

MY-EVO-mini User Manual



Model: MY-EVO-mini

SAING EI CORP.

<https://www.mytorqtools.com>



Y2F242-1-005
20260821

INDEX

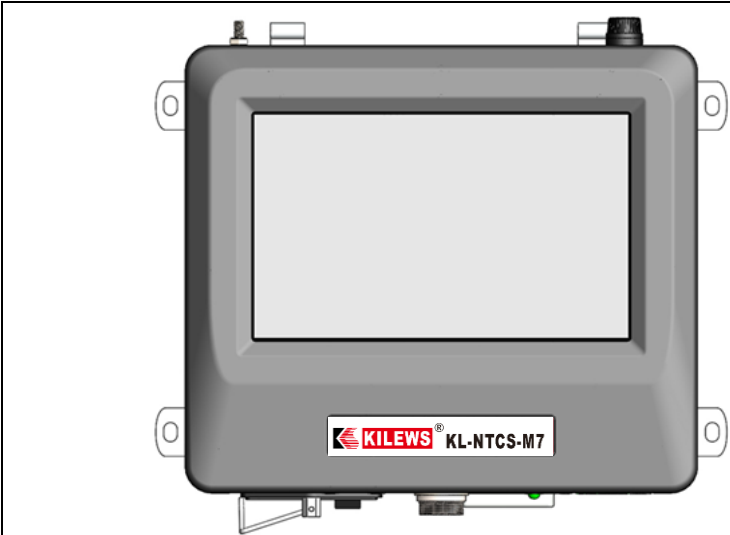
1. Product specification.....	2
2. Appearance.....	3
3. Home Screen.....	4
4. Dashboard.....	4
4-1. Login Settings.....	4
5. Function List.....	5
5-1. Fastening Results.....	5
5-1-1. Information / Retrieval / Chart Functions Overview.....	6
5-2. Job Edit.....	7
5-2-1. job Edit.....	7
5-2-2. Sequence.....	8
5-2-3. Step.....	10
5-2-4. I/O Import.....	12
5-2-5. I/O Output.....	14
5-3. Data.....	15
5-3-1. History Data.....	15
5-3-2. Logging Information.....	15
5-3-3. Graphic File Data.....	16
5-3-4. Configuration.....	16
5-3-5. Maintain.....	16
5-4. Setting.....	17
5-4-1. Controller.....	17
5-4-2. Tool.....	19
5-4-3. System.....	20
5-4-4. Barcode.....	21
5-4-5. Network.....	22
5-4-6. Update.....	22
5-5. Information.....	23
5-5-1. Tool.....	23
5-5-2. Controller.....	23
5-5-3. Manual.....	24
5-6. Chart.....	24
6. Description of external export control.....	25
7. Description of external import control.....	25
8. Description of display status code.....	26
8-1. Abnormal messages from controller/screwdriver/lock information.....	27
9. Modbus Instruction.....	28

1. Product specification

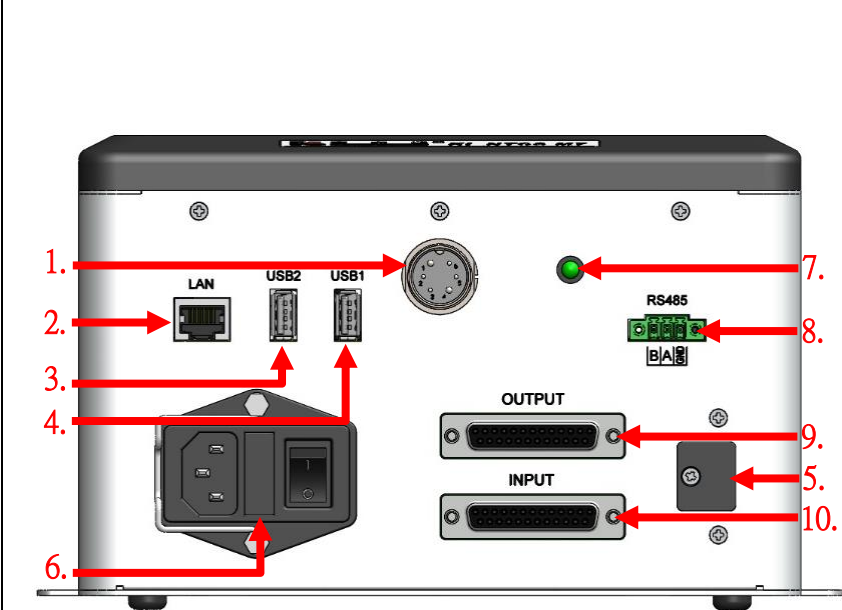
Model	MY-EVO-mini		
Import Voltage	AC 115V / 230V		
Import Frequency	50 - 60Hz		
Import Current	6.3A		
Import Voltage	DC 40V		
Export Current	Max 9A		
Export Power	360W		
Size (mm)	210*185*134		
Weight (g)	3467		
DC screwdriver model:	MY-EVO 0.3 micro series	Working Time	1s ON / 3s OFF
	MY-EVO 3 mini series		
	MY-EVO 5 series		
	MY-EVO 12 series		
	MY-EVO 60 series		
	MY-EVO 3 mini RA series		
	MY-EVO 5 RA series		
	MY-EVO 12 RA series		
	MY-EVO 60 RA series		
	MY-EVO PISTOL 3 mini series		
	MY-EVO PISTOL 5 series		

Accessories	Product Name		Quantity
	USB		1
	Accessories set Tripod		1
	Manual		1
	Warranty certificate		1

