

*Eastwood*

DO THE JOB RIGHT.

Part #13622

# 1/2" DRIVE DIGITAL ELECTRONIC TORQUE-ANGLE WRENCH INSTRUCTIONS



**IMPORTANT:** Please read these instructions thoroughly and carefully before operation. The instructions will provide you with important information regarding operation, warnings, and safety precautions.

Your **Eastwood Digital Electronic Torque-Angle Wrench** is a professional-quality tool designed for performing quick precision work on all vehicles. With care, it will provide many years of reliable service.



## FEATURES

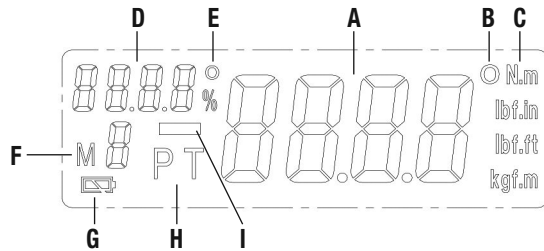
- Large back-lit display shows both target torque and real time reading.
- 3-color, Green-Amber-Red LED light and beeper tone provide visual and audible indication of when target torque and angle is reached.
- High accuracy within +/- 2%.
- Units of torque measure are selectable for maximum flexibility.
- Auto power off feature saves batteries.
- Memory storage accepts up to 5 sets of target torque settings.

## SPECIFICATIONS

<b>Drive:</b>	1/2" square drive (12.5 mm)
<b>Measuring Range:</b>	15-148 lb/ft [2-20 kg.m] / 177-1770 lb/in [20-200 N.m]
<b>Accuracy:</b>	±2% of reading @ 10% to 100% of full scale.
<b>Display Resolution:</b>	1°
<b>Units of Measurement:</b>	lb/ft, lb/in, kg.m, N.m
<b>Angle Range:</b>	0° - 360° (C.W. / C.C.W.)
<b>Angle Accuracy:</b>	±1°
<b>Display Resolution:</b>	1°
<b>Operating Voltage:</b>	6V (4 x AAA batteries, supplied)
<b>Operating Temperature:</b>	32°F - 104°F [0° - 40° C].

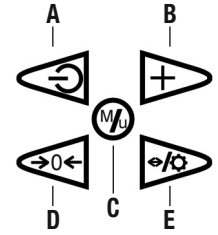
## DISPLAY

- A: Real-time torque value
- B: The unit of Angle
- C: Torque units
- D: Target Torque indicator
- E: Target Angle indicator
- F: Memory storage numbers
- G: Battery indicator
- H: Peak / Track mode
- I: MINUS symbol for counter-clockwise rotation



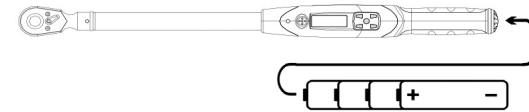
## CONTROL PANEL

- A: Power ON / OFF button
- B: Memory storage numbers selection / setting button
- C: Memorize the torque or angle setting value / Change the rotation of Angle in a CW or CCW direction / Enter Program Settings Mode.
- D: Button to zero out the torque and angle values
- E: Button for display illumination / for selecting the next decimal place / enter Angle measurement mode.



## PREPARATION FOR USE

- Open the cover of the battery compartment by turning it counter-clockwise.
- Insert four AAA batteries as shown below



- Close the battery compartment by turning the cover clockwise.
- The torque wrench is now ready for use.

## TURNING THE TOOL ON / OFF

- Press button to turn on. The buzzer sounds and all readouts on the display are shown at the same time for just a moment.
- Press button again to turn off the unit.

## PROGRAMMING SETTINGS

To enter Program Settings Mode, press the button. Once in the Program Setting Mode you can make changes to the following settings.

### PEAK AND TRACK MODE SETTINGS



After turning on the display, the unit automatically defaults to **“Track”** mode where the real-time torque reached during operation will be displayed.

During the **“Peak”** mode, the maximum value reached will be saved and the value is shown on the display for approx. 2 seconds. After that, the value flashes and you can continue to the next application or press button to zero then keep going for the next application.

1. Press button to select **“T”** for Track mode or **“P”** for Peak mode.
2. Press button to confirm the selection. The wrench will switch to **UNIT** setting automatically.

**NOTE:** If there is no button activity for 3 seconds, the wrench will retain the last selection of Peak or Track mode, and return to measurement mode.




## UNIT SELECTION

1. Once the Peak / Track mode has been set, the wrench switches to the setting of “UNIT SELECTION”.
2. **Ft/lb** is shown on screen, select the units between lb/ft, lb/in, kg.m, N.m by pressing  button.
3. Press  button to confirm the unit selection. The wrench will switch to Auto Power Off Settings when the button is pressed.

**NOTE:** If there is no button activity for 3 seconds, the wrench will retain the last selection of Units, and return to measurement mode.

## AUTO POWER-OFF SETTINGS

The torque wrench will be turned off automatically without any button activity over a selectable period. Changing the auto –off setting as follows:










1. Once the unit is selected, the default **Auto-Off** time: **5 (5 minutes)** will be shown on screen.
2. Wait for 2 seconds without touching any buttons, or press  button to retain the default setting.
3. Changing the wrench **Auto-off** time by pressing  button. Select the shut-off time between **5** minutes, **15** minutes or “**OFF**” to turn off the Auto-off function.
4. Press  button to confirm the selection. The wrench returns to measurement mode when the button is pressed.

**NOTE:** If there is no button activity for 3 seconds, the wrench will retain the last selection of Auto Power Off, and return to measurement mode.

## PROGRAMMING THE TORQUE AND ANGLE

The wrench has **5 sets** of memory storage for pre-setting the target Torque and Angle.

