

**CDI TORQUE**  
**PRODUCTS**  
A *Snap-on* Company

# COMPUTORQ<sup>3</sup>

**ELECTRONIC TORQUE WRENCH**

**INSTRUCTION MANUAL**



**ATTENTION:**

For your personal safety, read and understand this manual before operating this tool.

# COMPUTORQ3



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

Over torquing can cause breakage. Force against flex stops on flex head can cause head 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 DIGITAL TORQUE 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 Digital Torque 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 make sure the ratchet Forward/Reverse Switch is fully engaged in the correct position.
- 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.
- Never force the head of flex head drives against stops.
- 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

The **Computorq3** Electronic Torque Wrench digitally displays fastener torque specification settings, torque readings and peak hold measurements. **DISPLAY** - The wrench features a custom LCD display, use keypad to select torque units, readout in ft.lb., in.lb., Nm, and kg.cm. Display also includes a 10 segment bar graph.

**SETTING** - Determine torque specification for fastener. Next, use the **UP** or **DOWN** arrow keys to scroll to the desired target torque value. **NOTE:** The target torque value is adjustable between 10% and 100% of full scale. The scrolling display rolls over at both ends for quick and convenient adjustment of setting.

**TRACKING** - While torque is applied, the display switches from preset value to actual applied value with a 0.20 second update rate.

**AUDIBLE TONES AND LED'S** - When the applied torque value equals -10% of the target torque value, a **YELLOW** LED illuminates. When the target torque value is reached, the wrench outputs a 0.50 (1/2) second audible tone and the **GREEN** LED illuminates. At +10% of target torque the **RED** LED illuminates.

**PEAK HOLD** - When torque is released the display holds and flashes the **peak torque** reading for 10 seconds or until next torque is applied.

**OVERLOAD** - If the wrench is used beyond 100% of full scale the audible tone will pulse rapidly to warn the operator to stop. At 125% of full scale the display will lock and read "- - -".

**ZERO** - Wrench will automatically perform self calibration check and re-zero when powered ON. When powered ON, the wrench can be re-zeroed at any time by depressing the ON/ZERO key.

**SETUP MEMORY** - When powered ON, the wrench returns to the last unit and torque setting selected.

**BATTERY** - The Computorq3 uses two (2) standard replaceable "CR123" lithium cells which provide more than 80 hours of continuous operation. The current battery level can be determined by viewing the battery indicator icon in the upper left corner of the LCD display. A flashing "**bAtt**" display means the wrench is no longer accurate and the battery must be replaced before continuing usage of wrench.

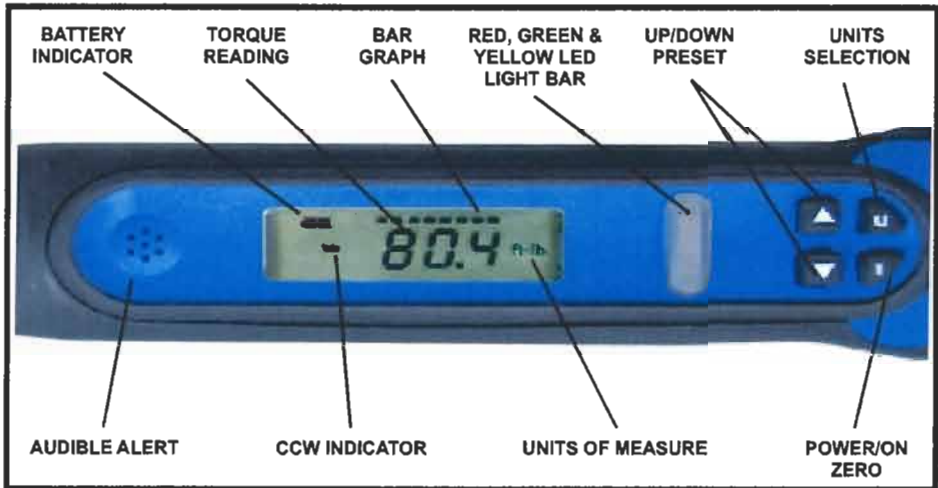
**POWER ON** - Depress and hold the ON/ZERO key until display illuminates.