2. Appearance

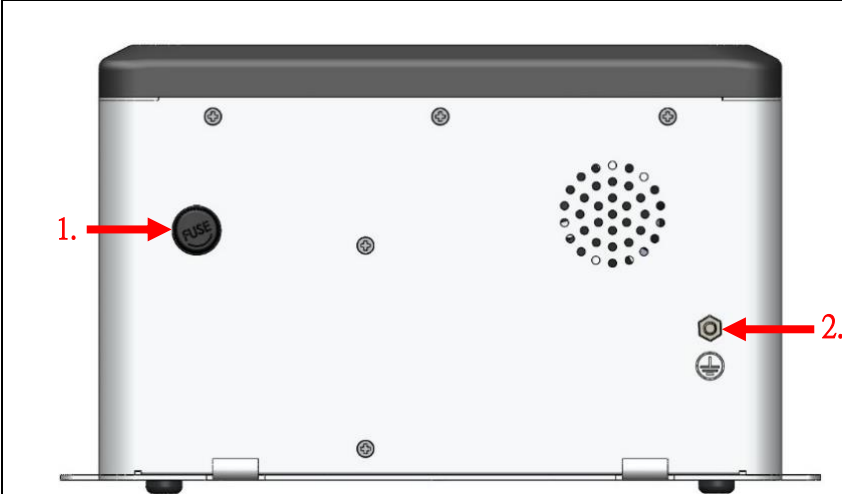


2.1 Panel



2.2 Bottom

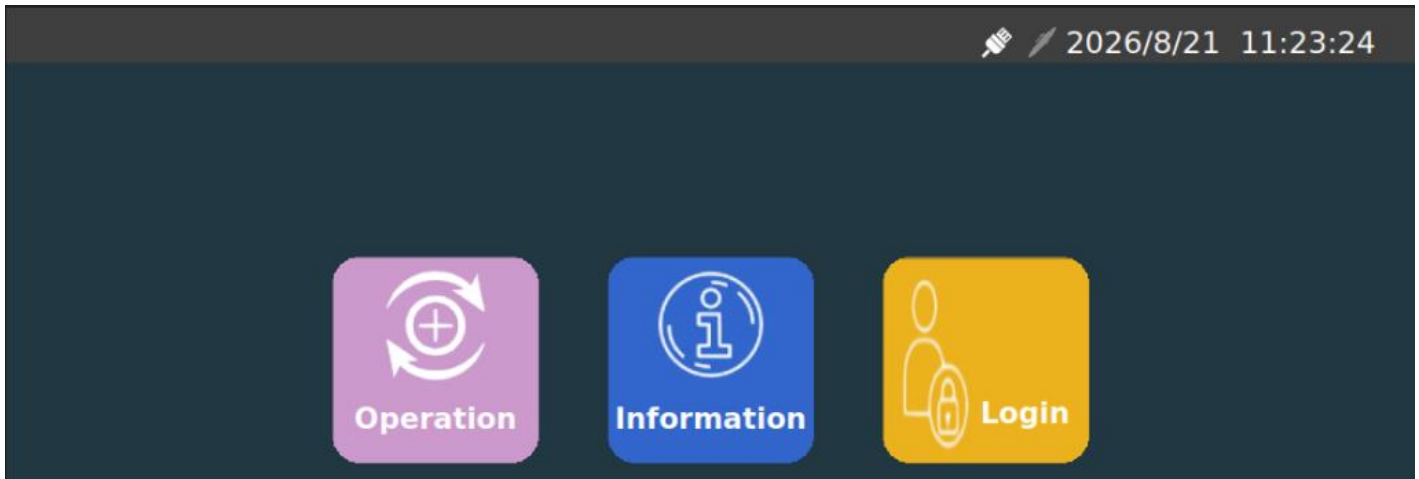
1	Tool connection seat
2	Wired communication port
3	Export/configuration file export/import/update software/scanner for lock data, USB type-A
4	Export/configuration file export/import/update software/scanner for lock data, USB type A
5	Power cord socket and power switch
6	LED Indicator: The lights will turn on for normal operation and standby/sleep mode. If the lights do not turn on, it indicates a malfunction.
7	Prcol export port
8	Export screwdriver signal port
9	Import control screwdriver signal port
10	



2.3 Upper cover

- 1.DC fuse seat (incl. 15A fuse)
- 2. Grounding terminal seat (FG)

3. First page



Homepage Functions	Description
Operation	Displays fastening information, screwdriver status, barcode, input/output, and function buttons
Information	Displays tool, controller, and manual download information.
Login	Access the permission management page with role-based usage via account and password.

4. Dashboard

4-1. Login

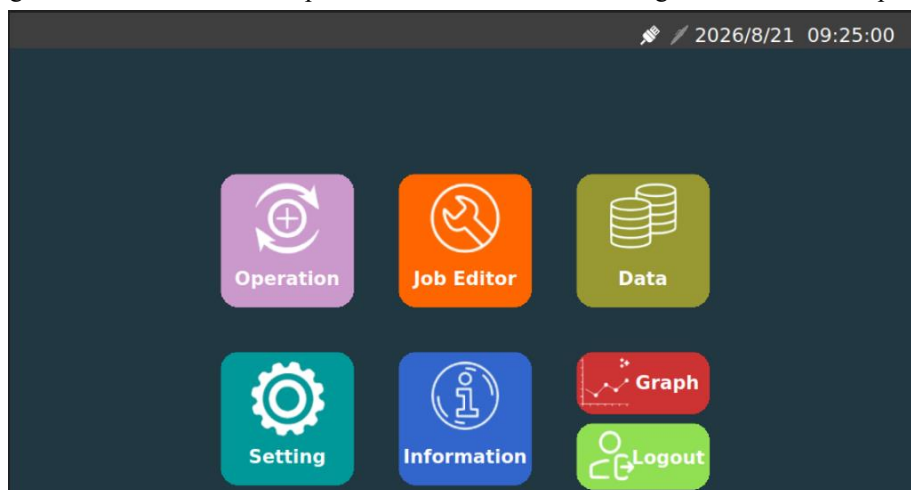
Operation

1. Before Login : Stays on the monitoring view (homepage icons only show: Fastening Results / Information / Login).
2. Login Account : **guest** Password: 0000 (default value)
3. Select Login



Login

1. Enter Homepage : Available functions: Operation / Job Edit / Data / Setting / Information / Graph / Logout



Logout : Exit the permission-based operation page and return to the monitoring view.

5. Function List

5-1. Fastening Results



Homepage Functions	Description		
1. Return to Main Screen	Tap to return to the main screen.		
2. Work Status	 Enabled: Tool is operational.  Disabled: Tool is prohibited from running; screwdriver display is dimmed.		
3. System Time	Displays system time.		
4. Job Name	Displays the currently executed job name.		
5. Call	Call other jobs / DEMO		
6. Process Name	Displays the current process name.		
7. Total seq	Current process number / total seq.		
8. Seq Clear	Reset to the first process.		
9. Step ID	Displays the current step ID.		
10. Target Torque	Displays the set target torque.		
11. Torque Value	Displays torque value during operation/fastening.		
12. Torque Unit	Displays the configured torque unit.		
13. TR	Displays current screw count / total screw count.		
14. Fastening Time	Displays total fastening time.		
15. Threshold Angle	Displays the set threshold angle.		
16. Step Angle	Displays step angle during operation.		
17. RPM	Displays rotation speed during operation.		
18. Target Angle	Displays the set target angle.		
19. Total Angle	Displays total angle during operation.		
20. Barcode	Displays scanned barcode.		
21. Fastening Result	Displays fastening status (READY, OK, NG, NS, OK-SEQ, IOK-JOB, etc.).		
22. Messages	Displays fastening messages, controller errors, or system interpretation messages.		
23. I/O Display/ Chart/Modbus	Can switch to display input/output indicator lights or shows charts or Modbus.		
24. Control Functions	1. Clear Screw Count : Resets the screw count. 2. Confirm : Clears the current status. 3. Enable : Tool is operational / Tool is enabled. 4. Disable : Tool operation is prohibited. 5. Skip : Skips the current process step. 6. Information : Displays fastening job settings. 7. Input / Output & Chart& Modbus : Click to toggle between input/output signals or charts or Modbus .		

5-1-1. Charts & Modbus / Retrieval / Information Page ntroduction

1. Chart	Switch to view Charts / Modbus.
----------	---------------------------------

2. Call	Call Other Job Compensated Target Torque: Enter the actual torque value to automatically calculate and populate the STEP compensation.
---------	--

3. Information	Fastening Step Parameter List
----------------	-------------------------------

Step	1	2	3	4	5
Target Type	Torque				
Target Value	1.0N.m				
Hi Torque	3.3N.m				
Lo Torque	0.0N.m				
Hi Angle	30600°				
Lo Angle	0°				
Direction	CW				
RPM	500				

5-2. Job Edit

5-2-1. Job Edit

 Job Editor
 2025/6/5 09:47:48

ID	Job Name	Total Seq	Add Seq
1	Job-1	1	+

Total Job **1**

Call
New
Edit
Copy
Delete
I/O Input
I/O Output

Job Edit	Description
Call	Open Job Call, call fastening job.
Add	Open Add Job interface.
Edit	Edit the selected job.
Copy	Copy the selected job, including processes and steps.
Delete	Delete the selected job.
I/O Import	Open I/O Input Settings interface.
I/O Export	Open I/O Output Settings interface.
+	Enter next level (Process Management).

