

OWNER'S MANUAL

Mini Digital Torque Wrench

BME Series

BPE Series

DME Series

DPE Series



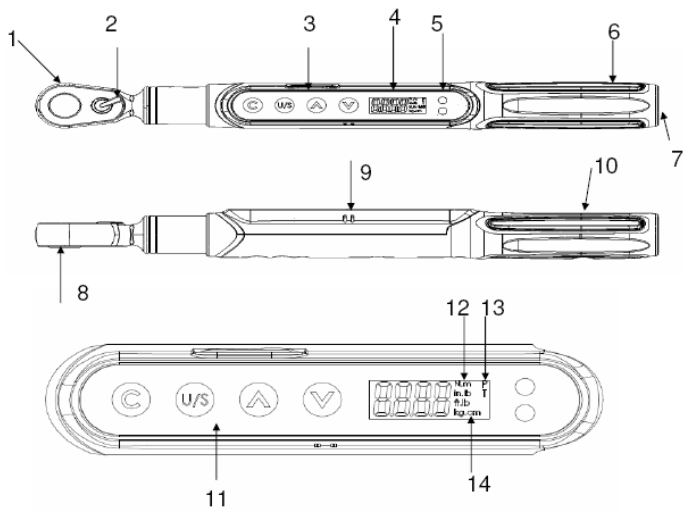
Dear Users,

Thank you for using mini digital torque wrench. This manual will help you to use the many features of your new digital torque wrench. **Before operating the torque wrench, please read this manual completely**, and keep it nearby for future reference.

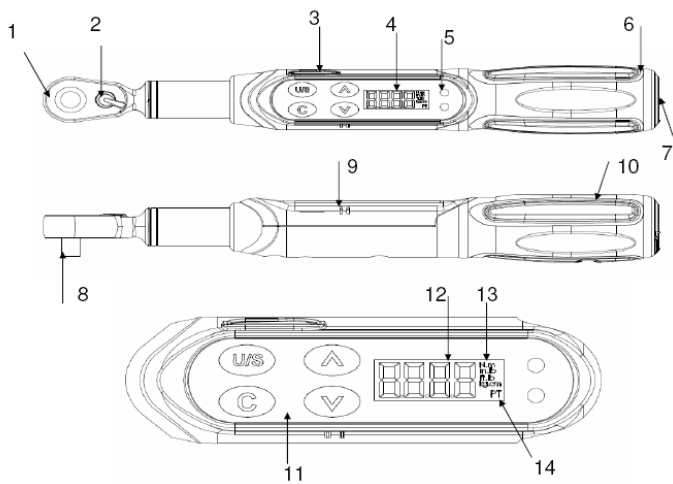
MAIN FEATURES

- Digital torque value readout
- +/- 3% accuracy
- CW and CCW operation
- Peak hold and track mode selectable
- Buzzer and LED indicator for the pre-settable target torque
- Engineering units(N-m, ft-lb, in-lb, kg-cm) selectable
- Auto power off after about 5 minutes idle
- Rechargeable batteries are compatible

NAMES AND FUNCTIONS OF PARTS



- | | |
|----------------------------|----------------------|
| 1. Reversible Ratchet Head | 9. Buzzer |
| 2. Direction Lever | 10. Calibration mark |
| 3. Communication Port | 11. Buttons |
| 4. LCD Readout | 12. Torque Value |
| 5. LED Indicator | 13. Units |
| 6. Anti-slip Handle | 14. Peak/Track Mode |
| 7. Battery Cover | |
| 8. Bit Holder | |



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| 7. Battery Cover | |
| 8. Ratchet Driver | |

SELECTION GUIDE

	①	③	④
MODEL NO:	BME2-006 BME2-012 BME2-020 BPE2-006 BPE2-012 BPE2-020	B	N

	②	③	④
MODEL NO:	DME2-006 DME2-012 DME2-020 DPE2-006 DPE2-012 DPE2-020 DPE2-030 DPE3-060 DPE3-085	B	N

① :

Model	Bit end fitting (inches)	Max. Torque
BME2-006	1/4	6 N-m / 4.424 ft-lb / 53.09 in-lb / 61.22 kg-cm
BPE2-006		
BME2-012	1/4	12 N-m / 8.85 ft-lb / 106.2 in-lb / 122.4 kg-cm
BPE2-012		
BME2-020	1/4	20 N-m / 14.75 ft-lb 177 in-lb / 204.1 kg-cm
BPE2-020		

② :

