KTC
KYOTO TOOL

Instruction Manual

Digital Ratchet

GEK Series

No.GEK030-R2
No.GEK030-C3
No.GEK060-R3
No.GEK085-R3
No.GEK085-R4
No.GEK135-R4
No.GEK200-R4

Thank you for your purchase of our Digital Ratchet GEK series product.

Read this instruction manual to use the Digital Ratchet GEK series product safely and properly. Be sure to understand the precautions and usages described herein and warning labels shown on the product before using it.
Save this manual for your future reference.

KYOTO TOOL CO.,LTD.

Digital Ratchet

GEK series

Precautions

⚠CAUTION	Indicates failing to observe the precautions herein may result in injuries or property damages.	⊘	Indicates things prohibited to perform.
❗	Indicates things you must perform.	NOTE	Indicates things you need to be careful of.

Please read before using the product. ⚠ CAUTION

❗
- Be careful not to expose the product to chemicals, seawater, and moisture.
- Make sure that no screws are loose on each of the parts.
- For safety, be sure to wear eye protection when using the product.

⊘
- Do not use the product when the product or object to be worked on is defective in any way such as it has crack or distortion.
- Do not operate the product with excessive torque, which may lead to damaging the product. Do not use it outside the specified torque range.
- Do not apply pressure or shock to the product. Otherwise, it may cause the product to malfunction.
- Do not disassemble or remodel the product. The product cannot function fully after it has been heated or remodeled.
- Do not operate the product when it is not fit to the object such as slantingly or shallowly.
- Do not operate the product on an unstable workpiece.
- Do not operate the product on an object or part which is out of the scope or specification of the product. Otherwise, it may cause the product to break or malfunction.

Please read before operating the product. ⚠ CAUTION

❗
- When disassembling or assembling parts or handling new parts, be sure to follow the instructions provided by the manufacturers of the parts for doing the task properly.
- When using the product in a place where the temperature changes rapidly, turn the product off and on frequently.
- Before storing the product, put it in the dedicated blowcase and store it in a place where the temperature ranges from -20 to 60°C without condensation.
- Be sure to keep the product out of the reach of infants. In case where an infant swallows any of the battery, battery cover, and screws, seek medical attention immediately.

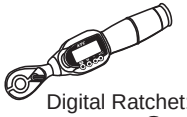
⊘
- Do not apply any force when turning on the product. Otherwise, the product may not measure torques correctly.
- Do not measure torque using a tool whose effective length is variable like a crow foot wrench since it leads to incorrect measurements.
- Do no measure torque near noise sources such as mobile phone, cordless phone, and ham radio.
- Stop using the product immediately if you notice any abnormal noise or any other anomalies.
- Do not apply any force on the display.
- Be careful not to apply excessive torque on the product. Although the product can raise an alarm when the target torque has been reached and show the maximum torque, it has no mechanism to protect itself from excessive force.
- When using the product as a ratchet handle, do not extend the grip with a pipe to protect the inner structure. In addition, do not apply a force higher than 680 N (70 kgf) on the grip.

Precautions for battery ⚠ CAUTION

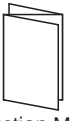
❗
- In case where liquid leaking from the battery comes into contact with your eye, immediately flush it with plenty of clean water and seek medical attention. Otherwise, it may cause loss of eyesight or similar injury.
- In case where liquid leaking from the battery comes into contact with your skin or clothes, immediately flush it with plenty of clean water. Otherwise, it may cause injury.
- Be sure to keep the battery out of the reach of infants to prevent them from swallowing it. In case where an infant swallows it, immediately seek medical attention.

⊘
- Load the battery orienting it to the correct direction. When the battery has run out, replace it with a new one immediately. When the product will not in use for a long period of time (over three months), take the battery out. Otherwise, the battery may leak, heat, or burst, damaging the product as a result.
- Do not throw the battery into fire. The battery may explode.

