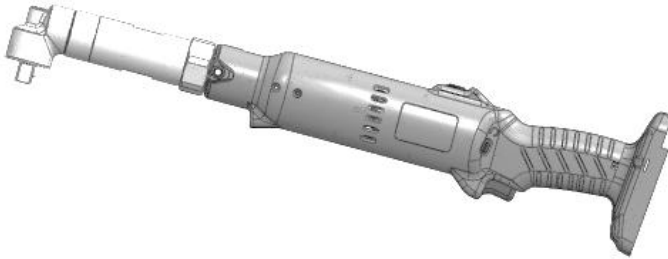




# **Automatic Industrial Cordless Brushless Power Torque Screwdrivers Series**

## **OPERATION AND MAINTENANCE MANUAL**



<b>PTA-L600-Series</b>	<b>PTA-L300-Series</b>	<b>PTA-L150-Series</b>
<b>SKC-PTA-L600</b> <b>SKC-PTA-L450</b>	<b>SKC-PTA-L300</b> <b>SKC-PTA-L150F</b> <b>SKC-PTA-L80F</b>	<b>SKC-PTA-L150</b> <b>SKC-PTA-L120</b> <b>SKC-PTA-L70</b> <b>SKC-PTA-L50F</b>

**Rechargeable -TYPE Automatic Brushless Series**

**KILEWS INDUSTRIAL CO., LTD.**

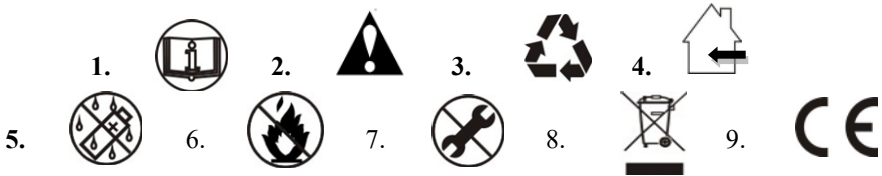
<http://www.kilews.com.tw>



Y2F137A-E-011

Before you use the Cordless Screwdriver for the first time, it is essential to read and understand the manual completely (including the spare parts view). The term “Cordless Screwdriver” in all of the warning listed below refers to your main operated appliance.

### Icon Instructions



- 1. Read instruction manual.
- 2. Observe caution and safety notes.
- 3. Recyclable.
- 4. For indoor use only.
- 5. Do not expose to wet or rain conditions.
- 6. Do not operate in an explosive atmosphere.
- 7. Do not disassemble.
- 8. Forbid throwing.
- 9. CE Certificate.

### Accessories

Item	Quantity	Unit
Suspension Hook Ring Group	1	PCS
Adjusting Wrench	1	PCS
Manual	1	PCS
Guarantee Card	1	PCS
Torque rings ass’y	1	Package
Waist hook	1	PCS
Screw M3*0.5P*10LT	1	PCS

## Warning

Read all instructions and make sure the appearance of the device has no damage before you use it. Failure to follow all instructions listed below may result in electric shock fire and/or serious injury.

