



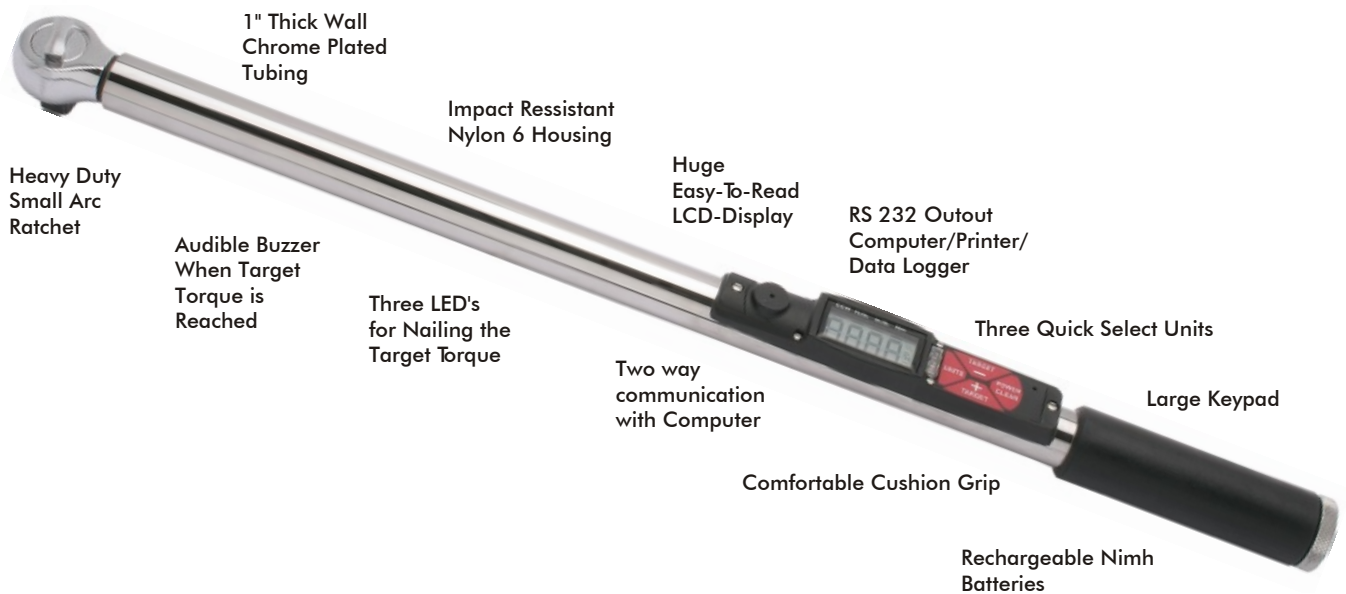
ELOTRONIC

Digital Torque Wrench 2420-EDS

OPERATION INSTRUCTION

Please read instruction carefully prior to first use!





Congratulations! You have purchased the most accurate, durable and easy to use ELOTRONIC 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 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 ratcheting speeds. 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 Nimh batteries.

For additional features log on to: www.elora.de

Thank you!

ELORA-WERKZEUGFABRIK GMBH



1. Install Batteries

Install 4 high quality
AA Batteries in handle



Unscrew metal end cap
to expose Batteries.

Notes:

It is OK to use externally rechargeable Batteries.

Batterie life depends on Batterie quality and the amount the lights and buzzer are used (target torque). Typical life is up to 100 hours.

Keep the end thrads clean and dry for a good contact.

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



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 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:

Press the "Units"-Button to select different torque 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.



