



Electronic Dial Torque Wrench Operation Manual



PROTO INDUSTRIAL TOOLS
2195 E. View Parkway, Suite 103
Conyers, Ga. 30013
Phone(770) 787-3800
Fax(770)385-3708



Congratulations! You have purchased the most accurate, durable and easy to use electronic torque wrench on the market. You will find this torque wrench can compete with other products costing 4 times as much. This wrench was made to be used as a tool and not as a high cost, fragile display that only a quality control person could figure out. Turn it on and apply the torque. It's that easy!

A significant advantage this wrench has over other more expensive wrenches is that it samples torque fast enough so you do not need to pull slowly on the wrench. Other wrenches will not capture the actual peak torque when you pull on the wrench at normal speeds. Simply put, this wrench is a "Hot Rod". It samples torque at a blazing rate of over 2,500 samples per second compared to as low as 250 per second from the competition.

Did you know with conventional mechanical torque wrenches (clickers) you can easily over torque the fastener by as much as 100%! This is because even though the wrench may have "clicked" at the target torque setting you most probably did not stop pushing on the wrench until much higher torque was achieved. You have no way of knowing what you actually torqued the fastener to.

With this new torque wrench, not only will you see exactly what torque you applied, you will be shown a red light and buzzer if you over torque the fastener. This results in more accurate torquing and less problems with broken bolts, warped heads, warped brake rotors etc..

Choose the power option and you have a wrench that will output data to a computer and has internal rechargeable batteries.

Thank you!

1. Install Batteries

Install high quality 9 volt battery in handle of wrenches 50 ft.lb. and below. Install in case on 100 ft.lb. and above.
Remove screw(s) to expose battery.



Do not overtighten screws!

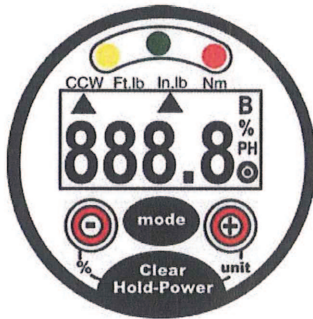
NOTES:

It is OK to use externally rechargeable batteries.

Battery life depends on battery quality and the amount the lights and buzzer are used (target torque). Typical life is up to 50 hours. Use a high quality lithium battery for longest life.

When batteries are low a "BATT" icon will light. When batteries are critically low the wrench will not turn on.

2. Power ON



Press and hold the power button to turn the wrench on.

NOTES:

If you do not use the wrench for 3 minutes the wrench will automatically shut off.

Do not apply torque to the drive when you power up.

If the wrench comes on and then shuts off immediately the batteries are probably low.

All previously stored settings (units, target value, target %) are stored even when the power is off and the batteries are out of the wrench.

3. Apply Torque:



Rotate the display for easy viewing!

NOTES:

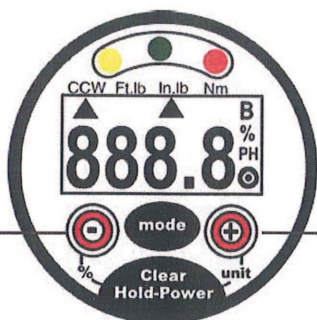
There are three ways to determine what torque you are applying:

1. Look directly at the LCD.
2. Set a target torque and look for the lights.
3. Set a target torque and listen for the buzzer.

(See next page to learn how to set the target torque).

4. View/Change the Target Torque Value:

Press and hold the Target - button to lower the current target value



Press and hold the Target + button to increase the current target value

NOTES:

Press either target key once to see the current target value without making any changes. The target will show for 3 seconds.

The longer you press and hold the target key the faster the display will change.

When you apply torque with a target set:

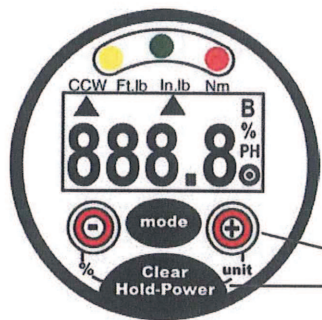
As you get close to the target torque value you will see a yellow light warning you that you are approaching the target value.

