



# Instructions

# Electronic Dial Wrench

# IMPORTANT SAFETY INSTRUCTIONS

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## **WARNING - Risk of Flying Particles**

Over torquing can cause breakage. An out of calibration torque wrench can cause part or tool breakage. Broken hand tools, sockets or accessories can cause injury. Excess force can cause crow foot or flare nut wrench slippage.



## **READ THIS MANUAL COMPLETELY BEFORE USING THE ELECTRONIC DIAL WRENCH**

- For personal safety and to avoid wrench damage, follow good professional tool practices.
- Periodic recalibration is necessary to maintain tool accuracy.
- **Users and bystanders should always wear eye protection.**
- Be sure all components, including adapters, extensions, drivers and sockets are rated to match or exceed the torque being applied with tool.
- Observe all equipment, system and manufacturer's warnings, cautions and procedures when using this wrench.
- Always use the correct size socket for the fastener being torqued.
- Do not use damaged sockets, showing signs of wear or cracks.
- Always replace damaged fasteners before applying torque.



## **WARNING - To avoid damaging the Electronic Dial Wrench**

- Never operate wrench when powered OFF. Always power wrench ON prior to applying torque.
- Do not press ON/ZERO key while torque is being applied.
- Never use this wrench to loosen fasteners.
- Never use extensions, such as a pipe, on the handle of the wrench.
- Always verify that the wrench capacity matches or exceeds each application before proceeding.
- Always verify the calibration of the wrench if you know or suspect its capacity has been exceeded.
- Always pull - do not push - on the wrench handle and adjust your stance to prevent a possible fall while applying torque.



## **WARNING - Electrical Shock Hazard**

- Electrical shock can cause injury.
- Plastic handle is not insulated.
- Do not use on live electrical circuits.

# INTRODUCTION

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The **Electronic Dial Wrench** provides accurate computer-controlled torque application to a preset target torque value.

**SETTINGS** - Press and hold the **UP** or **DOWN** key to set a Preset Torque Value. Press ON/ZERO momentarily to power ON / ZEROTARE. Press/hold for 3 seconds to power OFF.

**UNIT SELECTION** - Press the **UNIT** key to select "ft-lb", "in-lb", "Nm", or "kgcm".

**AUDIBLE ALERT AND LEDs** - At 90% of the preset value, the Target-Torque-Reached Indicator/Light Bar turns **YELLOW**.

At +/- **4%** of the preset value, the Target-Torque-Reached Indicator/Light Bar turns **Green** and the wrench issues a 1.0 cycle per second **audible alert**.

At more than **104%** of the preset value, the Target-Torque-Reached Indicator/Light bar turns **Red** and the wrench issues a 2.0 cycles per second **audible alert**. Release the applied torque to clear this condition (after a few seconds).

Excessive application of torque will result in four dashes ('----') on the display.

Note the peak torque applied, flashing for about 10 seconds or until torque is re-applied.

**SETUP MEMORY** - At power-on the wrench returns to the last preset torque setting.

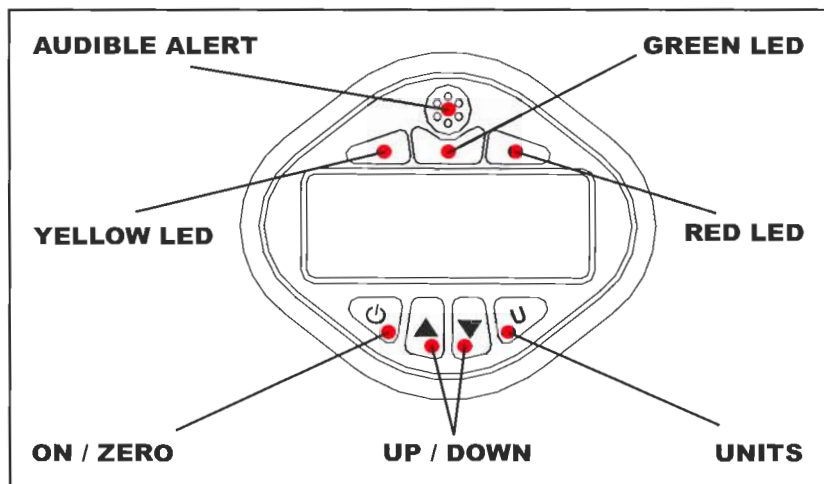
**BATTERY** - The **Electronic Dial Wrench** uses one standard replaceable 9V block battery (e.g. Duracell PN MN1604) for better than 80 hours continuous operation. One segment in the battery indicator means the battery is low (less than 50%). A **flashing** Low Battery Indicator means the battery must be replaced. The wrench will **not** power up if the battery level is too low.

**AUTO POWER OFF** - Automatic shut-off after sitting idle for 2 minutes.

**US and Foreign Patents Pending**



# OPERATOR INSTRUCTIONS

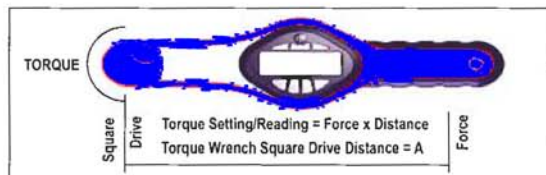


1. Press “ON/ZERO” key - the wrench will SELF-TEST/ZEROTARE and return to the last preset torque value. Press/hold for 3 seconds to turn power off.
2. Press and hold “▲” (UP) or “▼” (DOWN) keys to set a preset torque value.
3. Apply torque slowly, grasping the center of the handle. **DO NOT APPLY LOAD TO THE END OF THE HANDLE.**
4. At **90%** of the preset value, the Light Bar turns **YELLOW**. At **+/- 4%** of the preset value, the Light Bar turns **GREEN** with a 1.0 cycle per second **audible alert**.  
At more than **104%** preset value, the Light Bar turns **RED** with a 2.0 cycles per second **audible alert**. Release the applied torque to clear this condition (after a few seconds).  
Excessive application of torque will result in four dashes (‘----’) on the display. Note the peak torque applied, flashing for about 10 seconds or until torque is re-applied.
5. Press the **UNIT** key to select “ft-lb”, “in-lb”, “Nm”, or “kgcm”.

