TM100 Torque Tester Operation Manual



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1 Specification and Features

Measurement range	0.5~10 N-m
Display	5 effective digits max.
Accuracy	+/- 1% Reading
Unit of measurement	Lb-ft, Kg-ms, N-m
Operating temperature	+5 °C ~ +40 °C
range	
Storage temperature range	0 °C ~ +50 °C
Operating humidity	25~85 % RH
Power supply	100~240 Volt a.c. at 50-60 Hz input
Power consumption	Less than 1.5 W
Power cable	1800mm
Base material	Metal
Dimension	215mm x 134mm x 60mm
PC connection	RS232
Net Weight	1.3 Kg

- .Peak and tracing mode selection
- .Unit selection valid for Kg-cm, N-m, and Lb-ft.
- .High-/Low-limits setting and detection. Color LEDs indication for pass and fail.
- .Operation from internal rechargeable Li-ion battery pack or using the adapter connected to a.c. supply (100-240Volts).
- .RS232 serial bus connection to a PC for peak data reading transmission.
- .Packed in plastic case. Handy for carrying and storage.

2 Measure

- 1) The tester has to be set up on a table firmly with screw bolt.
- 2) Turn on the switch at the left side of the tester. Press the On(wake) button to start the LCD show.
- 3) If "Battery Low" is shown, plug the adapter charger and continue the measurement.
- 4) Place the soft-joint unit onto the measurement seat. Make sure that the soft-joint unit fit in the seat firmly.
- 5) If necessary, adjust the setting parameters of "Mode", "Unit", "Limit", "Flash timing" according to user's convenience.
- 6) Test the screwdriver for its torque output shown on LCD display. If "Peak Mode" is selected, the reading shown is the largest torque measure during the testing.

 Positive reading represents torque measurement in the clockwise direction. While negative reading is for counter-clockwise directional torque.
- 7) Before the testing is completed, it's very advisable to revert the soft-joint unit such that its spring load is fully released.

3 Control Panel Description

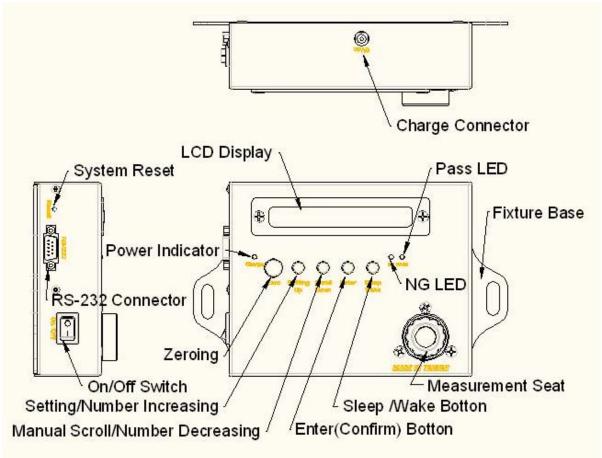
When the button is push,

- a. <u>ZERO</u>: In "Peak Mode", sending the reading shown to a person computer, if the PC is connected. The reading is then cleared.
- b. <u>Setting/Up</u>: Entering setting manual. Also increasing number when setting parameters. If the button is push long, the number will increase in a high speed.
- c. <u>Scroll/Down</u>: Scrolling the manual. Also decreasing number when setting parameters. If the button is push long, the number will decrease in a high speed.
- d. **Enter**: Confirming setting.
- e. <u>Sleep/Wake(On/Off)</u>: Entering power saving mode, or ending the power saving mode and back to work.

