



LX-190 USER MANUAL



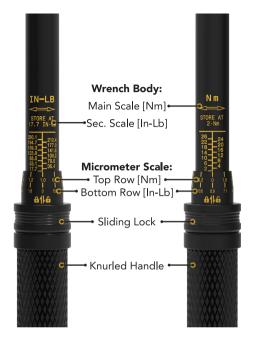
ATTENTION

- Before using the torque wrench, make sure to read and understand the entire manual, including safety information. Not following the instructions could result in damage to the tool, property, or personal injury.
- Treat this precision measuring tool with care and store it properly. Avoid using any additional devices to increase leverage of this wrench.
- It is recommended to practice first with a non-critical application. Be aware that at low torque settings, the click may be subtle; pull the wrench slowly to observe and learn to recognize the click both audibly and by feel.
- The wrench is calibrated & delivered in a ready-to-use condition. Tested to an accuracy of +/- 4% in CLOCKWISE direction and +/- 6% in COUNTERCLOCKWISE direction. To preserve this accuracy, it's crucial to store the wrench at its lowest torque setting of 2 Nm (17.7 in.lb.). Utilizing this setting relieves any additional strain on the internal spring, minimizing fatigue that will impact the wrench's accuracy.

INTRODUCTION

- A. Quick Release Button
- B. Secured Socket Mechanism
- C. Left/Right ratchet Lever
- D. 1/4-Inch Square Drive
- E. Wrench Body





Throughout the instruction manual, the wrench body scale will be referred to as the "main scale." The knurled handle that has more precise subdivisions will be referred to as the "micrometer scale."

This is a dual-range torque wrench marked with **Newton-meters (Nm)** and **Inch-pounds (in.-lb.)** on opposite sides of the wrench body. The micrometer scale has two rows; the top row is for **Nm**, and the bottom row is for in.-lb.

Wrench measures torque in clockwise and counterclockwise directions.

SETTING TORQUE READING

NEWTON METERS

(Example reading: 15 Nm)

Use top row of Micrometer scale

1. Slide down the locking collar to enable micrometer scale adjustment



2. Rotate the micrometer knurled handle until its top edge aligns with the horizontal "14" mark on the main scale, while the "0" mark on the micrometer scale is centered on the vertical line of the main scale.



3. The micrometer scale's top row divides the main scale markings into 10 divisions. Each marking represents 0.2 Nm. To adjust the torque from 14 to 15 Nm, turn the micrometer handle clockwise until the "1.0" (5 micro-movements) mark



of the top row aligns with the vertical line of the main scale. This adds 1.0 Nm. to the main scale reading of 14 Nm, resulting in a total torque of 15 Nm. 4. Slide up locking collar to maintain the torque setting. The wrench is now set to measure 15 Nm of torque and is ready to use.



INCH POUNDS (Use bottom row of micrometer scale)

To set the desired torque using the In.-lb. scale, follow the same procedure as you would for the Nm scale.

However, It is essential to keep in mind that every mark/increment on the micrometer scale will now represent 1.8 (1.77) In.-lb.

Contrasting with the Nm setting procedure, where each mark on the top micrometer scale represents 0.2 Nm, when referring to the in.-lb. setting, the value of each mark on the micrometer scale is 1.8 (1.77) In.-lb.

When using the torque wrench in-lb scale, it's crucial to keep this conversion factor in mind, and make sure you calculate each increment accurately.

SPECIFICATIONS

- Range Nm: 2 ~ 26
- Range Time 20
- Range In-Lb: 17.7 ~ 230.1
- Increment: 0.2 Nm (1.8 In-Lb)
- Accuracy CW: +/- 4%
- Accuracy CCW: +/- 6%
- Ratchet: 72 Tooth Gear
 Rotating Handle: Aluminum Alloy
 - Rotating Handle. Adminiant Allo
 - Wrench Length: 8.7 Inch / 22 cm
 - Finish: Electro-Black
 - Standard: ASME B107.300,

DIN-ISO-6789

WRENCH OPERATION

1. Install proper socket/attachment on the square drive and apply to nut/bolt. Make sure to keep your tightening hand centered on the knurled handle for accurate results.



2. Operate the wrench to tighten the nut/bolt, gradually increasing the force until they are snug. Slow down your operation and apply a smooth and steady pull. When you hear or feel a 'CLICK' or 'IMPULSE', stop pulling the wrench and release the pressure on the handle.



