BE Power Screwdriver
Control Display User Manual



Model: KL–WSCBSN (BE)

Please scan the following QR code or download the operation manual from KILEWS website

https://www.kilews.com.tw/tc/download-list.php

KILEWS INDUSTRIAL CO., LTD.

http://www.kilews.com.tw

Y2F216Q-1-003

1. Panel Function



Display Screen:
Boot Version: (Ver 2.xxx)
16X2 LCM Display Setting Function

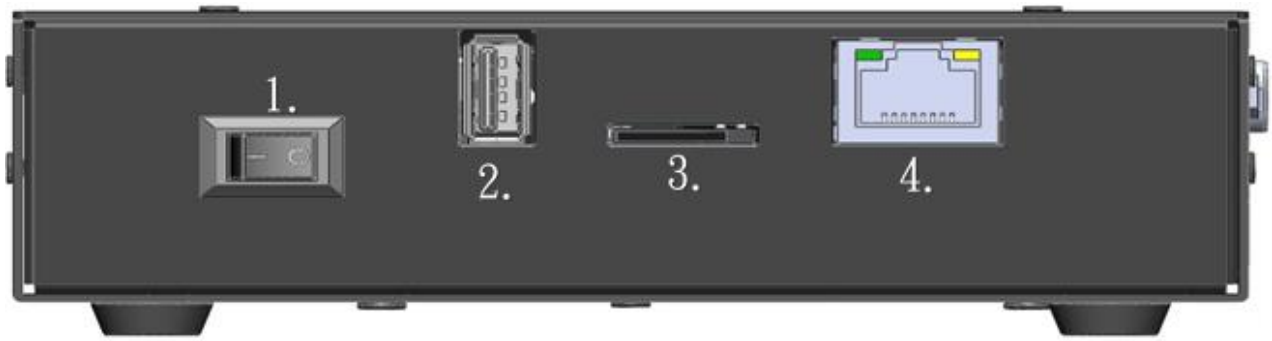
1	9	9			S	C	:	9	9			T	:	9	.	9	9
9	9			C	:	9	9	9	.	9			O	K	A	L	L

- 199: Display Job Sequence
- 99: Display Program
- SC: Display Count Value
- C: Display Screwdriver Action Turns
- T: Display Screwdriver Action Time
- 999.9: Display Number of Turns
- OKALL: Display status (OK, NGT, NGQ, NGC,...)

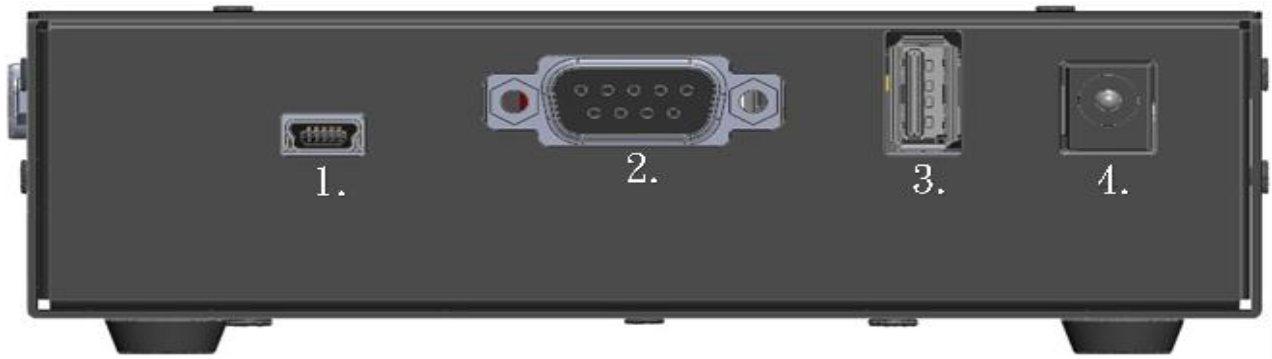
Up Key: Setting mode Up key switch function.
Down Key: Setting mode Down key switch function.
Left Key: Setting mode Left key switch function
Right Key: Setting mode Right key switch function
Esc Key: Press three seconds to enter/leave the setting mode.
↵Key: CONFIRM key
OK, NG, OKALL, start, Rev, Dis, POWER: Display status indicator.