1. Keep the working area nice and clean.
  - 1.1 Mess and dark areas may cause of accidents.
  - 1.2 Keep the device away from rain or moisture to decrease the risk of electric shock or short-circuiting occurred.
2. Be alert to workplace safety.
  - 2.1 Use the device under a well-lit and clean environment.
  - 2.2 Keep children and other people away unless the person has been assigned for the task to avoid the danger of injury.
  - 2.3 Do not play around while the tool is being used to avoid the danger of distractions.
  - 2.4 Do not work with the device in potentially explosive environments in which there are inflammable liquids, gases or dusts. Electrical power tools create sparks, which can ignite dusts or fumes.
  - 2.5 Do not use the device if you are tired or under the influence of drugs, alcohol or medication.
3. When the devices are not being used, store them in a safe place.
4. Use a suitable device for the job will be safer at work and have a better result.
5. Always use a screwdriver that is intended for the task you are undertaking. Do not overload or use it improperly such as drilling or tapping.
6. Dress properly. Do not wear loose clothing or jewels while operating the tool to avoid the danger of trapping.
7. By using the device correctly, make sure to hold it firmly with two hands in place before starting the trigger.
8. When using the electrical power tool, take into account the auxiliary handle or waist hook is advantage of working conditions. On the contrary, the purposes of the waist hook or driver hook is convenient to put the device away and easier to keep it out of reach of children.
9. Look after either the device or the battery carefully and have any damaged parts repaired by an authorized or qualified shop. Always keep the tool nice and clean; pay attention on the machine grease which might ruin the tool.
10. Disconnect the plug from the power source after the charger has been used.
11. Take apart the battery from the device when it is not being used.
12. Use only the accessories that are detailed in the operating instructions. The use of others which are not recommended in the operating instructions may affect the functioning of the device. It could lead to an increased risk of personal injury as well.
13. Remain alert at all times and watch what you are doing during proceeding. Before operation, always check every part is in good condition and move freely in order to function properly.
14. This device only applies for metal screw bits designated with their dimensions and their shape. Do not recommend to countersink or force of loading on any material such as plastic and wooden.
15. The device does not apply for elastic or tensile load with washer on.
16. To prevent parts in gearbox from damage, replace the grease at least once for every year.
17. It is necessary for the operators to read and follow up all the operating instructions in this manual. KILEWS is not responsible for any personal injury that might cause of disobeying the safety advice.
18. Use a safety device: Wear protective earmuffs to reduce personal injury.

### Noise:

The typical A-weighted noise level acc. To EN62841-2-2.  
Sound pressure level (LpA): 53.6 dB(A)  
Sound power level (LwA): 64.6 dB(A)


### Vibration:

The vibration total value acc. EN62841-2-2.  
Vibration emission value ah (m/s<sup>2</sup>): 0.17 m/s<sup>2</sup>  
Uncertainty K (m/s<sup>2</sup>): 0.02 m/s

## Function of cordless protection

- Over electric current protection
- Thermal Protector
- Slow rotation protection
- Battery Identification
- Prevent from low power
- Stall protection
- Reverse control protection
- Sleeping mode

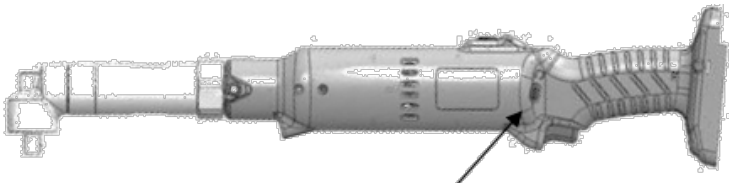
## Warning

 **Do not attempt to repair or disassemble this cordless screwdriver, the warranty will be considered void.**

1. This rechargeable screwdriver maintenance Make sure to remove the battery pack before maintaining or repairing the device by a qualified technician.
2. Do not attempt to disassemble or reassemble the device at will which may result in poor performance or danger of injury, the warranty applies only to initial package.
3. Do not repair the device with other than genuine KILEWS replacement parts may result in poor performance or danger of injury, the warranty will be considered void.
4. The temperature between 0° C ~ 35° C would be an ideal condition of carrying out the tasks on the device.

## Operating instructions

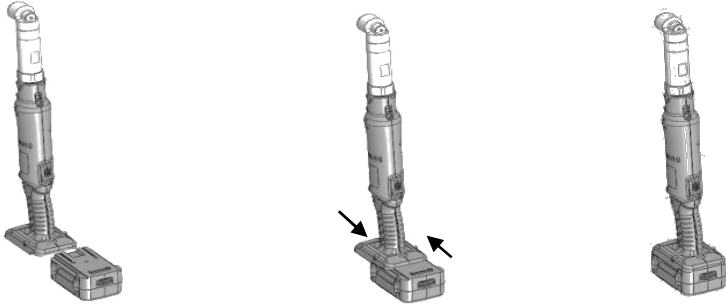
1. Charge the battery in the charging station before first use to make sure operates at its highest capacity. To ensure operators against injuries, release the Forward/Reverse lever as arrow showing below into a center position to have trigger locked before start or disassemble the device.



