OWNER'S MANUAL

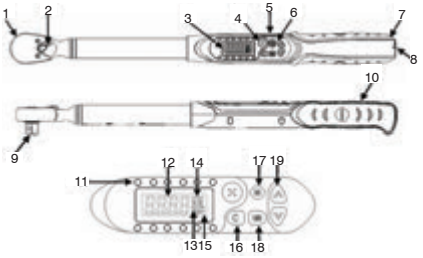
JET JDTW Series
Digital Torque Wrench

Thank you for choosing a JET digital torque wrench. **Before operating the torque wrench, please read this manual completely**, and keep it nearby for future reference. This is a precision instrument and must be treated and cared for as such. Rough handling may affect performance and diminish life.

MAIN FEATURES

- Digital torque value readout
- 12 led side lights and beeper indicate torque when screen cannot be seen
- +/- 2 or +/- 3% accuracy
- CW and CCW operation
- Peak hold and track mode
- Measures in/lbs, ft/lbs, kg/cm, and nm units
- 9 presettable target torque values
- 50 data memory for recall and torque auditing
- Auto sleep after 5 minutes idle time
- Compatible with rechargeable batteries

NAMES AND FUNCTIONS OF PARTS



1. Reversible Ratchet Head
2. Direction Lever
3. LCD Readout
4. Beeper
5. Calibration Port
6. Button
7. Battery Compartment
8. Battery Cover
9. Ratchet Driver
10. Anti-slip Handle
11. LED Indicator
12. Torque Value
13. Memory Number
14. Unit (N-m, ft-lb, in-lb, kg-cm)
15. Peak/Track Mode
16. Power on/Clear Button
17. Pre-setting Number Selection
18. Unit Setting/Selection Button
19. Up/Down Button

SELECTION GUIDE

Model	Square Drive	Max. Operation Range
JDTW-14250	1/4"	30 N-m / 22.12 ft-lb 265.5 in-lb / 306.1 kg-cm
JDTW-38100	3/8"	135 N-m / 99.5 ft-lb 1195 in-lb / 1378 kg-cm
JDTW-12150	1/2"	200 N-m / 147.5 ft-lb 1770 in-lb / 2041 kg-cm
JDTW-12250	1/2"	340 N-m / 250.7 ft-lb 3009 in-lb / 3469 kg-cm

SPECIFICATIONS

Model No.	Square Drive	Max. Operation Range (ft/lbs)	Alarm Setting Range (ft/lbs)	Length (mm)
JDTW-14250	1/4"	22.12	1.11~22.12	390
JDTW-38100	3/8"	99.5	5~99.5	415
JDTW-12150	1/2"	147.7	7.4~147.7	530
JDTW-12250	1/2"	250.5	12.5~250.5	650

All Models	
Accuracy*1	CW : ±2% CCW: ±3%
Memory	50 records
Pre-Set values	9
Communication	Models designated "-C" only. Check model number on package or case sticker
Operation Mode	Peak Hold/Track
Unit Selection	N-m, in-lb, ft-lb, kg-cm
Head Type	Lever Type Ratchet
Gear Teeth	36
Button	5
Battery	AA x 2
Battery Life *2 (Continuous operation)	110 hrs.
Battery Life *2 (Standby)	12 months

SPECIFICATIONS

Operating Temperature	-10℃ ~ 60℃
Storage Temperature	-20℃ ~ 70℃
Humidity	Up to 90% non-condensing
Drop Test	1 m
Vibration Test *3	10G
Life time *4	10,000 cycle
Environmental test *5	Pass
Electromagnetic compatibility test *6	Pass

Note:

*1. Accuracy of readout is guaranteed from 20% to 100% of maximum range + /- 1 increment. The torque accuracy is a typical value. Calibration point is at the middle line of black circle area on the rubber grip. To maintain accuracy, calibrate the wrench at least once per year