### TARGET TORQUE SETTING





1. Press  button to turn the wrench on.
2. Press  button to select the memory storage number between **M1~M5**. 
3. Once the memory number is chosen, access the target Torque/ Angle programming by pressing and holding  button for 5~10 seconds.
4. Release  button when **SET** is shown on screen, and the last saved torque is displayed. The first digit of this value (“0000”) is flashing. Press  button to zero the last saved value. Or by repeatedly pressing  button, the value of the flashing digit is gradually increased. When the desired value is reached, press  button to skip to the next decimal place. Repeat this process for all numeric places. (ones, tens, hundreds etc.) Example: A correct setting for **75 lb/ft** will read **075.0** in the display.
5. When the required torque level is set, press  to save the value.

**NOTE:** If there is no button activity for 5 seconds, the wrench will retain the last selection of torque and automatically switch back to Angle Programming.

**NOTE:** “Erro” (for ERROR will show on the display when the pre-set torque value exceeds 100% of the maximum torque value. After 1 second, the display returns to torque Measurement Mode.


**NOTE:** After pressing the “+” button to access the torque setting mode, without any activity after 6 seconds, the display will return to Measurement Mode.

### TARGET ANGLE SETTING

1. The display skips to Angle setting automatically once the target torque is set, and displays the last saved angle value. The first digit of this value (“0000”) is flashing.
2. Press the  button to zero the last saved value. Or by repeatedly pressing  button, the value of the flashing angle digit is gradually increased. When the desired value for this digit was achieved, press  button to skip to the next digit. Repeat this process for all numeric places in the angle value.
3. When the required angle is set, press  to save the value.

**NOTE:** If there is no button activity for 5 seconds, the wrench will retain the last selection of Angle Setting and automatically switch to Measurement Mode.

## TURNING THE DISPLAY ILLUMINATION ON / OFF

1. The display illumination can be turned on prior to or after programming the torque.
2. In order to do this, press and release the  button.

## OPERATING THE TORQUE WRENCH


1. Select the socket required for your work.
2. Attach the socket firmly to the square drive of the torque wrench, it will be held in place by the ball stop of the square drive.
3. If possible, do not use any extensions because they may distort the torque applied to a bolt.

### APPLYING PROGRAMMED TORQUE

1. Program the value necessary following the instructions in the **Target Torque Setting** section.
2. Place the torque wrench on the fastener. Grip the torque wrench and PULL on the wrench with a slow, easy movement. Avoid jerky movements.
3. With the target torque pre-set, the target value is indicated on the screen.
4. The LED will show **GREEN** when you are under 50% of the programmed torque value.
5. When approaching the target torque value,, the LED turns to **YELLOW**.
6. When you approach the programmed torque value, the buzzer will sound.
7. When you are **within 2%** of the programmed torque value, the **RED** LED will illuminate.  
**Once the torque is reached, the buzzer will emit quicker sound sequence.**
8. If you **exceed the programmed torque by 2%**, the buzzer will emit a continuous tone and the LED will turn **GREEN**.

**ATTENTION:** When you hear the continuous tone and the RED LED illuminates, stop pulling immediately or target torque will be exceeded.

## APPLYING PROGRAMMED ANGLE

1. Program the value necessary following the instructions in the **Target Angle Setting** section.
2. Place the torque wrench on the fastener. Press the  button to switch from torque measurement to angle measurement. The screen will display “ - - - - ” while it calibrates the orientation of the wrench. Once the screen displays “ 0° ”, you may proceed.
3. Grip the torque wrench and PULL on the wrench with a slow, easy movement. Avoid jerky movements.
4. With the target angle pre-set, the target value is indicated on the screen.
5. The LED will show **GREEN** when you under 50% of the programmed angle value.
6. When approaching the target angle value, the LED turns to **YELLOW**.
7. When you approach the target angle value, the buzzer will sound.
8. When you are **within 2%** of the programmed value, the **RED** LED will illuminate.  
**Once the angle is reached, the buzzer will emit a quicker sound sequence.**
9. If you **exceed the programmed angle by 2%**, the buzzer will emit a continuous tone and the LED will turn **GREEN**.

**ATTENTION: When you hear the continuous tone and the RED LED illuminates, stop pulling immediately or target torque will be exceeded.**

### NOTE:

- **NEVER USE THE TORQUE WRENCH WHEN THE BATTERIES ARE LOW. THE ACCURACY OF READINGS WILL BE AFFECTED.**
- The display will not show a reading until the applied force has exceeded 10% of full scale.
- “- - -” will be shown on the screen, when applied torque has exceeded 5% of the maximum of torque value. (See specifications)

## TORQUE WRENCH USE AND CARE

- Do not exceed the permitted maximum torque value for this tool. Over torquing the unit can cause permanent damage.
- Be sure all accessories including adaptors, extensions and sockets are rated to match or exceed the torque being applied.
- Use the correct size socket for the fastener.
- Do not use sockets that are cracked or damaged.
- Do not use the Torque Wrench near corrosive gas or liquid.
- Keep away from strong magnetic fields.
- Never hold or operate the unit with wet or greasy hands.
- Never apply torque when the tool is turned off or permanent damage can occur.
- Check that the Torque Wrench capacity matches or exceeds each application before proceeding.
- Do not drop and avoid excessive bumps or shock to this tool.
- If the tool is to be unused for an extended period of time, remove the batteries to prevent damage from leakage.

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**If you have any questions about the use of this product, please contact**

The Eastwood Technical Assistance Service Department: 800.544.5118 >> email: [techelp@eastwood.com](mailto:techelp@eastwood.com)

PDF version of this manual is available online >> [eastwood.com/13622manual](http://eastwood.com/13622manual)

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