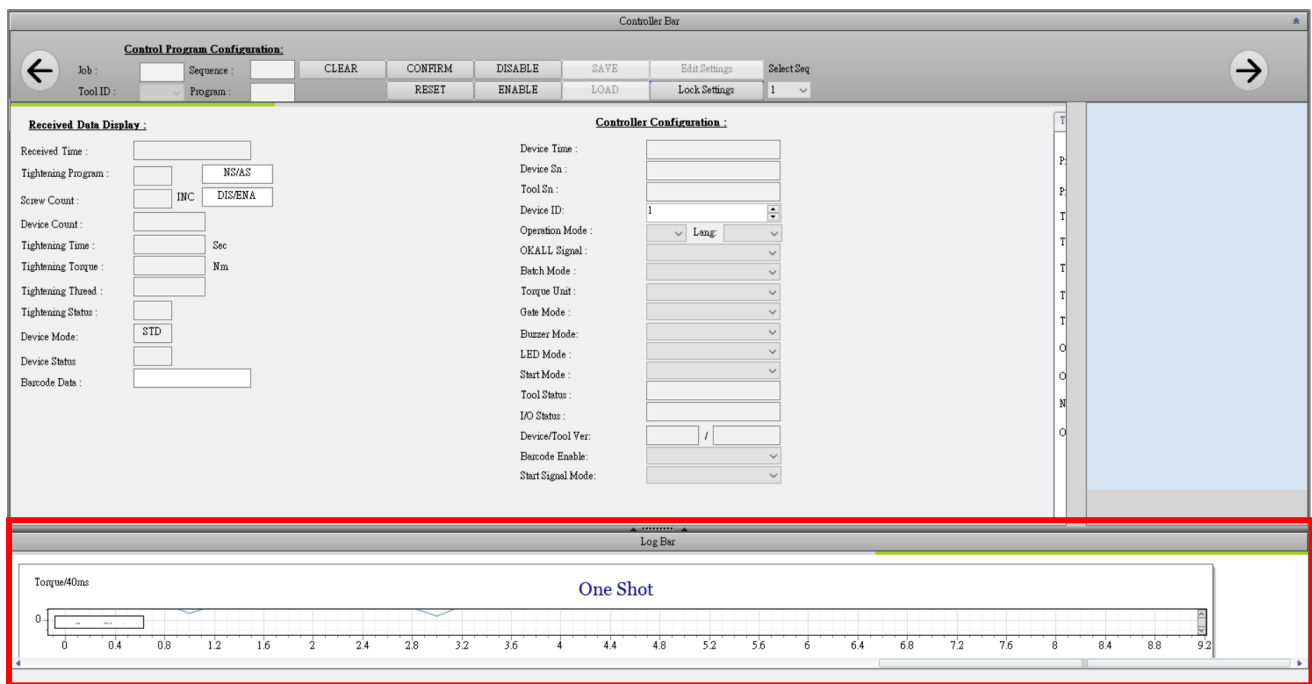
Device Time :
Device Sn :
Tool Sn :
Device ID :
Operation Mode : Lang :
OKALL Signal :
Batch Mode :
Torque Unit :
Gate Mode :
Buzzer Mode :
LED Mode :
Start Mode :
Tool Status :
IO Status :
Device/Tool Ver : /
Barcode Enable :
Start Signal Mode :