Add Job

 Job Editor
 2025/6/5 09:48:04

< New Job

Job ID

Job Name

OK Job

☐ OFF
 ☒ ON

OK Job Stop

☒ OFF
 ☐ ON

Save

Add Job	Description
Job ID	Displays the newly added Job ID (e.g., JOB-2 as shown in the example).
Job Name	Supports English (uppercase & lowercase), numbers, and symbols.
Job Completion Output (OK Job)	Off : No completion output (OK-JOB). On : Completion output (OK-JOB) is enabled. Default : On
OK Job Stop	Off : When the action is completed, the screwdriver will not stop, and it will not affect the next startup. On : When the fastening job is completed, the screwdriver will be immediately locked. The user must press the "Confirm" key to release forward rotation. (For I/O control, this corresponds to an external Confirm signal.) Default: Off

5-2-2. Process Management

Sequence Management 2025/6/5 10:11:24

<

Job ID 1

Job Name Job-1

ID	Seq Name	TR	Enable	Up	Down	Add Step
1	SEQ-1	1	☒			+

Total Seq 1

New

Edit

Copy

Delete

Process Management	Description
Job ID / Name	Displays the Job ID/Name selected from the previous page (Example: 1 / JOB-1)
Screw Count	Displays the screw count of the process.
☐	Checked: the process will be executed. Unchecked: the process will not be executed.
New	Opens the interface to New a new process.
Edit	Edits the selected process.
Copy	Copies the selected process along with its steps.
Delete	Deletes the selected process.
+	Enters the next level (Step Management).

New Sequence

Sequence Management 2025/11/7 15:42:33

< New Sequence

Job ID 1

DT(sec) 0

Seq ID 2

TT(sec) 0

Seq Name SEQ-2

OK Seq ☐ OFF ☒ ON

Tightening Repeat 1

OK Seq Stop ☒ OFF ☐ ON

Timeout(sec) 20

Accumulate Angle ☐ OFF ☒ ON

NG Stop 0

Total Angle limit(deg) 0

Total Angle Lower(deg) 0

Angle Calculation Step ☒ 1 ☒ 2 ☒ 3 ☒ 4 ☒ 5

Reverse

Reverse Count ☒ OFF ☐ ON

NG Reverse ☒ OFF ☐ ON

Reverse Mode ☒ Auto ☐ Custom

Speed (rpm) 300

Torque Threshold 0.000 (N.m)

Angle Threshold 0 degree

Direction ☐ CW ☒ CCW

Focre (%) ☒ ON 50 ☐ Unlimited ☐ OFF

Save

Add Step	Description
Job ID	Select Edit job ID.
Seq ID	Select Edit Seq ID.
Seq Name	Support English (capital and small characters), numbers and symbols.
Tightening Repeat	Total lock screw number in Setting Sequence.
Timeout (sec)	Set the operation time for a single screw. (Range: 0.1–60.0 sec, Default: 20 sec)
Stop on NG	Set the processing method selected when screwdriver lock is wrong: No / 1-9 1~9 : Setting 1: Lock screwdriver if trigger-once lock is error, Setting 2: Continuous lock error; lock screwdriver if trigger-twice lock is error... and so on; if anyone lock is OK, make re-calculation. Enable function 1~9: When the error signal "NS" appears, the screwdriver is locked immediately; user needs to press the "Confirm" button to confirm to release. (For the I/O part, confirm the Confirm signal externally, and confirm that the screwdriver can still remove the screw) No: When the error signal "NG" appears, the screwdriver won't stop; it won't affect the next start of the screwdriver, only a warning will be issued. Default: 0
DT: Screw Waiting Time (sec)	Screw Interval Time (DT): The time between receiving a judgment result (e.g., OK, NG) for one screw and triggering the next screw fastening. If the waiting time exceeds the set value, the controller will display a warning message/icon and sound an alarm until fastening is restarted. (Range: 1–99 sec, Default: 0 = disabled)
TT: Sequence Completion Time (sec)	Sequence Completion Time (TT): The total time from the first trigger in a sequence to the fastening of the last screw. If the sequence completion time exceeds the set value, the controller will display a warning message/icon and sound an alarm until all screws in the sequence are fastened. (Range: 1–6000 sec, Default: 0 = disabled)
OK Seq: Sequence OK	OFF: No sequence completion signal (OK-SEQ) is export. ON: Export sequence completion signal (OK-SEQ). Default: ON.
OK Seq Sto: Stop Sequence on OK	The processing method selected when the total number of screws in the Setting Sequence is counted to complete the action. OFF: The screwdriver won't stop when the action is completed; nor will it affect the next start of the screwdriver. ON: When the number of Sequence screws is locked, the screwdriver will be locked immediately; user must press the "Confirm" button to confirm that the forward rotation can be released. (If it is the I/O part, it is an external confirmation signal) Default: OFF.
Accumulate: Accumulate Angle	Accumulate Angle: Set whether clockwise and counterclockwise angles offset each other in accumulation. (Default: OFF)
Upper Total Angle Limit (°)	Sets the upper limit of the total angle for the process. (Range: 1–30600; 0 = Disabled; Default: 0)
Lower Total Angle Limit (°)	Sets the lower limit of the total angle for the process. (Range: 1–30600; 0 = Disabled; Default: 0)
Angle Calculation	☐ If unchecked, this step's angle will not be included.
Reverse Co: Reverse Count	OFF: Disable reverse screw counting. ON: Enable reverse screw counting. (Default: OFF)
NG Reverse	Set whether to perform screw removal before re-tightening when fastening fails. (Default: OFF)
Reverse Mode	Auto: Reverse torque = max torque × 1.1, Direction = opposite of last step, Speed = 50% of max driver speed, Threshold torque = 0, Threshold angle = 0. Custom: Execute based on user-defined parameters. (Default: Auto)
Speed (RPM)	Set the driver speed for screw removal. (Range: see driver specification, Default: 300 RPM)
Torque Threshold	Set the torque threshold for detecting screw removal.

	If reverse screw count is enabled, counting starts only after exceeding this torque. (Default: 0.000)
Angle Threshold	Set the angle threshold for screw removal. (Default: 0 = disabled)
Direction	Select Counterclockwise / Clockwise.
Force (%)	Reverse Force (Manual Setting): Set the maximum force for screw removal. ☒ On (1–100%) ☒ Unlimited ☒ Off Default: On (50%)

5-2-3. Step

Step Management

2025/6/5 10:23:24

<

Job ID 1

Seq ID 1

Job Name Job-1

ID	Step Name	Target Type	Direction	Speed (rpm)	Up	Down
1	STEP-1	Torque	CW	500		

New

Edit

Copy

Delete

Step Setting	Description
ID / Name:	Display the selected Job ID, Sequence ID, and Job Name from the previous page. (Example: 1 / 1 / JOB-1)
New	Open the New Step interface.
Edit	Edit the selected step
Copy	Copy the selected step.
Delete	Delete the selected step.

