

# Scout II Operation Instructions

(Rev 6.4 4/27/17)



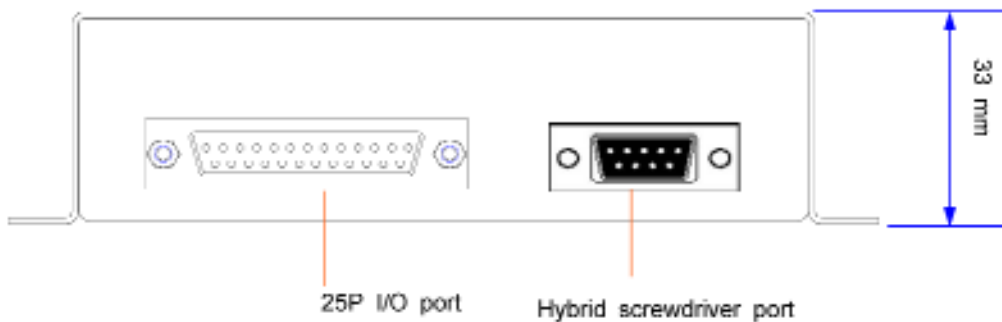
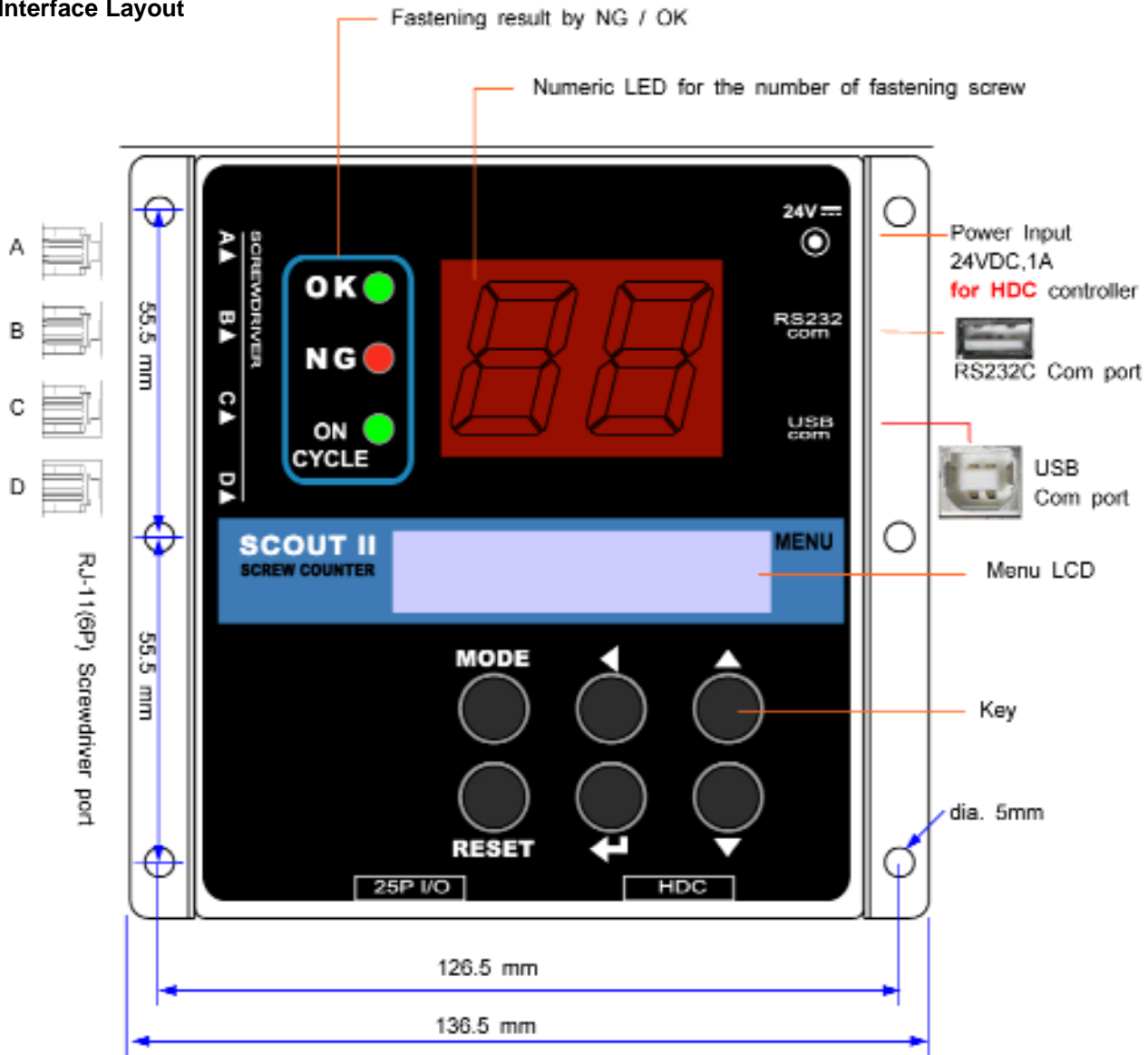
RoHS

CE

# Scout II (Screw Counter) Operating Instructions

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## Scout Interface Layout



# Scout II (Screw Counter) Operating Instructions

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## Connecting the Scout

1. The Scout can be powered by a STC30 Plus, STC40, ET-30D, FT-30D, YFC-35D or via external power, 24VDC, 1A.2) If no transformer, then Scout requires external power (24VDC, 1A).
2. To power up the Scout with a transformer, plug in the cable to the transformer where it says "Signal". Then plug the "Connection" cable into the RJ-11 modular jack where it says "Screwdriver" port A on the side of the Scout. Make sure the transformer is plugged in too.
3. For external power option, plug in power supply on the side where it states "24v m"
4. Maximum 5 screwdrivers can share one program of Scout. The Scout has 4 screwdriver ports on the side, and one extra screwdriver can be connected through 25P I/O.



Plug cable from Scout into transformer

- Note:** Maximum 4 screwdrivers (with a Mountz transformer) can share one program. Only one (1) STC30 Plus transformer with the version lower than v4.3 can be connected to Scout II.
5. The numeric LED shows the number of screws which should be fastened for a cycle (Max. 99).
  6. Fastening results are displayed by NG or OK for every fastening. In order to use NG/OK, the different parameter setting can be saved on the program number from A to G.
  7. The parameter setting can also be set-up on Scout Manager (pc software). It uploads the settings to Scout II. The settings on programs can be saved in csv format file.

## Caution

1. The screw counter SCOUT II should be used with STC30 Plus, STC40, ET-30D, FT-30D, YFC-35D transformer only. Never use the screw counter with any other tools not specified by the manufacturer.
2. Always use the right connecting cable between the transformer and Scout II.
3. Never use non specified cable by the manufacturer.
4. Don't connect both STC30 Plus, STC40, ET-30D, FT-30D, YFC-35D together to Scout II. Only use one transformer model type when using connecting multiple tools.
5. Do not use the screw counter near fire and magnetic environment.

## Accessories for Scout II

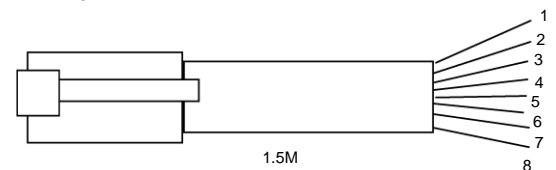
(Refer to image on page 4 for reference)

### ACCESSORIES INCLUDED

Item #	Model
14-7000007	Cable RJ-45(8 Pin) - RJ11(6Pin)*

Note\* This cable is used for connecting the selected Mountz transformer to the Scout unit.

Signal Cable (Item #14-PELZ911)



### ACCESSORIES OPTIONAL

Item #	Model
14-PELZ911	Cable (Signal 8-Pin)
14-GCM6913	Charger (24VDC 1A)
770319	Cable USB (Type A to Type B: M-M 6 ft)
145780	Cable (RS232 to USB Type A 6 ft)
145760	Cable 25P I/O (M-M)

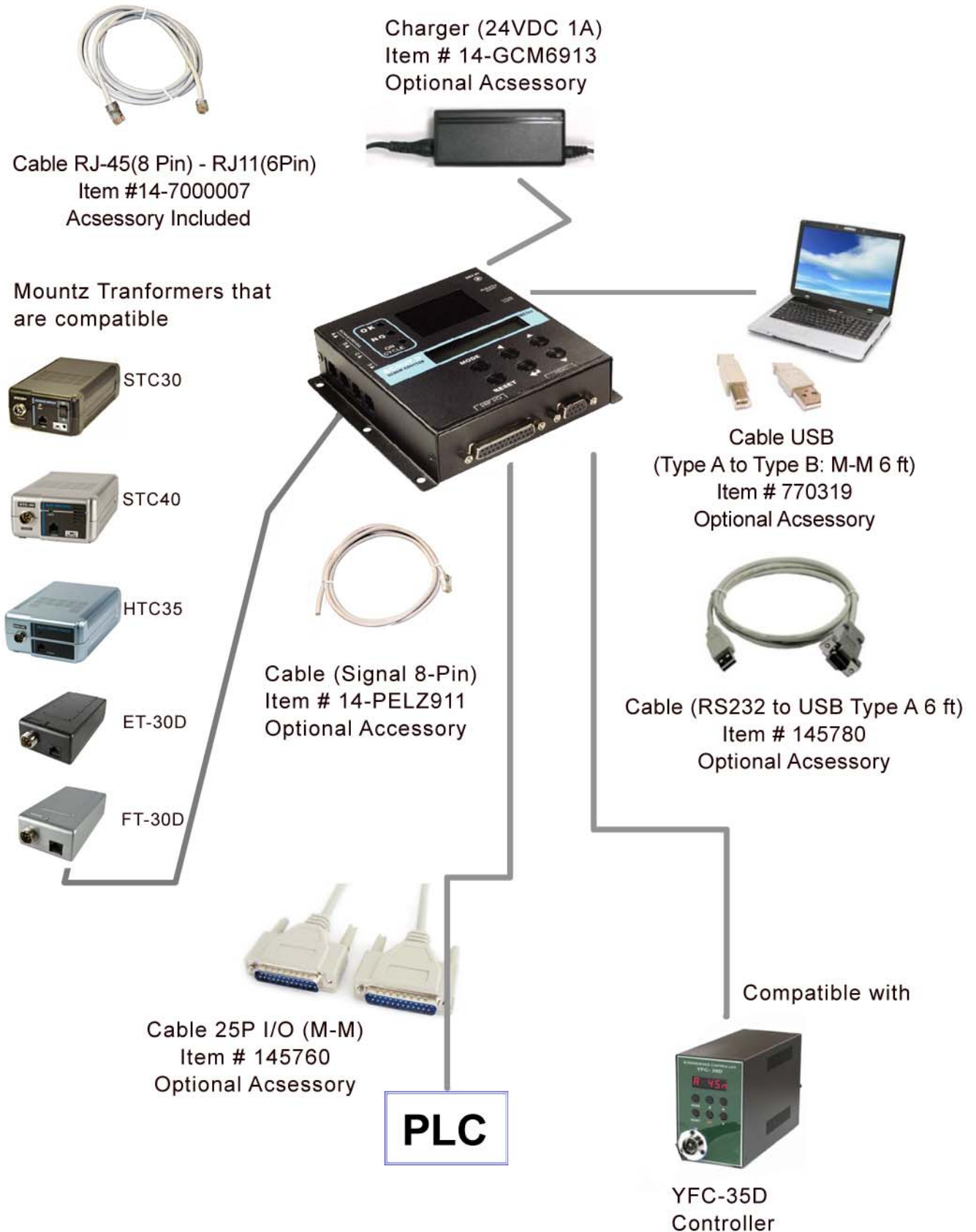
RJ-45 Modular Jack



Pin No.	Color	Function
1	Solid Orange	Not Used
2	White/Orange	Stop
3	Blue	Start
4	White/Blue	DC(-)
5	Green	Driver Lock
6	White/Green	Driver Lock
7	Brown	N/A
8	White/Brown	Not Used

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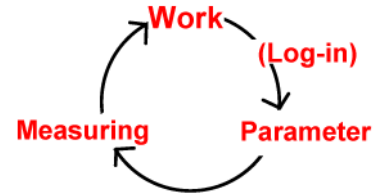
# Scout II (Screw Counter) Operating Instructions

