

Specifications:

Model	Range	Square Drive	Weight
SPM-502	5-50.0 ft-lb	3/8 inch	0.6 pound
SPM-1002	10-100.0 ft-lb	3/8 inch	0.7 pound
SPM-1503	15-150.0 ft-lb	1/2 inch	0.8 pound
SPM-2503	25-250.0 ft-lb	1/2 inch	0.8 pound
SPM-4004	40-400.0 ft-lb	3/4 inch	1.4 pound
SPM-6004	60-600.0 ft-lb	3/4 inch	1.5 pound

Display: 5-digit, alpha-numeric LCD with function and battery indicator icons.

Accuracy: Within $\pm 1\%$ of Indicated Value of both CW and CCW directions. (10%-100% of F.S)

Calibration: Recommended to be performed (by DTS) once a year or every 15,000 cycles which ever comes first.

Resolution:

Units of measure: ft-lb, in-lb, Nm

Model	Drive	ft-lb	in-lb	Nm
SPM-502	3/8 inch	0.01 ft-lb	0.1 in-lb	0.01 Nm
SPM-1002	3/8 inch	0.01 ft-lb	0.2 in-lb	0.02 Nm
SPM-1503	1/2 inch	0.02 ft-lb	0.4 in-lb	0.04 Nm
SPM-2503	1/2 inch	0.03 ft-lb	0.6 in-lb	0.06 Nm
SPM-4004	3/4" inch	0.04 ft-lb	0.10 in-lb	0.10 Nm
SPM-6004	3/4" inch	0.06 ft-lb	1.2 in-lb	0.12 Nm

Modes of measure: Track, Peak Hold

Measurement Modes:

TRACK - Real-time digital indication of applied torque for dial, bending beam or electronic wrench testing.

PEAK - 15-second display of highest torque reached during each application to indicate over-shooting.

Visual, Audible Alerts:

Yellow LED and buzzer pulse at 80% - 96% of target torque. Pulse rate increases as target torque is approached.

Green LED and buzzer alerts continuously when applied torque is within 96% - 104% of target torque.

Red LED and buzzer on continuously when applied torque exceeds >104% target torque or wrench full-scale.

Tactile Vibration when applied torque is within $\pm 4\%$ tolerance of target torque.

Temperature Drift: $\pm 0.0015\%/F$
Storage Temperature - 0°F to 125°F
Operating Temperature - 40°F to 110°F
Humidity - up to 90% non-condensing

Battery Power:

Rechargeable Li-Ion Polymer cell, 3.7V, up to 300 hours of operation per charge. Charger: 4 - 6 hour, 110 - 240VAC wall block with universal adaptors, (included), or through PC with USB cable, (not included).

Certification:

This device is calibrated at the factory and is certified to meet International Standards. ISO-6789-2003 and ASME B107-28-2005 standards compliant. Certificate of N.I.S.T. (National Institute of Standards Technology). Traceability from 10% to 100% of full scale.

Maintenance:

To clean the Meter, wipe with a lightly dampened cloth. **DO NOT** use: solvents, thinners or engine cleaners. **DO NOT** immerse in any liquids. It is highly recommended that your Torque Meter be calibrated once a year or every 15,000 cycles; whichever comes first. Contact Digitool Solutions representatives for repair and calibration services.

Warranty Service and Recalibration

Digitool Solutions provides a 1 year warranty that covers any Digital Torque Meter which fails to give satisfactory service due to defective workmanship or materials (excluding calibration) for 12 months from the date of original purchase. Calibration is only covered by this warranty for each new unused Torque Meter out of box. Products must be returned with proof of purchase—freight prepaid—to the warranty service center listed below.

This warranty excludes Torque Meter Pros which have been subjected to abnormal use, accidental damage, neglect, or lack of maintenance. Any modification or disassembly of this Torque meter, or repair by an unauthorized service center will void the warranty. This warranty gives you specific rights. You may also have other rights which vary from state to state. The foregoing obligation is Digitool Solutions sole liability under this or any implied warranty; and under no circumstances shall Digitool Solutions be liable for any incidental or consequential damages.

Note: Some states do not allow the exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you.

For Warranty Service and Recalibration/Certification Services, contact:

Digitool Solutions LLC.,

13905 Ramona Ave. Unit #A
 Chino, CA 91710
 Phone: (909)591-9581
 Fax (909) 233-6491
 Website: digitoolsolutions.com



USER'S GUIDE

TORQUE METER PRO

TRACK, PEAK INDICATOR

For Models
 SPM-502, SPM-1002, SPM-1503
 SPM-2503, SPM-4004, SPM-6004

Accuracy:

Torque. $\pm 1\%$ CW & CCW of 10%-100% of Full scale

Battery:

300 hours operation per charge
 Rechargeable Li-Ion Polymer

Display:

5-digit, alpha-numeric LCD with function and battery indicator icons.