New

< New Step

Torque Angle

Job ID 1

Step ID 2

Seq ID 1

Step Name STEP-2

Seq Name SEQ-1

Target Torque(N.m) 0.300

Hi Torque(N.m) 3.300

Lo Torque (N.m) 0.000

☐ Monitoring Torque by Window

Upper(%) 30

Lower(%) 30

Hi Angle(deg) 30600

Lo Angle(deg) 0

Interrupt Alarm ☐ OFF ☒ ON

Run Down Speed(rpm) 500

Over Angle Stop ☒ OFF ☐ ON

Direction ☒ CW ☐ CCW

Delay(sec) 0.000

Joint Offset(N.m) ☒ Plus ☐ Minus 0

Threshold Mode ☐ OFF ☐ Torque ☒ Angle

Angle Threshold(deg) 0

Downshift Mode ☐ OFF ☒ Torque ☐ Angle

Downshift Torque(N.m) 0

Downshift Speed(rpm) 0

Save

Step Parameters	Description
Job ID	Display the selected Edit job ID. (The example in the figure shows 1)
Seq ID	Display Sequence ID. (The example in the figure shows 1)
Seq Name	Display the selected Sequence Name . (Example: SEQ-1)
Step ID	Display Step ID.
Step Name	Support English (capital and small characters), numbers and symbols
Target Torque	Set the screwdriver Target Torque value.
Hi Torque	The upper limit of Setting Torque, the upper limit cannot exceed 110% of the maximum torque,
Lo Torque	The lower limit of torque setting; the default is 0.0 N-m.
Monitoring Torque by Window	☐ When checked, the upper and lower limits are set in percentage (%).
Upper (%)	The upper limit of angle setting. (Range: 1~30600, default: 30600)
Lower (%)	The lower limit of angle setting. (Range: 0~30599, default: 0)
Interrupt Alarm	If the press plate is released before reaching the tightening target and the motor stops, determine whether to trigger NG warning.
Over Angle Stop	If the tightening target is torque or time, determine whether to stop when exceeding the angle upper limit.
Direction	Set the screwdriver tightening direction: Clockwise (CW) / Counterclockwise (CCW). (Default: Clockwise (CW))
Delay (sec)	Set the delay time before proceeding to the next step after reaching the target.
Rotation Speed (RPM)	Rotation Speed (RPM): Set the screwdriver rotation speed (revolutions per minute).
Joint Offset	Positive: Actual torque increases. Negative: Actual torque decreases. Adjust this value for fine adjustment; making the actual torque value of the screwdriver lock is closer to the torque value displayed by the Controller. (KTM torque meter is an optional product) Default: Positive 0.00.
Threshold Mode	OFF: Disable function Torque: Threshold based on torque Angle: Threshold based on angle (Default: OFF)
Threshold Torque Angle	When the torque reaches the set threshold torque value, the controller begins calculating the tightening angle and stops within the upper/lower torque range = OK.
Angle Threshold (deg)	When the angle reaches the set threshold angle value, the controller begins calculating the tightening angle and stops within the upper/lower angle range = OK.
Downshift Mode	OFF: Disable function Torque: Deceleration based on torque Angle: Deceleration based on angle (Default: OFF)
Downshift Torque	When the torque reaches the set deceleration torque value, the screwdriver speed will reduce until stopping within the upper/lower torque limit = OK. (Default: 0.0 Nm)
Downshift Angle	When the set deceleration angle value is reached, the screwdriver speed will reduce until stopping within the upper/lower angle limit = OK. (Default: 0)
Downshift Speed (RPM)	Set the screwdriver speed when the deceleration torque value is reached.
Save	Save the settings on this page.

5-2-4. I/O Import

I/O Input

2025/6/5 10:07:41

< Job

1 - Job-1

Unified

Input Event	2	3	4	5	6	7	8	9	10

New

Edit

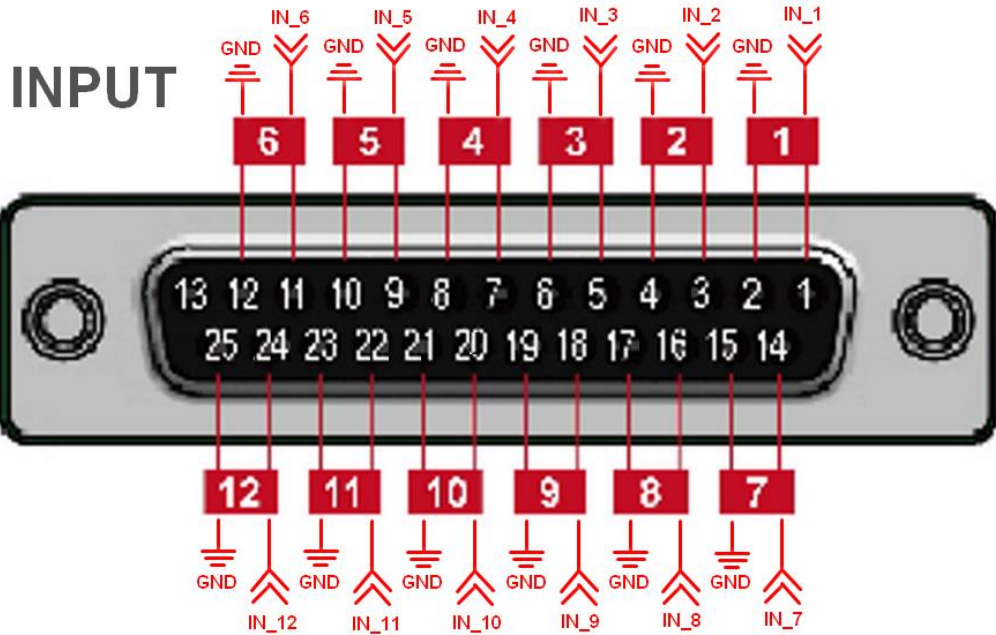
Copy

Delete

I/O Import	Description
Edit job	Select Execution Job
Unified	When an execution job is selected, the system will run only the parameters of that job. Other preset parameters will not be executed. After selecting a job, click this button (Yellow background / Black text) to enable the All Job function. Click again (White background / Black text) to disable the All Job function.
New	Open the Add Input interface.
Edit	Edit the selected event.
Copy	Copy the selected event.
Delete	Delete the selected event.

< New Input Job 1 - Job-1 Input Event OK																																					
Description																																					
Mode	Event Options																																				
I/O Input 2025/6/5 10:07:44 < New Input Job 1 - Job-1 Input Event Disable <table><tr><td>2</td><td></td><td></td><td>8</td><td></td><td></td></tr><tr><td>3</td><td></td><td></td><td>9</td><td></td><td></td></tr><tr><td>4</td><td></td><td></td><td>10</td><td></td><td></td></tr><tr><td>5</td><td></td><td></td><td>11</td><td></td><td></td></tr><tr><td>6</td><td></td><td></td><td>12</td><td></td><td></td></tr><tr><td>7</td><td></td><td></td><td></td><td></td><td></td></tr></table> Save	2			8			3			9			4			10			5			11			6			12			7						Description Disable / Enable / Clear / Confirm / Start / Reverse / Sequence Clear / Restart / One-time Detection / Custom 1 / Custom 2 / Custom 3 / Custom 4 / Custom 5 Signal Selection Blank (Not selected) High Level Low Level
2			8																																		
3			9																																		
4			10																																		
5			11																																		
6			12																																		
7																																					
Save	Save: Save the settings on this page.																																				
I/O Input 2025/6/5 10:07:48 < New Input Job 1 - Job-1 Input Event Gate Once <table><tr><td>2</td><td></td><td></td><td>8</td><td></td><td></td></tr><tr><td>3</td><td></td><td></td><td>9</td><td></td><td></td></tr><tr><td>4</td><td></td><td></td><td>10</td><td></td><td></td></tr><tr><td>5</td><td></td><td></td><td>11</td><td></td><td></td></tr><tr><td>6</td><td></td><td></td><td>12</td><td></td><td></td></tr><tr><td>7</td><td></td><td></td><td></td><td></td><td></td></tr></table> Workpiece Ready Confirm No yes Save	2			8			3			9			4			10			5			11			6			12			7						When the event "One-time Detection" is selected, the Workpiece Reset Confirmation field will be displayed. No: Workpiece reset does not require pressing the confirmation button. Yes: Workpiece reset requires pressing the confirmation button.
2			8																																		
3			9																																		
4			10																																		
5			11																																		
6			12																																		
7																																					