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## Operation

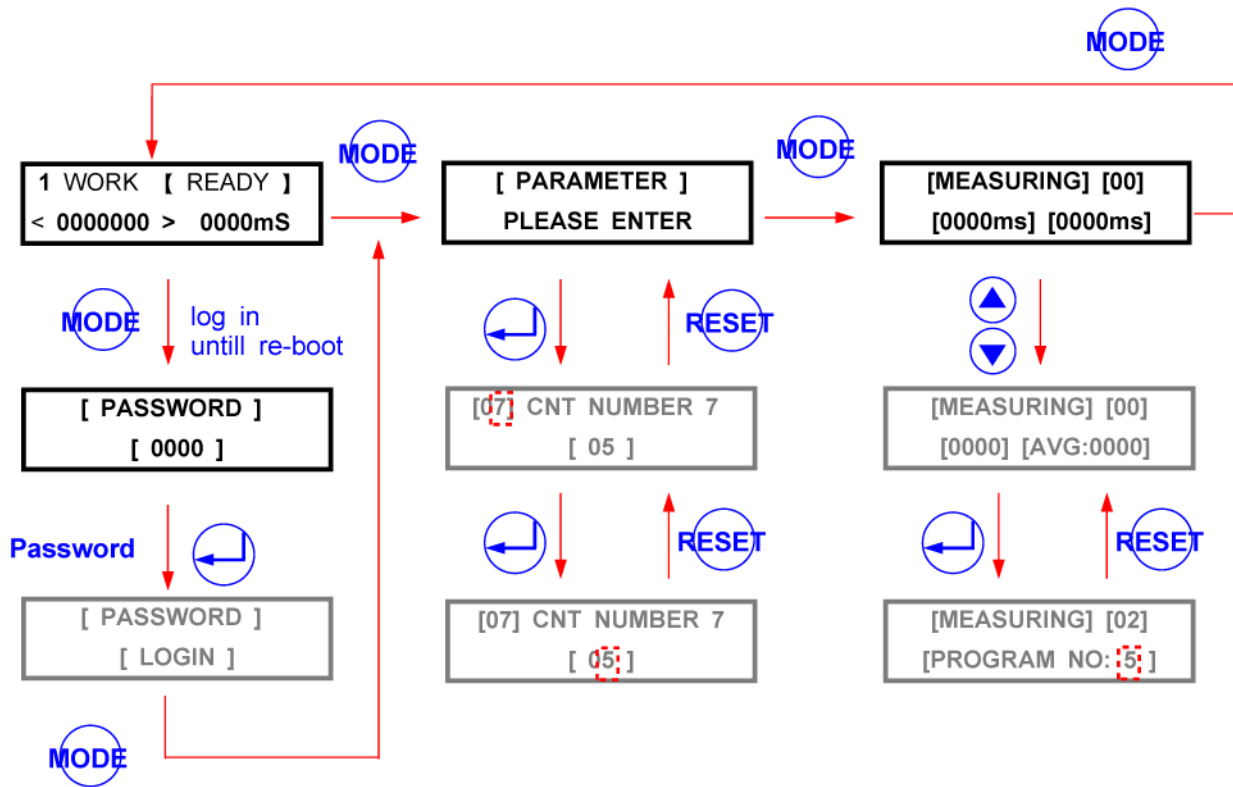
### 1. Mode

By pressing the **MODE** button, it circulates through Work, Log-in, Parameter and Measuring modes. Work is operating the unit. Before accessing parameter mode, the password is required. Every settings is accessible in Parameter mode. Once logged in, it circulates through Work, Parameter & Measuring modes until the power is turned off. When turned back on, then you must login again.



Fastening time is monitored on Measuring mode. Minimum and Maximum time measurements can be saved on the selected program #.

Factory setting password: 0

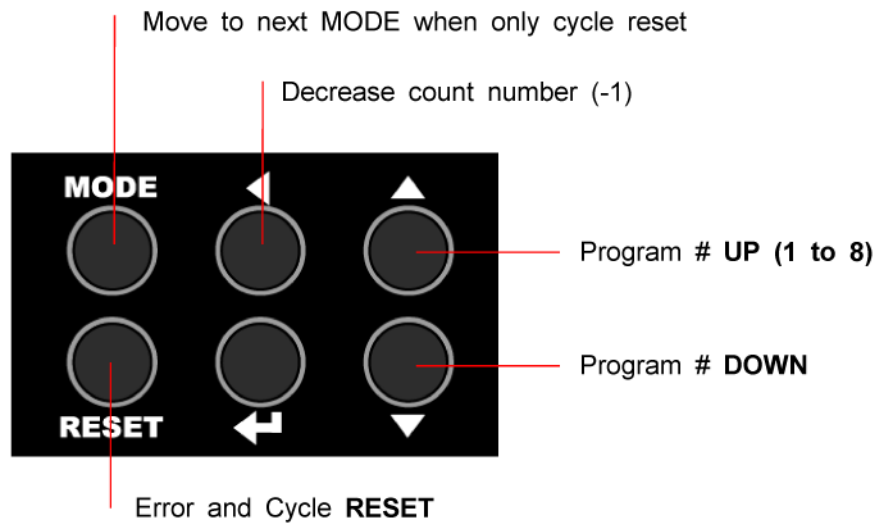
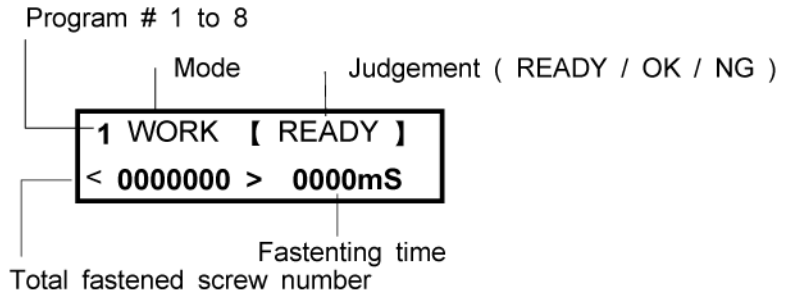


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## Operation

### 2. Work Mode



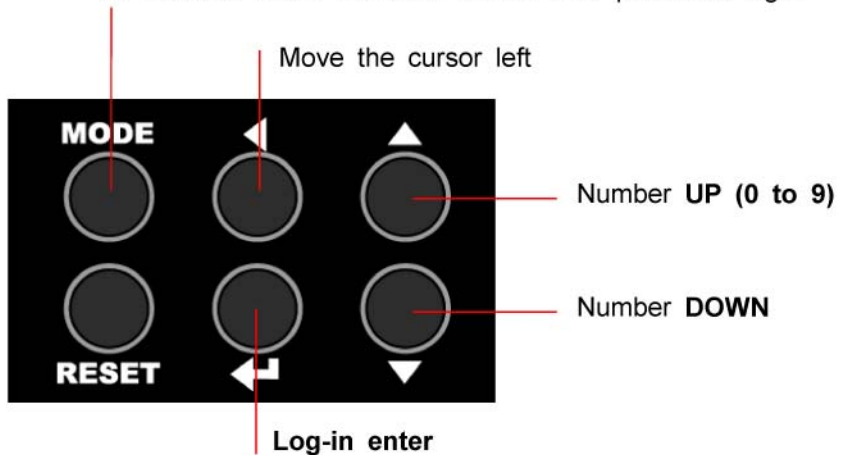
## Operation

### 3. Log-in Mode



Factory setting password "0000" can be changed in P33 parameter.

1. Move back to work MODE without password login
2. Move to next Parameter MODE after password login

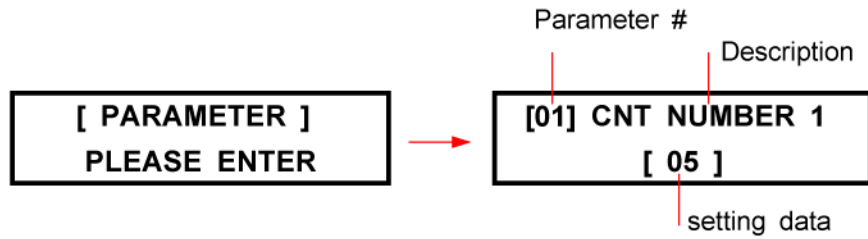


## Scout II (Screw Counter) Operating Instructions

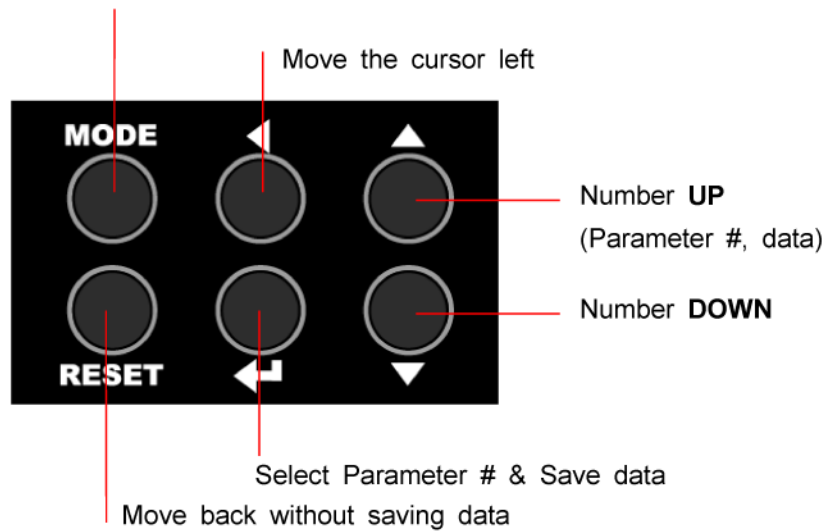
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### Operation

#### 4. Parameter Mode



Move to next Work MODE on Mode display



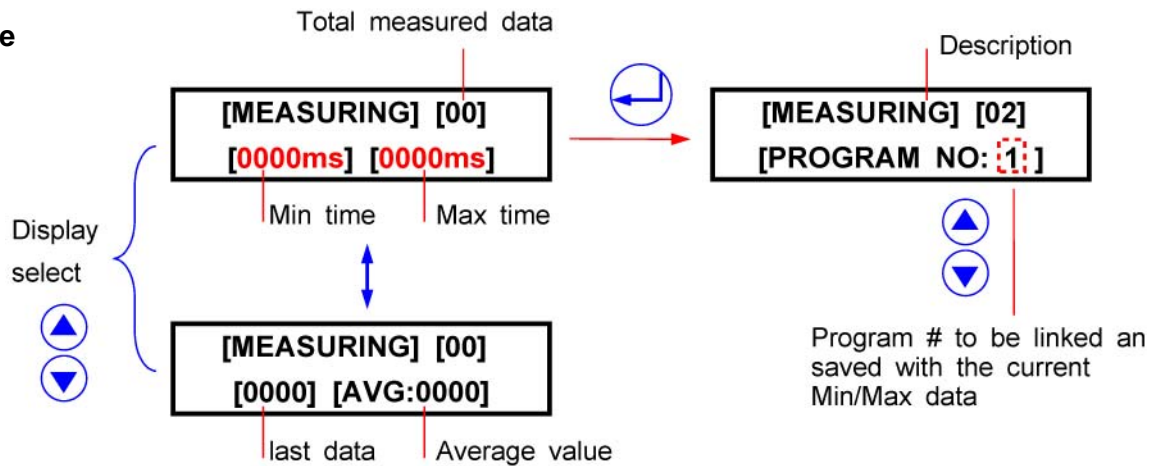


## Scout II (Screw Counter) Operating Instructions

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### Operation

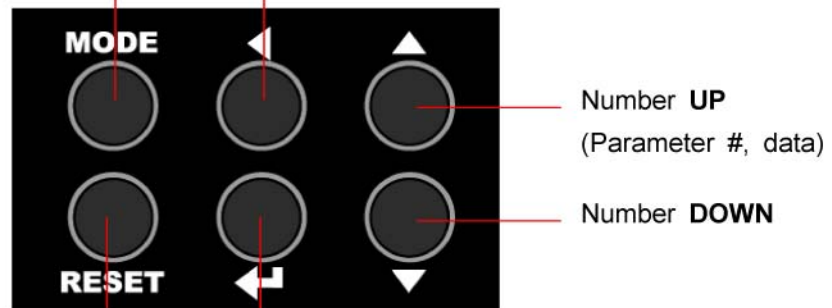
#### 4. Measuring Mode



Move to next Work MODE on Mode display

1. Move the cursor left

2. **Cancel the last data in calculation**



Link and save the current data to the selected Program #

Move back without saving data



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### Program # and Parameters

The program numbers from 1 to 8 are effected together with parameter 1~8 for number of screws, P9~16 for minimum tightening time, P17~24 for maximum tightening time.