Package Content

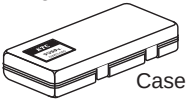


Digital Ratchet: 1

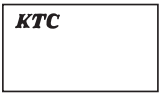


Instruction Manual: 1

Registration Card: 1

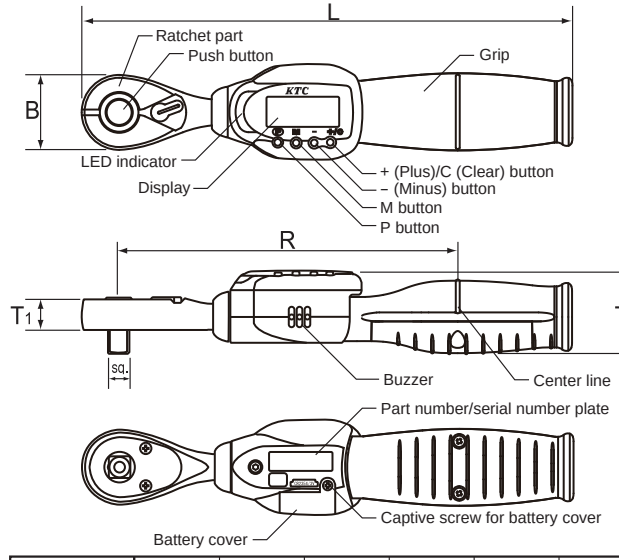


Case: 1



Inspection Record: 1

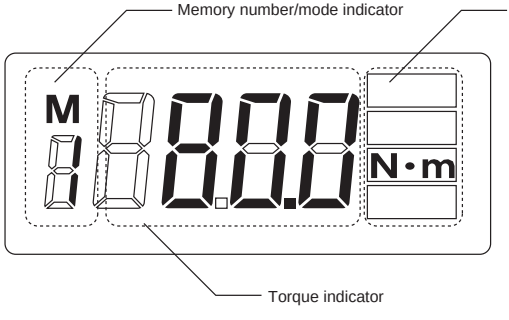
Names and Dimensions



Part number		GEK030-R2	GEK030-C3	GEK060-R3	GEK085-R3	GEK085-R4	GEK135-R4	GEK200-R4
sq.: Driving angle		1/4" sq.	3/8" sq.			1/2" sq.		
Measurement accuracy	Right-turning screw	±4.0%+1digit	±3.0% + 1 digit (digit= minimum unit of display)					
	Left-turning screw	±4.0%+1digit	±3.0% + 1 digit (digit= minimum unit of display)					
Accuracy assurance range (N-m)		6-30	12-60	17-85	17-85	27-135	40-200	
Minimum unit of display (N-m)		0.02	0.05	0.1	0.1	0.1	0.2	
L: Total length (mm)		211	217	271	274	380	580	
B: Ratchet width		22	33	33	39.5	39.5	39.5	
T1: Ratchet thickness		10	13.5	13.5	18	18	18	
T2: Display height		36						
Weight		330	400	440	590	700	990	
R: Effective length		150	150	204	204	310	510	
Operating temperature		-5 to 40°C						
Storage temperature		-20 to 60°C						
Battery		Lithium coin battery CR2354 (1)						
Battery life		Approx. 2 months (100 times of use/day)						

* Measured values outside the accuracy assurance range are reference values.

Names of indicators



0. <<Operating the Digital Ratchet>>

For the details of operations, see the topics for them.

Regular startup

Power ON

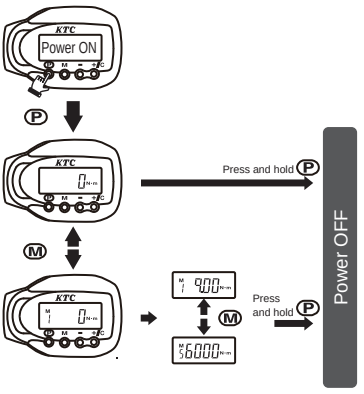
⇨ **1** -See (1)

Measurement mode

⇨ **1** -See (2)

Preset mode setting

⇨ **3** -See (3)