**POWER OFF** - Depress the ON/ZERO key and hold for 5 seconds.

**AUTO POWER OFF** - Auto power OFF will occur after 2 minutes of non-usage to conserve battery power.

# COMPUTORQ<sup>3</sup>

## OPERATOR INSTRUCTION:



### SET-UP:

1. To power wrench ON, depress the ON/ZERO key - the wrench will self-test and display the last unit and torque setting selected.
2. Select the desired units by depressing the UNITS key. Each time the UNITS key is depressed, a different unit of measure is displayed - (ft.lb., in.lb., Nm, or kg.cm.)
3. Pre-select desired torque value by depressing and holding the UP (▲) or DOWN (▼) key. The scrolling display rolls over at both ends for quick and convenient adjustment of setting.
4. Tool set-up is complete, wrench is ready for use.

**IMPORTANT:** Proper hand position when grasping wrench is necessary to ensure highest wrench accuracy. Position hand so that it is centered on the gripped portion of handle. AVOID GRASPING WRENCH ABOVE OR BELOW GRIPPED PORTION OF HANDLE.

### USAGE:

1. Begin torquing fastener using a pulling motion.
2. The display will track the applied torque.
3. Stop application of torque when half-second audible tone is heard and **GREEN** LED illuminates, If **RED** LED illuminates, preset torque value has been exceeded. When this occurs the operator must loosen fastener and repeat torque application. NOTE: **YELLOW** LED will illuminate when 90% of desired preset value has been achieved.
4. On release the PEAK (highest torque value applied)\* will be displayed, flashing for 10 seconds or until torque is reapplied.

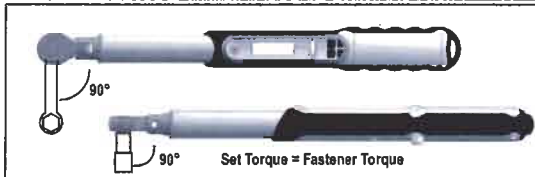
\*The PEAK torque reading will tell you if excess torque has been applied. This feature can be used to improve your wrenching technique for best accuracy.

## USE OF ADAPTERS, EXTENSIONS AND UNIVERSALS:

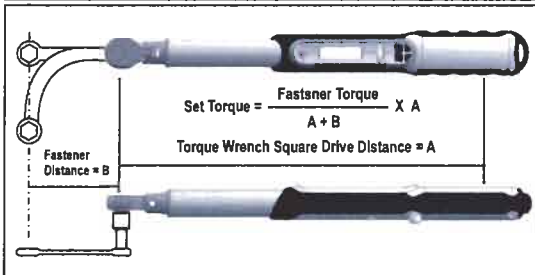
Anytime an adapter, extension or universal is used with a torque wrench in such a way that the fastener distance is different that the torque wrench square drive distance, an adjustment to the set torque is required to get proper fastener torque.



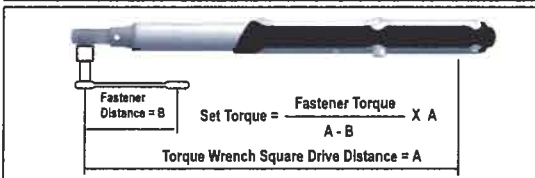
Fastener torque equals torque wrench square drive torque. Wrench setting is equal to desired fastener torque.



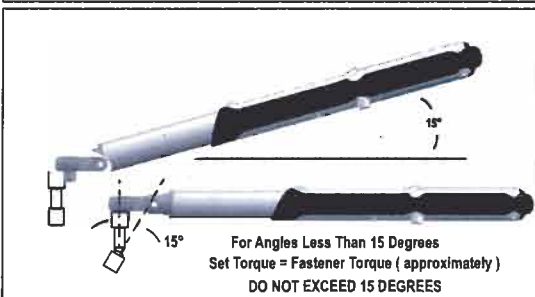
Fastener torque equals torque wrench square drive torque. Wrench setting is equal to desired fastener torque.



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.



When using a universal or wobble extension, do not exceed more than 15 degrees of offset from perpendicular drive. Do not use long extensions with the flex-drive.

