# 螺絲計數器

SCREWCOUNTER

KCT-01 KCT-04

奇力速工業股份有限公司 KILEWS INDUSTRIAL CO.,LTD



## 特點

可以現場監測設備(防止忘記鎖螺絲的計數器),防止設備因操作疏失沒有將螺絲擰緊以達到監控功能。

- 可以和電動起子直插交流 110V 和 220V 共用或低壓電動起子,可以提高每天栓螺絲的工作品質。
- \*重量輕,體積小,可以夾住電動起子,可以在使用者工作場所安裝並檢測。
- \*所設定的鎖螺絲次數已經達到,蜂鳴聲將會警告工作結束。
- \*螢幕顯示數字,讓使用者清楚判斷。
- \*剩餘的螺絲數目也會顯示出。(如果工作半途停止,蜂鳴器會警示。設定時間爲 0-30 秒)

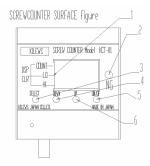
# KCT-01 功能

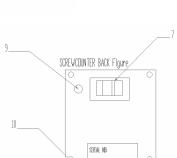
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各種功能		設置時間及數値	功能解釋	蜂鳴聲音/ 發光二 極體紅燈閃爍	
計數設置		1 - 99	螺絲計數		
計數方式			遞減		
LO		0.0 - 2.0 秒	<b>啓動之後,扭力停止時間早於設定時間就</b>	3 聲蜂鳴和發光	
		/0.1 或少於(0.01-0.09)	會出現錯誤。 (檢測螺絲沒有到位置)	二極體閃爍	
HI		0.0 - 9.0 秒	啓動後,扭力停止超過設定時間就會出現	5 聲蜂鳴和發光	
			錯誤。(螺絲滑牙檢測)	二極體閃爍	
顯示歸零時間	引 結束信號時間	0.5 - 3.0 秒	到達設定的數值之後顯示時間,自動歸零。	蜂鳴與發光二極	
				體	
反轉回覆		1 count	電動起子在反轉操作中,計數器的數值會		
			立即恢復爲 1		
蜂鳴警報	錯誤設置		LO≧HI	連續蜂鳴	
	待命時間	0-30 秒	當設定的數目還沒有達到而停止工作時	連續蜂鳴	

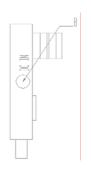
#### KCT-01 外觀特性

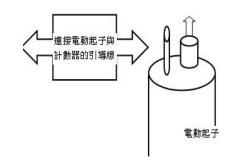
12017円銀元刊11工	
顯示	LCD 數位顯示
自動節能	90 分鐘內沒有使用,機器將會自動關閉
電源	可充電電池 1.2×3cells 110mAh
充電系統	與 AC 適配器連接的狀態,或使用電池
使用電池的情況下	連續栓螺絲 3600 或更多 (在電池充滿時)
充電器	輸入:50/60Hz AC100V 或 120Vor230V 輸出:DC7.5v
判斷正常和故障	O.K 蜂鳴聲音/NG 蜂鳴聲音 and LED 紅燈閃爍
尺寸/重量	80(H) x75(W) x13(D)/94g
應用電動起子	適合奇力速所有全自動電動起子型號
連接方式	參考示意圖形

## 外觀











外 觀	功能	
①顯示器	顯示設定與測試值。	
②N.G. 燈	不正常工作閃爍燈。	
③SELECT鍵	啓動設置程式或轉換時間設定的模式。(按下10秒以上)	
④DOWN 鍵	用來減少設定的値。	
⑤電源開關	ON/OFF	
⑥UP鍵	用來增加設定的數值。在工作感測器打開的情況下,用來防止時間設定感測器的蜂 鳴聲。(按下3秒以上)	
⑦線夾	用來固定KCT-01在起子的電源線上	
⑧AC 充電器接頭	用來充電使機器正常運作	
9重置開關	將此儀器設置數據RESET	
⑩起子連接端	連接起子與感應器的連接線	