When you are within 2% of the target value you will see a green light and hear a buzzer. Stop pulling!

When you go over 2% of the target value you will see a red light and hear an intermittent buzzer. Too much torque!

5. Changing Units:

For security it takes two key presses to change the units:



ft.lb.....In.lb.....Nm

NOTES:

When you change units the target setting will also be changed to the new units value (makes a great torque conversion calculator).

The units selected will become the default units when the wrench is turned off and on again.

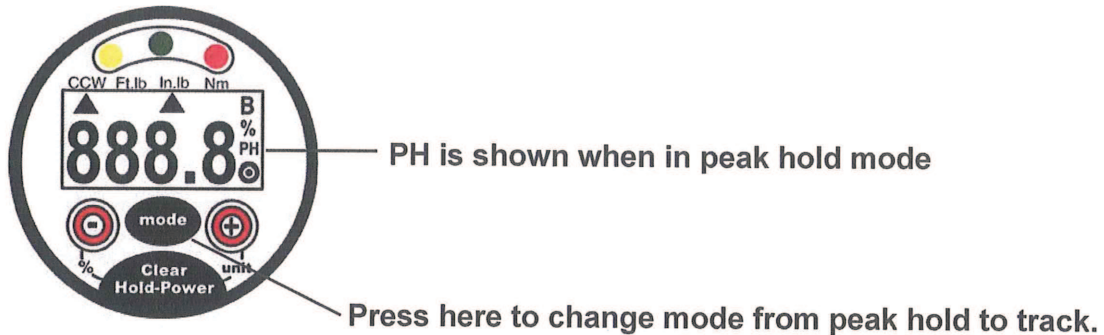
First press and hold the power/clear button (when wrench is on)
Then press the Target + key to change units.

Section 2

Miscellaneous Key Functions

- **Changing the mode to Track**
- **Changing the target zone from 2%**
- **Adjusting the LCD contrast**
- **Manually turning off the wrench**

To Change the Mode from Peak Hold to Track:

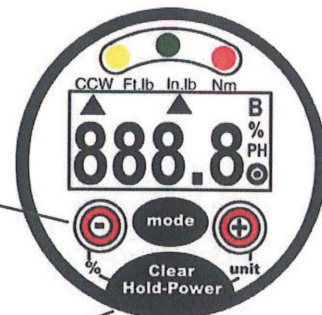


To Change the Target Torque Pass/Fail Zone (2% default):

You can change the Target Torque Zone from 2% (default) to 1%-10% or "OFF". With the wrench ON, hold the power button and press the Target - key. Keep pressing the Target - key until you show the desired value.

2. Press this button to change the zone from "OFF...1%....2%.....10%"

1. Press and hold this button when the wrench is on.



Miscellaneous (seldom used) key functions:

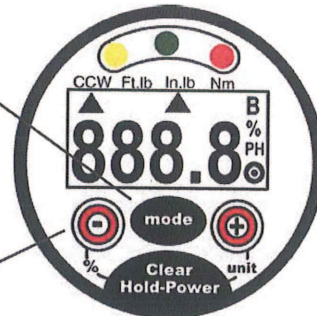
LCD Contrast:

You can change the LCD contrast (viewing angle) by first pressing and holding the mode button and then press the target - button. This is useful when the temperature is very cold or very hot but normally will not need to be changed.

NOTES:

The contrast changes very slowly. Be patient!

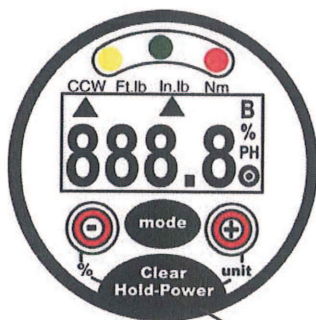
1. With wrench on press and hold mode button.



2. Then press and hold the Target - button, (wait for the contrast to change)

Manual Off:

To manually turn off the wrench, hold the Power button for 3 seconds.



The wrench will automatically turn off after 3 minutes without use

To manually turn off the wrench, hold here for 3 seconds