Log Bar

Data Log Chart

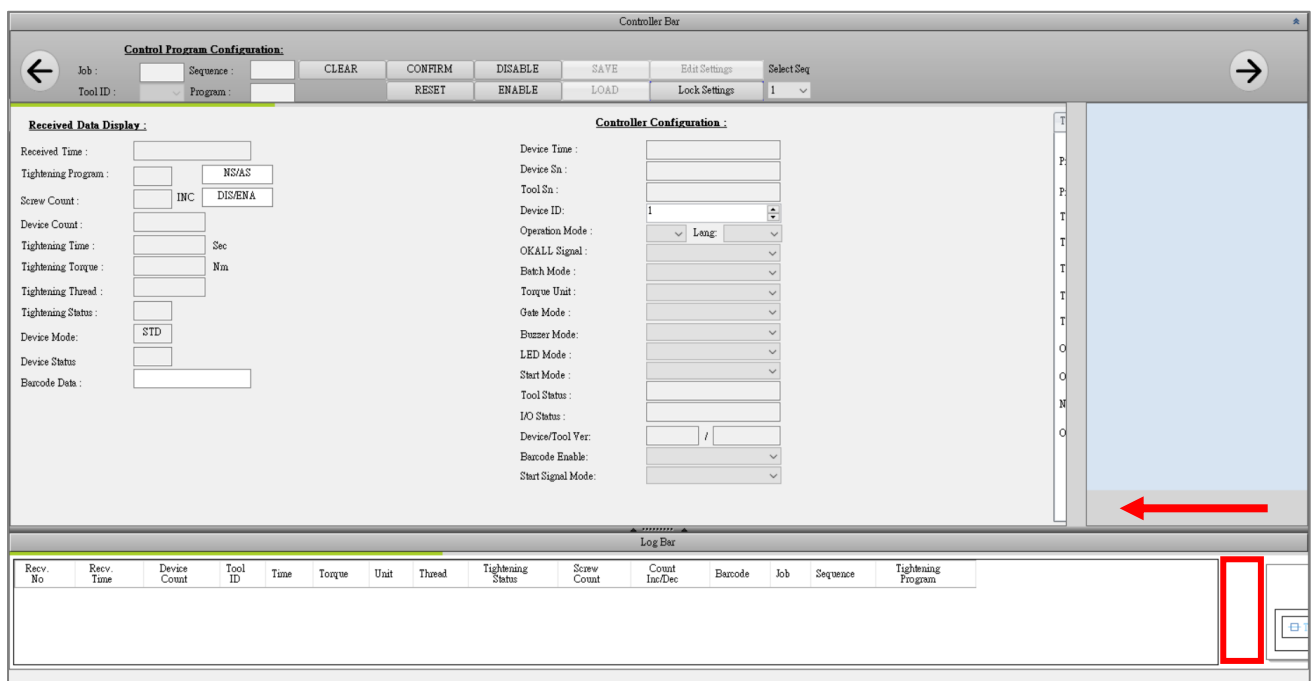






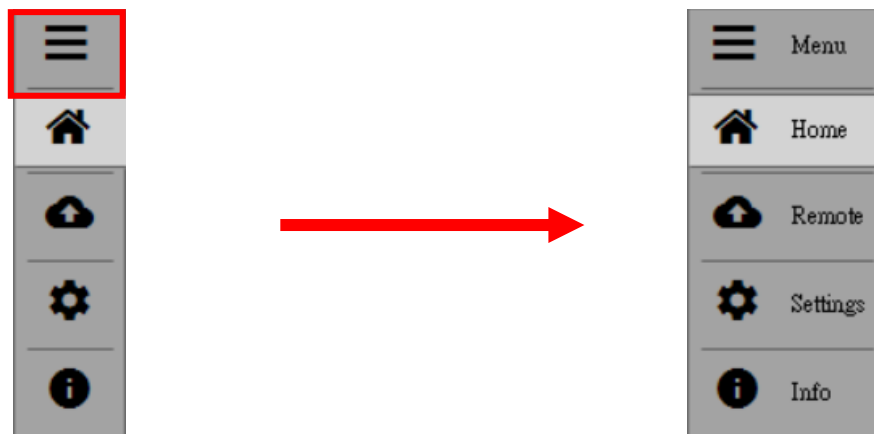
NOTE:

Touch the red box area and swipe to the next page to display a trend graph.





E Main menu: click  to hide or display English title.



F Go to previous page by pressing  button, next page by pressing  button.

Recv No	Recv Time	Device Count	Tool ID	Time	Torque	Unit	Thread	Tightening Status	Screw Count	Count Inc/Dec	Barcode	Job	Sequence	Tightening Program



2. Programming the Jobs / Tightening Programs / steps / SD Load page

Control Program Configuration

Controller Bar

Job : Sequence : CLEAR CONFIRM DISABLE SAVE Edit Settings Select Seq
Tool ID : Program : RESET ENABLE LOAD Lock Settings 1

Tightening Step(TS) Tightening Program(TP) Job Sequence(JS) Load SD card

Program 1 SAVE

Program Name

The First Step 1

The Second Step 0

The Third Step 0

The Fourth Step 0

The Fifth Step 0

OK ALL Alarm Time 0.0

OK One Alarm Time 0.0

NG Stop ☐

OK ALL Step OFF

Log Bar

Recv. No	Recv. Time	Device Count	Tool ID	Time	Torque	Unit	Thread	Tightening Status	Screw Count	Count Inc/Dec	Barcode	Job	Sequence	Tightening Program

A Tightening Step (TS)