Forward / Reverse lever

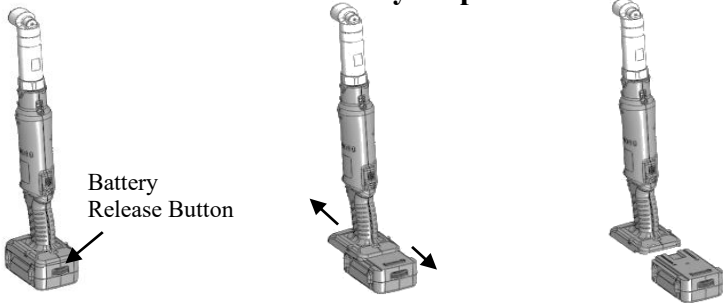
- 2.1 Below illustration is showing the process of correct install & disassemble the rechargeable battery. The beep sound comes along with a flash while the screwdriver is supplied genuine battery installation. It could be operated once the battery has been identified.
- 2.2 Too slow to install the battery may cause error identification so the beep sound and flash would be continuing. In order to function properly, re-assembling it as below process again.

### Insert Battery Steps



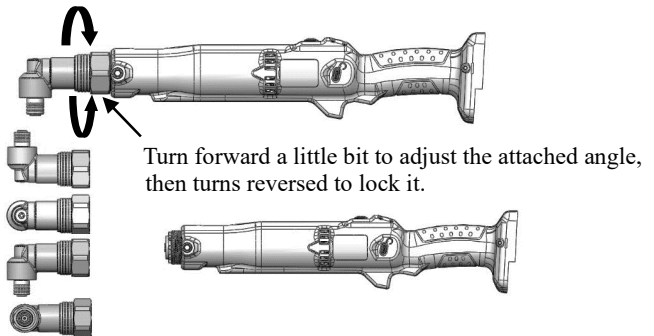
- (1) Insert the rechargeable battery into the device follow by the arrow as showing.  
 (2) Assembled completely.

### Remove Battery Steps

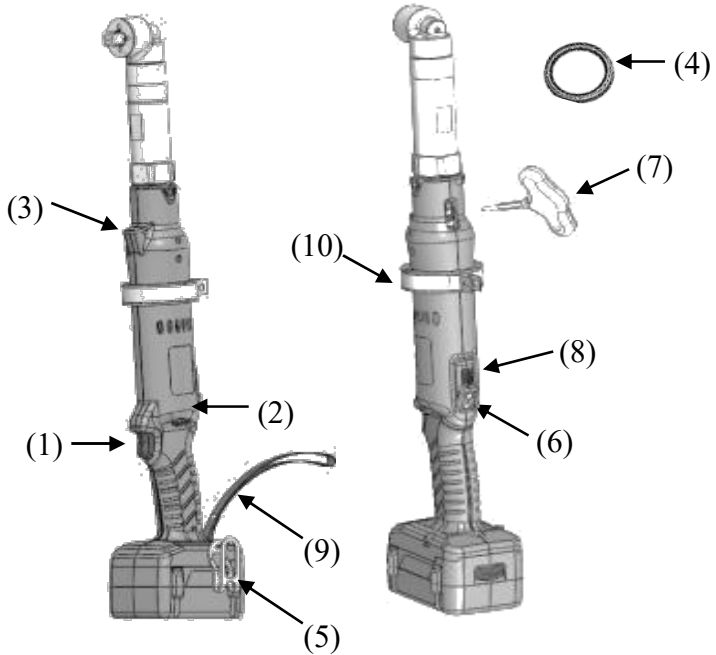


- (1) Press the release button and take it out of the device  
 (2) Follow the arrow direction.  
 (3) Removed completely.