	1st data	2nd data	3rd data	4th data
<b>Program #</b>	<b>Number of fastening</b>	<b>Min. time</b>	<b>Max. time</b>	<b>Mid. CNT signal</b>
1	P1	P9	P17	P38
2	P2	P10	P18	P39
3	P3	P11	P19	P40
4	P4	P12	P20	P41
5	P5	P13	P21	P42
6	P6	P14	P22	P43
7	P7	P15	P23	P44
8	P8	P16	P24	P45



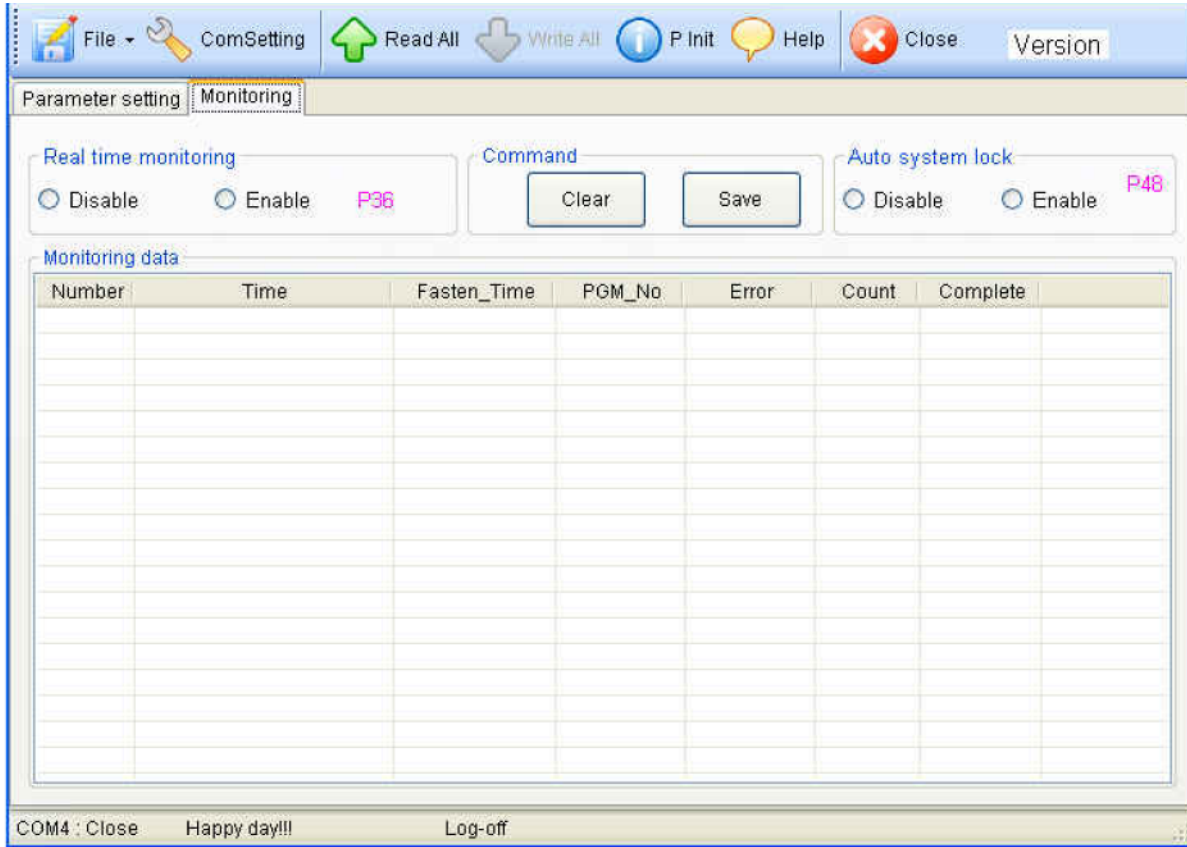
The screenshot shows the 'Parameter setting' window of the Scout II software. It features a menu bar with 'File', 'ComSetting', 'Read All', 'Write All', 'P Init', 'Help', and 'Close'. Below the menu bar are two tabs: 'Parameter setting' (selected) and 'Monitoring'. The main area is divided into several sections:

- Count status:** A table with columns for COUNT, MID, MIN, and MAX, and rows for PGM1 through PGM8. Each cell contains a numeric value (0 or 0.000) with up/down arrows.
- Cycle START/STOP signal type:** Radio buttons for AUTO, Start(Continuous ON), Stat(pulse) + Time limit(optional), Start(pulse) + Finish(pulse), and Etc1. A 'Time limit' field is set to 0.
- Cycle start signal interval required:** A field set to 10, with a note '\* 10ms Careful of chattering!!'.
- Com port select:** Radio buttons for USB and RS232.
- Judgement Min. time:** A field set to 0.0 sec.
- Screw driver input signal:** Radio buttons for Active High and Active Low.
- HDC Use:** Radio buttons for Not Use and Use.
- Fasten Buzzer type:** Radio buttons for Not Use, OK Only, NG Only, and OK + NG.
- Cycle Buzzer type:** Radio buttons for Not Use, OK Only, NG Only, and OK + NG.
- Cycle Reset key:** Radio buttons for Disable and Enable (P33).
- Program Select key:** Radio buttons for Disable and Enable (P34).
- IO/BCD Select:** Radio buttons for Disable and Enable (P35).

At the bottom, there is a status bar with 'COM4 : Close', 'Happy day!!!', and 'Log-off'.

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## Scout II (Screw Counter) Operating Instructions

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**Parameters**

P #	Name	Specification	Default
P01-P08	Program #	Save total number of screws on P1-8.	1
P09-P16	Minimum tightening time	Minimum screw tightening time Input : 0.000 - 9.999 sec ( "0" : No use )	0
P17-P24	Maximum tightening time	Maximum screw tightening time Input : 0.000 - 9.999 sec ( "0" : No use )	0
P25	Type of cycle start and stop	Select one of 4 types of Cycle Start signal input 0 : Auto 1 : Start (continuous ON) 2 : Start (pulse ON) + Stop (timer on P27) 3 : Start (pulse ON) + Stop (pulse ON)	0
P26	Input signal type	Select one of 2 signal type 0 : Active High  ( 0 --> 1 ) 1 : Active Low  ( 1 --> 0 ) <b>※ When Active Low is selected, the only one(1) screwdriver ("A") can be connected.</b>	0
P27	Timer setting for Cycle start/stop type 2 of P25	Input screw tightening time limit after Cycle start signal Input : 0.0 - 9.9 sec ( "0" : No use )	0
P28	Minimum time to judgement	Set the minimum time to judgement of OK/NG Input : 0 - 99 ( x 0.1s ) ( "0" : No use )	0
P29	Com port select	Select one of two com ports. 0 : USB 1 : RS-232C	0
P30	Hybrid HDC connect	Select one of two condition 0 : Not Connected (not use) 1 : Connected (used)	0

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**Parameters**

P #	Name	Specification	Default
P31	Fastening buzzer	Select one of followings 0 : Not use 1 : OK only 2 : NG only 3 : OK + NG	0
P32	Cycle buzzer	Select one of followings 0 : Not use 1 : OK only 2 : NG only 3 : OK + NG	0
P33	Reset key control	Select Reset key Enable / Disable 0 : Disable    1 : Enable	0
P34	Program key control	Select Program key Enable / Disable 0 : Disable    1 : Enable	0
P35	Program Select Input with Binary code	Program Select Input by Binary code with Pin no. 1 ~ 3 0 : Disable    1 : Enable	0
P36	Monitoring data output setting	Select Enable / Disable of monitoring data output through RS-232C port 0 : Disable    1 : Enable	0
P37	Cycle start signal interval required	The interval time between Cycle complete and new cycle start can be set between 1 ~ 10mS ( unit : 10 mS )	100
P38~45	Mid.Count signal setting for P1~P8	The signal of Pin #20 on I/O keeps ON after the Mid.CNT number until the cycle complete.	0
P46	Password	Key in the password in 4 numbers. Initial factory setting password is "0000"  If the password is forgot, click the " P Init " menu on Scout-Manager control bar with password "77", then all parameters are changed to the factory setting.	

## Scout II (Screw Counter) Operating Instructions

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**Parameters**

P #	Name	Specification	Default
P47	Parameter initial	All parameter are initialized to the factory setting. Key in "77" on P34 and press Enter button.	
P48	Auto system Lock	Driver is locked between Cycle complete and next new Cycle start signal. 0 : Disable    1 : Enable	0
P49	Count UP Enable	Count number display on the panel 0 : Disable ( Count DOWN ) 1 : Enable ( Count UP )	0
P50	Timer setting on Auto cycle start	Time limit on auto cycle start makes NG after set time 0 ~ 5.0sec ( 0 : not use ) unit : 0.1 sec	0
P51~56	Spare	Spare	
P57	Version information	It is not allowed to change.	version

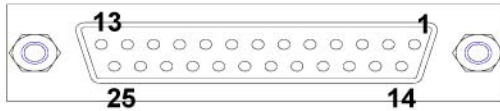
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### Interface

25P I/O interface details

The configuration of 25P I/O port for remote control is as below



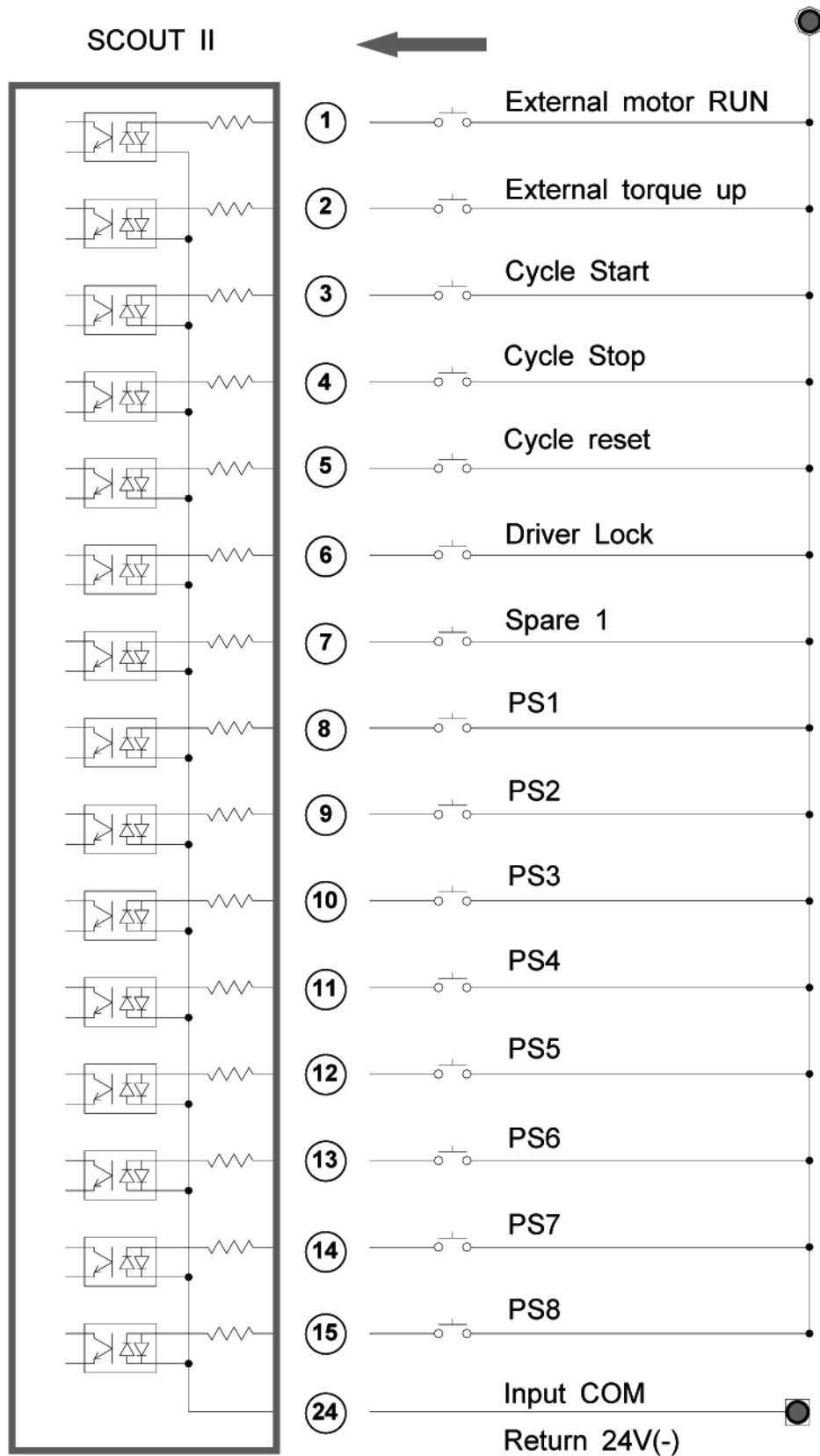
PIN no.	Configuration		IN / OUT
1	External Motor Run signal		<b>INPUT</b> (to Controller)  
2	External Torque Up signal		
3	Cycle Start		
4	Cycle Stop		
5	Cycle Reset		
6	Driver Lock		
7	Spare 1		
8	PS1 (Program selecting)	PS1(P35 Enable)	
9	PS2 (Program selecting)	PS2(P35 Enable)	
10	PS3 (Program selecting)	PS3(P35 Enable)	
11	PS4 (Program selecting)	spare	
12	PS5 (Program selecting)	spare	
13	PS6 (Program selecting)	spare	
14	PS7 (Program selecting)	spare	
15	PS8 (Program selecting)	spare	
16	Cycle complete OK		<b>OUTPUT</b> (from controller)   24VDC, 50mA max
17	Cycle complete NG		
18	Tightening OK		
19	Tightening NG		
20	Mid-count complete signal		
21	Driver Lock		
22	Spare 2		
23	No use		
24	Input COM		
25	Output COM		

## Scout II (Screw Counter) Operating Instructions

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**INPUT (Negative(-) Common wiring)**