1. OUTPUT: External output control
2. INPUT: External input control.
3. PORT1 (RS232): Connect to DAS or wifi module



1. Switch element: turn on or turn off the module power
2. USB port: Connect to the barcode reader.
3. MicroSD Card port: Used to store data.
4. Cable communication port: Used to online.



1. Micro USB port: Used to connect Micro harness.
2. RS232: Reserved port, no function for now.
3. USB port: Used to connect bluetooth module.
4 Power supply port: Used to supply power to module.

2. Set Function Options and Operating Instructions

After switching on the power, to enter into the function menu, press the “Esc” key on the panel for 3 seconds, following which password input is required to enter the menu.

CTRL Setting			
Name	**Set Up Time and Value**	**Function Interpretation**	**Factory Default**
[1]SEQ Numbers	000-199	Set the Number of Job Sequence.	OFF
[2]Job Sequence	JS: 001-199 P: 01-99 Tool: T1-T9	Set the parameter program and tools used in each job sequence.	JS: 001 P: 01 Tool: T1
[3]Device ID	000-250	WSCBSN No.	000
[4]Query Tool	NA	Search for pair-up tool; suggest pairing up different tools separately.	NA
[5]Tool Pair	NA	Set the devices found from the search process in Step [4] to the planned tool number.	NA
[6]Operator Mode	1: STD 2: ADV	STD: Execute inner parameters setting of controller. ADV: Job sequence controlled by AMS.	STD
[7]Default Value	1: Y 2: N	Restore to factory setting value.	N
[8]Gate in Mode	1: None 2: Once 3: Twice	Select the mode of external Gate in function.	None
[9]Sequence Set	1: OFF 2: Single	Select whether to enable the switch program, tool and small cycle through external DAS/AMS or not?	OFF
[10]BC-1 000-0	1: BC1-9 2: 1-103 3: 0-9	BC-1: Barcode 1, up to 9 in maximum. 000: (1) Switch Program:1-99. (2) Release NS: 100. (3) Release AS: 101. (4) Enable Tool: 102. (5) Disable Tool: 103. 0: Select tool. (1) Select tool: 1-9. (2) Unspecified: 0.	BC-1 000-0
[11]Password	0000-9999	Set module password	0000
[12]Product No.	NA	Product serial number (only for warranty revision).	NA
[13]Firmware Ver.	NA	Program version description (cannot be changed).	NA
SCREW Setting			
Name	**Set Up Time and Value**	**Function Interpretation**	**Factory Default**
[1]Program	U1-U99	Select program.	01
[2]Screw Count	1-99	Count the total number of screws.	05
[3]OKALL Alarm	0.1-9.9 Sec	The duration of the OKALL Alarm signal after OK Batch is completed.	1.000
[4]Slow Start Mode	SP: L0-L9 RC: 0.1-9.9 Sec	Start Speed(SP) Start slow start stroke speed. Slow Start Time(RC) Slow start function setting.	SP: L0 RC: 0.0
[5]Thread Limit	HC: 0.1-999.9 LC: 0.0-999.8	High thread(HC) Screw lock High thread(HC) Low thread(LC) Screw lock Low thread(LC)	H: 999.0 L: 001.0
[6]Time Limit	HT: 0.1-9.99 Sec LT: 0.0-9.98 Sec	High Time(HT) Screw lock High Time(HT) Low Time(LT)	H: 9.99 L: 0.01

		Screw lock Low Time(LT) While setting LT to 0.0 sec, it will activate the pre-lock function; the pre-lock time is the longest time of locking HT screws.	
[7]Stop Mode	NS: N/Y AS: N/Y	NG Stop(NS) Does the screwdriver automatically stop operation after the occurrence OKALL Stop(AS) Does the screwdriver automatically stop operation after OKALL or not	NS: N AS: N
[8]Count Thread	00-99	Set the value to judge the in-place shut off.	10

PS. Functions RC and SP: The slow start speed is applicable only during the initial phase for thread finding and engagement. It must not be used for the screw fastening or rundown stage.