External Input: Binary Switching Job



Steps for Binary Job Switching

1. First Input (IN_1): Short-circuit (ON) → enter binary job switching mode. (Note 1)
2. Convert the target Job ID number into 8-bit binary (decimal → binary). If the binary number has fewer than 8 digits, add leading zeros. (Note 2)
3. The converted 8-bit Job ID is mapped from high to low bit onto Input **Group 5 (IN_5)** → Input **Group 12 (IN_12)**.
0 → OFF (Open)
1 → ON (Short)
4. After confirming that all 8 bits are entered correctly, use Second Input (IN_2): Short-circuit (ON) → confirm and Operation switching.

Note 1: IN_1 = OFF (Open): Normal event mode. IN_1 = ON (Short): Binary job switching mode.

Note 2:

Job ID range: 01 ~ 100

Modbus Job ID: 221

$2^8 = 256$, Binary representation: 8-bit (0000 0000 ~ 1111 1111 = total 256 jobs), covering all current job IDs.

Example: 1. Job(1) → Binary switch to Job(11)

$11_{(10)} \rightarrow 0000\ 1011_{(2)}$

(IN_1)	(IN_2)	(IN_5)	(IN_6)	(IN_7)	(IN_8)	(IN_9)	(IN_10)	(IN_11)	(IN_12)
0	0	0	0	0	0	0	0	0	0
⇒ (IN_1)	(IN_2)	(IN_5)	(IN_6)	(IN_7)	(IN_8)	(IN_9)	(IN_10)	(IN_11)	(IN_12)
1	1	0	0	0	0	1	0	1	1

⇒ Example: Switch to Job (11)

2. Example: From Job (11) → Binary switch to Job (101)

$101_{(10)} \rightarrow 0110\ 0101_{(2)}$

(IN_1)	(IN_2)	(IN_5)	(IN_6)	(IN_7)	(IN_8)	(IN_9)	(IN_10)	(IN_11)	(IN_12)
1	0	0	0	0	0	1	0	1	1
⇒ (IN_1)	(IN_2)	(IN_5)	(IN_6)	(IN_7)	(IN_8)	(IN_9)	(IN_10)	(IN_11)	(IN_12)
1	1	0	1	1	0	0	1	0	1

⇒ Example: Switch to Job (101)

5-2-5. I/O Output

I/O Output

2025/6/5 10:07:55

< Job

1 - Job-1

Unified

Output Event	1	2	3	4	5	6	7	8	9	10	11

New

Edit

Copy

Delete

Test

I/O Output	Description
Job	Job Selection
Unified	When a job is selected, only the output parameters of that job will be executed. Other jobs'original output settings remain unchanged. After selecting a job, click this button (Yellow background / Black text) to enable All Job function. Click again (White background / Black text) to disable All Job function.
New	Open the Add Output interface.
Edit	Edit the selected event.
Copy	Copy the selected event.
Delete	Delete the selected event.
Test	Check whether the indicator light is working correctly.

Output Settings	Description
I/O Output 2025/6/5 10:07:58 < New Output Job 1 - Job-1 Output EventOK 1                                  	

5-3. Data

5-3-1 History Data

Data		2025/6/5 11:04:04						
History Log Data Graph Data Config Maintain			☒ All ☐ OK ☐ NG					
	No	Date Time		Job ID	Seq ID	Torque	Angle	Torque Unit
	5812	2025-06-04 10:39:56		1	1	1.058	562	1
	5811	2025-06-04 10:39:55		1	1	0.0	2701	1
	5810	2025-06-04 10:39:52		1	1	1.005	419	1
	5809	2025-06-04 10:39:50		1	1	1.07	208	1
	5808	2025-06-04 10:39:49		1	1	1.0	725	1
	5807	2025-06-04 10:39:46		1	1	1.011	1270	1
	5806	2025-06-04 10:39:42		1	1	1.017	1269	1
	5805	2025-06-04 10:39:40		1	1	1.005	919	1
	5804	2025-06-02 16:33:02		3	1	1.018	1972	1
	5803	2025-06-02 16:33:00		3	1	1.006	2225	1
	5802	2025-06-02 16:32:58		3	1	1.04	2534	1
	5801	2025-06-02 16:32:56		3	1	1.023	2616	1
	5800	2025-06-02 16:32:55		3	1	1.001	2410	1

Historic data	Description
Data Status Display:	Choose to display All / OK / NG status.
Historic data	Display the latest 100 records, showing: ID, fastening time, Job ID, Process ID, Torque, Angle, Quantity, Total Quantity, Status, Barcode.

5-3-2 Logging Information

Data

2025/6/5 11:04:07

History

Log Data

Graph Data

Config

Maintain

< Start

June 2025

>

< End

June 2025

>

Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
26	27	28	29	30	31	1	26	27	28	29	30	31	1
2	3	4	5	6	7	8	2	3	4	5	6	7	8
9	10	11	12	13	14	15	9	10	11	12	13	14	15
16	17	18	19	20	21	22	16	17	18	19	20	21	22
23	24	25	26	27	28	29	23	24	25	26	27	28	29
30	1	2	3	4	5	6	30	1	2	3	4	5	6

Destination

☐ USB1
 ☐ USB2
 ☐ FTP

Export Format

☐ CSV
 ☐ ZIP

Export

Export Historic Data	Description
Start	Select start date (YYYY/MM/DD) and time. Must select date before time.
End	Select end date (YYYY/MM/DD) and time. Must select date before time.
Destination	Choose export destination: USB1 / USB2 / FTP. FTP File Size Limit: 500MB.
Export Format	Choose CSV / ZIP (compressed)
Export	Export fastening data based on above conditions.

5-3-3. Graphic File Data

Data
2025/6/5 11:04:09

History
Log Data
Graph Data
Config
Maintain

Export Graph Data

Mode
☐ Single
☒ Continue

Source
☒ USB1
☐ USB2

Export

Export Image Data	Description
Mode	Choose Single / Continuous.
Source	Choose export source: USB1 / USB2 / FTP. FTP File Size Limit: 500MB.
Export	Export image data based on above conditions.