**External power (24VDC+)**



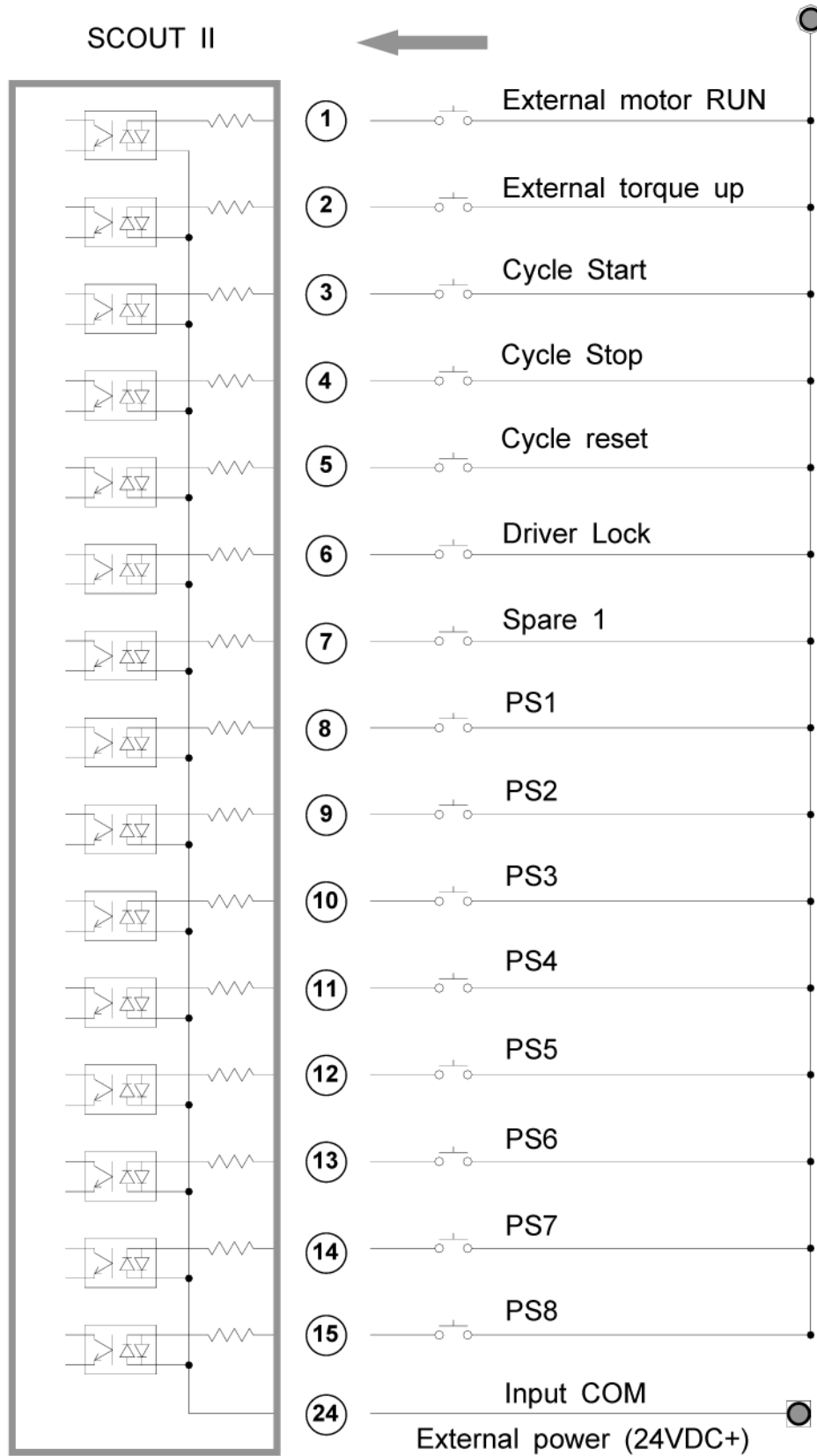


# Scout II (Screw Counter) Operating Instructions

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INPUT (Positive(+)) Common wiring

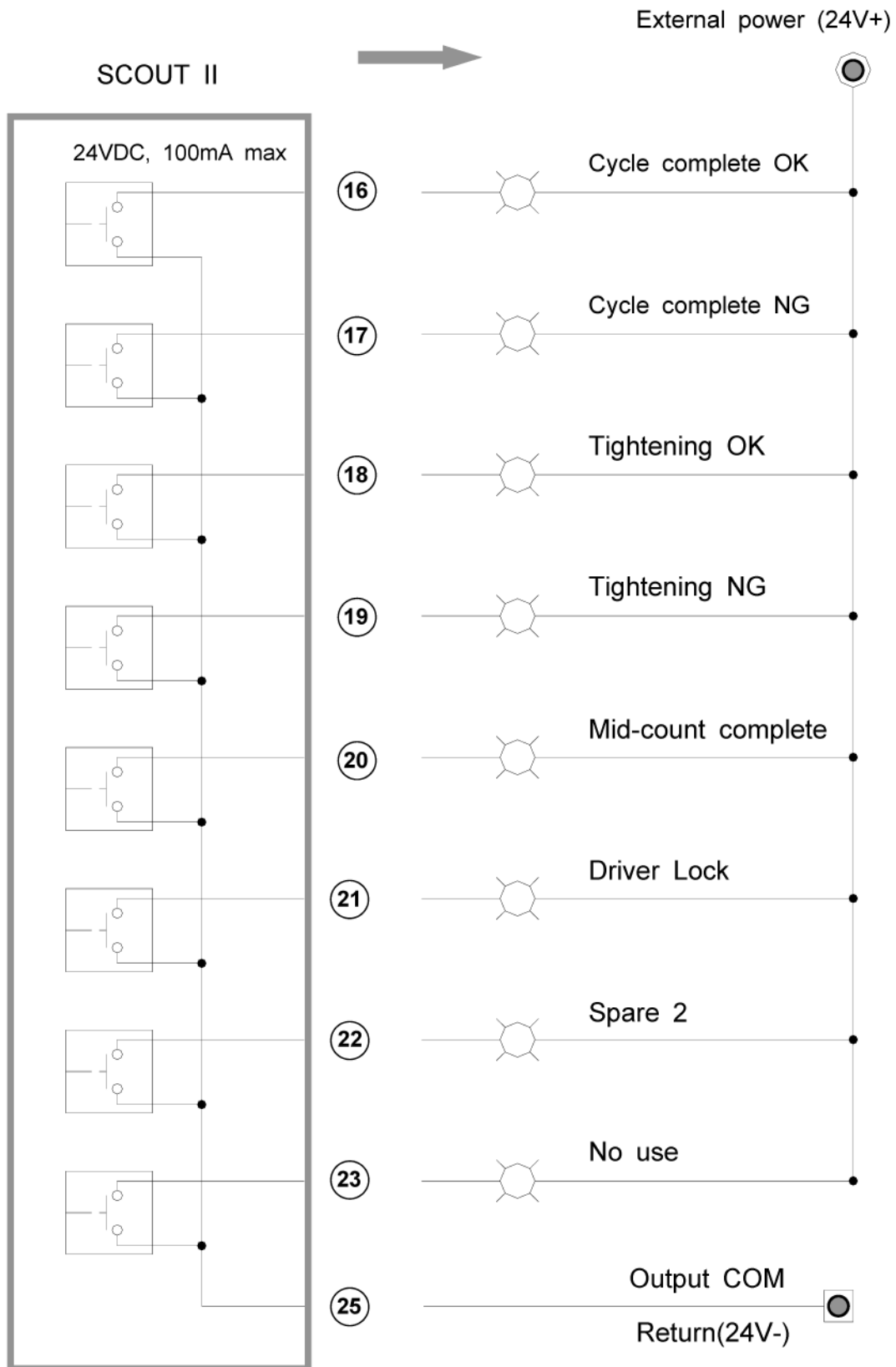
Return 24V(-)



## Scout II (Screw Counter) Operating Instructions

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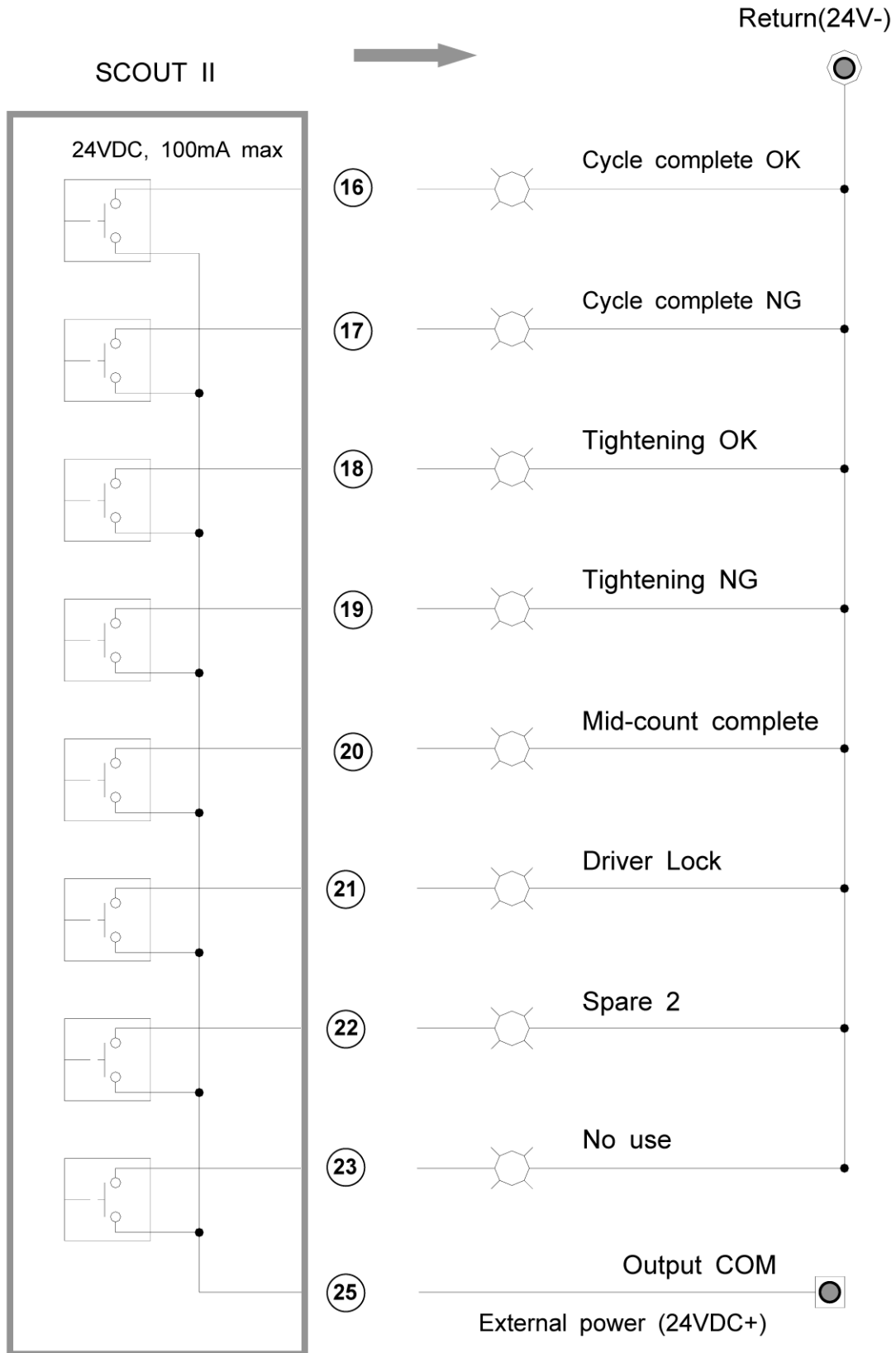
### OUTPUT (Negative(-) Common wiring)



# Scout II (Screw Counter) Operating Instructions

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## OUTPUT (Positive(+)) Common wiring



## Scout II (Screw Counter) Operating Instructions

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Binary coding for Program selecting by 3 pins ( Pin no. 8,9 and 10 ) -

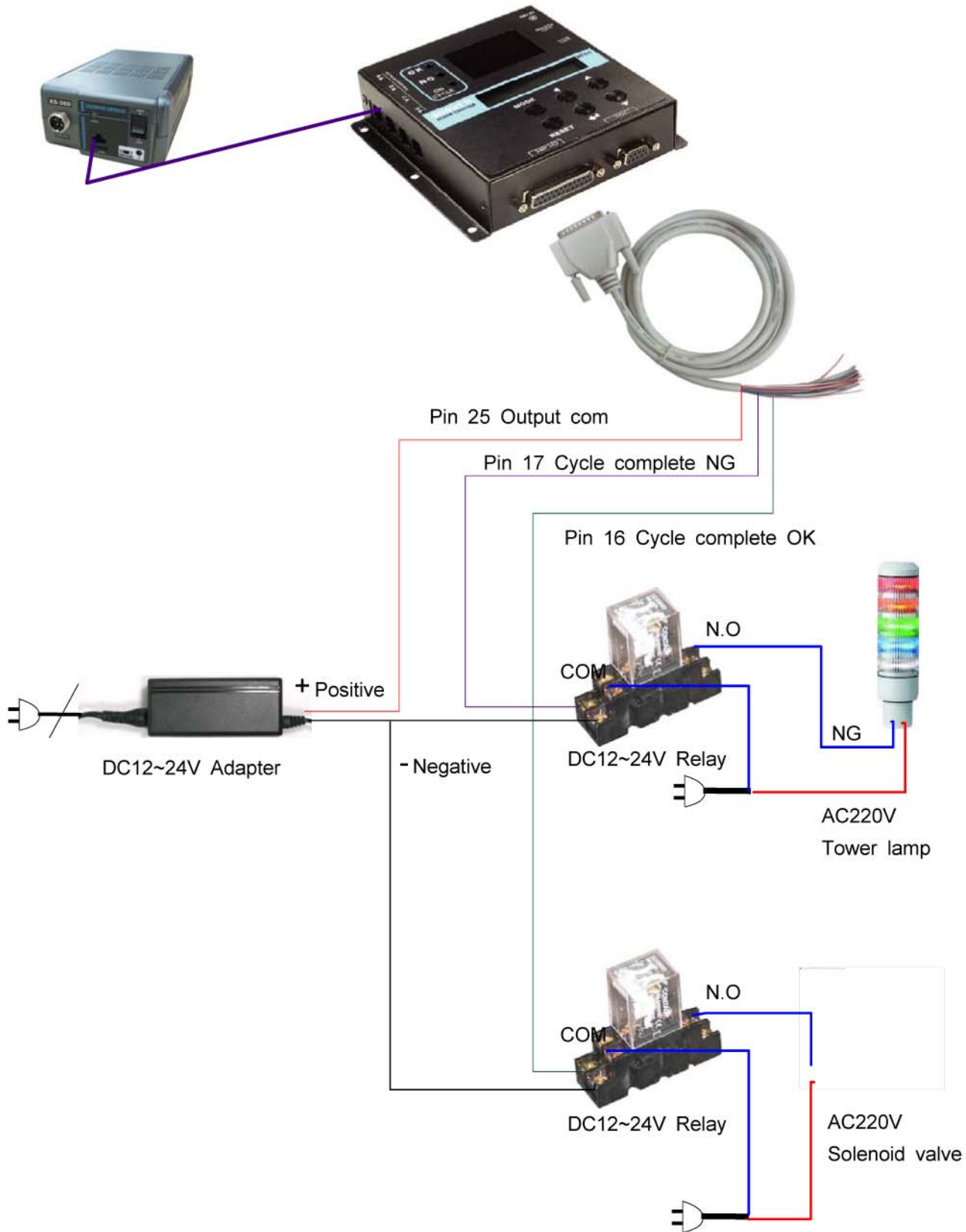
Program no.	pin 10 (PS3)	pin 9 (PS2)	pin 8 (PS1)
1	0	0	0
2	0	0	1
3	0	1	0
4	0	1	1
5	1	0	0
6	1	0	1
7	1	1	0
8	1	1	1

