Specifications:

<table>
<thead>
<tr>
<th>Model</th>
<th>Range</th>
<th>Square Drive</th>
<th>Weight + Bracket</th>
</tr>
</thead>
<tbody>
<tr>
<td>TC0502</td>
<td>50.0 ft-lb</td>
<td>3/8 inch</td>
<td>2.7 pound</td>
</tr>
<tr>
<td>TC1002</td>
<td>100.0 ft-lb</td>
<td>3/8 inch</td>
<td>2.8 pound</td>
</tr>
<tr>
<td>TC1503</td>
<td>150.0 ft-lb</td>
<td>1/2 inch</td>
<td>3.0 pound</td>
</tr>
<tr>
<td>TC2503</td>
<td>250.0 ft-lb</td>
<td>1/2 inch</td>
<td>3.2 pound</td>
</tr>
</tbody>
</table>

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

Accuracy: within ±1% of Indicated Value of both CW and CCW directions. (10%-100% of Full Scale)

Calibration: should performed once a year or every 15,000 cycles which ever comes first.

Resolution:

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

<table>
<thead>
<tr>
<th>Model</th>
<th>Drive</th>
<th>ft-lb</th>
<th>in-lb</th>
<th>Nm</th>
</tr>
</thead>
<tbody>
<tr>
<td>TC0502</td>
<td>3/8 inch</td>
<td>0.02 ft-lb</td>
<td>0.3 in-lb</td>
<td>0.03 Nm</td>
</tr>
<tr>
<td>TC1002</td>
<td>3/8 inch</td>
<td>0.04 ft-lb</td>
<td>0.5 in-lb</td>
<td>0.05 Nm</td>
</tr>
<tr>
<td>TC1503</td>
<td>1/2 inch</td>
<td>0.06 ft-lb</td>
<td>0.8 in-lb</td>
<td>0.08 Nm</td>
</tr>
<tr>
<td>TC2503</td>
<td>1/2 inch</td>
<td>0.10 ft-lb</td>
<td>1.2 in-lb</td>
<td>0.13 Nm</td>
</tr>
</tbody>
</table>

Measurement Modes:
- FIRST PEAK - 15 seconds display of captured break-away (click) for mechanical preset or adjustable wrenches. The Checker is adjust display to match the preset value. Percent error displayed on LED indicators:
  - Green: ≤±3% of preset torque value, with Buzzer.
  - Yellow: ≤±4% of preset torque value.
  - Red: >±4% of preset torque value.

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

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

Adjustable TARGET TORQUE: (Track and Peak Mode only)

Accuracies:
- ±1% CW & CCW from 10% to 100% of F.S.
- Preset Torque from 5% to 100% of F.S.
- Display Torque from 5% to 125% of F.S.

Battery:
- Using 3 AAA size battery. Up to 400 hours operation
- LCD display:
  - 5 digits alphanumeric display easy for instruction
- Power off:
  - Power OFF is automatic after 2 minutes idle.
- Mounting:
  - I-Beam -Bracket

For Warranty Service and Recalibration/Certification Services, contact:

Digitool Solutions LLC,
13905 Ramona Ave. Unit #A
Chino, CA 91710
Phone: (909)951-9581
Fax (909) 233-6491
Website: digitoolsolutions.com
Introduction

The DTS Torque Checker/Calibrator provides accuracy within ±1% of reading between 10% and 100% of full scale for testing or calibration of most mechanical and electronic torque wrenches. Its accessory mounting bracket, allows fixing the Checker to a bench, a roll cart for portability, or to the wall for convenient calibration of most mechanical and electronic torque wrenches.

Its accessory mounting bracket, allows fixing the Checker to a bench, a roll cart for portability, or to the wall for convenient calibration of most mechanical and electronic torque wrenches. It is rugged enough to accept the output torque of non-impacting: power tools or nut runners.

The DTS Torque Checker features a 3 AAA battery for versatility and convenience.

The display is user selectable for ft-lb, in-lb or Nm units of measure. Three testing modes are featured:

- **TRACK (T)** mode displays applied torque in real time for testing dial type, bending beam or electronic torque wrenches.

- **PEAK (P)** display mode reports maximum torque applied for dial follower or peak reading electronic wrenches, non-impacting power tools or nut runners. This mode is also useful for training wrench users to avoid overshooting the preset torque value.

- **FIRST PEAK (F.P)** display mode is used to capture the "click" of mechanical preset or adjustable wrenches. The Checker is programmed to match the preset value on the wrench and a unique LED indication (Patent Pending) signals the percent error of the click wrench;

- **Green < ±3%, Yellow : >= ±3% & <±4%, RED >= ±4%.

Important Safety Instructions

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

- Wear Safety goggles.

- Insure that all equipment is in good working order and that ratings of the Torque Checker, tools and devices exceed the torque being applied.

- Never use the Torque Checker with the power off.

- Never initiate zero tare with torque applied.

- Save these instructions.

Keypad Functions:

- **U** - Unit Select - ft-lb, in-lb or Nm
- **M** - Mode Select - TRACK, PEAK, FIRST PEAK

Power ON - M key

- **▲** - Increment TARGET TORQUE value (Press and Hold Key for rapid scrolling Up)
- **▼** - Decrement TARGET TORQUE value (Press and Hold Key for rapid scrolling Down)

Power OFF is automatic after 2 minutes idle.

Rear Panel Input/Output

Installation:

- Attach the accessory mount to a sturdy bench, roll-cab or waist high on a wall using the supplied hardware. Insert the Torque Checker male square drive into the female square drive of the mounting bracket with the display facing up. Secure the meter to the mounting bracket by tightening the hex screw on top of bracket.

- Insure that the Torque Checker range is equal to or exceeds the range of the equipment to be tested.

- Refer to the manufacturer’s testing or calibration instructions for the wrench/tool under test.

Operator Instructions

1. **Setup:**

   - a. With no torque applied, (wrench removed from the Checker) turn on the Torque Checker by momentarily pushing the **M** buttons.
   - b. Push the **U** key to view the units of measure. Repeatedly push the **U** key to the desired units of measure, ft-lb, in-lb or Nm.
   - c. Momentarily push the **M** key to select the modes:
   - TRACK (T) for dial, bending beam or electronic wrenches.
   - PEAK (P) for dial follower or peak reading electronic wrenches or non-impacting Power tools or nut runners.
   - FIRST PEAK (F.P) for “click” type preset or adjustable wrenches.

   d. Push the ▲ or ▼ key to view the TARGET TORQUE value. Use these same keys to increment or decrement to the desired value. For “click” type wrench testing set the TARGET TORQUE on the meter to the same value as the preset torque on the wrench. For all other wrenches set the TARGET TORQUE to the wrench full-scale value. During loading in TRACK and PEAK modes, the Torque Checker will display applied torque in real time. The yellow LEDs and the buzzer begin pulsing at 80% of TARGET TORQUE, getting faster as the TARGET TORQUE value is approached.

Front Panel Display and Keypad

Re-Order Components:

- Torque Checker Display P/N TCXXXF
- Bracket mount P/N DTS-I-8K
- User’s Guide P/N TC-UG-TC