3. Set Function Options and Operating Instructions

1)After switching on the power, to enter into the function menu, press the “Esc” key on the panel for 3 seconds, following which password input is required and press ↵ key to enter the menu or if no any operation is made for 10 sec, screen returns to the main page.
2)Press UP or DOWN key to select the setting page to enter; after that, press ↵ key.
3)If data fails to flash, check the parameters; the flashing data can be increased/decreased.
4)When data isn’t flashing, the RIGHT/LEFT keys are disabled. When data is flashing,switch to the parameter to be adjusted.
5)Press Esc to jump out from the setting page.

4. External Input Control Function Description

Connector No.	Definition	Function Description
CN 1	External start signal input STR_IN	1.When (CN3+CN4) is closed, the screwdriver then start reverse rotation. 2.When (CN3+CN4) is open, the screwdriver then stop reverse rotation.
CN 2	GND	Input power GND
CN 3	External reverse signal input Reverse	1.When (CN3+CN4) is closed, the screwdriver then start reverse rotation. 2.When (CN3+CN4) is open, the screwdriver then stop reverse rotation.
CN 4	GND	Input power GND
CN 5	External disable signal input Disable	1.When (CN5+CN6) is closed, the screwdriver disable rotation function is turn on. 2.When (CN5+CN6) is closed, the screwdriver disable rotation function is turn off.
CN 6	GND	Input power GND
CN 7	External Confirm key input Confirm	1.When (CN7+CN8) is closed, confirm is selected. 2.When (CN7+CN8) is open, there is no input status.
CN 8	GND	Input power GND
CN 9	External clear key input Cleared	To clear the count value, the (CN9+CN10) closed circuit can enable the function.
CN 10	GND	Input power GND
CN 11	External sensor switch GATE	1.When (CN11+CN12) is closed, article is detected. 2.When (CN11+CN12) is open, there is no article detected.
CN 12	GND	Input power GND

5. External Output Control Function Description

Connector No.	Definition	Function Description
CN 1	Start signal output START	1.When (CN1+CN2) is closed, the screwdriver then start running. 2.When (CN1+CN2) is open, the screwdriver then stop running.
CN 2	COM	This pin refers to the START signal connection negative end
CN 3	Brake signal output BRAKE	1.When (CN3+CN4) is closed, BRAKE is displayed. 2.When (CN3+CN4) is open, there is no output status.
CN 4	COM	This pin refers to the BRAKE signal connection negative end
CN 5	Screwdriver reversed signal output Reverse	1.When (CN5+CN6) is closed, the screwdriver then start reverse rotation. 2.When (CN5+CN6) is open, the screwdriver then stop reverse rotation.
CN 6	COM	This pin refers to the Reverse signal connection negative end
CN 7	After completion of fastening a screw OK	1.When (CN7+CN8) is closed, OK is displayed. 2.When (CN7+CN8) is open, there is no output status.
CN 8	COM	This pin refers to the OK signal connection negative end
CN 9	When error operation, NG is displayed	1.When (CN9+CN10) is closed, NG is displayed. 2.When (CN9+CN10) is open, there is no output status.
CN 10	COM	This pin refers to the NG signal connection negative end
CN 11	When the batch, work or job sequence completed, OKALL is displayed.	1.When (CN11+CN12) is closed, OKALL is displayed. 2.When (CN11+CN12) is open, there is no output status.
CN 12	COM	This pin refers to the OKALL signal connection negative end
CN 13	Vdc Positive DC voltage terminal	This pin is to provide the external positive voltage.
CN 14	GND Negative DC voltage terminal	This pin is to provide the external negative voltage.