**\*\* Program selecting is not effective during the cycle ON.**

# Scout II (Screw Counter) Operating Instructions

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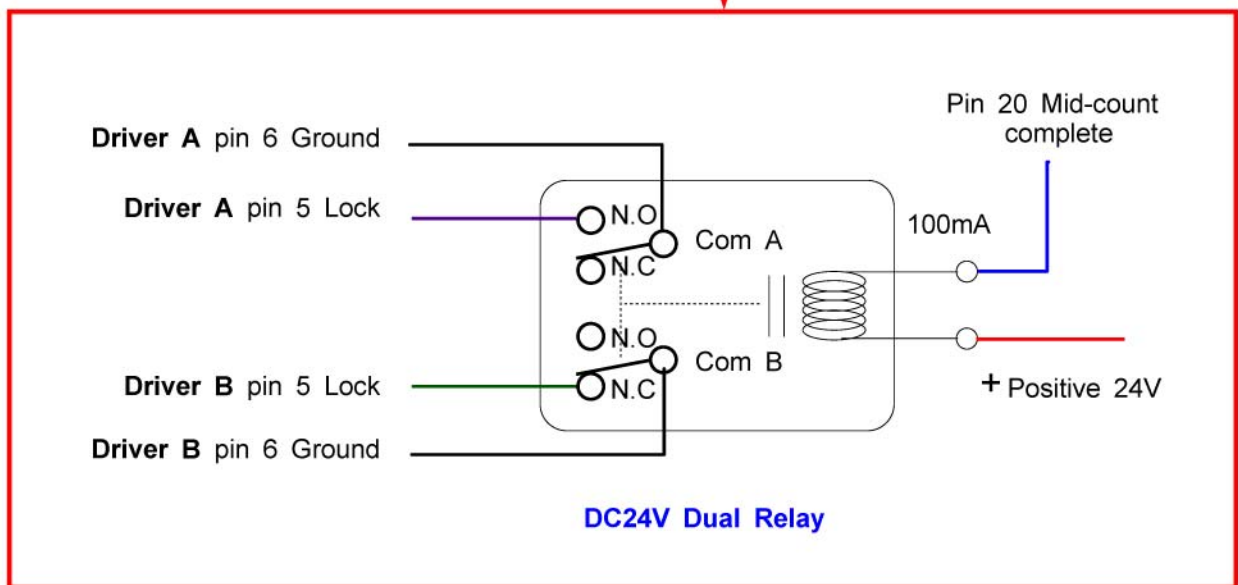
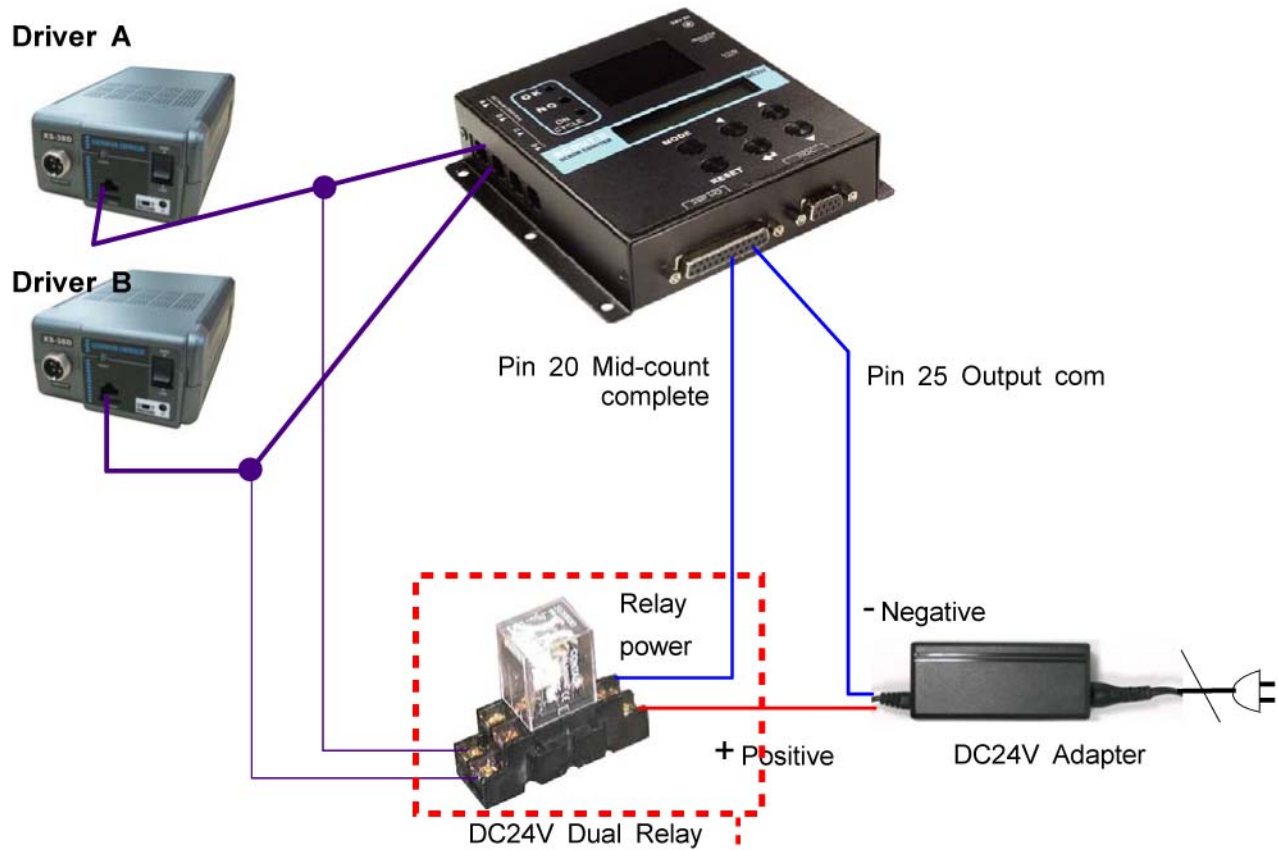
## Wiring example #1 - Tower lamp, solenoid valve, sensors, switch



## Scout II (Screw Counter) Operating Instructions

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### Wiring example #2 - Inter-Lock of two screwdriver with Mid-Count signal setting



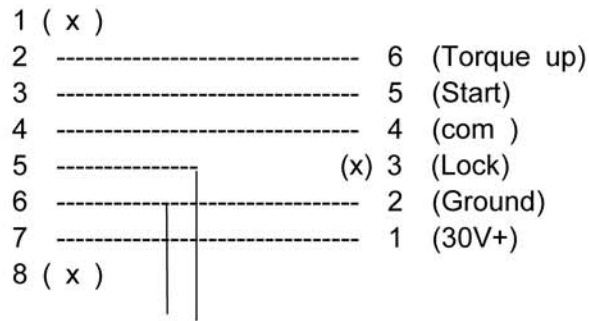
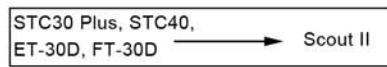
# Scout II (Screw Counter) Operating Instructions

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## Customized cable details

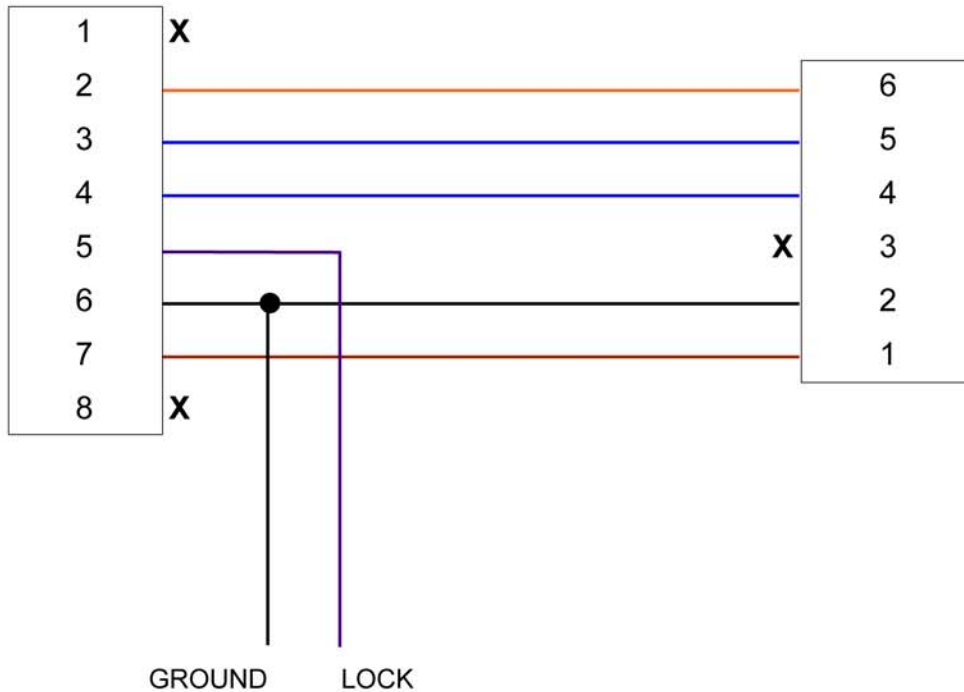


## Pin configuration



STC30 Plus, STC40, ET-30D & FT-30D

SCOUT II





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## Connecting to Hybrid HDC controller

The screw count number on P74 of Hybrid HDC controller can be changed by program selecting on Scout II through the RS-232 interface port. Only the RS-232 (not USB) interface of HDC controller works with Scout II.

The min/max tightening time on Scout does not work for Hybrid HDC controller. Only the screw count number on Scout works for counter in the HDC controller.