3. 90° Attached angle adjustment



## Function / Operating Introduction



Function Name Table

No.	Description	No.	Description
(1)	Trigger Switch	(6)	Indication light
(2)	Forward/Reverse Lever	(7)	Torque wrench
(3)	LED Light	(8)	Speed adjustment
(4)	Torque Ring	(9)	Wrist strap hole
(5)	S waist hook	(10)	Suspension Ring Accessory

## Manual / Function

### 1. Full auto shut-off screwdriver.

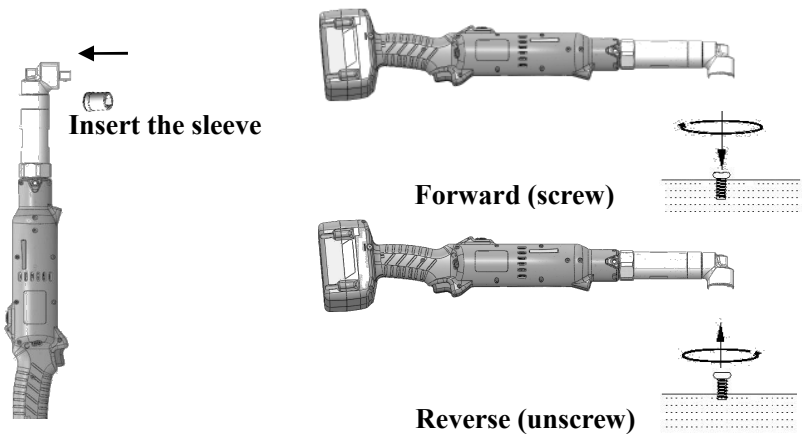
It stops automatically when the screw has been tightened up and reached the set-up torque level. The device will not cause damage of task since no continue running after screws are tightened.

#### (1) Trigger switch

The LED lights on when the trigger switch has been pressed about one-third down, and then the screwdriver starts functioning when the switch trigger has been pressed halfway down; on the contrary, it stops when the screw has been tightened up or the trigger has been released.

#### (2) Forward / Reverse switch

When the switch turn to the right as arrow indicates, the screwdriver will be clock-wise screwing to tighten things up; Vice versa, left switch means to release the screw. As the diagram showing, always set the switch to neutral position when the screwdriver is not being used.

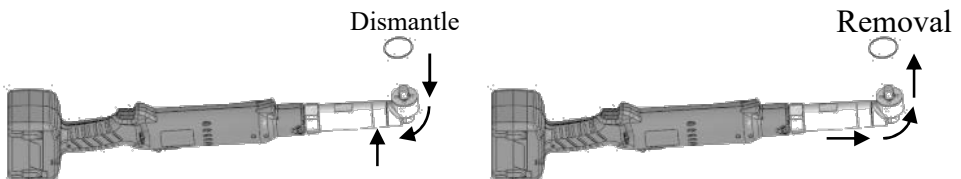


#### (3) LED light

While press the trigger, the LED lights up automatically to assist the job to be done; on the contrary, it will be off once the trigger has been released.

#### (4) Torque ring

The purpose of the color ring is to have the torque level visible; there are 3 different types in total, follow the diagram below for installation/removal.







### (5) Waist hook

The waist hook allows users to carry the device easily by attaching it to their work belt.

### (6) Functional light and the status indicator



Whenever the remaining power in the rechargeable battery is fewer than 20%, the tool is still alive but with red flashlights on. Once the remaining power is towards 10% or even fewer it may result in poor performance with the continuing red lights on.

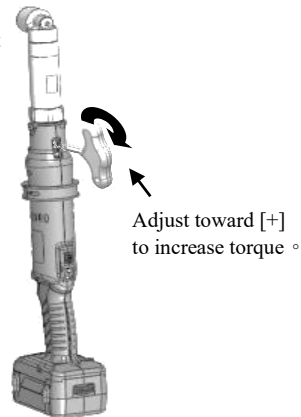
Functional indicator Determine the beep sound	 OK OK screwing with preset torque	 NG NG screwing
Indicator light	Green on~ off	Red on~ off
Beep sound warning	1 short beep	1 long beep

Indicator of low battery	 Power reserve <20% (17.5)	 Power reserve < 10% (17V)
Indicator light	Blinking Red	Red light on (low power)
Beep sound warning	Continuing Beeping	2 short 1 long beep
Screwdriver functioning	Able to function	Unable to function