3. Wrench will automatically reset for next operation after pressure is released.



IMPORTANT OPERATION NOTICE

Operating wrench too quickly or with too much force may cause you to miss the exact torque setting. Do not continue to pull after torque setting is reached. Doing so will damage the wrench's internal mechanism.

At low torque settings, the click can be subtle. Use the wrench in a quiet environment - Learn to hear and feel the click.

Do not use the wrench to break free stuck fasteners. Tighten/adjust sliding lock and knurled handle by hand only. Wrench does not measure torque below 2 Nm/17.7 in.-lb.







MAINTENANCE AND STORAGE

1. If the wrench has not been in use for a long time, operate it several times at a low torque setting. This will allow internal lubricant to recoat internal components.

2. Keep the Torque Wrench Scale at the lowest setting when not in use. The lowest setting: 2 Nm mark on the main scale and '0' mark on the micrometer scale. DO NOT turn handle below lowest torque setting.

3. Clean the wrench by wiping it with a clean, dry, lint-free cloth. Do not immerse in any liquid or cleaner, as it can damage the wrench's internal components.



TORQUE UNIT CONVERSION TABLE

TORREST STATE CONTROLLER TORREST										
	NEWTON METERS (Nm)	INCH POUNDS (inlb.)	FOOT POUNDS (ftlb.)	INCH POUNDS (inlb.)	FOOT POUNDS (ftlb.)	NEWTON METERS (Nm)	FOOT POUNDS (ftlb.)	NEWTON METERS (Nm)	INCH POUNDS (inlb.)	
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	8.85 17.70 26.55 35.40 44.25 53.10 61.96 70.81 79.66 88.51 97.36 106.21 115.06 123.91 132.76 141.61 150.46 159.31 168.16	0.74 1.48 2.21 2.95 3.69 4.43 5.16 5.90 6.64 7.38 8.11 8.85 9.59 10.33 11.06 11.80 12.54 13.28 14.01 14.75	10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230	1.13 2.26 3.39 4.52 5.65 6.78 7.91 9.04 10.17 11.30 12.43 13.56 14.69 15.82 16.95 18.08 19.21 20.34 21.47 22.60 23.73 24.86 25.99	0.83 1.67 2.50 3.33 4.17 5.00 5.83 6.67 7.50 8.33 9.17 10.00 10.83 11.67 12.50 13.33 14.17 15.00 15.83 16.67 17.50 18.33	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	1.36 2.71 4.07 5.42 6.78 8.13 9.49 10.85 12.20 13.56 14.91 16.27 17.63 18.98 20.34 21.69 23.05 24.40 25.76 27.12 28.47 29.83 31.18	12 24 36 48 60 72 84 96 108 120 132 144 156 168 180 192 204 216 228 240 252 264 276	
	21 22	185.87 194.72	15.49 16.23			CONVERSIONS				
	23	203.57	16.96							

CAUTION:

24

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STORE AT LOWEST SETTING - To maintain calibration, set wrench to lowest torque value before storage.

212.42

230 12

17.70 18.44

19 18

OPERATE SLOWLY - Wrench "clicks" to notify when torque value is reached. Wrench does not stop applying force automatically.

CONVERSIONS									
1 Nm =	1 inlb. =	1 ftlb. =							
0.737 ftlb. 8.85 inlb. 0.102 m-kg 10.2 cm-kg	0.0833 ftlb. 0.113 Nm 0.0115 m-kg 1.15 cm-kg	0.138 m-kg 12.0 inlb. 1.35 Nm 13.8 cm-kg							

LISTEN AND FEEL - At low torque settings clicks is subtle. Learn to hear and feel the click. PRECISION TOOL - Do not use for extreme operation like breaking loose stuck fasteners. PRACTICE FIRST - Try wrench on a non-critical fastener first to learn how it works.



THE LX-190 MEASURING INSTRUMENT INCLUDES
A STANDARD 1-YEAR WARRANTY

TO EXTEND THE WARRANTY FOR A TOTAL OF 2 YEARS

Simply register your new product online within 90 days of purchase register at:

www.lexivon.com/product-registration



FOR ANY HELP YOU MIGHT NEED
PLEASE DON'T HESITATE TO CONTACT US