※Remarks:

1. INPUT contact, if using non-isolating (wet contact) control, it needs to connect a 10K resistor in series on the line.
2. When the automatic machine is installed, it is recommended to install the signal line on the machine and then connects to KL-WSCBSN.
When working with automatic control, pay attention to the above items to prevent equipment damage.

6. CONFIRM Mode

Code	Description	Remarks
C1	External GATE signal trigger once CONFIRM mode.	External GATE signal trigger once
C2	External GATE signal trigger twice CONFIRM mode.	External GATE signal trigger twice
C3	When enable “Stop Mode AS” function, LCM screen will display “C3” when OKALL.	panel ↵key/external switch CONFIRM key
C4	When enable “Stop Mode AS” & “Gate Mode_Once” function, LCM screen will display “C4” when OKALL.	External GATE signal trigger once + panel ↵key/external switch CONFIRM key
C5	When enable “Stop Mode AS” & “Gate Mode_Twice” function, LCM screen will display “C5” when OKALL.	External GATE signal trigger twice + panel ↵key/external switch CONFIRM key

7. ERROR CODE Mode Status Description

Code	Description	Remarks
E3	Voltage-drop protection	When the voltage of the electric screwdriver drops instantly, the action of the electric screwdriver is stopped, and the LCM displays this symbol, representing that the screwdriver is currently under low-voltage protection.
E4	Over-temperature protection	When the internal temperature of the electric screwdriver is too high, the action of the electric screwdriver is stopped, and the LCM displays this symbol, representing that the screwdriver is currently under over-temperature protection.
E5	Rotation-jamming protection	When the startup of the electric screwdriver motor is abnormal, the action of the electric screwdriver is stopped, and the LCM displays this symbol, representing that the screwdriver is currently under motor startup abnormality protection.
E7	Direction push board abnormal	When the electric screwdriver motor is switched on, as the direction push board is changed, the motor of the screwdriver then stops action immediately, and LCM displays this symbol.
E8	Brake signal abnormal	When the electric screwdriver brake signal detection is abnormal, the action of the electric screwdriver is stopped, and the LCM displays this symbol.

8. BARCODE Operating Instructions

1. Hardware Configuration Description

Connect the Barcode Reader to the USB port specified on the diagram.





2. Operating Functions Description

2.1 First, set the lock command on Program of WSCBSN

Enable to switch the program used for workpiece lock through the Barcode Reader

Use the KILEWS barcode to switch program among Group 1-9; there are 1-99 groups (CMD.P01-CMD.P99) of barcodes available in factory.

CMD.P01

CMD.P02

CMD.P03

Description:

Stick the program barcode to be used (e.g., CMD.P01~CMD.P99) on the workpiece.
When the workpiece comes in, scan the barcode attached to the workpiece or pre-prepared to enable and the tool; and switch to the correct program.

2.2 Use Barcode Reader to release the AS Confirm command

When the lock of workpiece batch is completed and AS is set, it can be released by Barcode Reader.

Use KILEWS barcode format: CMD.C01 to release AS (okAll Stop) command



Description:

For the AS function already enabled on the WSCBSN. When AS occurs, the screwdriver will be locked and unable to use; operator can use the Barcode Reader to scan the pre-prepared command barcode to release it to facilitate the operation.

2.3 Use the Barcode Reader to release NS Confirm command

When the lock condition of workpiece is wrong, if NS is set, it can be released by the Barcode Reader.

Use KILEWS barcode format: CMD.C02 to release NS (Nok Stop) command



Description:

For the NS function already enabled on the WSCBSN. When NS occurs, the screwdriver will be locked and unable to use; operator can use the Barcode Reader to scan the pre-prepared command barcode to release it to facilitate the operation.