Custom Setup screen startup

Power ON

Measurement display mode setting

⇨See **4-1**

Auto Clear mode time setting

⇨See **4-2**

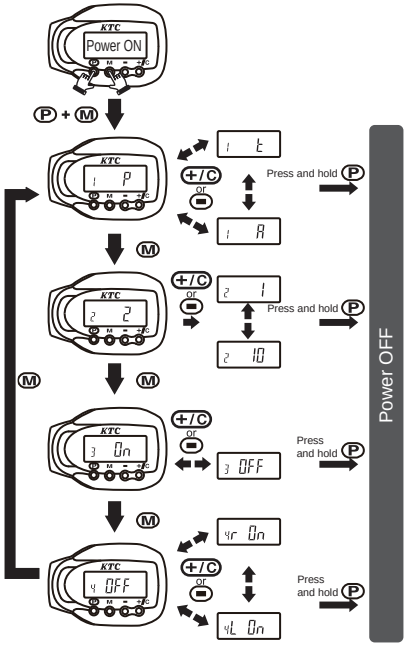
Buzzer sound setting

⇨See **4-3**

Pass/Fail mode setting

⇨See **4-4**

⇨See **5** (1)

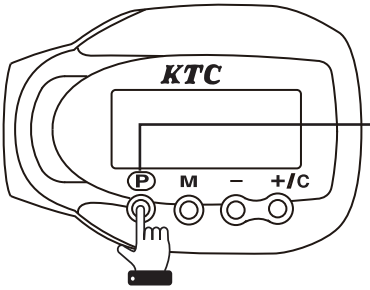


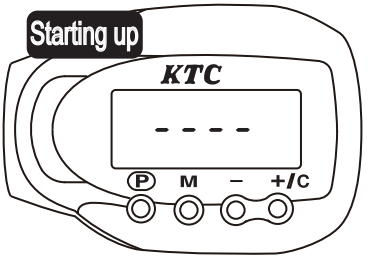
The settings made in the Custom Setup screen will take effect after turning OFF the power and turning it ON again.

1. <<Operations in the Measurement Mode>>

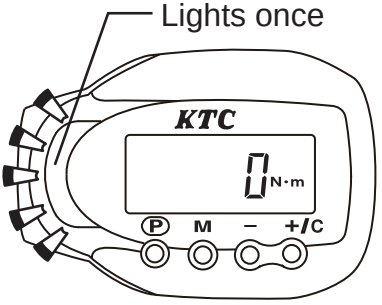
In this mode, you can control the torque by reading the display without specifying any target value. It allows you to tighten an object while checking the torque.

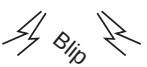
(1) Power ON: Turn ON the power for making measurements and settings.





With nothing shown on the display, press the P button to turn the power ON. The display will display "–" and the LED will light once with a short buzzer sound.





NOTE
If an error code appears, troubleshoot it referring to 8.

Measurement mode display
(With no load applied)

After the power is turned ON, the instrument enters the Measurement mode.

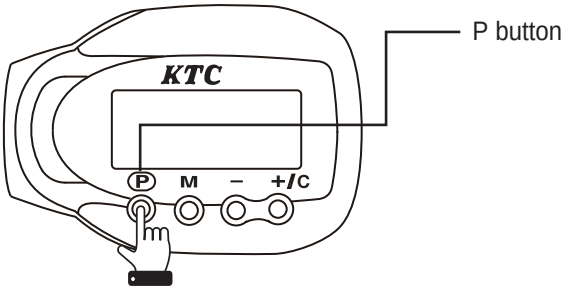
NOTE
When the Pass/Fail mode has been set, see -①. ⇨

! Be sure to not to apply any force to the instrument after turning it ON until the display displays "0". If it is turned ON with some force applied, it may not indicate the torque correctly.When you use it in a place where it is exposed to sudden changes in temperature, turn it OFF and ON frequently.

