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**IST-SD SERIES  
DIGITAL TORQUE SCREWDRIVER  
OPERATION MANUAL**

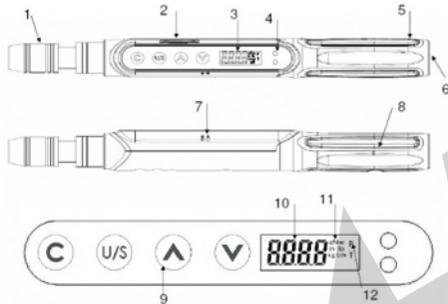


**Main Function**

- ◆ Digital torque value readout
- ◆ +/-2.5% or +/-3% accuracy
- ◆ CW and CCW operation
- ◆ Peak hold and Track mode selectable
- ◆ Buzzer and LED indicator for the pre-settable target torque
- ◆ Engineer units(cN-m, in-lb, kg-cm) selectable
- ◆ Auto power off after about 5 minutes idle
- ◆ Recharge batteries are compatible

**Description**

Structure:



- 1 Auto Bit Holder 2 Communication Port 3 LCD Readout 4 LED Indicator
- 5 Anti-slip Handle 6 Battery Cover 7 Buzzer 8 Calibration mark
- 9 Buttons 10 Torque Value 11 Units 12 Peak/Track Mode

**Specification**

- 1 Working Condition:
  - Operation temperature: -10°C~60°C
  - Store temperature: -20°C~70°C
  - Humidity: Can reach 90% if no condensation

**2 Parameter**

Code	IST-SD50	IST-SD200	IST-SD400
Range	10-50cN.m	40-200cN.m	80-400cN.m
Accuracy	CW	±3%	±2.5%
	CCW	±4%	±3.5%
Resolution	0.1cN.m	0.1cN.m	0.1cN.m
Size of shank(L)	1/4"	1/4"	1/4"
Power supply	1xAAA battery		
Length	193mm	203mm	203mm
Weight	190g	200g	200g

Note:

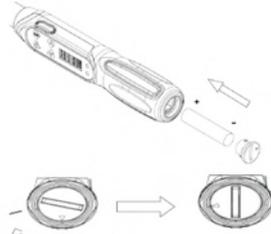
1. The accuracy of readout is guaranteed from 20%-100% of maximum range +/-1 increment. The torque accuracy is a typical value. Calibration point is on the rubber grip. For keeping the accuracy, calibrate the screwdriver for a constant period time(1 year).
2. One cycle means twist the screwdriver from 0 cN.m to maximum range and back to 0 cN.m.
3. Horizontal and vertical test.
4. Environmental test: a. Dry heat b. Cold c. Damp heat d. Change of temperature e. Impact(Shock) f. Vibration g. Drop
5. Electromagnetic compatibility test:
  - a. Electrostatic discharge immunity (ESD)
  - b. Radiated susceptibility (RS)
  - c. Radiated emission (RE)

**Before using the screwdriver**

Battery installation:

- ◆ Remove the battery cap.
- ◆ Insert one AAA battery matching the -/+ polarities of the battery to the battery compartment.

- ◆ Put on the battery cap and fasten it tightly according to the following figures.



Power on and resetting the screwdriver

- ◆ Press **C** to power on the digital screwdriver.
- ◆ Usually press **C** to reset the digital screw before using it.



Attention: If an external force is applied to the screwdriver during power-on period, an initial torque offset will be recorded in the memory.

Auto power off:

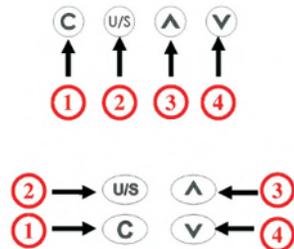
- ◆ The screwdriver will auto power off after about 5 minutes idle for power saving. Press **C** to power on the screwdriver again.

Cautions: During communication period (Send appears), the auto power off function is disabled.

Resetting the screwdriver:

- ◆ If the screwdriver does not function normally, loosen the battery cap then tighten it to re-start.

Setup:



- ① Power On/Clear
- ② Unit Selection/Setting
- ③ Adjust Torque Value Up
- ④ Adjust Torque Value Down