※ Refer to Hybrid manual for selecting RS232 / USB

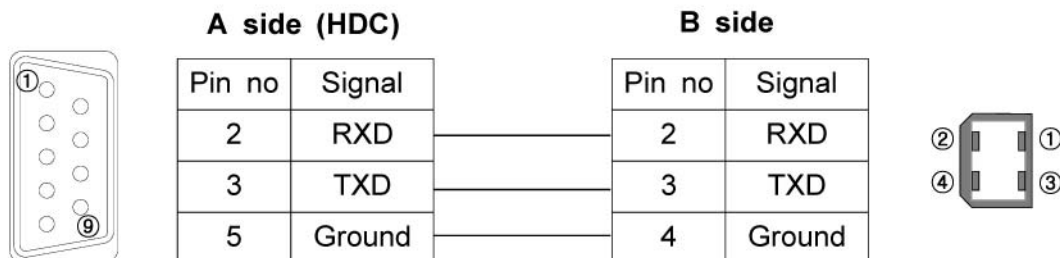
HDC Hybrid controller



A side

B side

USB(B) - RS232C cable 2M

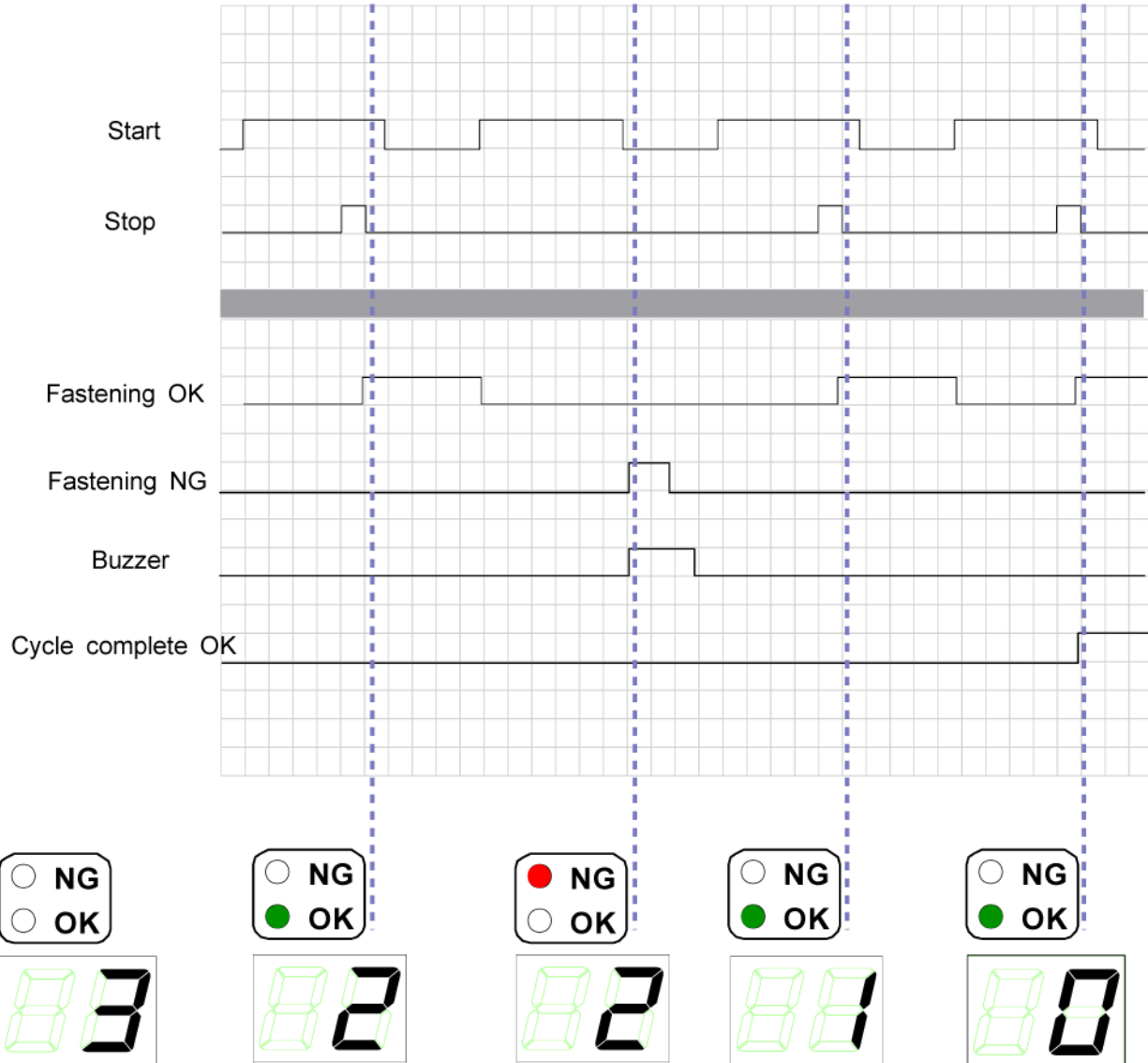


## Scout II (Screw Counter) Operating Instructions

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### Timing Chart

(example) number of fastening screw is supposed to be three (3)

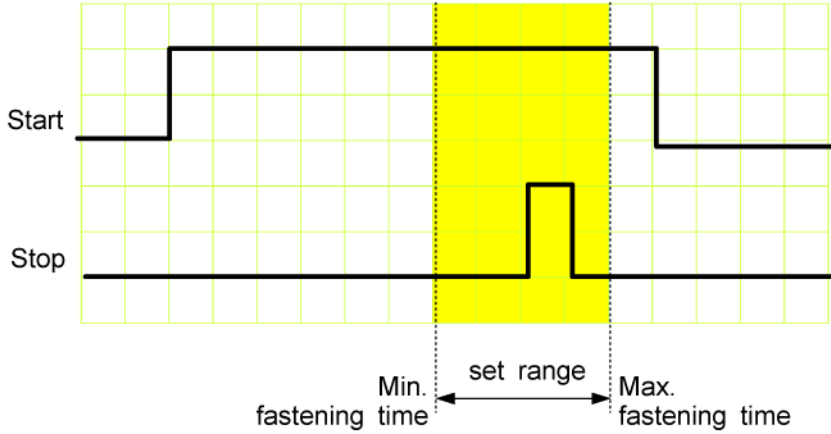


## Scout II (Screw Counter) Operating Instructions

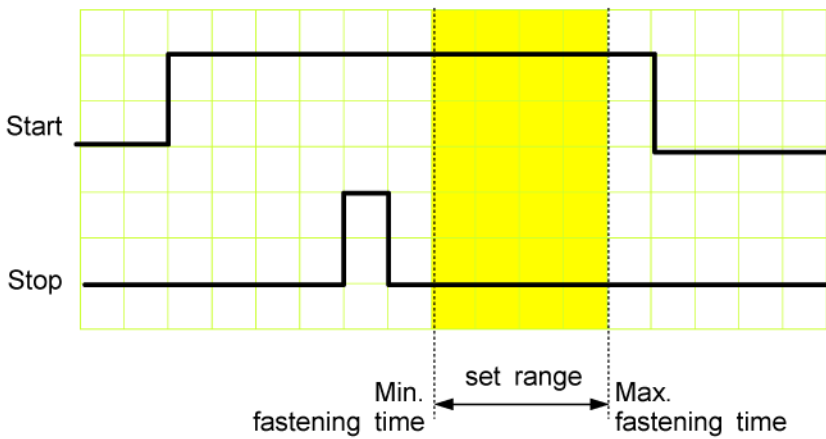
(Rev 6.4 4/27/17)

Timing chart details for NG / OK set up

### Fastening OK



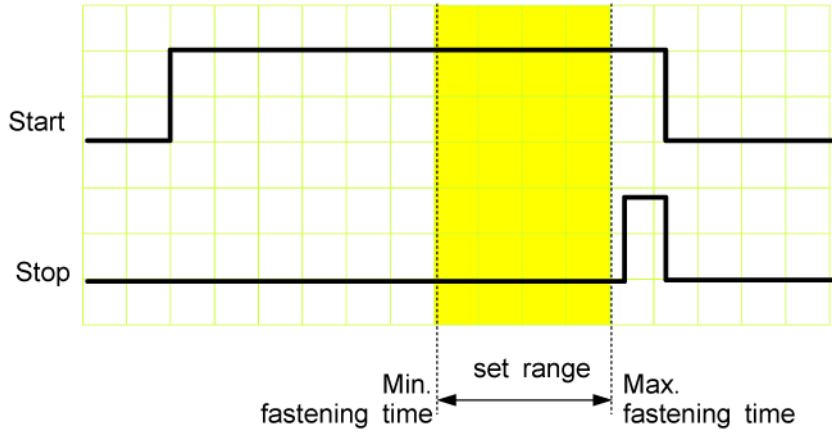
### Fastening ERROR 1 - TIME LAPSE



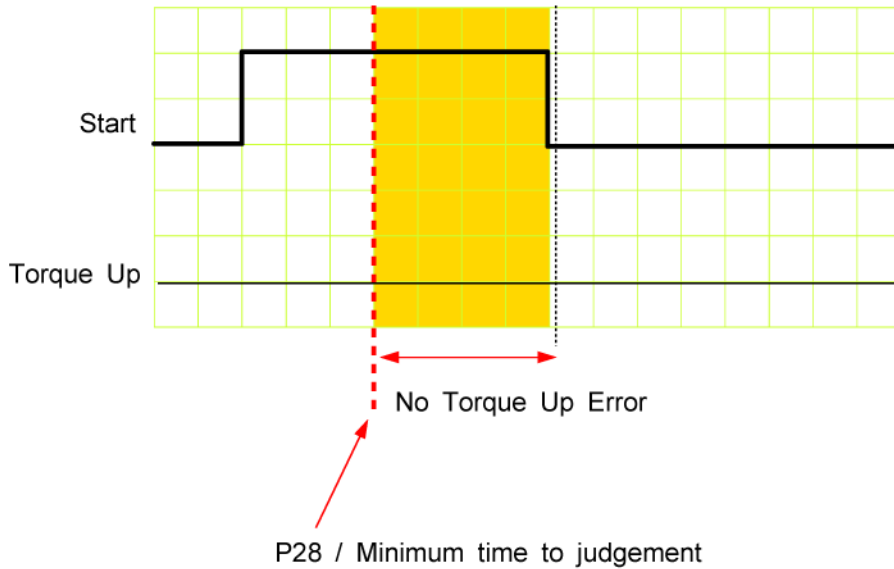
## Scout II (Screw Counter) Operating Instructions

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### Fastening ERROR 2 - TIME OVER



### Fastening ERROR 3 - NO TORQUE UP ( Most common mistake in assembly )



# Scout II (Screw Counter) Operating Instructions

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## Cycle Start / Stop in the various operating conditions

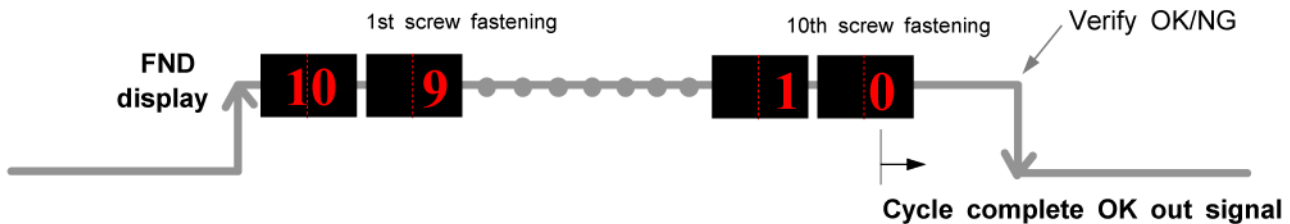
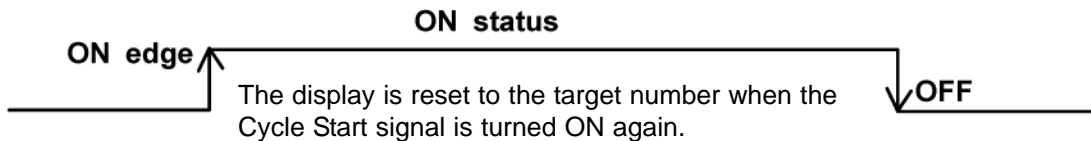
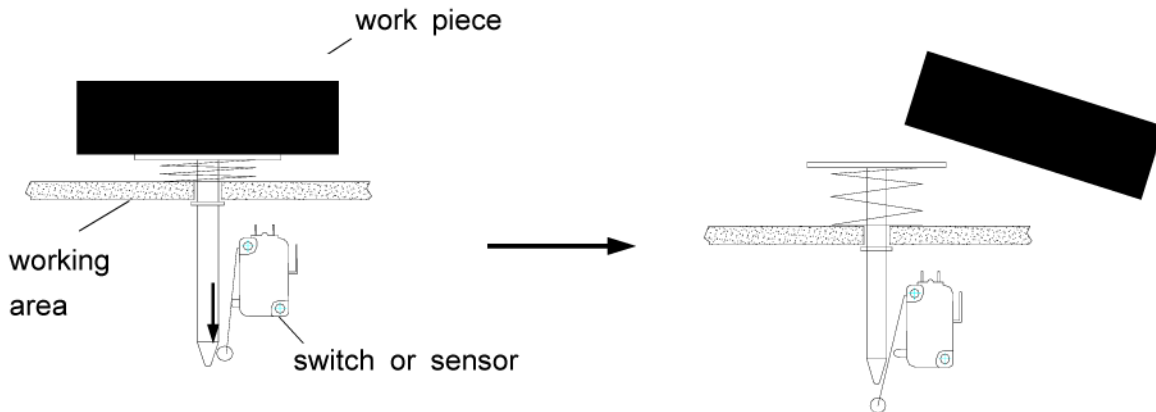
### Auto Start

Where the fastening number count is not necessary. It starts to count the number of fastening automatically just after cycle end with "0" display on the screw counter, and repeats without any cycle start and stop signal for counting. "Auto Start" can be used for monitoring fastening OK / NG condition without counting of fastening numbers.

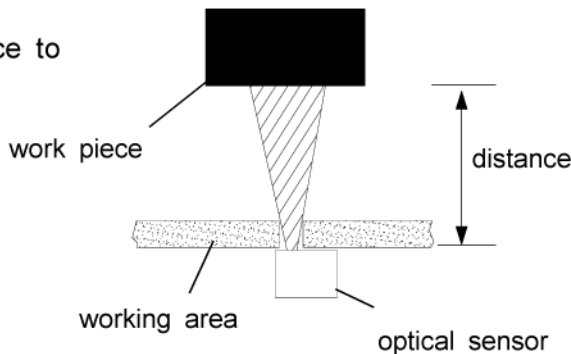
### Start ( Continuous ON )

Scout starts counting the fastening number from the ON signal edge and keeps counting until receiving a signal OFF. If the number reaches to the target before signal OFF, it makes the Cycle complete OK and provides Cycle end output signal.

Also it verifies the Cycle complete NG. If the ON status is turned OFF, it means the fastening work isn't finished because the work piece left the working area.



The above switch can be replaced by the sensor as shown on the right.