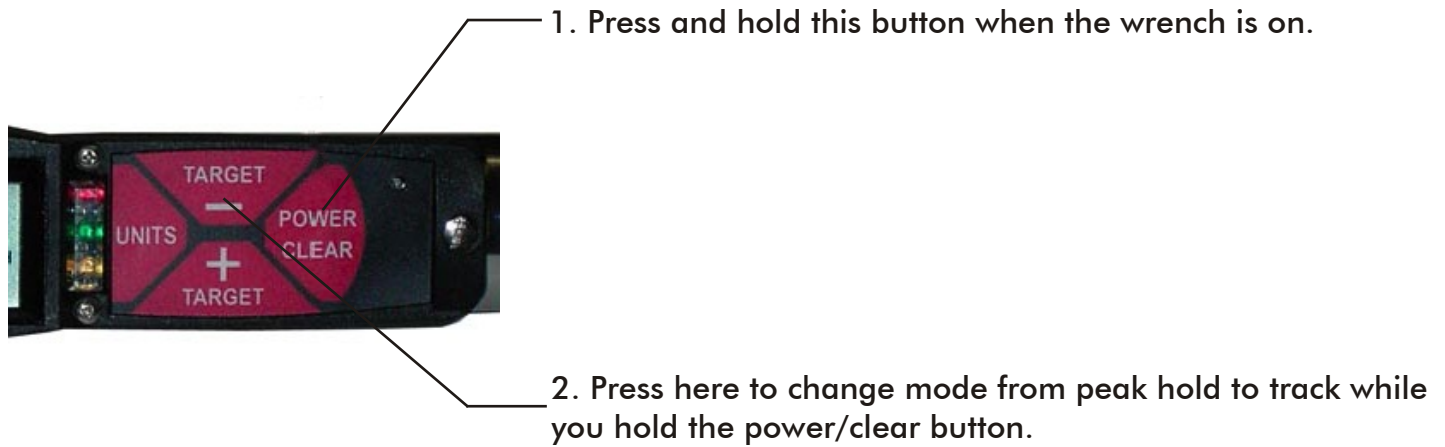
Section 2

Miscellaneous Key Functions

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

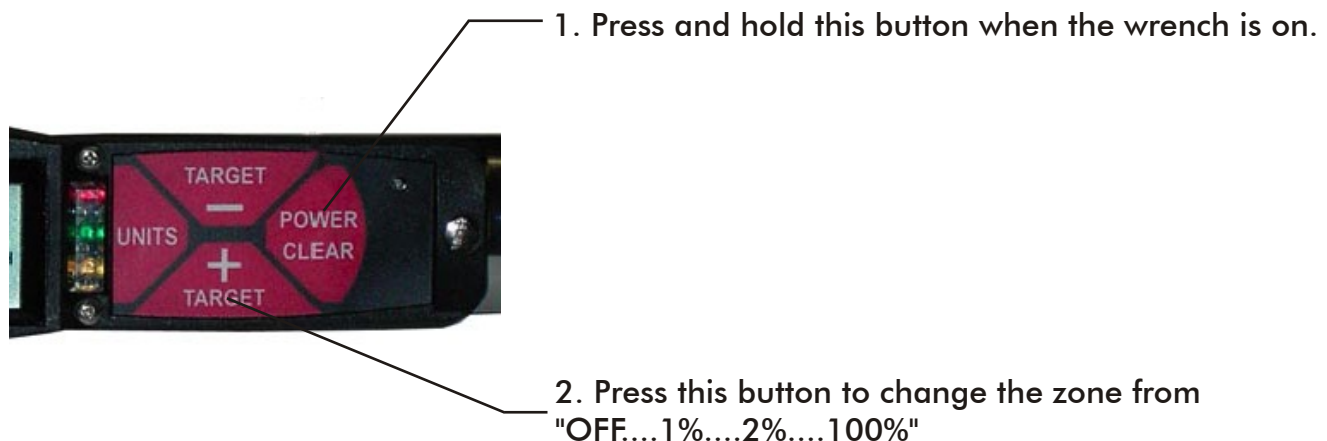


To Change the Mode from Peak Hold to Track:



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.





Miscellaneous (seldom used) key functions:

LCD Contrast:

You can change the LCD contrast (viewing angle) by first pressing and holding the units button and then press the "Target+"-Button. This is useful when the temperature is very cold or very hot.

Notes:

The contrast changes very slowly. Be patient!

1. With wrench on press and hold units 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.





Section 3

Superduty Power Option (-P models)



- Download data directly to a computer
- Internally rechargeable NimH batteries.



Superduty "Power" Option (-P models)

With the -P kit you can:

1. Charge NimH-Batteries while using the wrench.
2. Use the wrench on external power (no Batteries).
3. Send torque information to a printer, computer, data logger
(Data is sent automatically when the wrench clears or when the "Clear"-Key is pressed).



The "-P" kit comes with three additional components:

1. 110 volt transformer
2. Data Cable (standard 6 wire RJ11 cable)
3. RS 232 / Power Adapter
4. Rechargeable batteries

To Send Data To a Computer

Plug the RS 232 adapter in any 9 pin serial com-Port on your Computer.