Model	Squire Drive (inches)	Max. Torque
DME2-006	1/4	6 N-m / 4.424 ft-lb / 53.09 in-lb / 61.22 kg-cm
DPE2-006		
DME2-012	1/4	12 N-m / 8.85 ft-lb / 106.2 in-lb / 122.4 kg-cm
DPE2-012		
DME2-020	1/4	20 N-m / 14.75 ft-lb 177 in-lb / 204.1 kg-cm
DPE2-020		
DPE2-030	1/4	30 N-m / 22.12 ft-lb 265.5 in-lb / 306.1 kg-cm
DPE3-060	3/8	60 N-m / 44.24 ft-lb 530.9 in-lb / 612.2 kg-cm
DPE3-085	3/8	85 N-m / 62.7 ft-lb 752 in-lb / 867 kg-cm

③ :

Accuracy	
C	+/-2%-CW / +/-3%-CCW

④ :

Communication	
N	No

SPECIFICATIONS

Model No.	Resolution (N-m)	Torque Measuring Range (N-m)	Length (mm)
BME2-006	0.001	0.3~6	207
BPE2-006			216
BME2-012	0.01	0.6~12	207
BPE2-012			216
BME2-020	0.01	1~20	207
BPE2-020			216
All Models			
Accuracy *1	BN		
	CW : $\pm 2\%$ CCW : $\pm 3\%$		
PC Connectivity	No		
Bright LED	2 LEDs (1 Red+1 Green)		
Operation Mode	Peak hold/Track		
Unit Selection	N-m, in-lb, ft-lb, kg-cm		
Head Type	Bits		
Button	4		
Battery *2	AAA x 1		
Operating Temperature	-10°C ~ 60°C		
Storage Temperature	-20°C ~ 70°C		
Humidity	Up to 90% non-condensing		
Drop Test	1 m		
Vibration Test *3	10G		
Environmental test *4	Pass		
Electromagnetic compatibility test *5	Pass		

NOTE: Accuracy is guaranteed from 20% to 100% full scale.

* : See note on page 7

SPECIFICATIONS

Model No.	Gear Teeth	Resolution (N-m)	Torque Measuring Range (N-m)	Length (mm)
DME2-006	60	0.001	0.3~6	207
DPE2-006				216
DME2-012	60	0.01	0.6~12	207
DPE2-012				216
DME2-020	60	0.01	1~20	207
DPE2-020				216
DPE2-030	60	0.01	1.5~30	216
DPE3-060	48	0.01	3~60	239
DPE3-085	48	0.1	4.2~85	239
All Models				
Accuracy *1	bN			
	CW : ±2% CCW : ±3%			
PC Connectivity	No			
Bright LED	2 LEDs (1 Red+1 Green)			
Operation Mode	Peak hold/Track			
Unit Selection	N-m, in-lb, ft-lb, kg-cm			
Head Type	Lever Type Ratchet			
Button	4			
Battery *2	AAA X 1			
Operating Temperature	-10°C ~60°C			
Storage Temperature	-20°C ~70°C			
Humidity	Up to 90% non-condensing			
Drop Test	1 m			
Vibration Test *3	10G			
Environmental test *4	Pass			
Electromagnetic compatibility test *5	Pass			

NOTE: Accuracy is guaranteed from 20% to 100% full scale.

* : See note on page 7

Note:

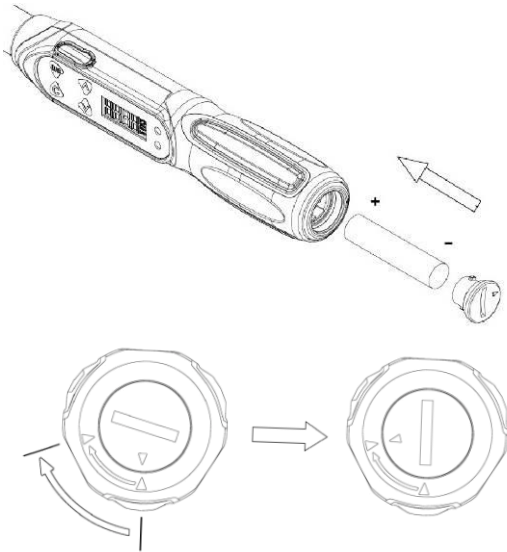
- *1: The accuracy of the readout is guaranteed from 20% to 100% of maximum range + /- 1 increment. The torque accuracy is a typical value. Calibration point is on the rubber grip. For keeping the accuracy, calibrate the wrench for a constant period time (1 year).
- *2: One AAA battery (Toshiba carbon-zinc battery)
- *3: Horizontal and vertical test.
- *4: One cycle means swing the torque wrench from 0 N-m to maximum range and back to 0 N-m.
- *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

- Remove the battery cap.
- Insert one AAA batteries matching the -/+ polarities of the battery to the battery compartment.
- Put on the battery cap and fasten it tightly according to the following figures.