*2. Use two AA batteries (Test condition: Toshiba carbon-zinc battery)

*3. Horizontal and vertical test

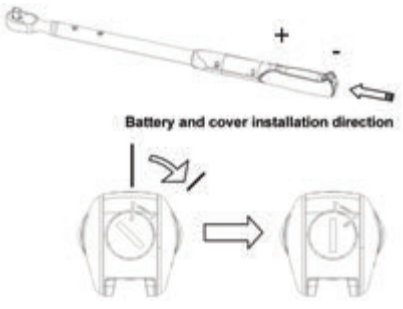
*4. One cycle means swing the torque wrench from 0 ft/lbs to maximum range and back to 0

*5. Environmental test:
   a. Dry heat
   b. Cold
   c. Damp heat
   d. Change of temperature
   e. Impact (shock)
   f. Vibration
   g. Drop

*6. Electromagnetic compatibility test:
   a. Electrostatic discharge immunity (ESD)
   b. Radiated susceptibility
   c. Radiated emission

BEFORE USING THE WRENCH

BATTERY INSTALLATION



POWER ON AND RESETTING THE WRENCH

- Press C to power on digital torque wrench.
- Press C to reset digital torque wrench before using it.

ATTENTION:
If an external force is applied to the torque wrench during power-on/reset or wake up period, an initial torque offset will be recorded in the memory. Ensure no load is applied during start up.

ACTIVATION DURING SLEEP MODE

- The wrench will auto sleep after about 5 minutes idle time to save power.
- Press C to activate wrench during sleep mode.

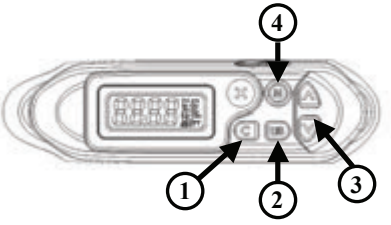
RESETTING THE WRENCH

- If wrench does not function normally, press C ∧ together to reset wrench.

LOW BATTERY VOLTAGE PROTECTION

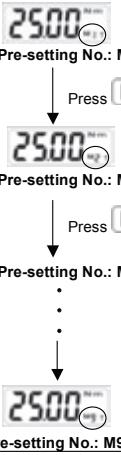
- If battery voltage is under 2.3 volts, wrench will display a battery symbol and then turn off after a while.

SETUP



1. Power On/Clear
2. Unit Selection/Setting
3. Adjust Torque Value
4. Pre-Setting No.

STEP 1: PRE-SETTING NO.



Note:

1. If Er0 appears, torque has been applied in excess of 110% of maximum value. Recalibration is required.
2. The maximum number of preset values is 9.
3. The Preset Memory number is sequential. Continue pressing M to scroll through all 9 choices.
4. If a memory value is adjusted, the new value will be stored automatically.

STEP 2: UNIT SELECTION

Pre-setting Unit: N-m

Press U/S

Unit Selection: in-lb

Press U/S

Unit Selection: ft-lb

Press U/S

Unit Selection: kg-cm

STEP 3: SET MAXIMUM TORQUE VALUE

Pre-setting Torque Value

Press ∧

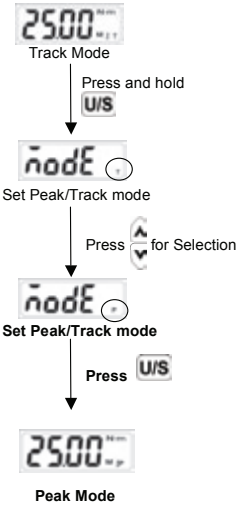
Increase Max. Torque Value

Press ∨

Decrease Max. Torque

Note:
1. The "Unit Selection" is sequential. Continue pressing U/S to scroll through all 4 choices.