#### KCT-01操作程式及設置

- (1) 電動起子和螺絲計數器終端之間用5根導線連接。(顯示的顏色表明了終端的狀態。)
- (2) 將線夾夾住電動起子的電源線上加以固定。
- (3) 附帶的AC 適配器是用來與DC IN的連接器相聯接的,AC適配器的插頭應插在交流電源的壁上插座上。
- (4) 打開電源開關。
- (5) 進入設置。(當你在設置階段,接下 ON/OFF 鍵超過3秒鐘,將會回到原來的狀態。)

## KCT-01 按鍵操作

ON/OFF 鍵	- 電源的 ON/OFF		
	- 在設定期間或操作時,可以作爲重設建使用,恢復到原來的狀況。(按下超過3秒)		
SELECT 鍵	-在開始設定作業時使用。		
	- 它也可以用來轉換不同的時間模式。		
UP 鍵	-用來增加設定的數值。		
DOWN 鍵	-用來減少設定的數值。		
UP+DOWN 鍵	-控制蜂鳴聲的開關。		

## UP+DOWN 按鍵功能

ON	鎖附一個螺絲、工作完成、錯誤操作會發出聲響警示操作人員
OFF	錯誤操作會發出聲響警示
FF	工作完成、錯誤操作會發出聲響警示
EF	每鎖附一個螺絲與工作結束會發出聲響警示;錯誤操作不發出聲音

# KCT-01 操作步驟

- 1. 請使用連接器(感應器)連接電動起子和起子終端。
- 2. 插入交流電線,打開電源。
- 3. 連續按下 SELECT 鍵直到有蜂鳴聲音。(大約10秒)
- 4. 標誌顯示在液晶顯示器的數位旁邊,開始標誌顯示在 COUNT 的位置。( 設定計數螺栓數目)
- 5. 用 UP/DOWN 鍵設定螺栓連接的數目。
- 6. 按下 SELECT 鍵,使標誌移動到 LO 的位置(設定螺絲起子扭力上升時間)。
- 7. 用 UP/DOWN 鍵設定 LO 的時間。 (通常設定為 0.1 0.2 秒)
- 8. 按下 SLECT 鍵,使標誌移動到 HI 的位置。(設定螺絲起子啟動時間。)
- 9. 用 UP/DOWN 鍵設定 HI 的時間。
- 10. 按下 SELECT 鍵被按下,標誌就會移動到結束信號時的位置 ,則顯示自動回復時間,由 UP 和 DOWN 鍵來設定。 (0.5-1.0-1.5-2.0-2.5-3.0)



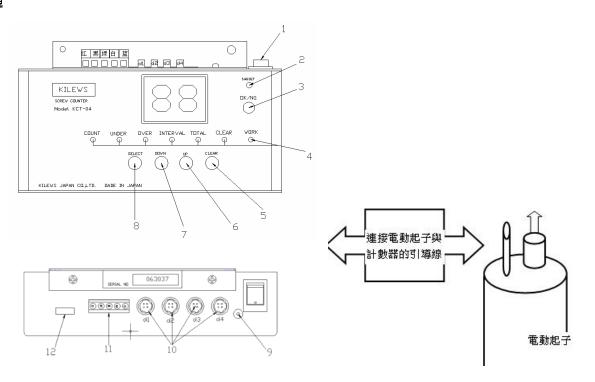
# KCT-04 功能介紹

各種功能		設置時間及數值	功能解釋	蜂鳴聲音/ 發光 二極體紅燈閃爍
計數模式			最多可接 4 把起子同時依序作業	
計數設置		1 - 99	螺絲計數	
起子感應順	i序	ON / OFF	ON: 起子計數方式續:d1d2d3d4	
			OFF: 起子計數方式不連續	
計數方式		ON / OFF	遞增 /遞減	
計數感應		ON / OFF	無須接開關感應 / 可外接開關感應	
工作檢知方	式	ON / OFF	應用在全自動流水線/應用在半自動流水線	
UNDER (LO)		0.0 - 2.0 秒	啓動之後,當扭力停止時間早於設定時間	3 聲蜂鳴和發光
		/0.1 或 0.2 秒	就會出現錯誤。 (檢測螺絲沒有到位置)	二極體閃爍
OVER (HI)		0.0 - 9.0 秒	啓動後,扭力停止超過設定時間就會出現	5 聲蜂鳴和發光
			錯誤。 (螺絲滑牙檢測)	二極體閃爍
顯示歸零時	間 結束信號時	0.5 - 3.0 秒	到達設定的數值之後顯示時間,自動歸零。	蜂鳴與發光二極
間				體
反轉回覆		1 count	電動起子在反轉操作中,計數器的數值會	
			立即恢復爲 1	
蜂鳴警報	錯誤設置		LO≥HI	連續蜂鳴
	待命時間	0-30 秒	當設定的數目還沒有達到而停止工作時	連續蜂鳴