POWER ON AND RESETTING THE WRENCH



- Press **(C)** to power on the digital torque wrench.
- Usually press **(C)** to reset the digital torque wrench before using it.



ATTENTION:

If an external force is applied to the torque wrench during power-on period, an initial torque offset will be recorded in the memory.

AUTO POWER OFF

- The wrench will auto power off after about 5 minutes idle for power saving. Press **(C)** to power on the wrench again.

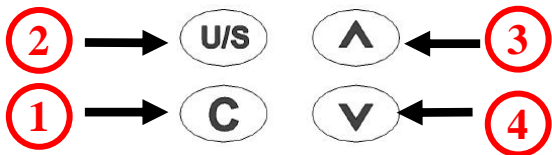
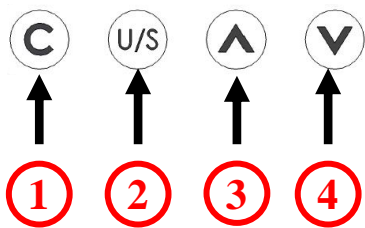
CAUTIONS:

During communication period (**Send** appears), the auto power off function is disabled.

RESETTING THE WRENCH

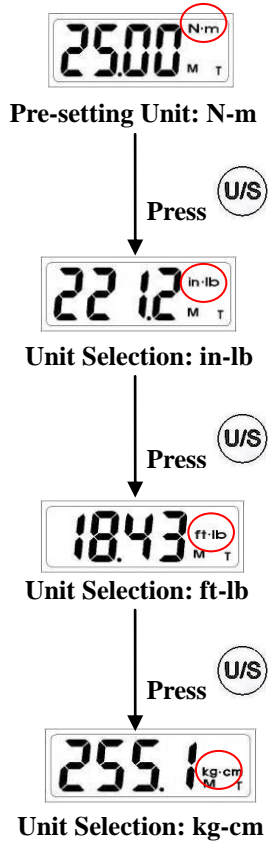
- If the wrench does not function normally, loosen the battery cap then tighten it to re-start.

SETUP

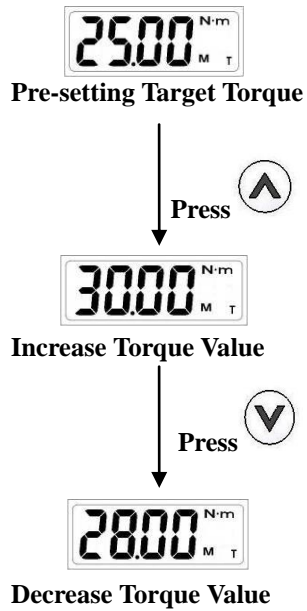


- ① Power On/Clear
- ② Unit Selection/Setting
- ③ Adjust Torque Value Up
- ④ Adjust Torque Value Down