1. <<Operations in the Measurement mode>>

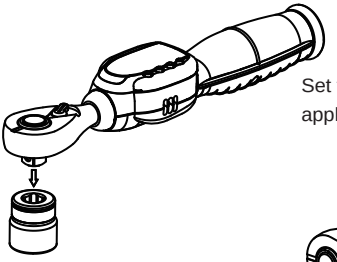
To turn OFF the power

To turn OFF the power, press and hold the P button. (For one second or more)

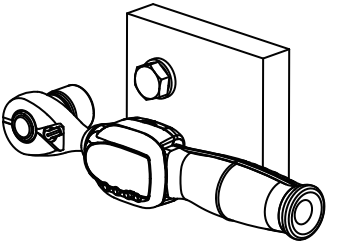


(2)**To measure a torque:** Measure a tightening or loosening torque.

Attach the socket that fits the object to be measured on the Digital Ratchet.



Set the Digital Ratchet on the object, and apply force to the grip gradually.

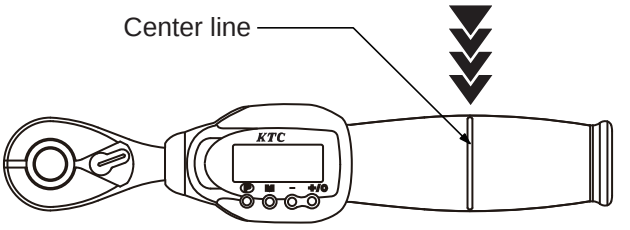


❗ Press the push button on the ratchet part to attach or detach a socket wrench. ⇨See 9

For accurate torque measurement

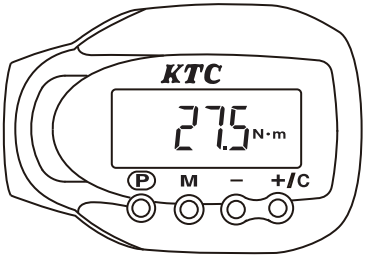
NOTE Be sure to observe the following precaution for obtaining more accurate measurements.

Apply force to the center line of the grip when making measurements.

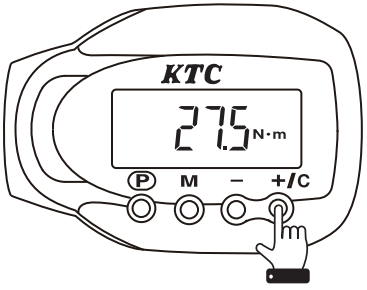


1. <<Operations in the Measurement Mode>>

(2) (continued)



After a measurement is made, the torque reading is shown on the display. The display shows the maximum measurement when the Peak Hold mode is active.



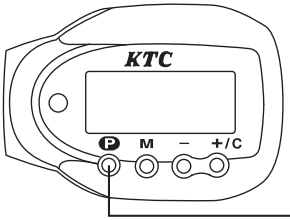
To disable the Peak Hold mode, press the + (Plus)/ (Clear) button.

NOTE The display keeps showing the torque while no operation is made. If no operation is made for two minutes, however, the power is automatically turned off and thus the measured torque is lost.

2. <<Unit Conversion >>

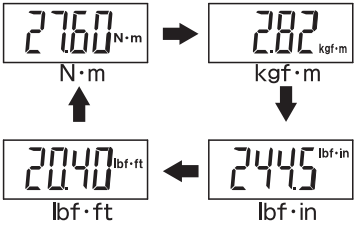
NOTE No unit conversion can be made in the Track mode.

The **Digital Ratchet** has the function to convert units for measurements.



P button

After a measurement is made in a mode with the Peak Hold function active or while a torque is being set in the Preset mode, you can convert the torque into a value in another unit by pressing the P button.



NOTE

Be aware that pressing the P button for a long time will turn OFF the power.

NOTE

The value after conversion is a reference value. In addition, since values after conversion have been rounded according to the minimum display unit, the values are a little off the original value. The unit indicator will light after the unit conversion is made to signal that the value is just a reference value.

3. <<Operations in the Preset mode>>

The Digital Ratchet allows you to preset target torques and tighten/loosen in accordance with those torques like a preset-type torque wrench. (See 3-(4))

In addition, it allows you to store (preset) torque values to different memory numbers, which is useful for frequent or repeated tasks. (See 3-(4))

Set a target torque as necessary.