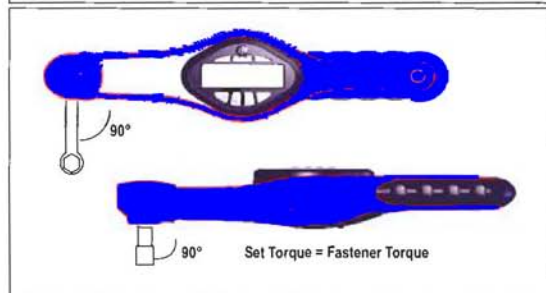
The **Electronic Dial Wrench** automatically shuts off after two minutes sitting idle.

# USE OF ADAPTERS, EXTENSIONS AND UNIVERSALS

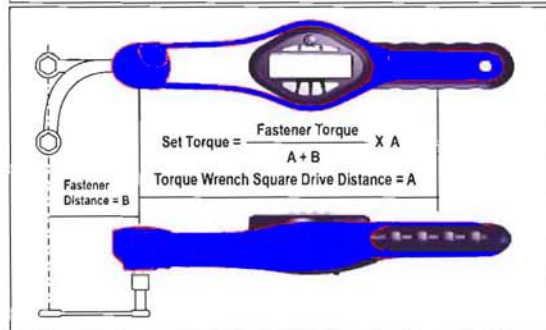
Anytime an adapter, extension or universal is used with a torque wrench in such a way that the fastener distance is different than the torque wrench square drive distance, an adjustment to the set torque is required to get proper fastener torque.



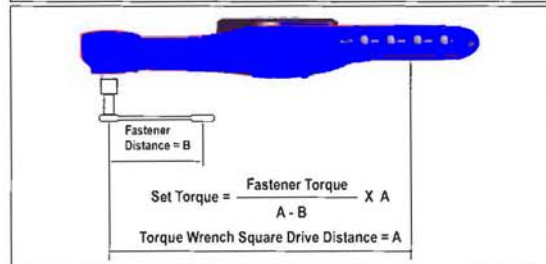
Fastener torque equals torque wrench square drive torque. Wrench setting is equal to desired fastener torque.



Fastener torque equals torque wrench square drive torque. Wrench setting is equal to desired fastener torque.



Fastener torque is greater than torque wrench square drive torque. Calculated setting will be lower than desired fastener torque.



Fastener torque is less than torque wrench square drive torque. Calculated setting will be higher than desired fastener torque.

# SPECIFICATIONS

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## DISPLAY CAPACITY AND RESOLUTION

Model	Drive	Range			Tolerance*	
		ft-lb	in-lb	Nm	CW	CCW
ED2600	3/8 in	5.0 - 50.0	60.0 - 600.0	6.78 - 67.8	+/-1.0	+/-1.0
ED2250	3/8 in	2.0 - 20.8	25.0 - 250.0	2.82 - 28.2	+/-1.0	+/-1.0
ED1050	1/4 in	0.4 - 4.1	5.0 - 50.0	0.5 - 5.6	+/-1.0	+/-1.0





\*Tolerance is for 20% to 100% of full scale

## TARGET - TORQUE - REACHED (TTR) INDICATOR

Yellow / Green / Red Light Bar

## BATTERY LOW INDICATOR AND TORQUE BAR GRAPH

### KEY PAD

-  **ON/ZERO** Power On/Off - Zerotare
-  **UP (+)** Increase preset torque setting
-  **DOWN (-)** Decrease preset torque setting
-  **Unit** To select ft-lb, in-lb, Nm, or kgcm

**SPECIAL FEATURE** Bezel can be rotated 180 degrees  
(Refer to Service Manual for details)

**OPERATING TEMPERATURE** 40 to 110 °F ( 5 to 42 °C )

**STORAGE TEMPERATURE** -1 to 122 °F ( -20 to 50 °C )

**HUMIDITY** Up to 90% non-condensing

DIMENSIONS	DRIVE	LENGTH	WEIGHT
	3/8 in	14.5 in	1.5 lbs
	1/4 in	11.0 in	1.1 lbs

**BATTERY** 9V block battery, over 80 hours continuous operation

**AUTO SHUT-OFF** After 2 minutes idle with no torque applied

# CALIBRATION

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## MAINTENANCE / SERVICE

To safely clean the torque wrench, wipe with a damp cloth. NEVER use solvents, thinners, or engine cleaners of any kind. NEVER immerse the torque wrench in liquid of any kind. Service, repair and calibration are to be performed by \_\_\_\_\_ Service Centers only.

## CERTIFICATION

This torque wrench, as calibrated at the factory, is certified to meet the accuracy specified in International Standard ISO 6789 and was calibrated on a torque standard traceable to the National Institute of Standards and Technology (N.I.S.T.).

## BATTERY REPLACEMENT

When Battery Low Indicator flashes, replace with 9V block battery. To replace battery, remove cover on back side of handle (opposite bezel).

