Specifications:

Model DWU-2501 DWU-1002 DWU-2503	Range 250.0 in-lb 100.0 ft-lb 250.0 ft-lb	Square Drive 1/4inch 3/8 inch 1/2 inch	Weight 1.5 pound 2.2 pound 3.4 pound		
Display:	5-digit, alpha-numeric LCD with function and battery indicator icons.				
	. 40/ 51 1				

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:

Model	Drive	ft-lb	in-lb	Nm
DWU-2501	1/4 inch	0.01 ft-lb	0.1 in-lb	0.01 Nm
DWU-1002	3/8 inch	0.1 ft-lb	1 in-lb	0.2 Nm
DWU-2503	1/2 inch	0.2 ft-lb	1 in-lb	0.3 Nm

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 torgue 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



ELECTRONIC TORQUE WRENCH

For Models DWU-2501, DWU-1002, DWU-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



Important Safety Instructions

Warning - Risk of flying particles.
 Read this entire User's Guide before using

- <u>
 :</u>
 - 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 loose nuts, bolts or fasteners
 - Save these instructions.

The **"DWU"** 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.

Introduction

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.

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.

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



How to Print, Erase and Exit

Before use of the tool, set up the driver "USB Driver.exe" and open up the program "DTS_USB.exe", which will both be located on the flash drive that is sent with this product.

When the .exe file is opened press the "BEGIN" button, the "Connection Status" box will then read "**Ready for transmission**".

Open up Microsoft Excel to record the data, placing the cursor at the location you wish to save the data at. SIDE NOTE:

If you move the cursor and click on a different location while the device is still storing data, the data will move to the new location and continue to store data.

To store data, apply torque to the device to the target torque you wish to store and then release the pressure. The number that was reached will then begin to blink on the display. You may then store the data by pressing the down arrow key, or you can immediately upload the data (if already connected to the computer) by pressing the up arrow key.

The display will flash the number for the next 15 seconds. After 15 seconds have elapsed the meter will once again read **0.0**.

After storing data, press the "M" key which will prompt one of the following commands: "PRINT", "ERASE", or "EXIT".

When you wish to the print the data that has been downloaded to the device, press the "M" key until the device reads "PRINT", and press the "U" key.

When you wish to the erase the data from the wrench, press the "M" key until the device reads "ERASE", and press the "U" key.

If you wish to continue to make measurements or simply wish to exit the choosing screen, press the "M" key until the device reads "EXIT", and press the "U" key.

This command screen will display any of the following three commands for 60 seconds. After the 60 seconds has elapsed, the device will return back to measuring mode. SIDE NOTE: If the battery is removed from the device, any previously stored data will be automatically deleted.

SIDE NOTE: The maximum amount of data entries that can be stored at a time is 330 entries



Operator Instructions

1. Setup:

a. Turn on the torque wrench by pushing the $\, M$ key.

b. In TORQUE mode

Press the ${\bf U}$ key to view the units of measure. Repeatedly push the ${\bf U}$ key to display the desired units of measure, ft-lb, in-lb or Nm.

TORQUE - Displays torque value in real time when torque is loading and also shows peak torque when torque is released.

- 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 is on, insert the torque wrench driver into the socket.
 - 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 trigger. 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 :

DWU Torque wrench USBUser 's Guide

P/N DWU-XXXX P/N DTS-UG- DWU