## KCT-04 外觀特性

1 <u>01 017  E0111   L.</u>	
顯示	LED 數位顯示
自動節能	90 分鐘內沒有使用,機器將會自動關閉
電源	須接本公司附屬之計數器專用充電器
充電器	輸入:50/60Hz AC100V 或 110Vor230V 輸出:DC7.5V
判斷正常和故障	O.K 蜂鳴聲音/NG 蜂鳴聲音 and LED 紅燈閃爍
尺寸/重量	92(H) x160(W) x40(D) / 360 g
應用電動起子	適合奇力速所有全自動電動起子型號
連接方式	參考示意圖形

# 外觀





外 觀	功能
①電源開關	ON/OFF
②RESET KEY	系統重置按鍵
③OK/N.G 警示燈	OK:工作完成會閃綠燈 N.G:工作若出現錯誤會閃紅燈
④功能顯示燈組	功能模組顯示燈,讓操作者辨識設定方式
⑤清除鍵	若操作過程中有出現錯誤,按此鍵3秒以上 講會清除錯誤數值與警示
⑥UP鍵	用來增加設定的數值。
⑦DOWN鍵	用來減少設定的數值。
⑧功能選擇鍵	若要設定其他功能,可按此鍵進入設定模式。
9 AC 充電器接頭	用來供應電源使機器正常運作。
⑩起子連接端	連接起子與感應器的連接線。
□訊號輸入/輸出端	外接輸入/輸出訊號接點
◎模式選擇開關	設定計數模式與感應的方法

## KCT-04 訊號輸入/輸出端

接口顏色	功能
紅	RESET 重置開關 內部電源:5V/1.2m A
黑	工作感應器輸入(必須搭配綠色接口) 內部電源:5V/1.2m A
綠	接地 (-) 內部電源:0V
白	螺絲鎖付完成後,會有輸出訊號 (必須搭配綠色接口) MAX:30V 20m A
藍	錯誤操作,會有輸出訊號 (必須搭配綠色接口) MAX:30V 20m A

## KCT-04 模式選擇開關

1	計數器模式	ON:遞增計算 OFF:遞減計算
2	工作感應(訊號輸出確認)	ON:開關感應無效 OFF:開關感應有效
3	感應順序	ON:不連續 OFF:連續
4	工作檢知方式	ON:適用全自動流水線 OFF:適用半自動流水線

功能	設定數值	功能說明	備註/錯誤 LED 警示
切肥	以是数恒	2010-02-02-0	佣缸/姐决 LED 言小
COUNT	1~99	設定每支起子計數的次數。	
UNDER	0.0~2.0/秒	設定 LO TIME,爲開始偵測起子啟動時間設定	紅色 LED 燈亮連續 3下
OVER	0.0~9.0/秒	設定 HI TIME, 設定起子鎖附螺絲完成所需的時間	紅色 LED 燈亮連續 5 下
INTERVAL	0.0~30	每只起子工作時等待下一工作的時間。	紅色 LED 燈連續
			蜂鳴器連續音
TOTAL	0.0~9.9/分	每支起子作業完成需要的時間設定,最大可設定為 9.9	紅色 LED 燈連續
		分	蜂鳴器連續音
CLEAR	0.5~3.0/秒	設定所有起子完成鎖附後,自動歸零的時間	