5-3-4. Configuration

Data
2025/6/5 11:04:12

History
Log Data
Graph Data
Config
Maintain

Export Config

Destination
☐ USB1
☐ USB2
☐ FTP

File

Database Ver
000.0088

Export

Import Config

Destination
☐ USB1
☐ USB2
☐ FTP

File

Import

Export / Import Configuration Settings	Description
Export Destination	Source: Choose Export source: FTP / USB1 / USB2. FTP File Size Limit: 500MB.
Export Configuration File	(cfg)
Database Ver	Displays the current database version.
Export	Export configuration file based on the above conditions.
Import Destination	Import Source: Select import source: FTP / USB1 / USB2. FTP Upload File Size Limit: 500MB.
Import File	Select the configuration file to import (.cfg).
Import	Import the configuration file.

5-3-5. Maintain

Data
2025/6/5 11:04:15

History
Log Data
Graph Data
Config
Maintain

Disk Storage Space

1%

No	File Name	Size	Count
1	2025	721.55	481

Delete

Disk Storage Space	Description
Disk Storage Space	Storage Usage: Displays the current disk usage percentage.
Delete	Fastening Data: Deletes fastening records.

5-4. Setting

5-4-1. Controller

Setting2025/11/7 15:41:57

Controller

Tool

System

Barcode

Network

Update

Controller

Device ID1

Device NameMY-EVO

Storage Warning(%)80

Torque Filter0.0

Downshift Torque(%)0

Downshift Speed(%)0

Torque UnitN.m

Circular ArchiveOFFON

Counting MethodIncDec

Blackout RecoveryOFFON

Buzzer ModeOFFON

ModbusTCPRTU (Must Reboot)

LanguageEnglish繁體中文简体中文

Save

Button Access with Password

Clear Seq button

Clear button

Confirm button

Enable button

Disable button

Skip button

Save

Background Color

OK SequenceGreenYellow

OK JobGreenYellow

Save

Load Default

Load Factory Default Setting ?

Load

Controller Settings	Description
Device ID	Displays the controller ID. (Range: 1~255, Default: 1) (Reboot required to take effect)
Device Name	Supports English (uppercase/lowercase), numbers, and symbols. (Range: 1~12 characters, Default: ntes 7)
Storage Warning (%)	Set disk full warning threshold. (Range: 50%~95%, Default: 80%)
Torque Filter	Set a threshold to filter out smaller torque values.
Downshift Torque (%)	When the last step of a job targets torque, the downshift torque is calculated as a percentage of the target torque. If this parameter is enabled, all jobs will use this value as the basis for downshift torque.
Downshift Speed (%)	When downshift torque is enabled, the corresponding downshift speed is calculated as a percentage of the final step speed. If the calculated speed is lower than the screwdriver's minimum speed, the minimum speed will be used instead.
Torque Unit	kg·m / N·m / kg·cm / lb·in / N·cm.
Circular Archive	When system storage reaches the warning threshold, the system will automatically delete the oldest year's data log files. Default: Off.
Counting Method	Countdown / Count-up: Screw count decreases or increases based on the selected mode. Default: Countdown.
Blackout Recovery	On: Saves the screw count before the controller was powered off. Default: On Off: Saves the job before the controller was powered off.
Buzzer Mode	On / Off: Enable or disable the buzzer sound.
Language	Options: English / Traditional Chinese / Simplified Chinese Default: English
Save	Save the above settings.
Modbus	TCP / RTU. Default: TCP. (Reboot required to take effect)
Button Access with Password	Password protection for command buttons on the real-time monitoring screen: "Clear Seq button" 、 "Clear button " 、 "Confirm button " 、 "Enable button " 、 "Disable button " 、 "Skip button " Enter the password to activate these buttons.
Save	Save the above password settings.
Background Color OK Sequence	Process Completion Signal: Choose background color: Yellow / Green Default: Yellow °
Background Color-OK Job	Job Completion Signal: Choose background color: Yellow / Green Default: Yellow
Save	Save the above color settings.
Load Default	Reset: Restore factory default settings. Fastening data will be retained, configuration files will be cleared.
Load	Confirm factory reset.

Tool Settings	Description
Start Mode	● Press Plate: Tool operation is triggered by pressing the plate. ● Downward Press: Tool operation is triggered by downward pressure. ● Remote: Tool operation is triggered via IO or communication protocol (e.g., Modbus). ● Press Plate or Downward Press: Tool operation is triggered by either press plate or downward press. ● Press Plate and Downward Press: Tool operation is triggered only when both press plate and downward press are activated simultaneously. ● Press Plate or Remote: Tool operation is triggered by either press plate or IO/communication protocol. ● Press Plate or Downward Press or Remote: Tool operation is triggered by any of the three methods. ● Default: Press Plate
LED Tool Light Settings	Off: LED remains off. Always On: LED remains on. During Operation: LED lights up while the tool is running. Before Start: LED lights up when the press plate or downward press is activated to a certain level, but the motor has not yet started.
Start Delay (Sec)	Delay time before the next process can be started. Unit: Seconds (supports one decimal place)
Lever Sensitivity (%)	Sensitivity threshold for triggering tool operation via press plate. Range: 10%–90% Default: 50%
Push Sensitivity (%)	Sensitivity threshold for triggering tool operation via downward press. Range: 10%–90% Default: 50%
Save	Save the settings on this page.

5-4-3. SystemM



System Date	Description
Date	Select Year / Month / Day.
Time	Select Hour / Minute / Second.
Save	Save the date and time settings.
Screen Settings	Description
Screen Rotate	Set the screen to rotate 180 degrees. The controller will automatically reboot after rotation.
LED Brightness	Select brightness level: 25% / 50% / 75% / 100%. Default: 100%
Save	Save the brightness settings.
Password Settings	Description
New Password	4–10 digits (numbers only).
Confirm Password	4–10 digits (numbers only).
Save	Save the password settings.

5-4-4. Barcode

Setting
 2025/6/5 11:00:28

Controller
 Tool
 System
Barcode
 Network
 Update

Job ID	BarCode

Barcode

From Count

Barcode Mode ☒ BS ☐ BS Free ☐ Switch Job/Seq

Select Job

Save Delete

System Management	Description
Barcode Master List	Displays the list of created job IDs and barcode contents.
Barcode	Real-time display area for scanned barcodes. Barcode content does not support single quotes ('). If single quotes are used, they will be replaced with double quotes (") due to length constraints.
From	Set the starting character position for barcode matching in each job/process. Range: 1–100 characters Default: 1
Count	Number of characters to match starting from the defined position. After scanning, the total character count of the barcode will be displayed. Range: 1–100 characters Default: 1
Barcode Mode	Barcode Mode Selection Barcode Stop (BS) 、Barcode Stop (Process Switchable) 、Switch Job / Process Default: Barcode Stop Barcode Stop (BS) Job-based mode: After scanning the configured barcode, the system switches to the corresponding job and disables restrictions (Disable). Once the job is triggered, process switching or scanning any other barcode is not allowed during execution. The barcode will be cleared only after the job is completed. Barcode Stop (Process Switchable) - BS(Free):Job-based mode: After scanning the configured barcode, the system switches to the corresponding job and disables restrictions (Disable). Once the job is triggered, process switching and barcode scanning to switch jobs or processes (limited to barcodes listed in the master list) are allowed during execution. The barcode will be cleared only after the job is completed. Switch Job / Process (Switch Job / Seq.):Process-based mode: After scanning the configured barcode, the system switches to the corresponding process. After scanning, users can switch to different processes or switch to other jobs again. During execution, barcodes can be scanned at any time to update the fastening barcode data. The barcode will be cleared when the process is completed.
Select Job	Select the job corresponding to the scanned barcode. Only available in Switch Job / Process mode. In other modes, saved jobs cannot be selected and will appear grayed out.
Select Sequence	Select the process corresponding to the scanned barcode. The "Select Process" menu is only displayed when the "Switch Job / Process" mode is selected. Only in "Switch Job / Process" mode can you select other processes under the same job.
Save	Save the settings on this page.
Delete	Delete the selected barcode from the master list.