Power off:

Auto shut off after 2 minutes idle



Important Safety Instructions



- **WARNING** - Risk of flying particles.
- Read this entire User's Guide before using the Torque meter. Always follow good professional tool practices.



- **Wear Safety goggles.**
- Insure that all equipment is in good working order and that ratings of the Torque Meter, tools and drives exceed the torque being applied.
- Never use the Torque Meter Pro with the power off.
- Never initiate ZeroTare with torque applied.
- Save these instructions.

Introduction

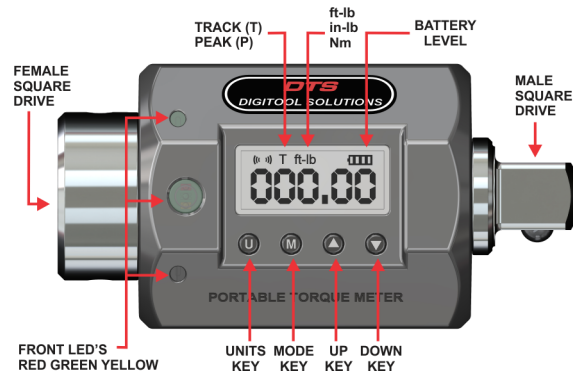
The DTS Torque Meter Pro Series provides torque accuracy within $\pm 1\%$ both directions CW and CCW of reading between 10% and 100% of full scale. It is rugged enough to accept the output torque of non-impacting: power tools, nut-runners or robotic spindles.

It may be used as an adaptor between any square drive hand tool, such as a ratchet wrench or breaker bar, and common fastener drive sockets

Because the Torque Meter Pro is entirely self-contained, there is no wrap up of interconnecting cables during use.

It features a rechargeable Li-Ion battery for long service life and the display is user selectable for ft-lb, in-lb or Nm units of measure. Two modes are featured:

- **TRACK** - real time digital indication of applied torque
- **PEAK** - 15-second display of highest torque reached during each application



Front Panel Display and Keypad

Keypad Functions:

Power ON - U or M key

U - Unit Select - ft-lb, in-lb or Nm
- Zero Tare Torque (hold key 3 seconds)

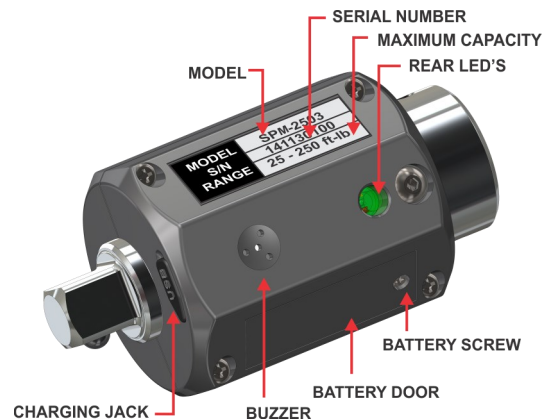
M - Mode Select - TRACK, PEAK
- Manual power off, (hold key 3 seconds)

▲ - Increase TARGET TORQUE value
(Press and Hold Key for rapid scrolling Up)

▼ - Decrease TARGET TORQUE value
(Press and Hold Key for rapid scrolling Down)

This device automatically Powers OFF after 2 minutes of Idle time.

Rear Panel Input/Output



Operator Instructions

1. Setup:

- Turn on the Torque Meter Pro by pushing the **U** or **M** or **UP** buttons.
- Push the **U** key to select Units.
For Track and Peak to view the units of measure: Repeatedly push the **U** key to display the desired units of measure, ft-lb, in-lb or Nm.
- Push the **M** key to select the display mode:
TRACK (T) for tracking torque applying.
PEAK (P) Display will hold the highest torque applied.
- Push the **▲** or **▼** key to view the TARGET TORQUE
Use these same keys to increase or decrease to the desired value.
During loading in TRACK, PEAK modes, the Torque Meter will display applied torque in real time.

2. Application:

- With the power on, install the Torque Meter Pro between the driver and the socket.
- Apply torque load to the fastener in either CW or CCW directions. During loading, the Torque Meter Pro will display applied torque in real time.
- When the applied torque is within 4% of the TARGET TORQUE value in TRACK or PEAK modes, the green LED, buzzer and vibrator (optional) will alert continuously. Stop applying torque, as the installation is complete.

Release Indications:

Should the applied torque exceed the TARGET TORQUE value by more than 4%, the red LED and buzzer will alert continuously. If the torque is exceeded 125% of the full scale, meter will indicate "OVER TORQUE."

Box Includes :

- Torque Meter P/N SPM-XXXX
- Rechargeable Li-Ion Polymer cell P/N DTS-BAT1
- Universal battery charger P/N DTS-CHARGER1
- User 's Guide P/N DTS-UG-SPA