Specifications:

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

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

Accuracy: Torque: within ±1% of Indicated Value of both CW and CCW directions. (10%-100% of F.S)
Angle: within ± 1° when rotating to 90° at the speed rate @ 2°/s to 400°/s

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

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

Modes of measure: Peak Hold, Angle

Measurement Modes:

ANGLE - 15 seconds display of peak Angle.
Minimum 5% of full scale torque apply before Angle start measurement.
Example: Model DWA-1002 full scale is 100 ft-lb
5% of F.S is 5 ft-lb. when torque reached
Above 5 ft-lb. Angle will start measure.

TORQUE - Display torque value in real time when torque is loading and display peak torque when 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 200 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 & Angle 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 a 1 year warranty that covers any Digital Torque & Angle 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 & Angle 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 & Angle Wrench that have been subjected to abnormal use, accidental damage, neglect, or lack of maintenance. Any modification or disassembly of this Torque & Angle 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

Digitool Solutions LLC,

For Models
DWA-2501, DWA-1002, DWA-2503

USER’S GUIDE

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

Accuracy:
Torque. ±1% CW & CCW
From 10%-100% of Full scale
Angle. ±1° of 90° rotation
@ speed rate 2°/s - 400°/s

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 200 hours of continuous operation

Rev.Dec. 2014
**Keypad ON - M key**

- **M** - Mode Select: TORQUE, ANGLE
- **U** - Unit Select: ft-lb, in-lb or Nm
- **Zero Tare Torque/Angle** (hold key 3 seconds)
- **Manual power off** (hold key 3 seconds)
- **Increase TARGET TORQUE / ANGLE value** (Hold for rapid scrolling)
- **Decrease TARGET TORQUE / ANGLE value** (Hold for rapid scrolling)

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

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**Setup:**

1. **a.** Turn on the Torque and Angle Wrench by pushing the M buttons.
2. **b.** Press the U key. For 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. For Angle, pushing the U key will clear the Angle to 0°.
3. **c.** Press the M key to select the display mode: TORQUE or ANGLE Mode.
4. **d.** Push the ▲ or ▼ key to view the TARGET TORQUE or ANGLE value. Use these same keys to increase or decrease to the desired value. While loading in either TORQUE or ANGLE modes, the Torque and Angle wrench will display applied torque or angle respectively. The yellow LED and the buzzer will begin to pulse at 80% of TARGET TORQUE, getting faster as the TARGET TORQUE value is approached.

**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 over 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

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**Re-Order Components :**

- Torque Angle wrench P/N DWA-XXXX
- User’s Guide P/N DTS-UG–DWA