5-4-5. Network

Setting
 2025/6/5 11:00:32

Controller
 Tool
 System
 Barcode
Network
 Update

Network Mode ☒ DHCP ☐ Static
 Network IP Set Static IP
 Subnet Mask Port
 Gateway IP

Network Settings	Description
Network Mode	Dynamic Wired Network / Static Wired Network
Network IP	Displays the current IP address of the controller.
Subnet Mask	Configure the subnet mask for the controller's network connection. Default: 255.255.255.0
Gateway IP	Configure the default gateway IP address for the controller. Default: 0.0.0.0
Set Static IP	Configure the static IP address for the controller. Default: 0.0.0.0
Port	Set the communication port used to connect to the server. Default: 502
Save	Save the settings on this page.

5-4-6 Update

Setting
 2025/6/5 11:00:34

Controller
 Tool
 System
 Barcode
 Network
Update

Controller
 Controller Version
 Source ☐ FTP ☐ USB1 ☐ USB2
 File

Tools
 Tools Version
 Source ☐ FTP ☐ USB1 ☐ USB2
 File

CPB
 CPB Version
 Source ☐ FTP ☐ USB1 ☐ USB2
 File

Controller Update	Description
Controller Version	Displays the current version of the controller. (* New feature: whitelist version can be updated, e.g., auto remove VU.001)
Source	Import updated version by selecting the source: FTP / USB1 / USB2
File	Select a .zip file for update (e.g., NTCS7_ALL_V0089.zip)
Update	Start executing the update.
Screwdriver Firmware Update	Description
Tools Version	Displays the current firmware version of the screwdriver.
Source	Import the update by selecting the source: FTP / USB1 / USB2
File	Select a .bin file for the update. Example: NTMD_20250528_V1p27_N_P.bin
Start	Begin executing the firmware update
Power Board Firmware Update	Description
CPB Version	Displays the current firmware version of the power board.
Source	Select the update source: FTP / USB1 / USB2
File	Select a .bin file for the update. Example: PowerBoard_20250528_V1p10.bin °
Start	Begin executing the power board firmware update °

5-5. Information

5-5-1. TOOL

Information

2025/11/7 15:43:19

Tool

Controller

Manual

Model No

12345678

Serial No

987654321

Cumulative Count

7178

Total Count

7178

RPM

20 / 980

Torque

0.300 / 3.000

N.m

Version

1.37

Model No	Display the tool model.
Serial No	Display the tool's serial number.
Cumulative Count	Display the number of maintenance operations. (When the count reaches 1,000,000, the homepage will show an EOC alert.)
Total Count	Display the total number of fastenings performed by the tool.
Rotation Speed (RPM)	Display the tool's minimum and maximum rotation speed values.
Torque	Display the tool's minimum and maximum torque values.
Version	Display the tool's software version.

5-5-2. Controller

Information

2025/11/7 15:43:24

Tool Controller Manual	Serial No	NTR211859
	Controller Version	000.0100
	CPB Version	1.04
	DB Version	000.0100
	Image/System Version	N7_V1.007 / 1.203
	IP	192.168.0.127
	Mask	255.255.255.0
	Gateway	192.168.0.255
	MAC Address	78:e9:96:60:00:2f

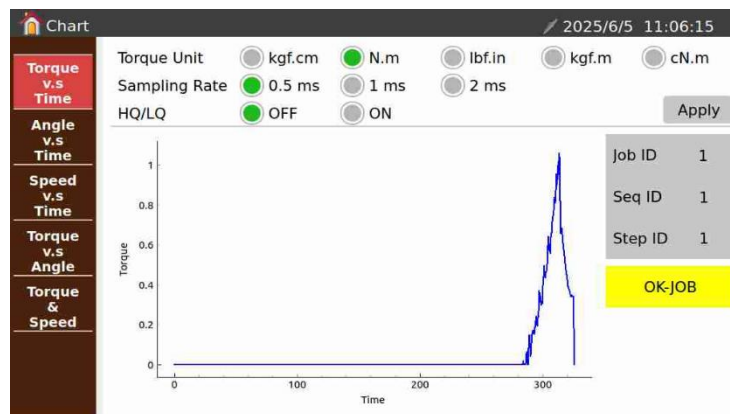
Controller Information	Description
Serial No	Display the controller's serial number.
Controller Version	Display the controller's version.
CPB Version	Display the firmware version of the power board.
Database Version	Display the current database version.
Image Version	Display the current image version.
IP	Display the current IP address of the controller.
Mask	Set the subnet mask for the controller's network connection.
Gateway	Set the default gateway IP for the controller's network connection.
(MAC) Address	Display the controller's MAC address.

5-5-3. Manual



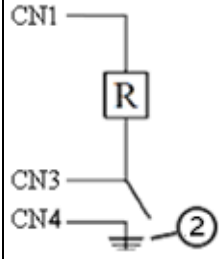
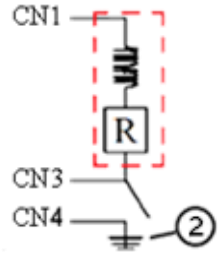
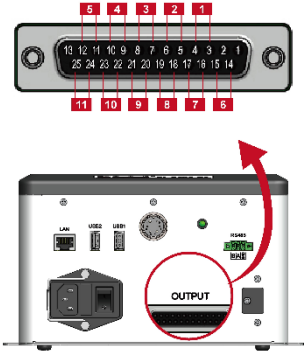
Manual Information	Description
QR Code	Display a QR code that provides the download link for the user manual.

5-6. Chart



Curve Chart Settings	Description
Chart	Select Display Chart Torque vs Time: Horizontal Time, Vertical Torque. Angle vs Time: Horizontal Time, Vertical Angle. Rotation Speed vs Time: Horizontal Time, Vertical Rotation Speed. Torque vs Angle: Horizontal Angle, Vertical Torque. Torque & Rotation Speed: Horizontal Time, Left Vertical Torque, Right Vertical Rotation Speed.
Torque Unit	Kgf.cm / N.m / lbf.in / kgf.m / N.cm °
Sampling Rate	Select Output Sampling Rate 0.5 (ms) / 1 (ms) / 2 (ms) °
HQ/LQ	Off: Do not display upper and lower limit guide lines. On: Display upper and lower limit guide lines. Default: Off.
Apply	Apply angle settings.
Angle	Select Display Mode: Step Angle / Total Angle Step Angle: The angle of the last step. Total Angle: The total accumulated angle calculated from the start of the tool operation. Default: Step Angle
Curve Chart	Displays the position of the fastening curve chart.
Job ID	Displays the executing Job ID.
Seq ID	Displays the executing Process ID.
Step ID	Displays the executing Step ID.
Status	Displays the fastening status.