※若 UNDER>OVER 的時間時,機器本身會無法動作,並且有蜂鳴警示聲,請重新切換設定。

## KCT-04 操作程式及設置

- (1) 電動起子和螺絲計數器終端之間用5根導線連接。(顯示的顏色表明了終端的狀態。)
- (2) 將機器加以固定,避免因碰撞而使機器掉落損傷。
- (3) 附帶的AC 適配器是用來與DC IN的連接器相聯接的,AC適配器的插頭應插在交流電源的壁上插座上。
- (4) 打開電源開關。
- (5) 進入設置。(當你在設置階段,按下 ON/OFF 鍵不少於 1 秒鐘,將會回到原來的狀態。)
- (6) KCT-04 可以設定起子 d1-----d2------d4 若起子順序需要更換時可以從設定模式中切換
- (7) 作業流程中,不管什麼原因若蜂鳴器響,按"CLEAR"3 秒以上,將會解除誤動作回到原先的 設定。
- (8) 工作時,感應器會感應螺絲是否有效,計數器解除的時候螺絲是否和設定的是否一致,所以使用前必須限設定正確(參考 1 各值設定方式)



## KCT-04 按鍵操作

SELECT 鍵	- 在開始設定作業時使用。 - 它也可以用來轉換不同的時間模式。
UP 鍵	- 用來增加設定的數值。
DOWN 鍵	- 用來減少設定的數值。
CLEAR	- 用來清除計數數據,回歸起子初始設定(必須按3秒以上)
UP+DOWN 鍵	- 控制蜂鳴聲的開關。

#### UP+DOWN 按鍵功能

ON	鎖附一個螺絲、工作完成、錯誤操作會發出聲響警示操作人員	
OFF	錯誤操作會發出聲響警示	
FF	工作完成、錯誤操作會發出聲響警示	
EF	每鎖附一個螺絲與工作結束會發出聲響警示;錯誤操作不發出聲音	

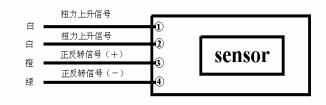
## KCT-04 操作步驟

- (1) 按下 SELECT, 螢幕上會出現 d1~d4 ,則表示需要設定第幾支起子, 按 UP& DOWN 可以設定供 位的起子參數設定。
- (2) 再按一次"SELECT",面板底下 COUNT 燈會亮起,可調整 UP&DONE,調整計數螺絲的次數。 (3) 再按一次"SELECT",面板底下 UNDER 燈會亮起,可設定 LO TIME 時間,一般設定於 0.1~0.2 秒;可調整 UP&DONE 調整時間。
- (4) 再按一次"SELECT", 面板底下 OVER 燈會亮起,設定 HI TIME 時間,一般使用者需配合公司螺絲的尺寸長度, 可調整 UP&DONE。
- (5) 再按一次"SELECT",面板底下INTERVAL燈會亮起 設定起子工作結束後跳到下一次起子開始工作所需的時間, 可按 UP&DONE 來調整 0.2---0.4---0.6---0.8---1.0············3.0-----0.2·········
- (6) 再按一次"SELECT", 面板底下 TOTAL 燈會亮起,設定所有起子完成的時間,可調整 UP&DONE
- (7) 再按一次"SELECT",面板底下CLEAR 燈會亮起,表示設定每隻起子自動歸零的時間長短, 可調整 UP& DOWN 來設定。
- (8) 再按一次"SELECT",面板底下 WORK 燈會亮起,表示設定結束,開始工作。

#### 設定時間示意圖:



## 感應器與起子連接規格:





## 關於充電

當在數位顯示板上顯示 [L](充電信號)時,表示電池只剩下很少的電量。完全充電大約需約 12 個小時。 充電時間不要超過 15 個小時。充電時必須使用隨機附帶的專用 AC 適配器。

#### 操作警告

- (1) 爲確保機器正常的操作。如果 SELECT 按鈕沒有被按下超過 10 秒鐘,機器將會繼續工作。
- (2) 在設定期間若起子運轉(馬達裝置),計數器將處於計數狀態。
- (3) 扭力上升(起子刹車)之後,計數的值就會減少。表示若計數達到0就等於設定的數值。
- (4) 當扭力上升(起子刹車)時,通過反轉可以立即清除數位。因此,它可以再次固定一個螺絲。
- (5) 啓動起子或按下 ON/OFF 鍵 1 秒,就使蜂鳴警報器停止。
- (6) 爲了啓動系統,使用系統重置開關時電池必須處於飽和狀態。
- (7) 如果連續90分鐘部處於使用狀態,主件的電源會自動關閉的,當要再次使用時,請再次打開電源開關。

