Specifications:

<table>
<thead>
<tr>
<th>Model</th>
<th>Range</th>
<th>Square Drive</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>DW-2501</td>
<td>250.0 in-lb</td>
<td>1/4 inch</td>
<td>1.5 pound</td>
</tr>
<tr>
<td>DW-1002</td>
<td>100.0 ft-lb</td>
<td>3/8 inch</td>
<td>2.2 pound</td>
</tr>
<tr>
<td>DW-2503</td>
<td>250.0 ft-lb</td>
<td>1/2 inch</td>
<td>3.4 pound</td>
</tr>
</tbody>
</table>

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

Accuracy: ±1% of Indicated value of both CW and CCW directions. (10%-100% of F.S)

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

Resolution:

<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>DW-2501</td>
<td>1/4 inch</td>
<td>0.01 ft-lb</td>
<td>0.1 in-lb</td>
<td>0.01 Nm</td>
</tr>
<tr>
<td>DW-1002</td>
<td>3/8 inch</td>
<td>0.1 ft-lb</td>
<td>1 in-lb</td>
<td>0.2 Nm</td>
</tr>
<tr>
<td>DW-2503</td>
<td>1/2 inch</td>
<td>0.2 ft-lb</td>
<td>1 in-lb</td>
<td>0.3 Nm</td>
</tr>
</tbody>
</table>

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

Measurement Modes:

TORQUE - Display torque value in real time when torque is loading and also show peak torque when torque is released.

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 on 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 ±4% of Target torque.

Battery Power:
2 AA battery up to 400 hours of continuous operation

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 wrench, 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 wrench 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 one year warranty that covers any Digital Torque Wrench 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 Wrench out of box. Products must be returned with proof of purchase, freight prepaid, to the warranty service center listed below. This warranty excludes torque wrenches that have been subjected to abnormal use, accidental damage, neglect, or lack of maintenance. Any modification or disassembly of this torque wrench 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

For Models
DW-2501, DW-1002, DW-2503

USER'S GUIDE

Ratchet head:
1/4", 3/8" and 1/2" drive 36 teeth

Accuracy:
Torque ±1% CW & CCW
From 10%-100% of Full scale

Display:
5-digit, alpha-numeric LCD
With functions, units and battery indicator icons.

Indicators:
LED Green, Yellow and Red
Buzzer, Vibrator

Power:
Manual/Auto shut off after
5 minutes Idle

Battery:
2 AA size Battery Regular Alkaline
up to 400 hours of continuous operation

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

Rev. Dec 2014
**Warning - Risk of flying particles.**
- Read this entire User’s Guide before using this torque wrench
- Always follow good professional tool practices.

**Wear Safety goggles.**
- Insure that all equipment is in good working order and that ratings of the torque wrench, tools and drives exceed the torque being applied.
- Never use the torque wrench with the power off.
- Never initiate ZeroTare with torque applied.
- Do not use the wrench as a breaker bar to loosen nuts, bolts or fasteners
- Save these instructions.

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**Introduction**

The “DW” series of electronic torque wrenches establishes a new standard in threaded faster installation tools. It features the latest state-of-the-art sensing and micro-controller technology in a robust tool designed for the professional mechanic.

The DW series feature +/-1% accuracy of torque reading between 10% and 100% of full scale in both CW and CCW directions which exceeds the ASME B107.28 Standard. The wrench is usable down to 5% of full scale at +/-3% of reading precision. Its integral 36-tooth ratchet drive provides strength as well as versatility in use. Three wrench sizes are available, providing 1/4in, 3/8in and 1/2in square drive ratchet heads, covering 20 in-lb to 250 ft-lb torque capacity.

The wrench is powered by two easily replaceable AA Alkaline cells. This battery provides up to 400 hours of continuous operation. This electronic torque wrench is intended for use in industrial, aerospace, automotive repair, reliability labs and quality assurance environments.

One modes are featured:
- **TORQUE** - Display torque value in real time when torque is loading and also show peak torque when torque is released.

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**Front Panel Display and Keypad**

**Keypad Functions:**

**Power ON - M key**

- **U** - Unit Selection - ft-lb, in-lb or Nm
- **Zero Tare Torque** (Press and hold key 3 seconds)
- **M** - Mode - Manual power off, (Press and 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)

**Automatic Power OFF after 5 minutes of idle time.**

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**Operator Instructions**

1. **Setup:**
   a. Turn on the torque wrench by pushing the **M** key.
   b. In **TORQUE** mode
      Press the **U** key to view the units of measure. Repeatedly push the **U** key to display the desired units of measure, ft-lb, in-lb or Nm.
   c. **Manual Power off:** Hold the **M** key for more than 5 sec
   d. Push the **▲** or **▼** key to view the TARGET TORQUE value. Use these same keys to increase or decrease to the desired value.

During loading, the torque wrench will display applied torque in real time. The yellow LED and the buzzer will begin to pulse at 80% of TARGET TORQUE, and getting faster as the TARGET TORQUE value is approached.

2. **Application:**
   a. With the power on, insert the torque wrench driver into the socket.
   b. Apply torque load to the fasterner in either CW or CCW directions. During loading, the torque wrench will display applied torque in real time.
   c. When the applied torque is within 4% of the TARGET TORQUE value, the green LED, buzzer and vibrator (optional) will output 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 applied is exceeded 125% of torque range, the display will indicate “OVER TORQUE.”

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

**Re-Order Components :**
- DW Torque wrench P/N DW-XXXX
- User’s Guide P/N DTS-UG–DWA

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*Note: For resolutions and decimal point, see table on back.*