Tightening Step(TS) Tightening Program(TP) Job Sequence(JS) Load SD card

Step 1 SAVE

Step Name

RPM 100

Direction CCW

Target Thread

Thread condition 10.0

Torque condition 10.00

Delay Time 0.0

HI Thread 0.0 HI Torque 0.00

LO Thread 0.0 LO Torque 0.00



- Step: Step NO.1 ~ Step No.250 could be selected.
- Step Name: 6 characters are available for the name including English, Chinese, and Number).
- RPM: The speed (rpm) that the tool will run.
- Direction: Forward (CW), Reverse (CCW).
- Target: Thread, Torque.
- Thread condition: This step will be finished when it meets this thread setting.
- Torque condition: This step will be finished when it meets this torque setting.
- Delay Time: The delay time interval between current step and next step (Sec).
- HI Torque: The controller will make a NG alarm when the torque reading value over this setting.
- LO Torque: The controller will make a NG alarm when the torque reading value lower than this setting.
- HI Thread: The controller will make a NG alarm when the shaft rotation cycles over this setting.
- LO Thread: The controller will make a NG alarm when the shaft rotation cycles lower than this setting.

NOTE: Tightening Step (TS) settings will be saved after clicking the  button.



B Tightening Program (TP)

Tightening Step (TS)	Tightening Program (TP)	Job Sequence (JS)	Load SD card
Program	1		SAVE
Program Name			
The First Step	1		
The Second Step	0		
The Third Step	0		
The Fourth Step	0		
The Fifth Step	0		
OK ALL Alarm Time	0.0		
OK One Alarm Time	0.0		
NG Stop			
OK ALL Stop	OFF		

- Program: Program NO.1 ~ Program No.99 could be selected.
- Program Name: 6 characters are available for the name including English, Chinese, and Number).
- The First Step: Select a step No. for the first step of this selected program.
- The Second Step: Select a step No. for the second step of this selected program.
- The Third Step: Select a step No. for the third step of this selected program.
- The Fourth Step: Select a step No. for the fourth step of this selected program.



- The Fifth Step: Select a step No. for the fifth step of this selected program.
- OK All Alarm Time (AT): Set the time for OK All output signal duration (Sec.)
- OK One Alarm Time (OT): Set the time for OK One output signal duration (Sec.)
- NG Stop (NG): Disable the tool or not when a NG signal generated.
(OFF, The maximum NG counter 1-9)
- OK All Stop (AS): Disable the tool or not when a OK ALL signal generated.
(ON: Disable the tool, OFF)

NOTE: After clicking the  button, the above settings will be saved to the selected Tightening Program (TP).

NOTE: User can set “0” to specific Step to ignore executing that Step.

Example: If you set Second & Third Steps to “0” but First, Fourth and Fifth Steps are non-zero. The controller will execute First, Fourth and Fifth Steps.

NOTE: Refer to manual for condition parameters.



C Job Sequence (JS)

- Job: Job NO.1 ~ Job No.50 could be selected.
- Job Sequence: Job Sequence NO.1 ~ Job Sequence No.50 could be selected.
- Tightening Program (TP): Tightening Program (TP) NO.1 ~ Tightening Program (TP) No.99 could be selected.
- Tightening Repeat (TR): Tightening Repeat (TR) NO.1 ~ Tightening Repeat (TR) No.99 could be selected.
- Direction: CW, CCW.
- Force: Setting value from 1 to 9, (9 maximum force).
- RPM: Set desired RPM. The limitation is based on screwdriver specifications.
- Job Name: Assign the name of job (1~10 characters can be input).



- Active: After naming the job and checking "☒Active" and click save, the checked job will be displayed on the right side of the real-time display data page, and you can choose to switch to the specified task.

NOTE: After clicking the  button, the Job Sequence (JS) will be saved to the controller.