## Scout II (Screw Counter) Operating Instructions

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### Start (pulse) + Stop by time limit (Optional)

#### Automatic flow assembly line with pallet conveyor system which is controlled by PLC



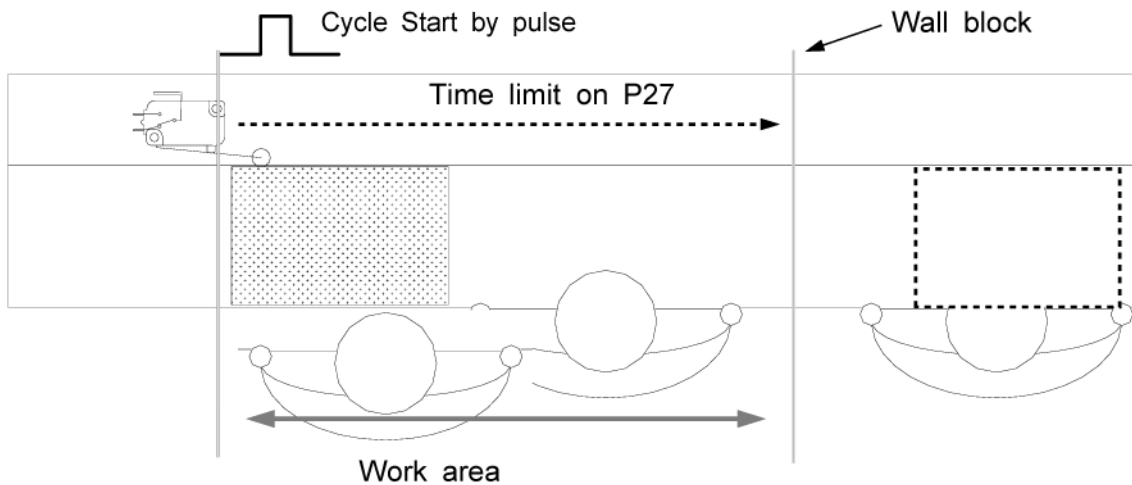
In order to control the flow of the work-piece to next process automatically, the SCOUT works with the PLC for transmitting signals of the fastening "cycle start" and "cycle stop" process.

If PLC gives the cycle start signal (pulse) to the SCOUT when the work-piece arrives at the worktable, then the SCOUT is ready to monitor the screw fastening process. Once the required number of screws is fastened properly, the SCOUT sends a signal (pulse - 0.5S) to the PLC to alert it that the "cycle stop" process has occurred. Then PLC will make another process.

With a semi-auto assembly line, the operator can push the button for every "cycle start" as soon as picking up the work-piece from the conveyor belt and taking it to the work-table. Pushing the button sends the signal (pulse - 0.5S) to the SCOUT.

If the time is limited on P27 and the fastening is not complete at the set time, the Scout will verify the fastening NG at the set time. It can be cleared to the target by pressing RESET button

#### Example #1 ) Cycle start pulse signal with time limit on P27

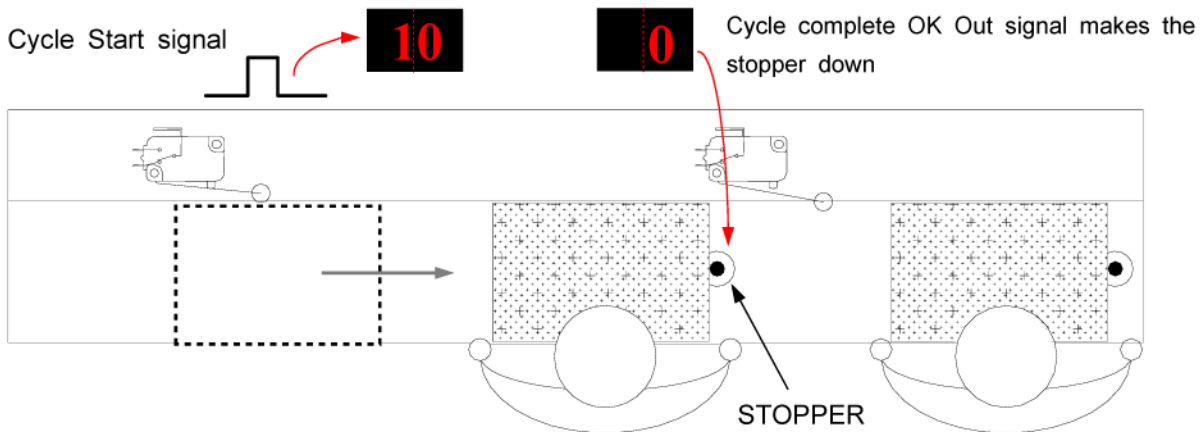


## Scout II (Screw Counter) Operating Instructions

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### Example #2 ) Cycle start pulse signal without time limit on P27

Without the fastening time limit on P27, it can be a useful application with a pallet conveyor system with a stopper as shown below. The stopper does not go down keeping the work piece in work area, if there is no Cycle complete OK signal from the Scout.

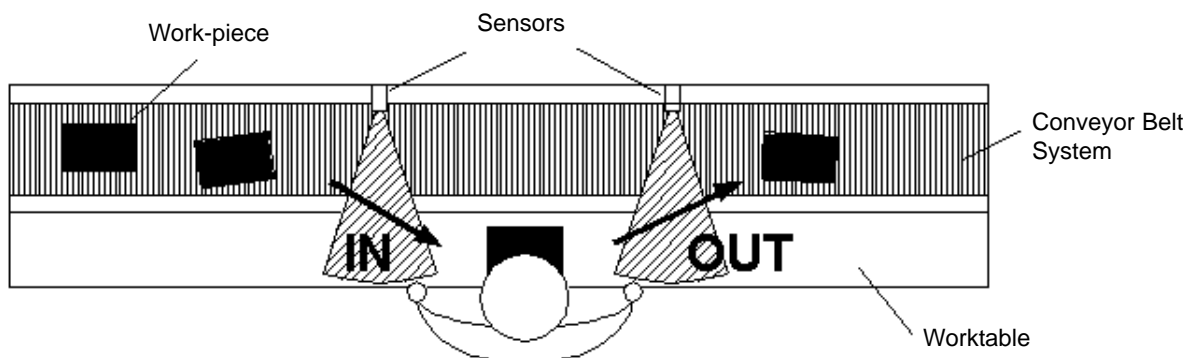


### Start (pulse) + Stop (pulse)

#### Using Optical or Magnetic Sensors for an Alert Buzzer for Semi-Auto Assembly Line with Belt Conveyor System

If the operator lifts the work-piece up for any reason, like inspecting it, the SCOUT will recognize the work-piece as being moved out and trigger an alert buzzer. In this case, it is a suitable solution for detecting work-piece. This process requires two signals for the work-piece coming IN and OUT using the optical or magnetic sensors.

With two signals for work-piece coming IN and OUT using the optical or magnetic sensors. Scout starts to count fastening numbers with Start signal, and verify Cycle complete OK / NG with Stop signal.



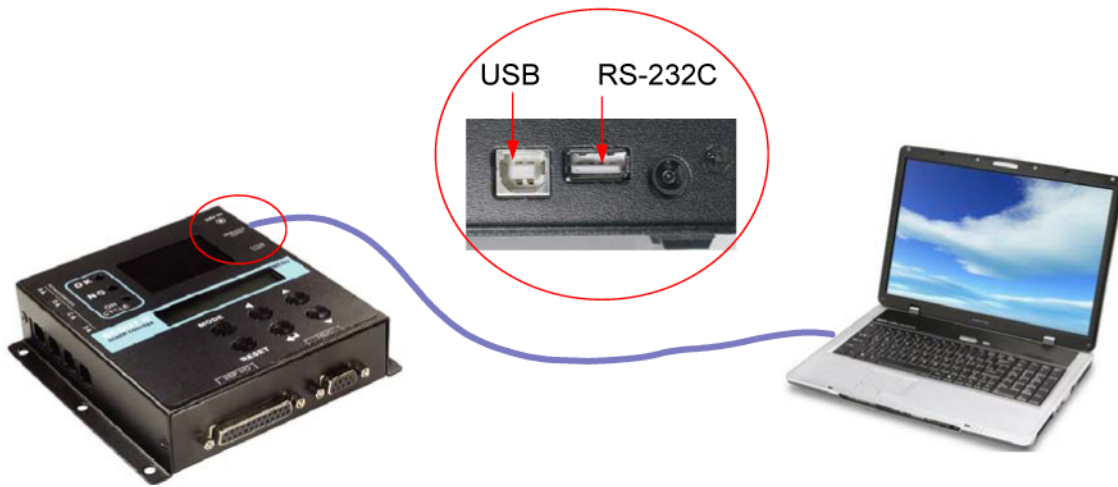


## Scout II (Screw Counter) Operating Instructions

(Rev 6.4 4/27/17)

### RS-232C & USB communication port

Scout II provides both RS-232C and USB communication port together with free PC software, SCOUT II Manager. The com port and cable specification is as below.



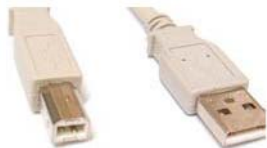
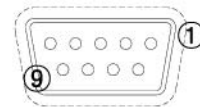
#### RS-232C Port



Cable (RS232 to USB Type A 6 ft.)  
Item # 145780

#### SCOUT II

Pin no	Signal		Pin no	Signal
2	TXD	—	2	RXD
3	RXD	—	3	TXD
4	Ground	—	5	Ground

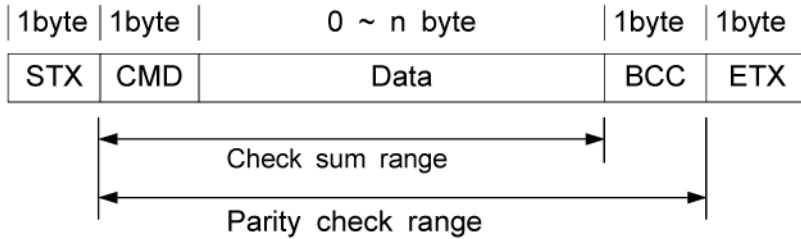


Cable USB (Type A to Type B: M-M 6 ft.)  
Item # 770319

## Scout II (Screw Counter) Operating Instructions

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Protocol            Protocol frame



- Baud rate : 19200 BPS
- Data bit : 8bit
- Parity : None
- Stop Bits : 1

### Communication control letter

Name	Word	Description
Packet start	STX	It means Packet start at the first of the message.
Packet finish	ETX	It means Packet end at the last of the message.
OK response	ACK	OK response on the message receipt
NOK response	NAK	NOK response on the message receipt
Packet end	ETB	It means the packet end of the first message of two blocks of long message

### Command

The command for data request and response are same, but distinguished by the capital letter for request, the small letter for response.

no	Description	Command	Direction
1	Save the parameter	S (capital)	PC → SCOUT II
2	monitoring Data output	m (small)	SCOUT II → PC

## Scout II (Screw Counter) Operating Instructions

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It add all binary number within Check sum range and convert to 1 Byte of ASCII code. The "41H" is check sum result (BCC) in the example shown.

STX	CMD	Data	BCC	ETX
-----	-----	------	-----	-----

Example)

STX	S	0	0	1	0	0	1	5	BCC	ETX	----- ASCII code
-----	---	---	---	---	---	---	---	---	-----	-----	------------------

STX	53	20	20	21	20	20	21	35	BCC	ETX	----- Hexa code
-----	----	----	----	----	----	----	----	----	-----	-----	-----------------

```

5 3 H
2 0 H
2 0 H
2 1 H
2 0 H
2 0 H
2 1 H
+ 3 5 H
-----

```

1 4 **A** H ----- Hexa code

↓ ↓

34H **41H** ----- Hexa value of "A" in ASCII code

Parameter change and save

1) Save parameter ( PC --> Scout II )

STX	S	1	1	1	2	2	2	2	BCC	ETX
-----	---	---	---	---	---	---	---	---	-----	-----

1 : Parameter number ( 001 - 999 )

2 : Data ( 0000 - 9999 )

※ Example Program # 1 - Number of screw (12), Min (500mS), Max (750mS)  
Parameter #1      Parameter #9      Parameter #17

Screw #

STX	S	0	0	1	0	0	1	2	BCC	ETX
-----	---	---	---	---	---	---	---	---	-----	-----

Min time

STX	S	0	0	9	0	5	0	0	BCC	ETX
-----	---	---	---	---	---	---	---	---	-----	-----

Max time

STX	S	0	1	7	0	7	5	0	BCC	ETX
-----	---	---	---	---	---	---	---	---	-----	-----

## Scout II (Screw Counter) Operating Instructions

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### Monitoring data output

By selecting "Enable(1)" on P36, the following output data come out automatically from RS-232C port whenever there is an event on Scout II.

STX	m	1	1	1	1	,	2	,	3	3	,	4	4	,	5	,	BCC	ETX
-----	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	-----	-----

m : Command for monitoring data output

1 : Fastening time ( 4 digits )

2 : Program number 1 ~ 8 ( 1 digit )

3 : Error number 1 ~ 5 ( 2 digits )

※ Error number details

1 : Fastening Time Lapse ( Less than Min time )

2 : Fastening Time Over ( Over than Max time )

3 : Fastening No Torque Up

4 : Cycle Error

5 : Cycle limit time over on P27

4 : Count Number displayed on Scout II FND ( Remained screw number )

5 : OK / NG judgement

※ OK / NG judgement details

1 : Fastening OK

2 : Fastening NG

3 : Cycle OK

4 : Cycle NG

## Scout II (Screw Counter) Operating Instructions

(Rev 6.4 4/27/17)

### PC communication software, SCOUT II-Manager (for MS Windows)

The PC communication software, SCOUT II-Manager, is for programming the screw counter. The Min, max fastening time & total number of screws can be changed on PC software and downloaded to Scout II.

For changing parameters of SCOUT II by PC software, it requires a Log-in password. For the Log-in password of SCOUT II-Manager software, please contact to the Mountz. The password can not be open to operators without agreement of managing group. SCOUT II-Manager without Log-in is available by request as well.

### Software install

- PC Operating System : MS Windows ( 2000, XP, Vista )
- Display : 800 x 600 ( Optimized )

The SCOUT II-Manager software require MS Dot Net framework v 2.0 or higher on your OS before installing. Window 2000 and XP can be updated with Dot Net framework on the download center of Microsoft web site. ( [www.microsoft.com](http://www.microsoft.com) ).