① Step 1: Unit selection

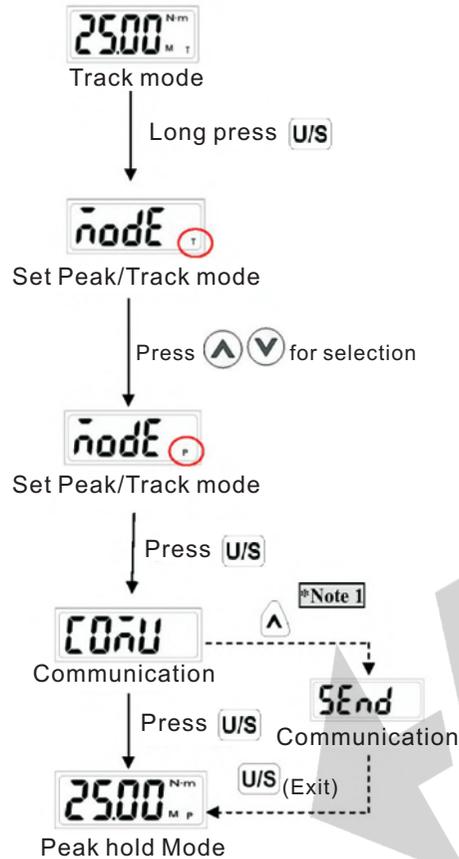


② Step 2: SET Target Torque



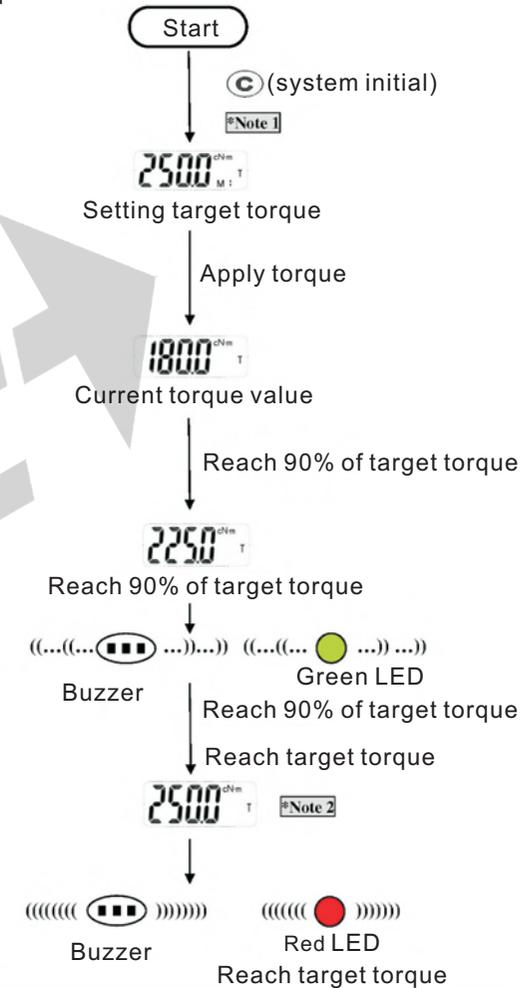
Note:  
The "Unit Selection" is cyclic.

3 Step 3: Peak hold/Track mode selection



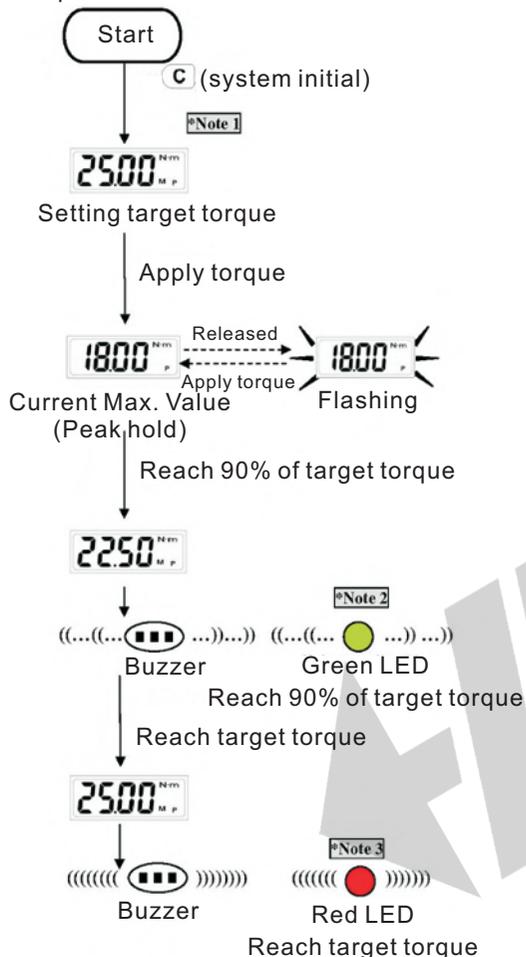
 Note:  
Communication is for calibration of screwdriver. Please contact your local dealer for information.

Track Mode Operation



 Note: 1. If Er8 is appeared, that means this screwdriver has ever been applied more than 110% of torque of the spec.  
2. When reaching the setting target torque, the green and red LED will be on at the same time.

Peak Hold Mode Operation:



 Note: 1. If **E-0** is appeared, that means this screwdriver has ever been applied more than 110% of torque of the spec.  
2. When reaching the setting target torque, the green and red LED will be on at the same time.

Maintenance

Attention:  
One year periodic recalibration is necessary to maintain accuracy.  
Please contact your local dealer for calibrations.



- 1 Over-torque (110% of Max. torque range) could cause breakage or lose accuracy.
- 2 Do not shake violently or drop screwdriver.
- 3 Do not use this screwdriver as a hammer.
- 4 Do not leave this screwdriver in any place exposed to excessive heat, humidity, or direct sunlight.
- 5 Do not use this apparatus in water. (not waterproof)
- 6 If the screwdriver gets wet, wipe it with a dry towel as soon as possible. The salt in seawater can be especially damaging.
- 7 Do not use organic solvents, such as alcohol or paint thinner when cleaning the screwdriver.
- 8 Keep this screwdriver away from magnets.
- 9 Do not expose this screwdriver to dust or sand as this could cause serious damage.
- 10 Do not apply excessive force to the LCD panel.
- 11 Apply torque slowly and graspe the center of the handle. Do not applu load to the end of the handle.
- 12 When checking the accuracy or calibration, please use the bit head packed inside the below mold case.

Battery Maintenance

- 1 When the screwdriver is not used for an extended period of time, remove the battery.
- 2 Keep a spare battery on hand when in long trip or cold areas.
- 3 Sweat, oil and water can prevent a battery's terminal from making electrical contact. To avoid this, wipe both terminals before loading a battery.
- 4 Dispose of batteries in a designated disposal area. Do not throw batteries into a fire.