### (7) Torque adjustable

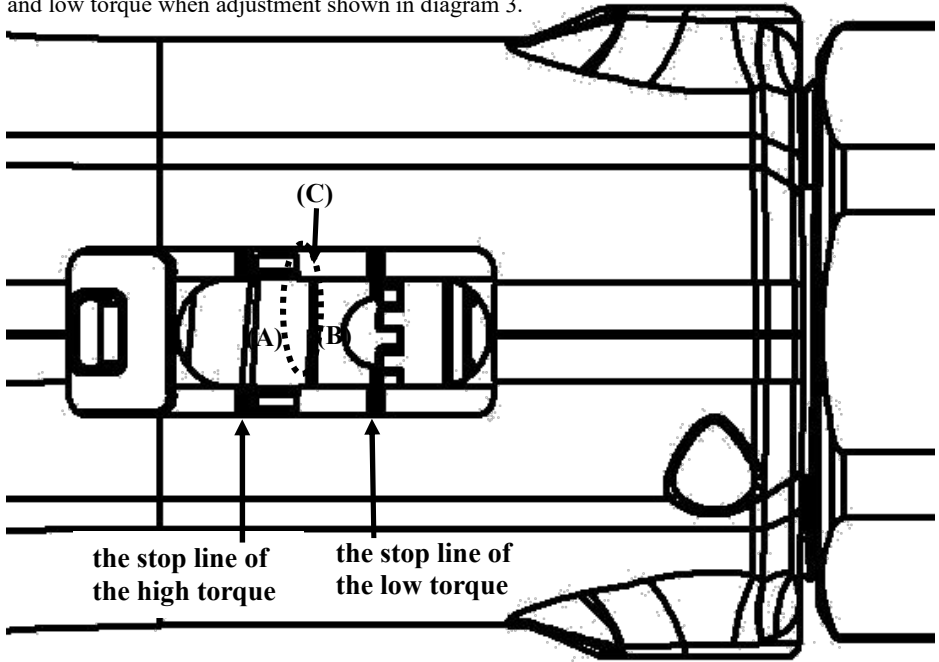
The torque is able to be changed by following steps.

- 1) Remove the battery from the device or set the rotation switch to neutral position to prevent the tool from starting up unintentionally.
- 2) Open up the torque safety cover cap; follow the illustration on the right which inserting the torque wrench from the bit sleeve to turn the nut over in a central position, the user may check the nut lock from side uncovered window.
- 3) Having the torque changed by inserting the torque wrench into the nut lock to adjust the torque range.
- 4) Adjusting the torque in two directions (-) for less torque (+) for more torque.
- 5) Torque adjustment wrench showed in a diagram 2: when torque rotation  adjustment wrench turns to the (+) sign means that the Torque adjustment ring will move up to the (+) sign and increase the torque force until reached the maximum torque scale. When the Rotation  torque adjust wrench turns to the (-) means that the torque adjustment ring will move down to the (-) sign and decrease the torque force until reached to the minimum torque scale.





Notice: Use the junction of waring spring and spring fixing plate as a reference point when adjusting torque. To avoid jamming and abnormal conditions, please do not exceed the stop line of the high and low torque when adjustment shown in diagram 3.



### (8) Hi/Lo Switch

When the rotating speed needs to be changed, set up the switch to Hi for the fastest rotation, and set up the switch to Lo for slowest rotation. It's possible that the uncompleted shut-off occurs when the switch is setup to Lo and the presetting torque is more than 50% of torque range. Please refer to the following table.