Microsoft .NET Framework ver 2.0

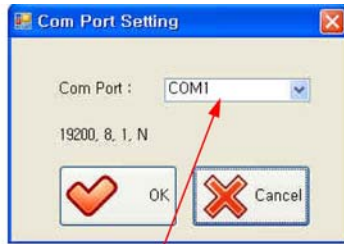
For installation of SCOUT II-Manager, just copy the file ( SCOUT II-Manager.exe ) on your PC, and double click for open.

### How to use

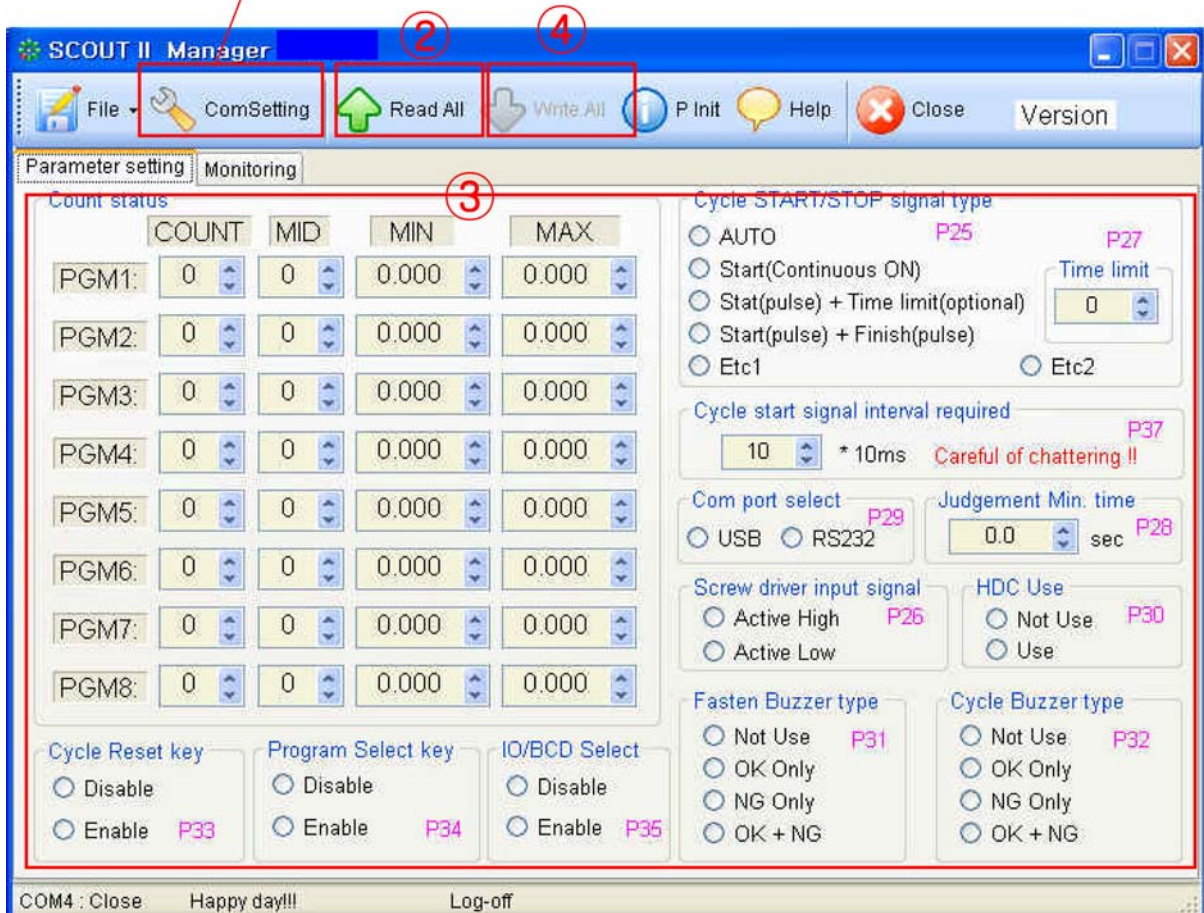
- Install the provided USB driver on your PC
- Connect the SCOUT II to PC, and Power on.
- Check COM port no.of SCOUT II USB port on your PC device manager. example ) CP210x USB to UART Bridge Controller (COM4)
- Open the SCOUT II-Manager software
- Select the Comport no and click OK on Scout II manager
- Click " READ ALL " menu for read all parameters from the connected SCOUT II.
- For changing parameter, it require Manager Log-in password.

# Scout II (Screw Counter) Operating Instructions

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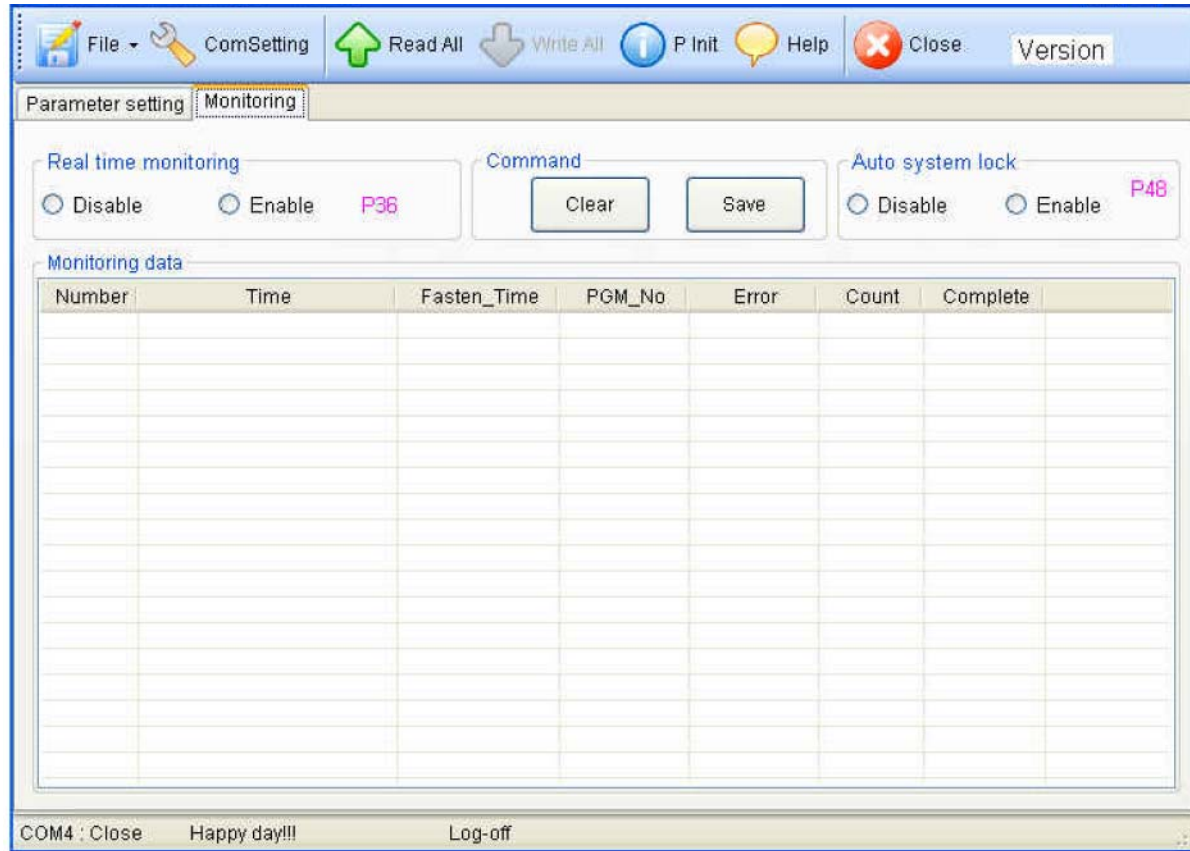


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## Scout II (Screw Counter) Operating Instructions

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## Scout II (Screw Counter) Operating Instructions

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### SCOUT II Firmware Upgrade History

NO	Date	Version	Description	Firmware	Scout-Manager
1	2010.01.28	V1.1		SCOUT2_V1.10_100128.hex	
2	2010.04.06	V1.12	1) Display word replacement to " Mid Cnt Signal " 2) Bug patch in progrma selection by I/O when HDC is connected. 3) Parameter # is added on Scout-Manager window	SCOUT2_V1.12_100304.hex	scout2_V1.01
3	2010.04.06	V1.2	Monitoring feature is added (P36)	SCOUT2_V1.20_100405.hex	scout2_V1.10
4	2010.04.07	V1.21	A,B,C.... For Progrma # is replaced to 1,2,3... Ex) PGN A --> PGN1	SCOUT2_V1.21_100407.hex	
5	2010.04.13	V1.22	Fastening is allowed even after Cycle NG, in order to finish the cycle. (Request of Mountz)	SCOUT2_V1.22_100413.hex	
6	2010.05.18	V1.23	The interval time limit between the cycle is changed to 50mS from 100mS ( Request of Doga / A customer has pallet moving with whort distance providing very short time of sensor detection. Too short detect time is not effective.	SCOUT2_V1.23_100518_DogaTest.hex	Scout2_V1.3
7	2010.05.26	V1.3	1) Added P37 - the interval time limit between the cycle is allowed to set from 10 to 100mS. 2) 8 Mid count number setting for 8 programs. 3) When "Continuous ON" is selected on P25 for Cycle start, time setting on P27 is effective from cycle start signal, but now effective from first torque up of new cycle start 4) Improving other bug	SCOUT2_V1.23_100518_DogaTest.hex	Scout2_V1.3
8	2010.07.23	V1.31	Chattering protection for Doga's Binary Decoder	SCOUT2_V1.31_1000723.hex	
9	2010.08.09	V1.32	1) Added P48 - System lock enable When P48 is Enabled, screwdriver is locked after Cycle complete, and released just after new Cycle Start.	SCOUT2_V1.32_1000809.hex	Scout2_V1.32
10	2010.10.08	V1.33	2) Added P49 - Count UP Enable The display number on the panel selection between 0 : Count DOWN (Disable) 1 : Count UP (Enable)	SCOUT2_V1.33_1001008.hex	Scout2_V1.33
11	2011.01.25	V1.34	1) P50 added- Time limit on Auto cycle start _ NG after set time 2) P51~56 (spare) added 3) P57-version	SCOUT2_V1.34_110125.hex	Scout2_V1.34
12	2011.05.04	V1.35	Bug solved_ when two drivers are used with inter-lock, the last fastening made double hit. --> solved	SCOUT2_V1.35_110504.hex	Scout2_V1.34
13	2013.02.18	V1.36	P51 added for Count delete key Enable / Disable	SCOUT2_V1.36_130218.hex	Scout2_V1.36
14	6/10/14	V1.37	Tightening error on the first screw in a cycle could not be reset, --> solved --> requested by Torq on	SCOUT2_V1.37_140610.hex	Scout2_V1.37
15	7/15/14	V1.38	Reset on the first screw in a cycle become a error --> Requested by Mountz	SCOUT2_V1.38_140701.hex	Scout2_V1.37



## Scout II (Screw Counter) Operating Instructions

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### Mountz Torque Testers and Calibration Equipment

Torque tools go out of calibration with use. Calibrating a torque tool is a fine-tuning process of bringing the tool back within its tolerance. Torque testers can also be used for quick tools tests on the line or in the lab to determine whether torque tools are holding a given setting.

A regular torque tool calibration and re-calibration guarantees the operator repeatable accuracy and adherence to international standards. Torque testing also ensures torque equipment is operating to peak performance and can highlight potential tooling problems before they arise perhaps due to tool wear or broken components.

Controlling torque is essential for companies to ensure their product's quality, safety and reliability isn't compromised. The failure of a three-cent fastener that isn't properly tightened can lead to catastrophic or latent failures. Fasteners that are insufficiently torqued can vibrate loose and excessive torque can strip threaded fasteners. Using a quality torque tool has become increasingly important for many companies to ensure that proper torque is being applied and maintains gauge requirements associated with the ISO 9001 Quality Standard. Look for the Mountz hexagon logo - it's a stamp for quality tools, service and knowledge in the field of torque control.

### Mountz Calibration & Repair Services

Mountz Inc. features an experienced calibration and repair staff. Our trained technicians can calibrate and repair most any tool. Mountz provides rapid service with quality that you can trust as we offer two state-of-the-art calibration lab and repair facilities that can calibrate up to 20,000 lbf.ft.

Mountz, The Torque Tool Specialists®, has been a leader in the torque tool industry for more than 50 years. Engineered in the Silicon Valley and serving the globe, Mountz focuses on delivering high-quality torque products, services, and solutions to ensure customers can always proceed with confidence. We are committed to forging a safer world through precision and accuracy, and by innovating every day.

### Tool Service & Repair Capability

Torque Wrenches: Click, Dial, Beam, Cam-Over & Break-Over

Torque Screwdrivers: Dial, Micrometer, Preset & Adjustable

Torque Analyzers/Sensors: All brands

Electric Screwdrivers: All brands

Air Tools: All brands

Impact Wrenches, Drills, Pulse Tools, Grinders, Percussive Tools,  
Air Screwdrivers, Nutrunners, DC Controlled Nutrunners

Torque Multipliers: All brands

### Mountz Service Locations

#### **Eastern Service Center**

19051 Underwood Rd.

Foley, AL 36535

Phone: (251) 943-4125

Fax: (251) 943-4979

#### **Western Service Center**

1080 N.11th Street

San Jose, CA 95112

Phone: (408) 292-2214

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