## 處理警告

- \*小心連接終端的架子的不同的導線與電動起子的聯接方式。
- \*非技術人員請勿自行拆卸計數器或讓計數器受到強烈的撞擊和震動。



#### Characteristic

It can check on the spot as equipment (forgetting to fasten prevention counter) which proper bolting is performed or prevents bundle forgetting by bolting work of a screw.

It can correspond to electric driver of exchange 110V or 220V or DC-Type Screw driver, and the quality of everyday bolting work improves. The feature

- \*It is lightweight and compact, and it clamps in the code of electric driver, and can install and check near the worker.
- \*If the set number of bolting books is reached, an end will be told at a buzzer.
- \*Count cancellation can be performed.
- \*The remaining quantity of the number of bolting books is told. (If operation is left on the way, you will be told about at an alarm buzzer. Setting time 0 30 seconds)

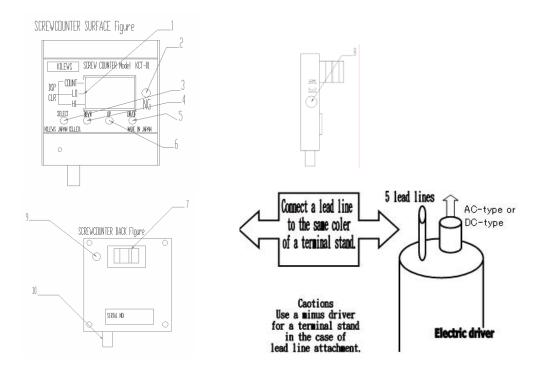
## KCT-01 Function

Each function		Setting time and a numerical value	Functional explanation	Buzzer sound / LED red blink
A setup of the number of counts		1 - 99	Bolting books	
Count system			The system which reduces a display of the number of setup.	
LO		0.0 - 2.0 seconds /0.1or0.2	When a torque rise is early carried out from setting time.	3 buzzer sound /LED blink
НІ		0.0 - 9.0 seconds	After starting, when setting time is exceeded.	5 buzzer sound /LED blink
Display clear time	FINISH SIGNAL TIME	0.5 - 3.0 seconds  Display time after reaching the number of setting books, until it clears.		The buzzer and LED
NG count cancellation		1 count	The number of counts returns one count in inversion operation immediately after a torque rise.	
Alarm buzzer	A mistaken setup		LO≧HI	Buzzer sound continuously
Standby time 0 - 30 seconds		0 - 30 seconds	When it is left, without reaching to the number of setting books.	buzzer sounds continuously

#### KCT-01 Specification

ici oi opociioadon		
Display	LCD digital display	
Automatic power save	90 minutes no use, automatically switch off.	
Charge system	The state which connected AC adapter, or a battery drive.	
In the case of a battery drive	3600 or more continuation bolting (at the time of the fully charge)	
Charger	INPUT:50/60Hz AC100V or 120V or 230V OUTPUT:DC7.5v	
Success-or-failure judging  O.K Buzzer sound / NG buzzer sound and LED red blink		
A size/weight 80(H) x75(W) x13(D)/94g		
Application electric driver FOR KILEWS ALL MODE AUTOMATIC ELECTRICDEIVER		
Attachment Code clamp (with a lock)		
The connection method	Refer to the last page figure.	