Set a target torque.

Measurement

Preset a target torque.

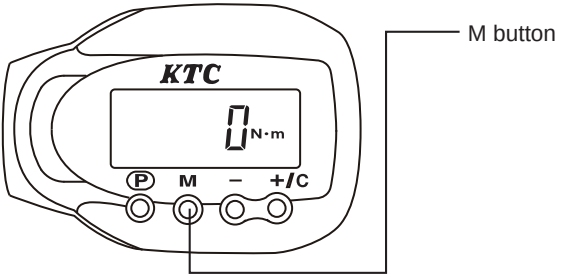
Set a target torque.

Register

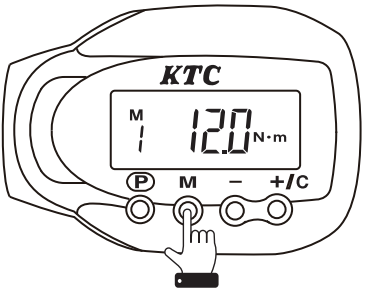
Measurement

(1)Turn ON the power. (See 1 -(1)).

(2)Select the Preset mode.



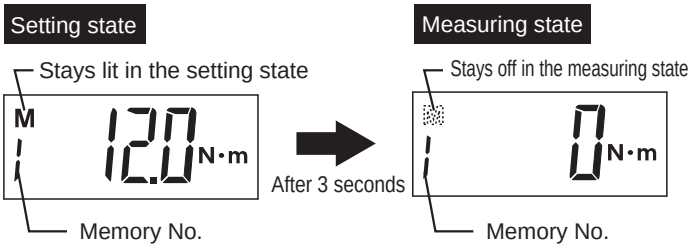
Turn ON the power, and then press the M button once after the instrument enters the Measurement mode.



The display shows "M" at the upper-left corner and the registered torque value as the current setting of the Preset mode. (For how to make the setting, see 3-(4).)

3. <<Operations in the Preset mode>>

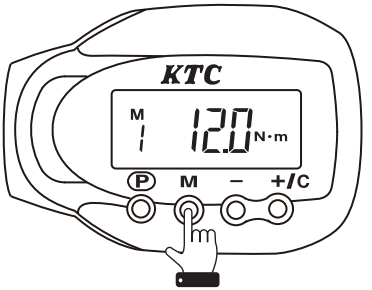
Preset mode display



The setting state will turn to the measuring state with "M" at the upper-left corner of the display disappearing after three seconds of no operation.

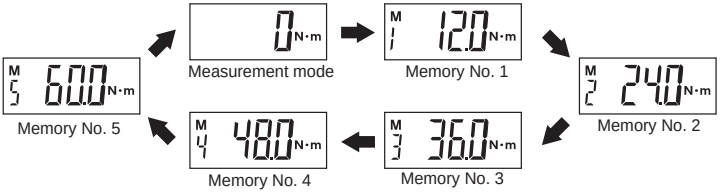
Memory numbers

In the Preset mode, you can preset up to five torque values storing them into memory numbers 1 through 5.



Every time the M button is pressed, the next memory number is called up.

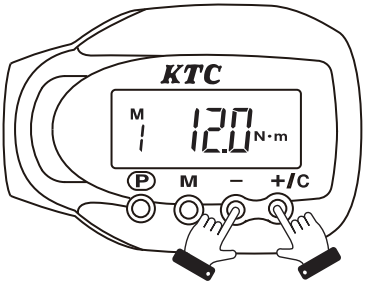
Pressing the M button when the memory No. 5 is shown returns the display to the Measurement mode.



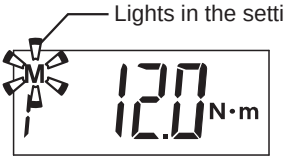
A torque value is registered to each of the memory numbers before shipment. Use the memory numbers by changing their torque value.