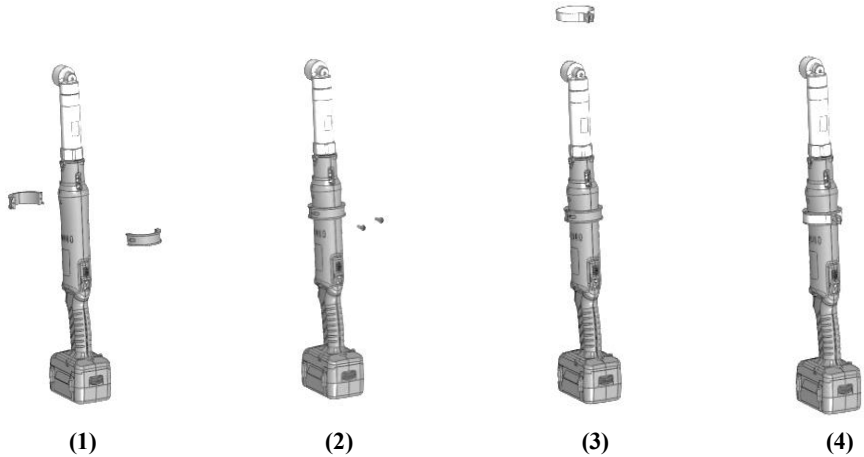
Lo Switch Shut-off	OK (N.m)	NG (N.m)
PTA-L600	25~30↓	30↑
PTA-L450	15~22.5↓	22.5↑
PTA-L300	12~15↓	15↑
PTA-L150F	5~7.5↓	7.5↑
PTA-L80F	3~4 ↓	4↑
PTA-L150	apply to scale 8 only	8↑
PTA-L120	6↓	6↑
PTA-L70	2.5~3.5 ↓	3.5↑
PTA-L50F	2~2.5 ↓	2.5↑

### (9) Hole for wrist band

Enable to install the wrist band which is more convenient and safer for users.

## (10) Suspension Ring Accessory

Use for hanging tool apply to the application, assembly follow below steps:



- (1). Take both up and downside cover of suspension ring.
- (2). Lock both screws
- (3). Close the locking ring
- (4). Completed

## Other Cautions

1. The best condition of using the tool is under 8 hours a day, do not overloaded. according to operating frequency and torque loaded, we suggest adding lubricating oils in clutch per 3-6 months, and kindly contact with distributor when product's maintenance.
2. Do not attempt to repair or disassemble this cordless screwdriver without authorization. Always have the device serviced by assigned factory or qualified person in order to have the warranty effective continually.
3. KILEWS is not responsible for any poor performance or damage caused by customers own modification of the tool.
4. It is necessary for the management to have individual operators read and follow up all instructions in this manual. Do not attempt to repair or disassemble this cordless screwdriver themselves.
5. Chemicals, Acetone, Benzene, Alcohol, Thinner, Ketone, trichloroethylene, etc. shall not be in contact with the surface of the screwdriver in order to prevent chemical damage.
6. Please follow instruction carefully and do not drop or shock the screwdriver.
7. This product allows you to adjust freely ( - ) and ( + ) to decrease and increase torque. Different models will deliver different level of torque, when the torque is adjusted to the limit the switch will not be able to turn, please do not force it or it will be damaged. High frequency of using this power tool might cause overheating, please have the tool to be cool down properly.
8. Not allow to turn the Hi/Lo switch during operation in order to cause system malt-function.

9. The device will not be able to function again once the OK/NG indicator/signal is not turn off yet.
10. When adjusting the torque, for safety purpose should stop the screwdriver completely and set the switch to neutral position. It could prevent the user from turning the tool on accidentally.
11. During operation, the switch has been changed accidentally that the device will enable its self-protecting mode which is power off. Re-start the tool when this happens.
12. Each operational torque setting, using time and frequency may result in different level of wear and tear, at higher torque setting and use extensively could accelerate the wearing down of tool. After one month, the torque is getting reduce gradually at the rate of 2~3% or 3~5 % (max torque). The longer use of the device, torque reduction will become stable, and the users could measure the torque by a tester on a regular time schedule to check if the torque power still meets the criteria.

Slow speed Duty Cycle Conversion (for reference)

Based on 1000 rpm, 1 second ON/3 seconds OFF. For example, the duty cycle for 350rpm,  $1000-350=650 \cdot 650/1000\%=65\%$

ON=  $1*1.65=1.65$  · OFF =  $3*1.65=4.95$  (rounded value) = 2 seconds ON / 5 seconds OFF

This tool is intended for a duty cycle of 2.0 sec on, 5.0 sec off.