#### Appearance



Appearance	Function	
①Display	The number of counts and setting are	
	displayed.	
②N.G. lamp	It blinks at the time of No Good.	
③SELECT key	It is used when starting a setting operation	
	or shifting at each mode at the time of	
	a setup. (push 10 seconds or more)	
④DOWN key	It is used when reducing a setting	
	numerical value.	
⑤POWER Switch	ON/OFF	
⑥UP key	It is used when increasing a setting	
	numerical value.	
	In the case of the work sensor ON.	
	It is used as chattering prevention of a time	
	setting sensor. (it pushes 3 seconds or more)	
7CLAMP		
<b>®AC ADAPTOR Terminal</b>	Power supply	
	RESET SWITCH	
© Electric driver output Connecting the Counter cord		

## KCT-01 Operation procedure and a setup

- (1) Connect five lead lines from electric driver to the terminal of SCREWCOUNTER.
  - (The color display has been carried out to the terminal stand.
  - The lead line color of driver is connected to the terminal of the same color.)
- (2) Clamp SCREWCOUNTER in the code of electric driver.
  - (Set to the position which can be checked)
- (3) AC adapter of an appending article is connected to the connector of DC IN.
  - The plug of AC adapter is inserted in AC power-supply wall socket.
- (4) A power-supply switch is turned on.
- (5) Go into Setup. (Pushing ON/OFF-key 1 second or more, when carrying out setting change on the way. It returns in early stages.)



Key operation

ricy operation		
ON/OFF key	- ON/OFF of a power supply	
	- Use it for the reset key in the case of being in the middle of a setup or operation, and returning first. (Push 3 second or	
	more)	
SELECT key	- It is used when starting setting operation.	
	- It is used when shifting at each mode at the time of a setup.	
UP key	-It is used when raising a setting numerical value.	
DOWN key	-It is used when lowering a setting numerical value.	
UP+DOWN	-ON/OFF change of buzzer sound	
key		

## UP+DOWN key

ON	It will warm the operator by sound when screwing a nut, work completion or any fault happened.
OFF	It will warm the operator by sound when any fault happened.
FF	It will warm the operator by sound when work completion or any fault happens
EF	It will warm the operator by sound only when screwing a nut or work completion.

## KCT-01 Operation procedure

- (1) Push and Turn on Power-Supply Key.
- (2) Pushing SELECT key is continued until a buzzer sounds. (For about 10 seconds)
- (3) The mark of is displayed beside the numerical value of a liquid-crystal screen.
- (4) As for the first display, a mark is displayed on the place of COUNT.
- (5) Set up the number of bolting books by UP or DOWN key.
- (6) Push SELECT key.
- (7) A mark moves to the place of LO and perform a time setup of LO by UP or DOWN key.
- (8) Push SELECT key again.
- (9) A mark moves to the place of HI and perform a time setup of HI by UP or DOWN key.
- (10) Push SELECT key again.
- (11) A mark moves to the place of FINISH SIGNAL TIME, and set up display clear time by UP or DOWN key.
- (12) A setup is ended above. In addition, after a display clear time setup, if SELECT key is pushed within 5 seconds, it can set up continuously to apply change immediately after a setup.

  When 5 seconds or more pass after a display clear time setup, perform operation procedure from (2).

# KCT-04 Function

Each function		Setting time and a numerical value	Functional explanation	Buzzer sound / LED red blink
A setup of the number of counts		1 - 99	Bolting books	
Count system			The system which reduces a display of the number of setup.	
UNDER (LO)		0.0 - 2.0 seconds /0.1or less(0.01-0.09)	When a torque rise is early carried out from setting time.	3 buzzer sound /LED blink
OVER (HI)		0.0 - 9.0 seconds	After starting, when setting time is exceeded.	5 buzzer sound /LED blink
Display clear time	FINISH SIGNAL TIME	0.5 - 3.0 seconds	Display time after reaching the number of setting books, until it clears.	The buzzer and LED
NG count cancellation		1 count	The number of counts returns one count in inversion operation immediately after a torque rise.	
Alarm buzzer	A mistaken setup		LO≧HI	Buzzer sound continuously
	Standby time	0 - 30 seconds	When it is left, without reaching to the number of setting books.	buzzer sounds continuously