3. <<Operations in the Preset mode>>

(3) Setting a target torque value



Press the + (Plus)/C (Clear) and - (Minus) buttons to display the torque value you wish to set.You can change the value faster by pressing the M button longer.

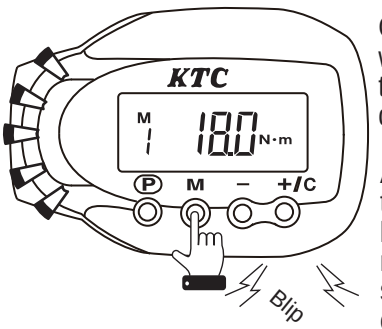


Preset mode display
(Setting state)

"M" lit at the upper-left corner of the display signals that the current reading is different from the preset torque registered in the memory number.

NOTE The preset torque values are all lost when the power is turned off. When the power is automatically turned off after two minutes of non-operation, however, the value registered last is kept in memory, although the other values are lost.

(4) Registering a target torque value

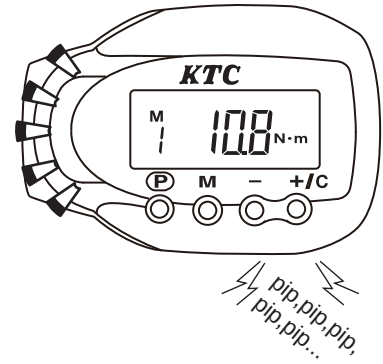


Call up the memory number to which you wish to register a torque value and set your desired value.
(See 3-(3))
After setting your desired torque, press the M button longer. The value will be registered along with a short sound of buzzer and flashing of the LED lamp.

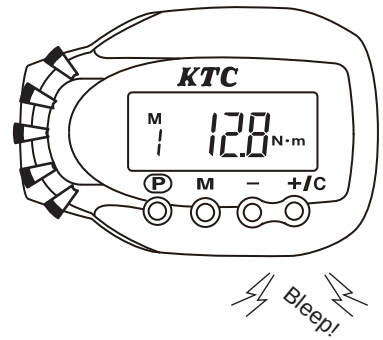
NOTE A newly registered torque value will overwrite the value previously registered in the memory number.

3. <<Operations in the Preset Mode>>

(5) Measuring a torque (see 1-(2))



In the Preset mode, the instrument notifies you of the target torque being approached with intermittent sounds of buzzer and flashing of the LED lamp. It starts when the measured torque has reached 10% short of the target.



In the Preset mode, the instrument notifies you that the measured torque has exceeded the target value by emitting a continuous buzzer sound and lighting the LED lamp.

NOTE The torque value is displayed according to the setting made in 4-1.

Peak Hold mode ⇒ The value is maintained until it is canceled.

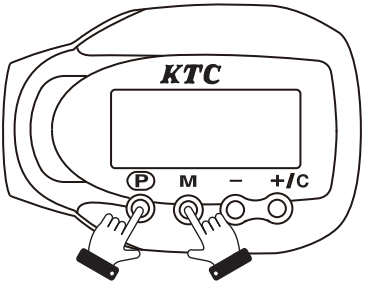
Auto Clear mode ⇒ The value is cleared after the specified time has elapsed.

Track mode ⇒ The torque value applied is displayed at all times.

4. <<Custom Settings>>

The Custom Setup screen allows you to make various settings to use the instrument more conveniently.

Setup screen operations



To open the Custom Setup screen, press the P button while holding the M button with the power turned off. The Custom Setup screen appear.

After the screen is opened, every time the M button is pressed, the setting item changes.