Notes:

Data is sent standard ASCII-Format

Protocol:

9600 Bps, 8,1,n

Information sent:

(comma separated values)

- Torque value
- Units
- Target torque setting
- Target Zone setting (%)
- Under/Pass/Over Target

Output example:

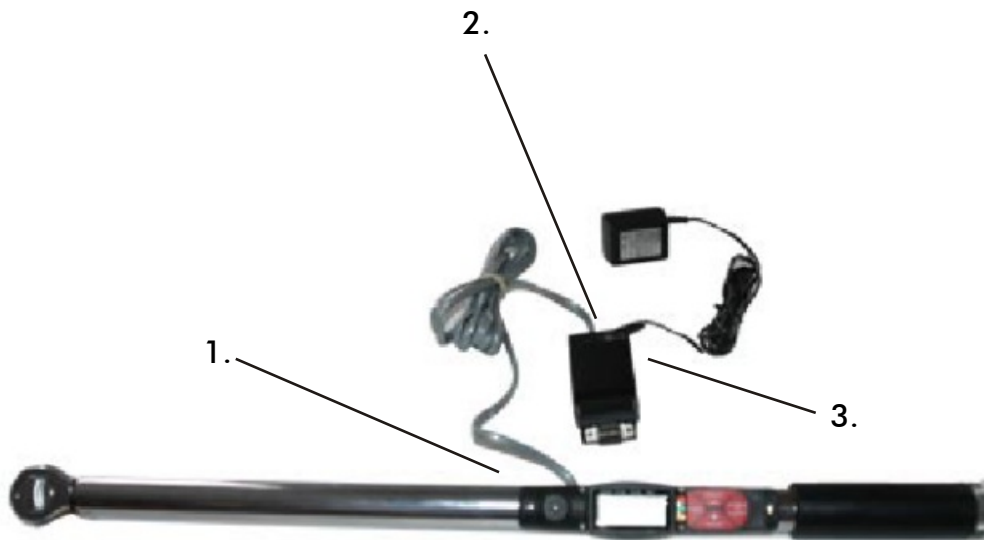
Actual torque
Unit
+015.1 ft-lbs +040.0 2% Low
Target torque
Target Zone Setting:
Shows actual torque is below target



Recharging Batteries (-P Option):

To charge the internal NimH Batteries:

1. Plug the RS232 / Power cable in the back of the Wrench.
2. Plug the RS232-Adapter into the other end of the Data / Power cable.
3. Plug the transformer into the back of the RS232 / Power-Adapter.



Notes:

You can use the wrench when the Power-Adapter is charging the batteries.

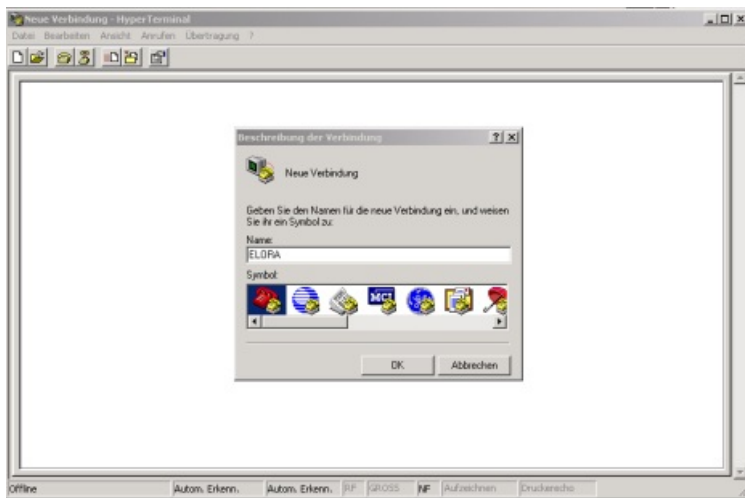
You can use the Wrench on external power without batteries.

You can charge the batteries while the RS232 / Power-Adapter is plugged into a computer (while you are sending data to the computer).

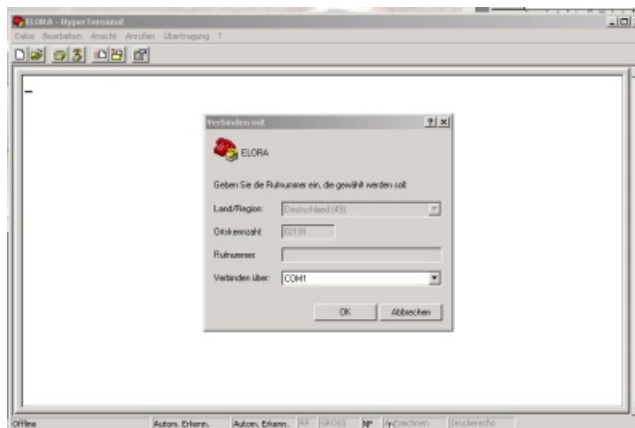


To open Hyperterminal select:

- Start
- Programs
- Accessories
- Communications
- Hyperterminal
- Name the new file



- Select a com port



- Set parameters as shown
- Select connect