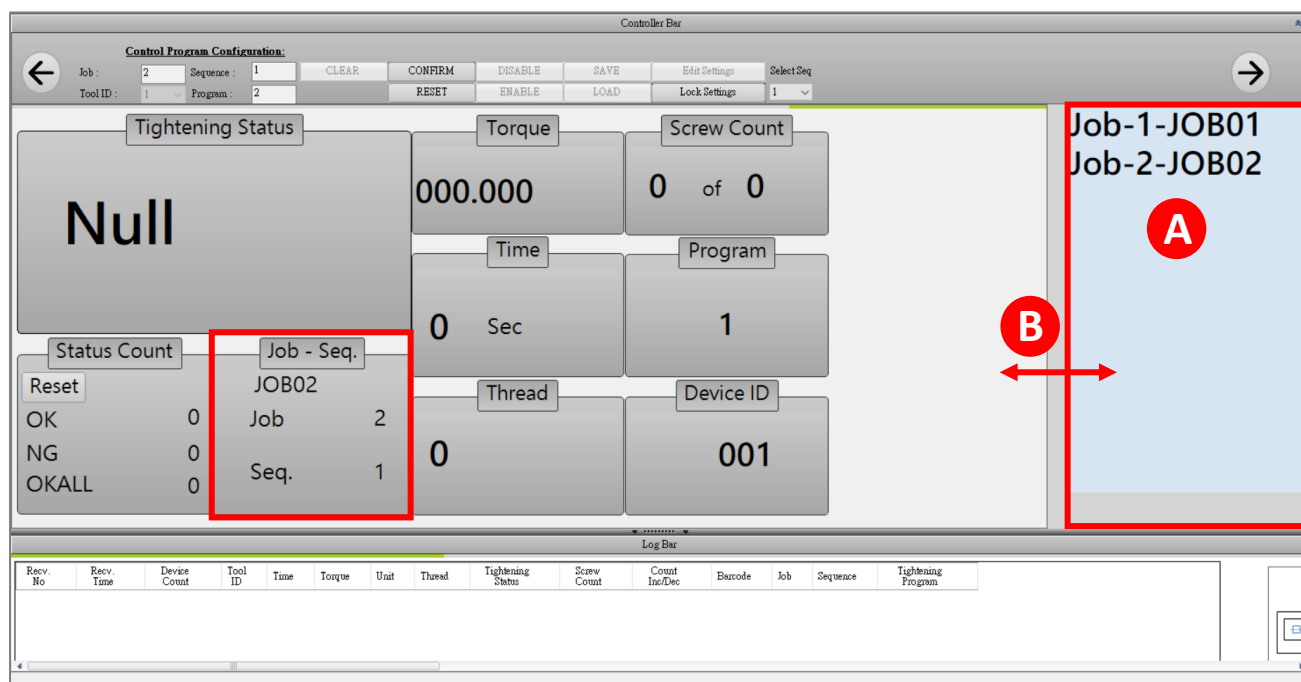
Example: On the right side of the Instant data display page, a list of the selected jobs will be displayed

Step 1: Set Job1 、 Job Name: JOB01 、 ☒Active 、 SAVE

Step 2: Set Job2 、 Job Name: JOB02 、 ☒Active 、 SAVE

Tightening Step (TS)	Tightening Program (TP)	Job Sequence (JS)	Load SD card
Job 1	Job Sequence 3	Job Name JOB01	☒ Active 

Job 2	Job Sequence 2	Job Name JOB02	☒ Active 
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The screenshot shows the 'Controller Bar' interface. At the top, there's a 'Control Program Configuration' section with fields for Job (2), Sequence (1), and Program (2). Below this, the 'Tightening Status' section displays 'Null'. The 'Torque' section shows '000.000'. The 'Screw Count' section shows '0 of 0'. The 'Time' section shows '0 Sec'. The 'Program' section shows '1'. The 'Thread' section shows '0'. The 'Device ID' section shows '001'. The 'Status Count' section shows 'OK 0', 'NG 0', and 'OKALL 0'. The 'Job - Seq.' section shows 'JOB02', 'Job 2', and 'Seq. 1'. On the right side, a list of jobs is displayed: 'Job-1-JOB01' and 'Job-2-JOB02'. A red box labeled 'A' highlights this list. A red box labeled 'B' highlights the 'Job - Seq.' section. At the bottom, there's a 'Log Bar' section with a table of logs.

Recv No	Recv Time	Device Count	Tool ID	Time	Torque	Unit	Thread	Tightening Status	Screw Count	Count Inc/Dec	Barcode	Job	Sequence	Tightening Program



NOTE A : Activated Job list docks on right side of each screen, click on the program to be executed on the list (JOB-2-JOB2 with a blue background as shown above) and wait for about five seconds JOB-Seq. will display the selected program.

NOTE B : If the JOB Name is blocked, you can adjust the horizontal bar on the left to display the full name on the job list.



D Load SD card

Setting data can be stored in the SD card. Insert the SD card into the computer and use the SD card loading function of this system to load the data into other controllers, If there are multiple controllers in same setting.

Tightening Step(TS)	Tightening Program(TP)	Job Sequence (JS)	Load SD card
Load SD card	SET	☐ TS	☐ TP
		☐ JS	☐ BarCode

- Load SD card: Select the file extension of .kls in the SD card.
- SET: After confirming that the data is correct, click SET.