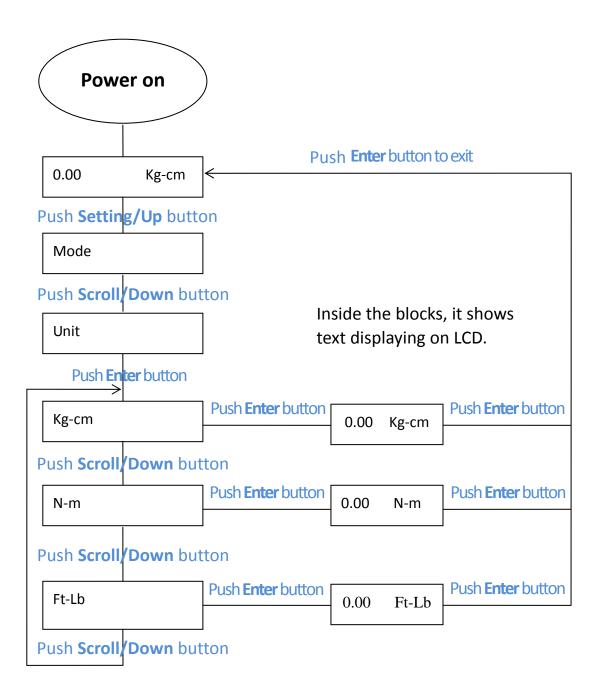
LED indications,

- a. <u>PASS</u>: indicating torque measure in spec. The torque is below the high limit and above the low limit.
- b. NG: indicating torque measure out of spec. The torque is beyond the high limit.
- c. <u>Charge</u>: red when charging. The light turns yellow green when charge completing.

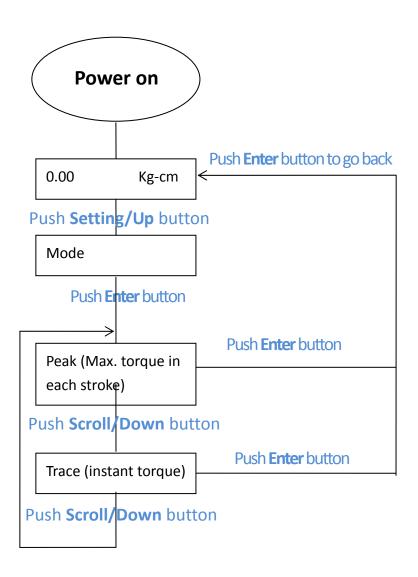
The tester is pictorial described as the figure below.