# COMPUTORQ3

## SPECIFICATIONS:

**DISPLAY** - 4-digit LCD, Low Battery Indicator.

**SETTING** - Displayed with not torque applied.

**TRACKING** - Real time display with torque applied.

**PEAK** - Displayed value flashes for 10 seconds at torque release.

**DISPLAY CAPACITY** - 8,000 Counts CW/CCW torque from 10% to 125% of full scale.

MODEL	DR.	ft.lb.	in.lb.	Nm	kg.cm.
2401CI3	1/4"	2.0 - 20.0	24 - 240	2.71 - 27.10	27.6 - 276
1002CF3	3/8"	5.0 - 100.0	120 - 1200	13.6 - 135.6	138 - 1382
2503CF3	1/2"	25 - 250	300 - 3000	33.8 - 338	345 - 3456

## ACCURACY CW CCW

(@72° F)	+/-2%	+/-3%	of reading, 20% to 100% of full scale
	+/-4%	+/-6%	of reading, 10% to 19% of full scale

## DIMENSIONS:

PART NUMBER	DRIVE	LENGTH	WEIGHT
2401CI3	1/4"	15 in.	2.0 lbs.
1002CF3	3/8"	17 in.	2.2 lbs.
2503CF3	1/2"	27 in.	3.5 lbs.

## SEALED KEY PAD

- ON/ZERO** power on - auto self check - zero
- UP (+)** increases torque setting
- DOWN (-)** decreases torque setting
- UNITS** selects ft.lb., in.lb., Nm, or kg.cm.

## 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

**BATTERY:** Two (2) "CR123" Lithium cells, over 80 hours continuous operation.

**AUTO SHUT-OFF:** Auto power OFF will occur after 2 minutes of non-usage to conserve battery power.

## CALIBRATION:

Contact CDI Torque Products for calibration services.

## IMPORTANT:

Calibration by the user is recorded in the wrench and voids factory certification.

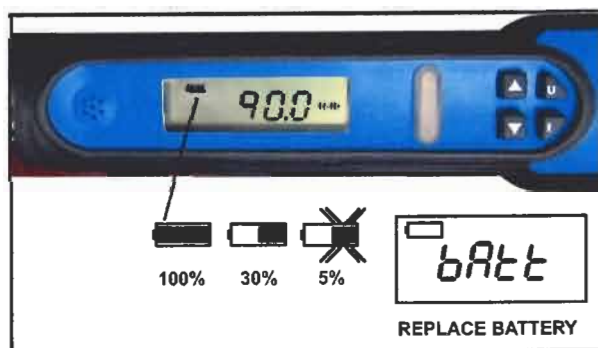
**EQUIPMENT REQUIRED:** Precision test bars and certified calibration weights or another torque source, accurate to 1/2% or reading.

**MAINTENANCE / SERVICE:** To safely clean torque wrench, wipe with a damp cloth. NEVER use solvents, thinners, or engine cleaners of any kind. NEVER immerse torque wrench in liquid of any kind. Service, repair and calibration are to be performed by CDI Torque Products only.

**CERTIFICATION:** This torque wrench, as calibrated at this 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.)

**NOTE:** If the display shows "Err0" at power ON, the wrench is damaged and must be returned to CDI Torque Products for repair.

**BATTERY REPLACEMENT:** Replace with two (2) "CR123" Lithium cells only (available anywhere). To replace battery, remove cover on under side of handle (opposite display)



## For Warranty Claims, Contact CDI Torque Products

### **LIMITED WARRANTY**

The **Computorq 3** Electronic Torque Wrench is backed by a one year warranty. This warranty covers manufacturer defects and workmanship. The warranty excludes misuse, abuse and normal wear and tear. Exclusion is not allowed in some states and may not apply. This warranty gives you specific legal rights, and you may have other rights, which vary from state to state.



A *Snap-on* Company

19220 San Jose Ave.  
City of Industry, CA 91748  
Phone: 626-965-0668  
Fax: 626-965-2410  
Email: [sales@cditorque.com](mailto:sales@cditorque.com)  
Website: [www.cditorque.com](http://www.cditorque.com)

**Made in USA with US and Global Components**

FORM 20-1800-CDI  
07/05 REV N/C