NOTE: File naming rules, for example: the file name is

P_cTTToxx _____ - 05081107.kls

- P: Tightening Program (TP)

J=Tightening Step(JS)

P= Tightening Program(TP)

S=Job Sequence(TS)

- cTTToxx: Display controller serial number
- 05081107: Display time saved to SD card

(The format is month, day, hour, and minute, 05 is month,
08 is day, 11 is hour, 07 is minute)



- .kls: file name

Example: Write the data stored in the SD card to this system

(Select the file name as P_cTTToxx_____05081107.kls)

Step 1: Click “Load SD card”

Step 2: Selected file name is the extension of .kls (after clicking, the selected

file will be displayed as )

Step 3: Press SET and wait for loading to complete.

(After loading, click “X” in the window)

Tightening Step(TS)

Tightening Program(TP)

Job Sequence(JS)

Load SD card

Load SD card

SET

☐ TS

☒ TP

☐ JS

☐ BarCode

☐ Controller

▶	2	1	***Qoo	1	1	11	21	31	41
	2	2	***Zoo	1	1	2	12	0	0
	2	3	***Koo	1	3	13	23	0	0
	2	4	***444	1	4	0	0	0	0
	2	5	**** Process - 100%					0	0
	2	6	**** Setup Finish!				0	0	0
	2	7	****				0	0	0
	2	8	****				0	0	0
	2	9	*****	1	1	0	0	0	0
	2	10	*****	1	10	0	0	0	0
	2	11	*****	1	1	0	0	0	0
	2	12	*****	1	1	0	0	0	0
	2	13	*****	1	1	0	0	0	0
	2	14	*****	1	1	0	0	0	0

[illegible]

Received Data List :

Data Chart

Historical Data File List :

- 
- Save as



C Data Log

The dialog box titled "Data Log" contains a checked checkbox labeled "Data Log :". Below it are two radio buttons: "Instant Save" (selected) and "Auto Save". To the right of the "Auto Save" radio button is a numeric input field containing "60" and a "Sec" label.

- Data Log: When ☒ **Data Log :** is checked, there are two ways to automatically export Excel reports (instant archive, automatic archive).
- When ☒ **Instant Save** is selected, any data fastened will be automatically exported to the bottom of **Excel** . When the system passes the integral time point, the form will be cleared to ensure sufficient memory space.
 - When ☐ **Auto Save** is selected, the data will be recorded in “seconds” as set in and the report will be exported below **Excel** .

D Trend Setting: Time, Torque, Thread

Select one of the Time, Torque, and Thread from the pull-down menu. It will show the graphic trend chart. (Refer to [“TQC Trend Setting”](#))

The "Trend Setting" dialog box shows a pull-down menu with "Time" selected. To the right, a larger dropdown menu is shown with "Time", "Torque", and "Thread" as options.

NOTE: When changing the “Trend Setting”(T/Q/C) setting, the screen of the chart will be clear and then display again after finished a new tighten.



4. Instant data display

The screenshot displays the 'Controller Bar' interface for the KILEWS electric screwdriver. It features a 'Control Program Configuration' section at the top with fields for Job, Sequence, Tool ID, and Program, along with buttons like CLEAR, CONFIRM, DISABLE, SAVE, Edit Settings, Select Seq, RESET, ENABLE, LOAD, and Lock Settings. The main display area is divided into several sections: 'Tightening Status' (showing 'Null'), 'Torque' (000.000), 'Screw Count' (0 of 0), 'Time' (0 Sec), 'Program' (1), 'Status Count' (Reset, OK, NG, OKALL), 'Job - Seq.' (Job, Seq.), 'Thread' (0), and 'Device ID' (-). At the bottom, there is a 'Log Bar' with a table of logs.

Recv. No	Recv. Time	Device Count	Tool ID	Time	Torque	Unit	Thread	Tightening Status	Screw Count	Count In/Dec	Barcode	Job	Sequence	Tightening Program

- Tightening Status: Display current complete status of fasten process.
- Status Count: Display current screw fastening status.
Reset: Reset "Status Count" counters.
- Job-Seq.: Display current fastened tasks and work sequence.
- Torque: Display fastening torque.
- Time: Display screw fastening time.
- Thread: Display the number of turning screwdriver.
- Screw Count: Display the number of current screw count status.
- Program: Indicate the current Program of the Sequence.
- Device ID: Display controller device number.