6. External output control function description

Connector No	Self-definition	Description	Ordinary load	Inductive load
CN 1	Vdc	The voltage output of controller is DC+12V/100mA or +24V/50mA. Default: +24V/50mA (+12V/100mA is also applicable)		
CN 2	GND	Power output GND		
CN 3	Example: OK	OK: CN3 and CN4 are connected when a screwdriver is initiated. CN3 + CN4 are connected when short-circuited CN3 + CN4 are disconnected when open-circuited		
CN 4	COM			
				
Output state definition	OK NG NG-High: Exceed upper limit. NG-Low: Lower than lower limit. OK-Sequence: Sequence completion signal OK-JOB: Job completion signal	Tool Running: Motor signal Tool Trigger: Initiating signal Reverse BS: Barcode Stop Barcode UserDefine1: Self-definition 1	UserDefine2: Self-definition 2 UserDefine3: Self-definition 3 UserDefine4: Self-definition 4 UserDefine5: Self-definition 5	

7. External input control function description

Connector No	Self-definition	Description
CN 3	Example: START IN	1. When CN3 + CN4 is (CLOSE), screwdriver is initiated. 2. When CN3+CN4 is (OPEN), screwdriver stops running
CN 4	GND	
Input state definition	Disable: Not used Enable: Able to use Clear: Clear the counts Confirm: Make confirmation Start IN: Start Reverse: Screw removing Sequence Clear: Clear sequence Reboot: Restart	Gate Once: Trigger-once sensing UserDefine1: Self-definition 1 UserDefine2: Self-definition 2 UserDefine3: Self-definition 3 UserDefine4: Self-definition 4 UserDefine5: Self-definition 5 FreeRotate

Remark:

- ※ For the INPUT contact, if the non-isolated (wet contact) control method is used, a 10K resistor shall be connected in series on the wiring to prevent equipment damage.
- ※ CN1(V+) and CN2(GND) can supply DC+24V (default). (DC +12V needs to be customized)
- ※ If user needs other DC voltage, users must use step-down circuit to step down voltage.
- ※ If user needs input voltage to drive the police instrument, the input voltage should not exceed DV+/-40V, +/-1A, max:10w (use MOS RELAY I/O version)

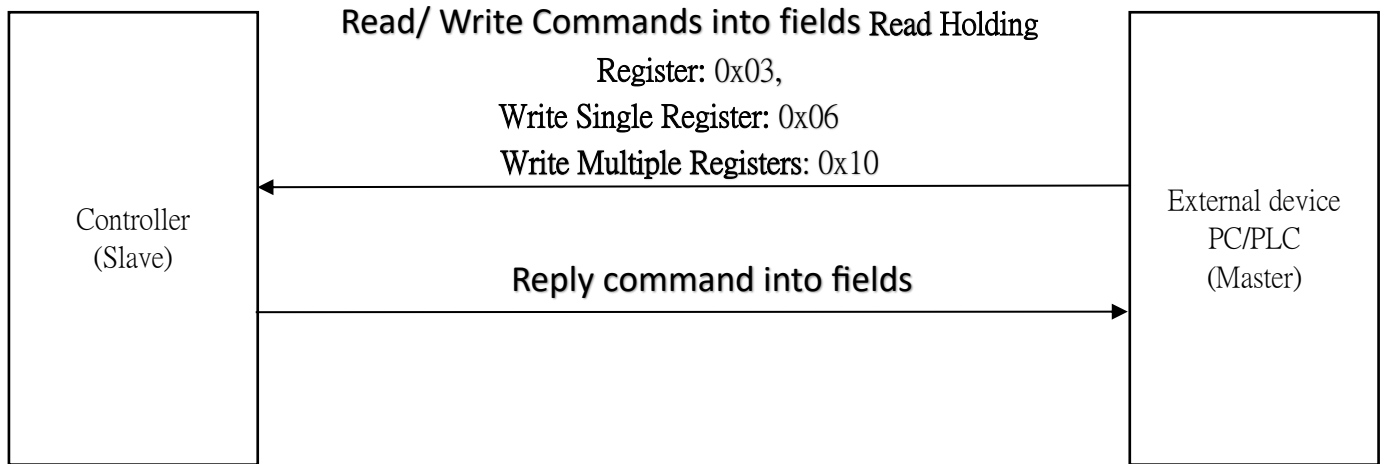
8. Description of display status code

8.1 Abnormal messages from controller/screwdriver/lock information

Code	Error message	Description
1	NO-ERR	NO Error
2	ERR-MOT-TEMP	Temperature Error
3	ERR-HALL	Stall Protection
4	ERR-MOT-CURR	Overcurrent Protection
5	ERR-TMD-FRAM	TMD Communication Error
6	ERR-ENCODER	Sensor Error
7	ERR-DMS-COMM	Wrong Tool Connected
8	ERR-PROC-MAXTIME	Timeout Failure
9	Interrupt Alarm	Interruption Alarm
10	ERR-HIGH-ANGLE	Step Angle Upper Limit Error
11	ERR-LOW-ANGLE	Step Angle Lower Limit Error
12	ERR-HIGH-TORQUE	Torque Upper Limit Error
13	ERR-LOW-TORQUE	Torque Lower Limit Error

9. Modbus Instruction

Modbus Data Transmission



Communication method uses MODBUS TCP/ MODBUS RTU standard protocol.

Connection methods are:

- **TCP connection and setup:**
 1. **Selecting LAN-DHCP or LAN-STATIC from controller.**
 2. **Configuring the controller's IP to be on the same domain as the PC's. (Find out an IP from LAN-DHCP or select/ setup an IP address from STSTIC IP or GATEWAY IP.)**
 3. **Setting the Server port (default is 502) and click SAVE.**
- **RS-485 connection and setup**
BAUDRATE configuration: 115200/ Data bits: 8/ Stop bits: 1/ Parity: None/ Flow Control: Xon/ Xoff.

MODBUS PDU :

- Using Big-Endian as data placement format
- Read Fun code supports Read Holding Registers
- Write Fun code supports Write signal Register/ Write Multiple Registers
(If writing multiple addresses in ASCII, only Write Multiple Registers is supported.)

Note 1: To use command control for the screwdriver, set the screwdriver to Remote Start (Go to Settings > Tools > Tool Settings > Start Settings > Remote Start).

Note 2: When using command control to start the screwdriver (ON), remember to turn off the start (OFF) when other operations are required.

Supported Versions: Controller Version V066 and above.

For the Modbus communication document (Read/Set Fields), please contact the original manufacturer.

Chart 1 Controller Data fields

TCP/RTU Torque Reading as below:

Request

Device ID	Function Code	Start address High	Start address Low	No of addresses High	No of addresses Low	CRC16 Low	CRC16 High
01	03	10	3B	00	02	B1	06

Response

Device ID	Function Code	No of byte	Data #1 High	Data #1 Low	... x n data		CRC16 Low	CRC16 High
01	03	04	00	00	00	33	BA	26

add (Hex)	add (DEC)	Length	Parameter INS	Parameter area	Function Code
103B	4155	2	Tightening Torque* 100	0~TOOL MAX	0x03

Char2. Controller function setting address

TCP/RTU An example of setting the screwdriver to start is as follows:

Request

Device ID	Function Code	Address High	Address Low	Date High	Data Low	CRC16 Low	CRC16 High
01	06	01	C8	00	01	C8	08

Response

Device ID	Function Code	Address High	Address Low	Date High	Data Low	CRC16 Low	CRC16 High
01	06	01	C8	00	01	C8	08

add (Hex)	add (DEC)	Length	Parameter INS	Parameter area	Function Code
01C8	456	1	Screwdriver Starting	0: off	

Our company reserves the right to modify the product without prior notice.