STEP 1: UNIT SELECTION



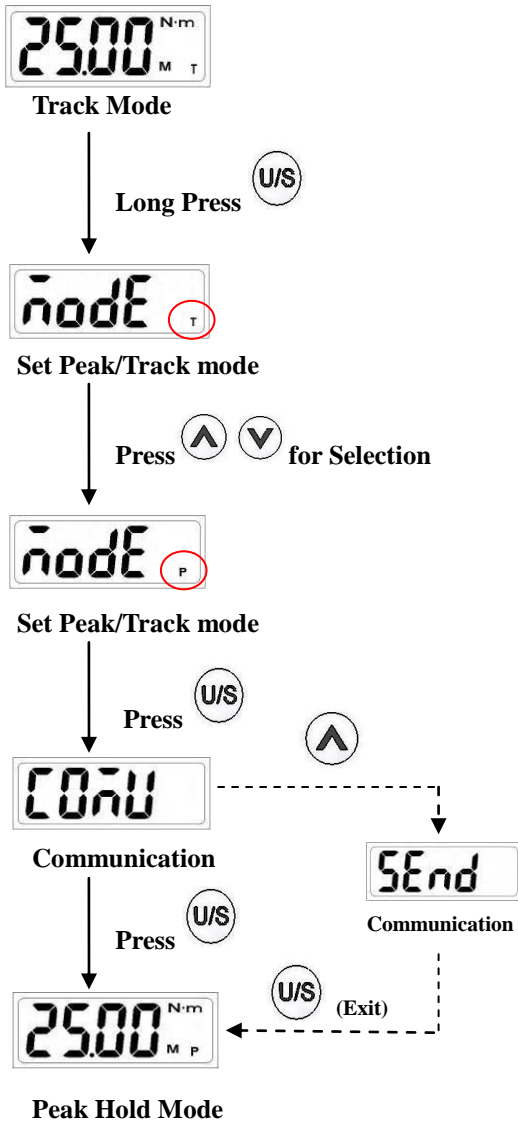
STEP 2: SET TARGET TORQUE



Note:

1. The “Unit Selection” is in cyclic.

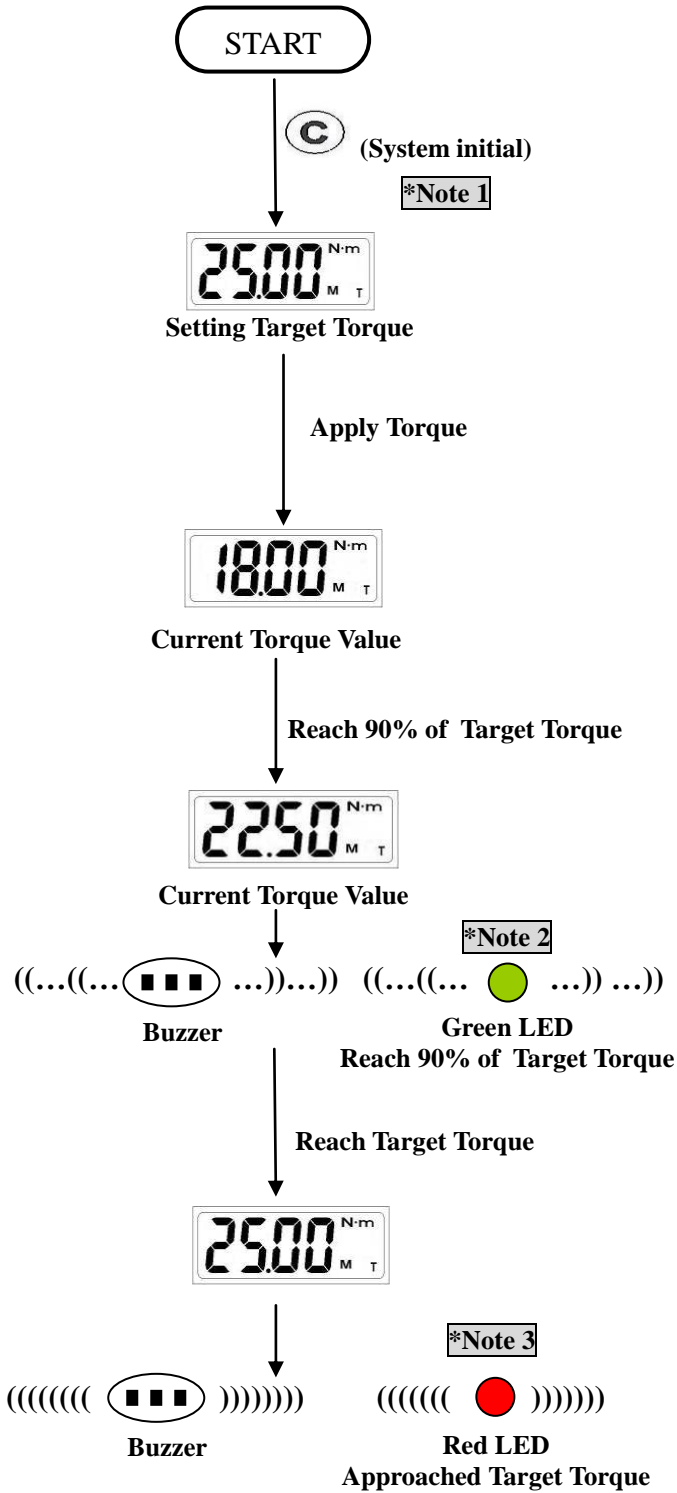
STEP 3: PEAK HOLD /TRACK MODE SELECTION




Note:

1. Communication is for calibration of torque wrench. Please contact your local dealer for information.

TRACK MODE OPERATION

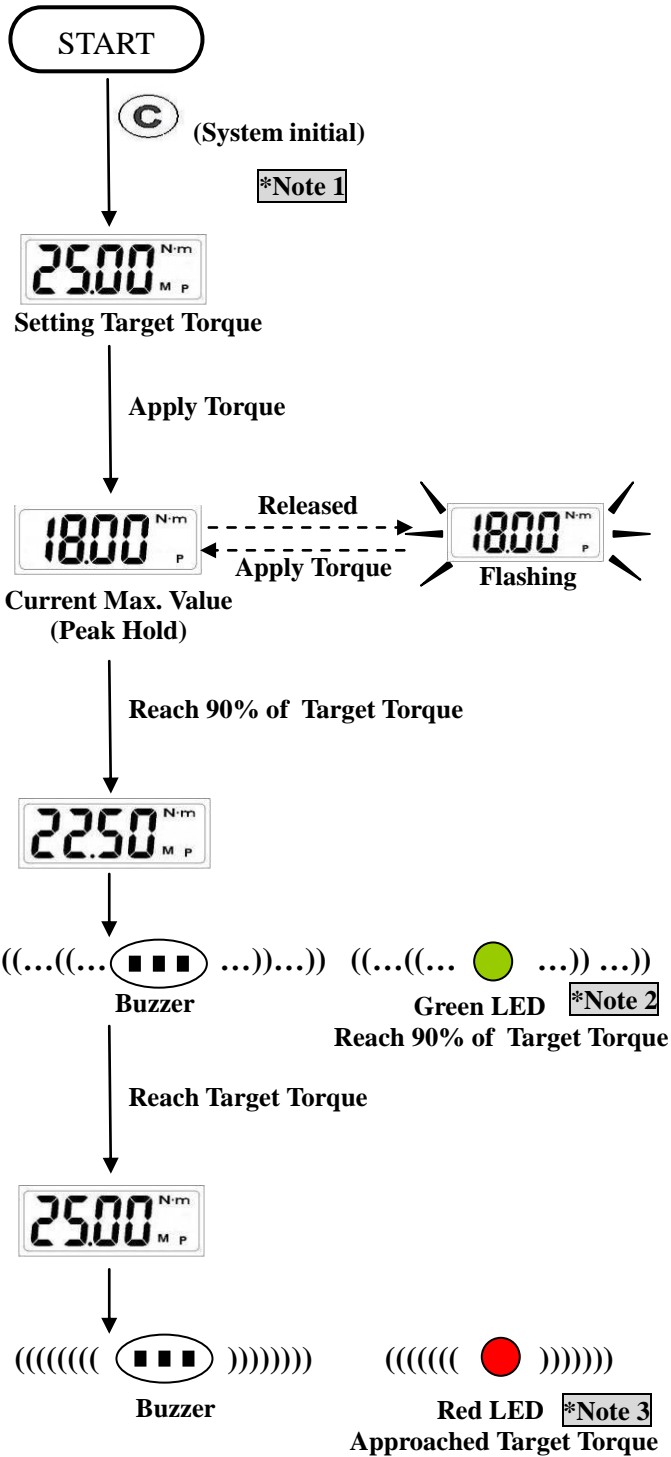




Note:

1. If **Er0** is appeared, that means this wrench has ever been applied more than 110% of torque of the spec.
2. When 90% of the target torque is reached, the green LED will begin to flash and the alarm tone will beep intermittently.
3. When 99.5% of the target torque has been reached, the alarm will change to a steady tone and the green LED will stop flashing and stay on. The red LED will also illuminate.

PEAK HOLD MODE OPERATION



Note:

1. If **Er0** is appeared, that means this wrench has ever been applied more than 110% of torque of the spec.
2. When 90% of the target torque is reached, the green LED will begin to flash and the alarm tone will beep intermittently.
3. When 99.5% of the target torque has been reached, the alarm will change to a steady tone and the green LED will stop flashing and stay on. The red LED will also illuminate.

MAINTENANCE AND STORAGE

ATTENTION:

One-year periodic recalibration is necessary to maintain accuracy.

Please contact your local dealer for calibrations.

CAUTION:



1. **Over-torque (110% of Max. torque range) could cause breakage or lose 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 apparatus in water.(not waterproof)
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.
11. Apply torque slowly and graspe the center of the handle. Do not apply load to the end of handle.
12. **When checking the accuracy or calibration, please use the bit head packed inside the blow mold case.**

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. Sweat, oil and water can prevent a battery's terminal from making electrical contact. To avoid this, wipe both terminals before loading a battery.
4. Dispose of batteries in a designated disposal area. Do not throw batteries into a fire.

Rev. : BME/BPE/DME/DPE 1.0