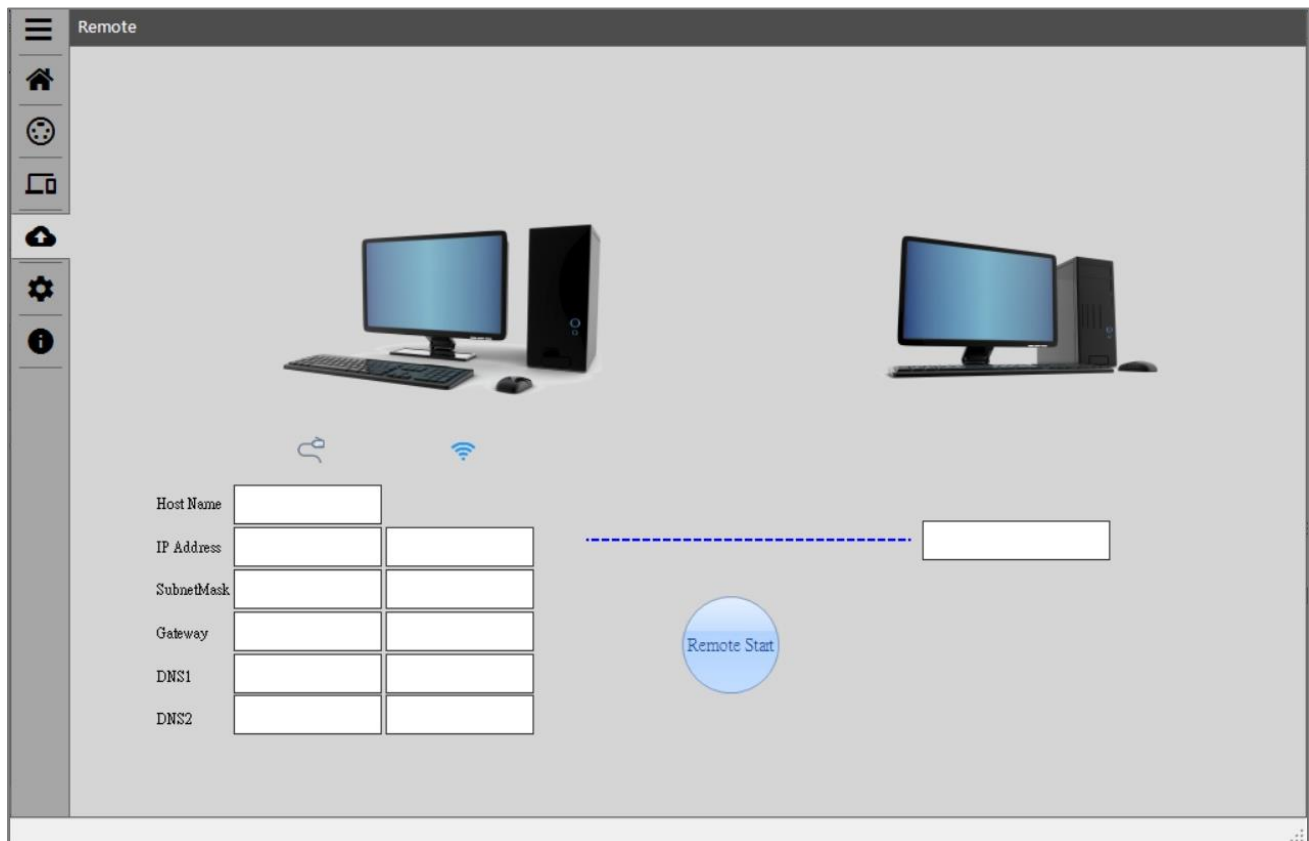


⑦ Remote Screen



The screen image by remote monitoring.