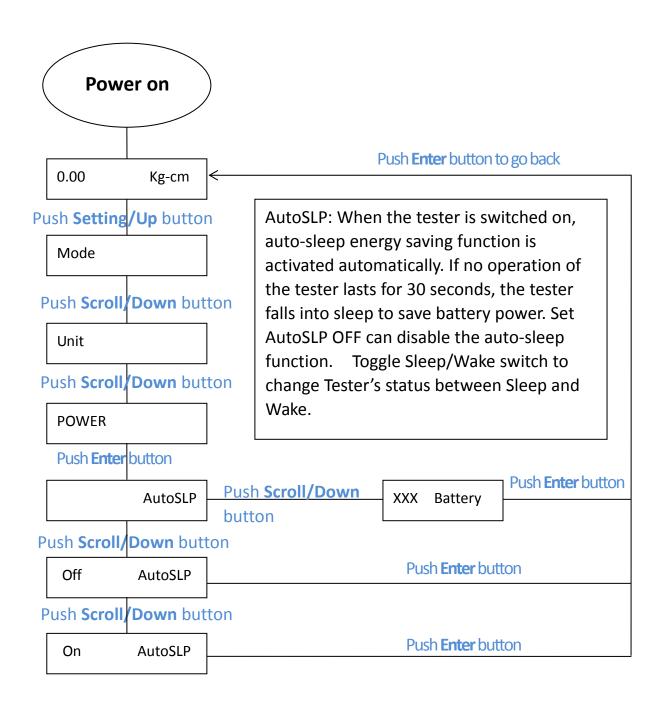
4 Setting Unit



Selecting Mode

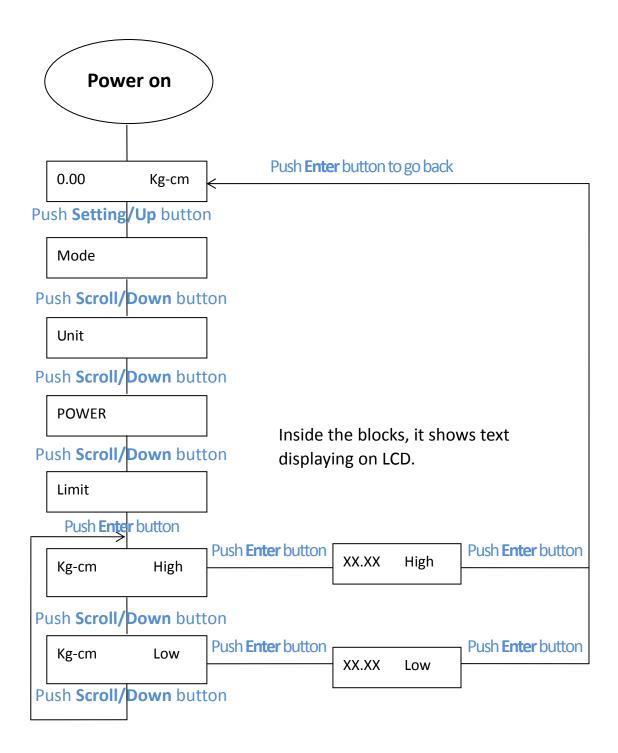


6 Quitting Auto-sleep and Battery Check

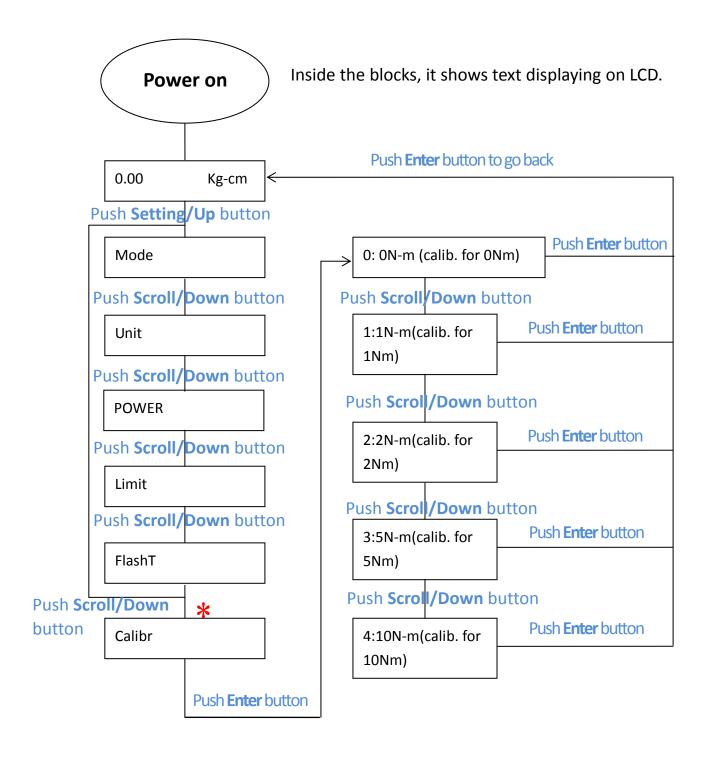


XXX: The value represent the energy storage status of the battery. It's 840~855 when fully charged. The tester need recharging if the value falls below 765.

7 Setting Specification Limits

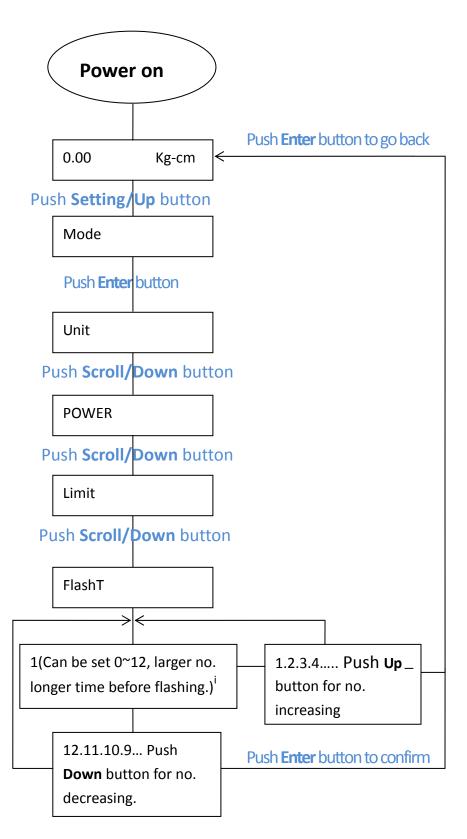


8 Setting Calibration Points



^{*} Need push <u>Setting</u> button steadily, then toggle the <u>Scroll/Down</u> button.

9 Setting Timing for Flashing Peak Torque Reading



i: Manually toggle **Zero** button to flash display if set 0.

10 Road Map of Setting Manual

