



## **OWNER'S MANUAL**

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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.

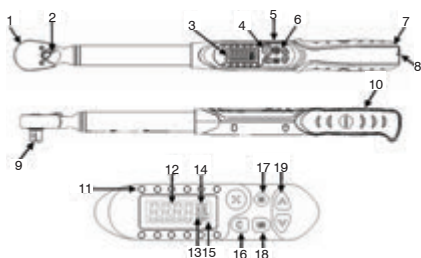
## **MAIN FEATURES**

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- 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**

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

## SELECTION GUIDE

| Model      | Square Drive | Max. Operation Range                              |
|------------|--------------|---------------------------------------------------|
| JDTW-14250 | 1/4"         | 30 N-m / 22.12 ft-lb<br>265.5 in-lb / 306.1 kg-cm |
| JDTW-38100 | 3/8"         | 135 N-m / 99.5 ft-lb<br>1195 in-lb / 1378 kg-cm   |
| JDTW-12150 | 1/2"         | 200 N-m / 147.5 ft-lb<br>1770 in-lb / 2041 kg-cm  |
| JDTW-12250 | 1/2"         | 340 N-m / 250.7 ft-lb<br>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         |
| <b>All Models</b>                             |              |                                                                               |                              |             |
| <b>Accuracy*1</b>                             |              | CW : $\pm 2\%$<br>CCW: $\pm 3\%$                                              |                              |             |
| <b>Memory</b>                                 |              | 50 records                                                                    |                              |             |
| <b>Pre-Set values</b>                         |              | 9                                                                             |                              |             |
| <b>Communication</b>                          |              | Models designated "-C" only.<br>Check model number on package or case sticker |                              |             |
| <b>Operation Mode</b>                         |              | Peak Hold/Track                                                               |                              |             |
| <b>Unit Selection</b>                         |              | N-m, in-lb, ft-lb, kg-cm                                                      |                              |             |
| <b>Head Type</b>                              |              | Lever Type Ratchet                                                            |                              |             |
| <b>Gear Teeth</b>                             |              | 36                                                                            |                              |             |
| <b>Button</b>                                 |              | 5                                                                             |                              |             |
| <b>Battery</b>                                |              | AA x 2                                                                        |                              |             |
| <b>Battery Life *2 (Continuous operation)</b> |              | 110 hrs.                                                                      |                              |             |
| <b>Battery Life *2 (Standby)</b>              |              | 12 months                                                                     |                              |             |

## SPECIFICATIONS

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|                                              |                          |
|----------------------------------------------|--------------------------|
| <b>Operating Temperature</b>                 | -10°C ~ 60°C             |
| <b>Storage Temperature</b>                   | -20°C ~ 70°C             |
| <b>Humidity</b>                              | Up to 90% non-condensing |
| <b>Drop Test</b>                             | 1 m                      |
| <b>Vibration Test *3</b>                     | 10G                      |
| <b>Life time *4</b>                          | 10,000 cycle             |
| <b>Environmental test *5</b>                 | Pass                     |
| <b>Electromagnetic compatibility test *6</b> | 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  to activate wrench during sleep mode.

## **RESETTING THE WRENCH**

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

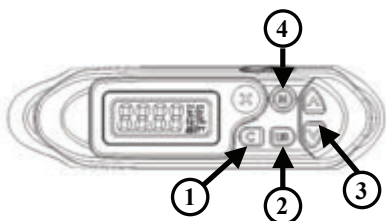
## **LOW BATTERY VOLTAGE PROTECTION**

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



# SETUP

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

## STEP 1: PRE-SETTING NO.

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2500 <sup>Nm</sup>  
M1

Pre-setting No.: M1

Press **M**

2500 <sup>Nm</sup>  
M2

Pre-setting No.: M2

Press **M**

Pre-setting No.: M3

...

2500 <sup>Nm</sup>  
M9

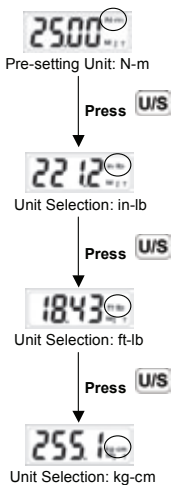
Pre-setting No.: M9 \*Note 1, 2, 3



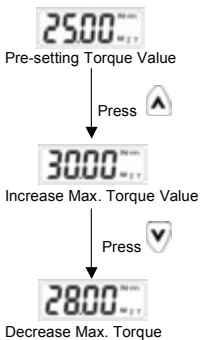
Note:

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



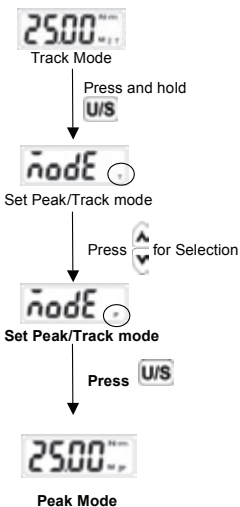
## STEP 3: SET MAXIMUM TORQUE VALUE



**Note:**

1. The "Unit Selection" is sequential. Continue pressing  to scroll through all 4 choices.

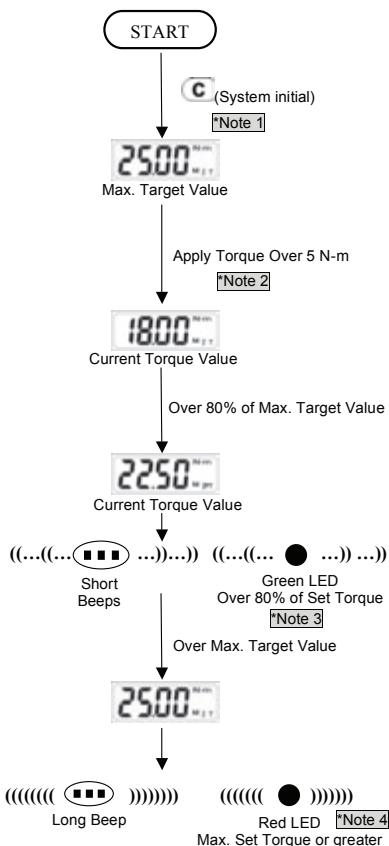
## STEP 4: PEAK HOLD/TRACK MODE SELECTION



**Note:**

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

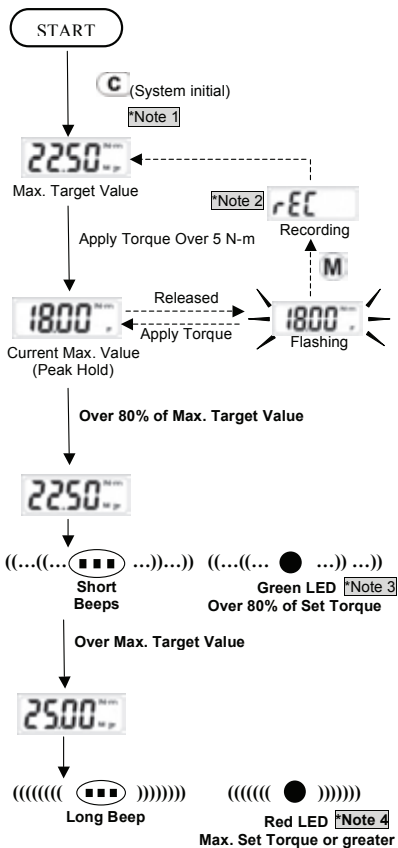
# TRACK MODE OPERATION



## Note:

1. If **Err0** 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.

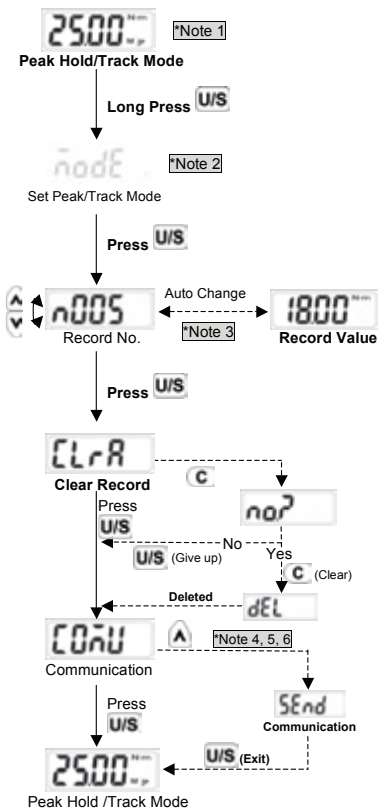
# PEAK HOLD MODE OPERATION



## 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 flashing 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 **none**. Please go to next step.
3. If the record is empty, display will show **none**. Use **A** and **V** 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

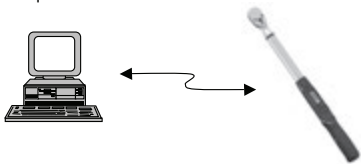


## Precaution:

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   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 warranted 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.