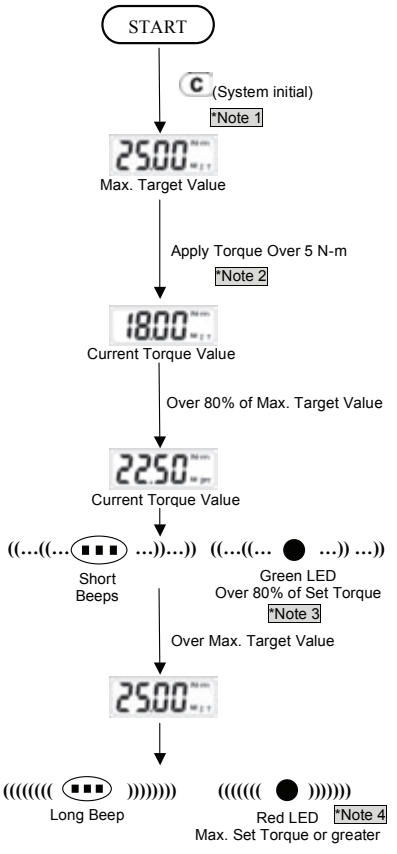
STEP 4: PEAK HOLD/TRACK MODE SELECTION



Note:

1. The "Peak/Track" mode is sequential. Press ▲ or ▼ to scroll between choices

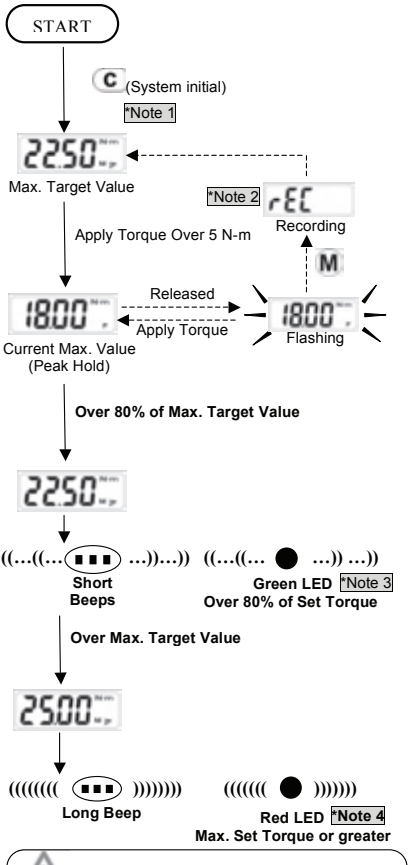
TRACK MODE OPERATION



Note:

1. If Er0 appears, torque has been applied in excess of 110% of maximum value. Recalibration is required.
2. When using Track mode LCD will begin to show changes after 5 Nm has been applied. If applied torque is less than 5 Nm display will show no change.
3. The green LED's will light at 80%, 85%, 90%, 95%, and 97.5% of set torque value to show progress.
4. The red LED's will light at 100% of set torque value. Beeper tone will be steady until handle is released. This is a stop signal.
5. Unit displays 0 when handle is released.

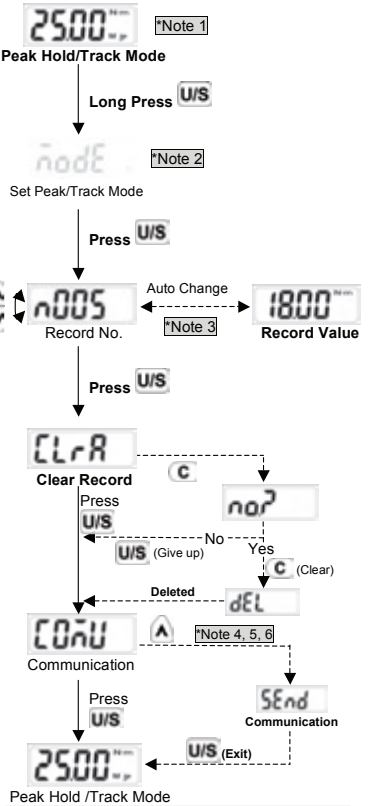
PEAK HOLD MODE OPERATION



Note:

1. If Er0 appears, torque has been applied in excess of 110% of maximum value. Recalibration is required.
2. Press M while display is flasing to record value. If Full appears wrench memory is full and the next value cannot be written in. Please refer to "Peak Hold Mode Recorded Value Review" section to clear memory data. Skip this step if recording of data is not required.
3. The green LED's will light at 80%, 85%, 90%, 95%, and 97.5% of set torque value to show progress.
4. The red LED's will light at 100% of set torque value. Beeper tone will be steady until handle is released. This is a stop signal.
5. Unit displays peak torque applied until reset or used again.

PEAK HOLD MODE RECORDED VALUE REVIEW



Note:

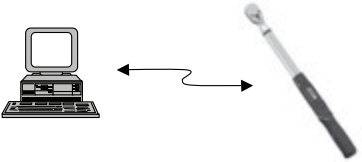
1. The "Peak Hold" mode recorded value review can also be used in "Track" mode operation.
2. If operated in the "Peak Hold" mode, the display will show nodE. Please go to next step.
3. If the record is empty, display will show nonE. Use ▲ and ▼ to review records. Display will alternate between Record no. and recorded value. Press C to clear or U/S to store value and return to ready mode.
4. Communication is not supported on all models.
5. Communication mode is also for calibration of torque wrench. Please contact your local dealer or JET Equipment & Tools for more information.

COMMUNICATION

Precaution:
1. Communication function is only supported on some models. Check the model no. and its specification before using communication function.
2. Do not insert the plug of communication cable into torque wrench that does not support communication function.

CONNECTING COMMUNICATION CABLE

- Turn off power and then connect the accessory cable between the RS232 COM port of PC and torque wrench.



UPLOADING RECORD DATA

- Make sure the connection between PC and wrench is working.
- Press C A together to reset the wrench.
- Change the wrench operation mode to "**Send**". (Please refer to "**Peak Hold Mode Recorded Value Review**" section)
- Use PC to start the uploader program.
- In uploader program, first select the correct COM port No.
- Next, select the file path to save the uploaded data.
- Finally, press "upload" button to transmit the torque records to PC.
- The uploaded data is saved as a *.csv file. Use Microsoft Excel to view *.csv file.

CAUTIONS:
Refer to the uploader program user guide for detailed instructions.

MAINTENANCE AND STORAGE

ATTENTION:
One-year periodic recalibration is necessary to maintain accuracy.
Please contact your local dealer for calibrations.

CAUTION:

1. **Over-torque (105% of Max. torque range) could cause breakage or loss of accuracy.**
2. Do not shake violently or drop wrench.
3. Do not use this wrench as a hammer.
4. Do not leave this wrench in any place exposed to excessive heat, humidity, or direct sunlight.
5. Do not use this wrench in water.
6. If the wrench gets wet, wipe it with a dry towel as soon as possible. The salt in seawater can be especially damaging.
7. Do not use organic solvents, such as alcohol or paint thinner when cleaning the wrench.
8. Keep this wrench away from magnets.
9. Do not expose this wrench to dust or sand as this could cause serious damage.
10. Do not apply excessive force to the LCD panel.

BATTERY MAINTENANCE

1. When the wrench is not used for an extended period of time, remove the battery.
2. Keep a spare battery on hand when going on a long trip or to cold areas.
3. Do not mix battery types or combine used batteries with new ones.
4. Sweat, oil and water can prevent a battery's terminal from making electrical contact. To avoid this, wipe both terminals before loading a battery.
5. Dispose of batteries in a designated disposal area. Do not throw batteries into a fire.

WARRANTY

JET Digital torque wrenches are warranteed to be free of factory defects. Calibration is the responsibility of the user and is not covered. For warranty details, consult the JET hand tools catalogue or your local distributor.