Rotating speed (rpm)	operation frequency	Rotating speed (rpm)	operation frequency	Rotating speed (rpm)	operation frequency
900	1.0 ON 3.0 OFF	600	1.0 ON 3.0 OFF	300	2.0 ON 5.0 OFF
850	1.0 ON 3.0 OFF	550	2.0 ON 5.0 OFF	250	2.0 ON 5.0 OFF
800	1.0 ON 3.0 OFF	500	2.0 ON 5.0 OFF	200	2.0 ON 5.0 OFF
750	1.0 ON 3.0 OFF	450	2.0 ON 5.0 OFF	150	2.0 ON 5.0 OFF
700	1.0 ON 3.0 OFF	400	2.0 ON 5.0 OFF	100	2.0 ON 5.0 OFF
650	1.0 ON 3.0 OFF	350	2.0 ON 5.0 OFF		

13. SKC-PTA-L600/L450/L300 must be measured by the KILEWS torque meter KTM-1000.  
SKC-PTA-L150F/L150/L120 must be measured by the KILEWS torque meter KTM-250.  
SKC-PTA-L80F/L70/L50F must be measured by the KILEWS torque meter KTM-150.
14. Kilews cordless screwdriver torque output is generated by clutch machinimas, and it is applicable to ISO 6789.

## Description of Battery and Charger



1. Choice the suitable battery for your application,SKC-LB1840 for PTA-L600/L450 and
2. SKC-LB1830C for PTA-L300/L150F/L80F/PTA-L150/120/L70/L50F is recommended, Please contact to your local agents for more Information.
3. The use of other than genuine KILEWS batteries or screwdrivers can't be active due to the build-in protection system enforce no charging.
4. Use SKC-P120W/SKC-P80W charge station for PTA-L600/L450 and SKC-P80W-D charge station for SKC-PTA-L300/L150F/L80F/L150/120/L70/L50F is recommended.

**⚠ WARNING** Read all safety warnings and all instructions. *Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.*

**Save all warnings and instructions for future reference.**

### 1) Work area safety

- a) **Keep work area clean and well lit.** *Cluttered or dark areas invite accidents.*
- b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** *Power tools create sparks which may ignite the dust or fumes.*
- c) **Keep children and bystanders away while operating a power tool.**

*Distractions can cause you to lose control.*

### 2) Electrical safety

- a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.**

*Unmodified plugs and matching outlets will reduce risk of electric shock.*

- b) **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** *There is an increased risk of electric shock if your body is earthed or grounded.*

- c) **Do not expose power tools to rain or wet conditions.** *Water entering a power tool will increase the risk of electric shock.*

- d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** *Damaged or entangled cords increase the risk of electric shock.*

- e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** *Use of a cord suitable for outdoor use reduces the risk of electric shock.*

- f) **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** *Use of an RCD reduces the risk of electric shock.*

### 3) Personal safety

#### a) Stay alert, watch what you are doing and use common sense when

**operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while**

*operating power tools may result in serious personal injury.*

**b) Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing**

*protection used for appropriate conditions will reduce personal injuries.*

**c) Prevent unintentional starting. Ensure the switch is in the off position**

**before connecting to power source and/or battery pack, picking up or carrying the tool.**

*Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.*

**d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in**

*personal injury.*

**e) Do not overreach. Keep proper footing and balance at all times. This**

*enables better control of the power tool in unexpected situations.*

**f) Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.**

**g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.**

### 4) Power tool use and care

**a) Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.**

**b) Do not use the power tool if the switch does not turn it on and off.** *Any power tool that cannot be controlled with the switch is dangerous and must be repaired.*

**c) Disconnect the plug from the power source and/or the battery pack from**

**the power tool before making any adjustments, changing accessories, or**

**storing power tools.** *Such preventive safety measures reduce the risk of starting the power tool accidentally.*

**d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** *Power tools are dangerous in the hands of untrained users.*

**e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's**

**operation. If damaged, have the power tool repaired before use.** *Many*

*accidents are caused by poorly maintained power tools.*

**f) Keep cutting tools sharp and clean.** *Properly maintained cutting tools with*

*sharp cutting edges are less likely to bind and are easier to control.*

**g) Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** *Use of the power tool for operations different from those intended could result in a hazardous situation.*