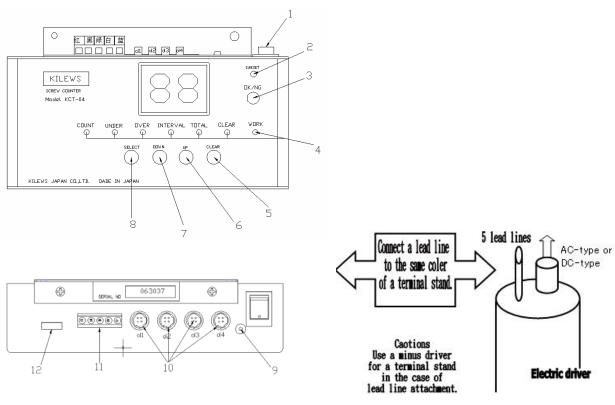
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# KCT-04 Specification

Display	LED digital display	
Automatic power save	90 minutes no use, automatically switch off.	
Power supply	Ni-Cd chargeable battery 1.2x3cells 110mAh	
Charge system	The state which connected AC adapter, or a battery drive.	
In the case of a battery drive	3600 or more continuation bolting (at the time of the fully charge)	
Charger	INPUT:50/60Hz AC100V or 120V or 230V OUTPUT:DC7.5v	
Success-or-failure judging	O.K Buzzer sound / NG buzzer sound and LED red blink	
A size/weight 92(H) x160(W) x40(D)/360g		
Application electric driver FOR KILEWS ALL MODE AUTOMATIC ELECTRICDEIVER		
Attachment	Code clamp (with a lock)	
The connection method	Refer to the last page figure.	

## Appearance



Appearance	Function	
①POWER SWITCH	ON/OFF	
②RESET KEY	System reset	
③OK/N.G Light	OK: green light flashing when complete for work	
	NG: red light flashing when problems occur during work	
4) function Light	Mode light for operators' selection	
⑤CLEAR	When problem occurs, press this key over 3 seconds to clear the wrong numbers and warning.	
⑥UP Key	For increasing the number	
⑦DOWN Key	For decreasing the number	
®SELECT	Press this key for entering mode selection for the other functions	
9AC Adaptor Terminal	Electric supply for the machine to maintain its work	
©CONNECT The connect wire for screwdrivers and inductors		
□ Input/Output Input/Output interface		
②MODE switch Select for counting mode and inducing		

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#### Data Input/output

Pin color	FUNTION
Red	RESET (pair with Earth wire to GREEN inlet)
Black	Sensor inlet (pair with Earth wire to GREEN inlet)
Green	Earth (-)
White	Data output after each screwdriver work completed.
	( pair with Earth wire to GREEN inlet)
Blue Error message output (pair with Earth wire to GREEN inlet)	

#### UP+DOWN key

ON	It will warm the operator by sound when screwing a nut, work completion or any fault happened.
OFF	It will warm the operator by sound when any fault happened.
FF	It will warm the operator by sound when work completion or any fault happens
EF	It will warm the operator by sound only when screwing a nut or work completion.

#### The Function Modes

1	COUNTING	ON: accumulatiing	OFF: subtracting
2	SENSOR SWITCH	ON: no sensor control	OFF: with sensor control
3	TOOL SEQUENCE	ON: Not required	OFF: Seq. D1 to d4 required
4	DETECT METHOD	ON: Pulse	OFF: Time

#### Key operation

They operation			
Function	Setting time and a numerical value	Functional explanation	Buzzer sound / LED red blink
COUNT	1~99	Etting the rundowns for each cycle of work	
UNDER	0.0~2.0/SEC	Setting the minimum second for each rundown	Red NG light blink with buzzer sounds 3 times.
OVER	0.0~9.0/SEC	Setting the maximum second for each rundown	Red NG light blink with buzzer sounds 5 times
INTERVAL	0.0~30	Setting the interval second between each rundown	With ceaseless red NG light and buzzer sounds.
TOTAL	0.0~9.9/CEN	Setting the completion minutes for each cycle of work	With ceaseless red NG light and buzzer sounds.
CLEAR	0.5~3.0/SEC	Setting the signal light and buzzer timing when works completed by each screwdriver	

\*When 'UNDER' timing is set less than 'OVER', the counter won' t work and buzzer will sound ceaseless until the setting is corrected.