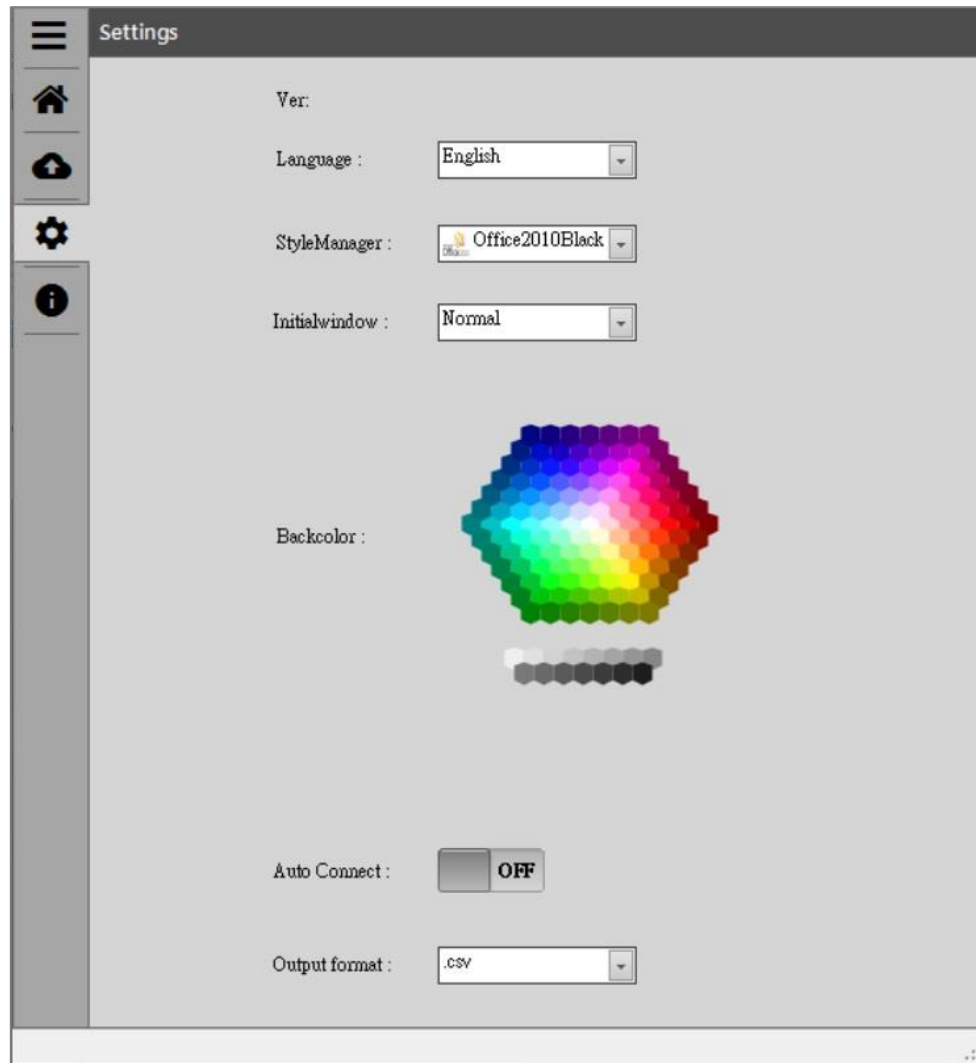
NOTE: Please contact with local distributors for the detail information.

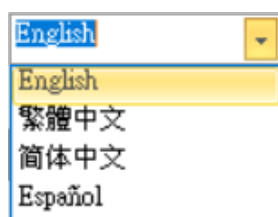




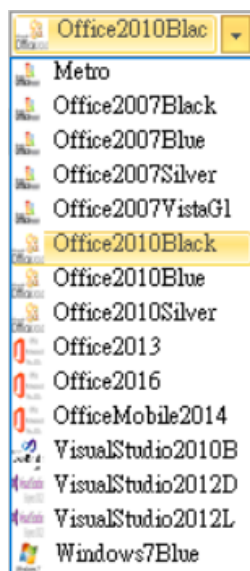
⑧ System Function Setup

Switch to  Settings page to operate system functions.

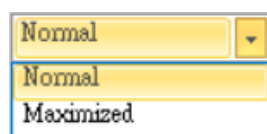




1. Language: three language options are available.



2. Style: system operating style can be changed.



3. Initialwindow: To set the initial windows setting.



4. Background color: system background color can be selected.



5. Auto connection: When switching , the serial port (COM) will automatically connect to the device the next time you start the software.

6. Output format: Different formats for record storage can be select.



⑨ Info Company Website

Switch to  Info page to browse  Kilews official website.



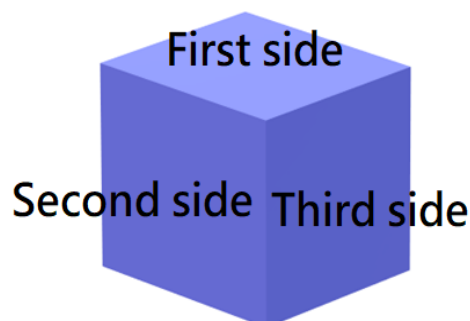


⑩ Example Description

NOTE:

1. 1 Job (Job No.1 ~ Job No.50) = Sequence (Sequence *50)
2. 1 Sequence (Sequence No. 1 ~ No. 50) = Tightening Program (TP *1) +
Tightening Repeat (TR No.1 ~ TR No.99)
3. 1 Tightening Program (TP No.1 ~ TP No.99) = Tightening Step (TS *5) +
Reverse Parameter
4. 1 Tightening Step (TS No.1 ~ TS No. 255) = TS NO.1 ~ TS No.255 could be
selected.
5. Tool: always Tool1

When screws are fastened on 3 sides of a product, the condition is as follows:





Job

Sequence	Tightening Program (TP)	Tightening Repeat (TR)	Tightening Step (TS)
First Side (Sequence 1)	First TP	4 pcs	3.0 kgf.cm (Torque)
Second Side (Sequence 2)	Second TP	3 pcs	2 rotation (Thread) 3.0 kgf.cm (Torque)
Third Side (Sequence 3)	Third TP	2 pcs	5.0 kgf.cm (Torque)

Set the Seq 1 ~ Seq 3 condition (refer to [“Programming the Jobs / Tightening Programs / steps page”](#) for setting up the parameter condition):

1. Set to Seq 1 when the first side is fastened

Seq 1 condition = Tightening Repeat (TR) 4 screws + Tightening Step (TP) First
TP
= 3.0 kgf.cm (Torque)

2. Set to Seq 2 when the first side is fastened

Seq 2 condition = Tightening Repeat (TR) 3 screws + Tightening Step (TP)
Second TP
= 2 rotation (Thread) 、 3.0 kgf.cm (Torque)

3. Set to Seq 3 when the first side is fastened

Seq 3 condition = Tightening Repeat (TR) 2 screws + Tightening Step (TP) Third
TP
= 5.0 kgf.cm (Torque)



Step 1: After setting Seq 1 ~ Seq 3 parameters to Job Sequence (JS) No. 1, then click  button to save the data to the controller.

Step 2: After setting parameters to Program 1 in Tightening Program (TP), then click  button to save the data to the controller.

NOTE: Input “0” to the steps which are not activated.



Step 3: After setting parameters to Step 1 in Tightening Step (TS), then click



button to save the data to the controller.

Tightening Step(TS)	Tightening Program(TP)	Job Sequence (JS)	Load SD card
Step	1	SAVE	
Step Name			
RPM	100		
Direction	CCW		
Target	Torque		
Thread condition	10.0		
Torque condition	3.00		
Delay Time	0.0		
HI Thread	0.0	HI Torque	0.00
LO Thread	0.0	LO Torque	0.00

NOTE: Step 1 was already assigned to “The First Step” previously.



Step 4: After setting parameters to Program 2 in Tightening Program (TP), then click  button to save the data to the controller.

Tightening Step(TS)	Tightening Program(TP)	Job Sequence (JS)	Load SD card
Program	2		
Program Name			
The First Step	2		
The Second Step	1		
The Third Step	0		
The Fourth Step	0		
The Fifth Step	0		
OK ALL Alarm Time	0.0		
OK One Alarm Time	0.0		
NG Stop			
OK ALL Stop	OFF		

NOTE: Input “0” to the steps which are not activated.

NOTE: The digit “2” in the “The First Step” is a new setting, the detail setting condition of Step 2.



Step 5: After setting parameters to Step 2 in Tightening Step (TS), then click



button to save the data to the controller.

Tightening Step(TS)	Tightening Program(TP)	Job Sequence (JS)	Load SD card
Step	2	SAVE	
Step Name			
RPM	100		
Direction	CCW		
Target	Thread		
Thread condition	2.0		
Torque condition	3.00		
Delay Time	0.0		
HI Thread	0.0	HI Torque	0.00
LO Thread	0.0	LO Torque	0.00

NOTE: Step 2 was already assigned to “The First Step” of Program No.2 previously.



Step 6: After setting parameters to Program 3 in Tightening Program (TP), then click  button to save the data to the controller.

Tightening Step(TS)	Tightening Program(TP)	Job Sequence (JS)	Load SD card
Program	3		
Program Name			
The First Step	3		
The Second Step	0		
The Third Step	0		
The Fourth Step	0		
The Fifth Step	0		
OK ALL Alarm Time	0.0		
OK One Alarm Time	0.0		
NG Stop			
OK ALL Stop	OFF		

NOTE: Input “0” to the steps which are not activated.

NOTE: Program 3 was already assigned to “Seq3” previously.



Step 7: After setting parameters to Step 3 in Tightening Step (TS), then click



button to save the data to the controller.

Tightening Step(TS)	Tightening Program(TP)	Job Sequence (JS)	Load SD card
Step	3	SAVE	
Step Name			
RPM	100		
Direction	CCW		
Target	Torque		
Thread condition	2.0		
Torque condition	5.00		
Delay Time	0.0		
HI Thread	0.0	HI Torque	0.00
LO Thread	0.0	LO Torque	0.00

NOTE: Step 3 was already assigned to “The First Step” of Program No.3 previously.

NOTE: After completed Step 1 to Step 7 settings above, you finished the Job No.1 setting.

NOTE: For the rest Jobs settings, the concept is the same as this one.



⑪ 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.