## **5) Battery tool use and care**

**a) Recharge only with the charger specified by the manufacturer.** *A charger*

*that is suitable for one type of battery pack may create a risk of fire when used with*

*another battery packs.*

**b) Use power tools only with specifically designated battery packs.** *Use of any other battery packs may create a risk of injury and fire.*

**c) When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** *Shorting the battery terminals together may cause burns or a fire.*

d) Under abusive conditions, liquid may be ejected from the battery; avoid **contact**. If **contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** *Liquid ejected from the battery may cause irritation or burns.*

## 6) Service

a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.** *This will ensure that the safety of the power tool is maintained.*


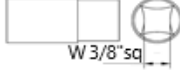
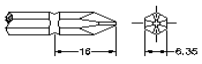
**⚠ WARNING** Read all safety warnings and all instructions. *Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.*

**Save all warnings and instructions for future reference.**

### .Sound power level & Vibration :

- . Weighted surface sound pressure level  $L_{pA}$  according to EN ISO 3744: 81.9 dBA
- . Uncertainty  $K_{pA}$ : 0.566 dBA
- . A-weighted sound power level  $L_{WA}$  according to 8.6 of EN ISO 3744 : 92.9 dBA
- . Uncertainty  $K_{WA}$ : 0.566 dBA
- . Weighted emission sound pressure level  $L_{pCpeak}$  according to EN ISO 11203: 97.6dBA
- . Uncertainty  $K_{pCpeak}$ : 0.565 dBA
- . Recommendation for the operator to wear hearing protection.
- . Vibration total value  $a_h$  according to EN ISO 5349-1 and EN ISO 5349-2:  $1.0683\text{m/s}^2$
- . Uncertainty  $\text{m/s}^2$ :  $0.566\text{m/s}^2$
- . “Vibration total value may also be used in a preliminary assessment of exposure.”
- . “Warning - vibration emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used.”
- . “Warning - the need to identify safety measures to protect the operators that are based on an estimation of exposure in the actual conditions of use.”

## Specifications

MODEL (PTA-)		L600-Series		L300-Series			L150-Series			
		L600	L450	L300	L150F	L80F	L150	L120	L70	L50F
INPUT VOLTAGE(DC)		DC 18V								
TORQUE (N.m)	hard joints	25-60	15-45	12-30	8-15	3-8	8-15	6-12	2.5-7	2-5
	Soft joints	48↓	36↓	24↓	12↓	6.4↓	12↓	9.6↓	5.6↓	4↓
Torque accuracy (%)		±5%								
Torque adjustment		Internal adjustment								
Duty cycle		1.0s ON 3.0s OFF								
Unloaded Speed n0 (r/min) ±10%	HI	200	200	350	850	1200	350	550	850	1200
	LO	130	130	220	550	800	220	350	550	800
Screw size (mm)	Machine screw	≤12	≤12	≤10	≤8	5.0~6.0	≤8	≤6	5.0~6.0	4.0~5.0
Weight (Kg)		2.85kg		1.9kg			1.25kg			
Length (mm)		530mm * 122 mm L * H w/o battery		460mm * 92 mm L * H w/o battery			400mm * 92 mm L * H w/o battery			
KILEWS torque meter		KTM-1000	KTM-1000	KTM-1000	KTM-250	KTM-150	KTM-250	KTM-150	KTM-150	KTM-150
Applicable Bit Type		W 1/2"sq	W 1/2"sq	W 3/8"sq	W 3/8"sq B9.5	W 3/8"sq B9.5	W 3/8"sq B9.5	W 3/8"sq B9.5	B9.5	B9.5
Applicable battery		SKC-LB1840			SKC-LB1830C					
Applicable charger station		SKC-PI20W SKC-P80W			SKC-P80W-D					
Applicable Bit type		 W 1/2"sq		 W 3/8"sq			 B 6.35			

Bits Code ~ W: square B: Hex 6.35mm

**CAUTION**   
**SAVE THE INSTRUCTIONS**  
**DO NOT DESTROY**

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