#### KCT-04 Function

- (1) SELECT THE SCREWDREIVER Press the 'SELECTION' button to get into SETTING modes. Press the 'UP' or 'DOWN' for select each screwdriver among d1~d4 to be setting.
- (2) SETTING THE RUNDOWNS FOR EACH CYCLE OF WORK Press 'SELECT' again, the 'COUNT' light is turned on and ready for setting the desired rundowns of each screwdriver by pressing 'UP' or 'DOWN' buttons.
- (3) SETTING THE MINIMUM SECOND FOR EACH RUNDOWN Press 'SELECT' again, the 'UNDER' light is turned on and ready for setting the minimum second (0.1~0.2 second in normal) of every rundown by pressing 'UP' or 'DOWN' buttons.
- (4) SETTING THE MAXIMUM SECOND FOR EACH RUNDOWN SETTING THE MAXIMUM SECOND FOR EACH RUNDOWN Press 'SELECT' again, the 'OVER' light is turned on and ready for setting the maximum second (adjustment depend on height of the screw employed) of every rundown by pressing 'UP' or 'DOWN' buttons.

  (5) SETTING THE INTERVAL SECOND BETWEEN EACH RUNDOWN Press 'SELECT' again, the 'INTERVAL'
- (6) SETTING THE COMPLETION MINUTES FOR EACH CYCLE OF WORK Press 'SELECT' again, the 'TOTAL' light is on and press 'UP' or 'DOWN' buttons to set the sum up timing of whole cycle of works by all screwdrivers.



- (7) SETTING THE SIGNAL LIGHT and BUZZER TIMING WHEN WORKS COMPLETED BY EACH SCREWDRIVER
  - Press 'SELECT' again, the 'CLEAR' light is on. Pressing 'UP' or 'DOWN' buttons to set the OK LIGHT and BUZZER display time as a confirmation of work completion on each screwdriver.
- (8) COMPLETON OF THE SETTING on each screwdriver Press 'SELECT' again, the 'WORK' light is on, standing for setting completed and ready for work.

\*\*Remark: This counter may be changed into the SETTING modes whenever the "SELECT" button is pressed.

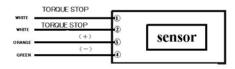
#### KCT-04 Operation procedure

- (1) Connecting the Counter cord ( ) of each screwdriver to d1~d4 modular jack successively on top of the counter.
- (2) KCT-04 can be connected with up to 4 screwdrivers and with set up each screwdriver specifically (Please refer to Setting the Counter, pt.2)
- (3) When the screwdriver change to reverse turning after a normal rundown is done, the counter will make up one count automatically. But this correction is available for once only on each rundown/count.
- (5) Whenever NG state is happened with buzzer sound, you may press 'CLEAR' up to 3 seconds to release the state to original setting.

#### Sketch mep of time settingt:



#### Connect the sensor and screwdrive:



#### About charge

When a display of [:] (Charge sign) comes out between the numbers of a display board, it is a signal with little remaining quantity of a battery. The fully charge is about 12 hours. Charge quickly.

In addition, charge time does not exceed 15 hours. Moreover, charge surely uses attached exclusive

AC adapter. AC adapter can be removed and used for after the fully charge.

Moreover, it can be used where AC adapter is connected.

#### The cautions on operation

- (1) For the incorrect use prevention by the worker, if SELECT button is not pushed 10 seconds or more, it will operate.
- (2) If it enters during a setup at a start (motor drive), it will be in a count operation state as it is.
- (3) The number of counts becomes fewer after a torque rise. It means reaching the number of zero equal setting books.
- (4) When a torque rise is carried out, count cancellation is received by reversing immediately after. Therefore, it can perform refastening a screw.
- (5) Start driver, or push ON/OFF key for 1 second, and release of an alarm buzzer cancels it.
- (6) When a battery changes into a saturation state completely and LCD does not display, even if it charges, in order to start a system, use a system reset switch.
- (7) The power supply of a main part is automatically turned off, if the state where it does not operate for 90 minutes continues. When you use it again, turn on a power supply once again.

#### Handling cautions

Be careful of the wiring from which the lead line linked to a terminal stand differs.

Do not decompose or do not give a strong shock or a strong vibration.