After the Setup Screen is opened

M button	Selects setup screens
+ (Plus)/C (Clear) button	Changes settings
- (Minus) button	

Custom Setup screen startup

Power ON

Measurement display mode setting

See 4-1

Auto Clear mode time setting

See 4-2

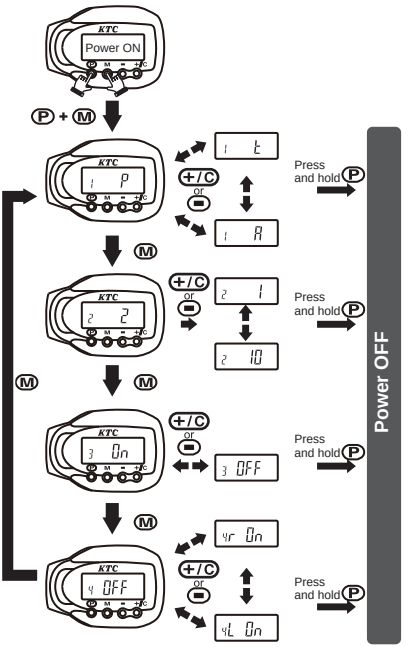
Buzzer Sound Setting

See 4-3

Pass/Fail mode setting

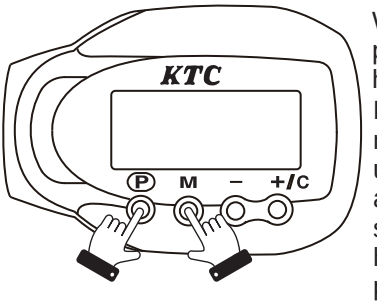
See 4-4

See 5-(1)



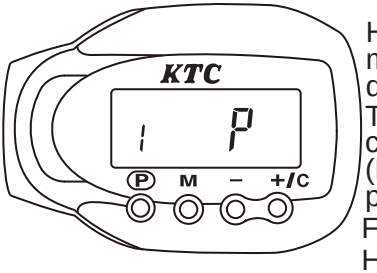
The settings made in the Custom Setup screen will take effect after turning OFF the power and turning it ON again.

4-1. <<Custom Setting: Measurement Display Mode Setting>>



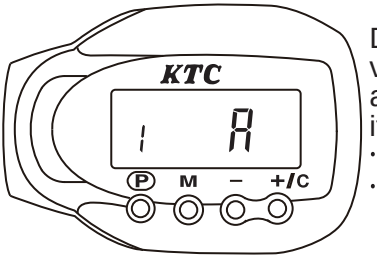
With the power turned off, press the P button while holding down the M button. Now you can set up the measurement display mode using the + (Plus)/C (Clear) and - (Minus) buttons.After the setting is made, press and hold the P button to turn the power off, which completes the setting.When the power is turned on next time, the modified settings are enabled.

a. Peak Hold mode



Holds the maximum measurement value and display it.
The held value will not be cleared unless the + (Plus)/C (Clear) button is pressed.
Factory setting: P (Peak Hold)

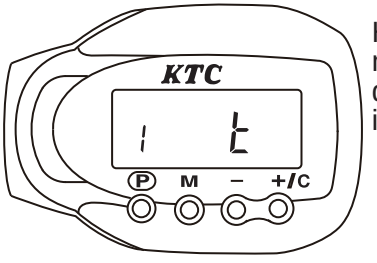
b. Auto Clear mode



Displays the measured value for the specified amount of time and clears it automatically.
・Factory setting: 2 seconds
・Settable time : 1 to 10 seconds

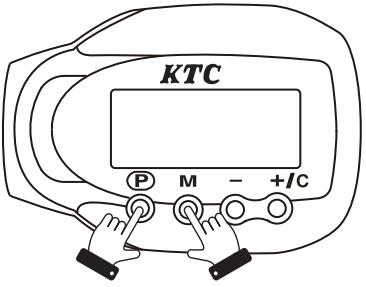
(See 4-2 for the setting)

c. Track mode

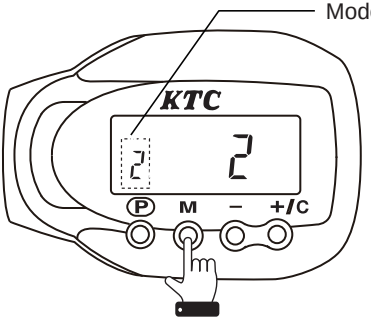


Holds no maximum measured value and displays measured torques in real time.

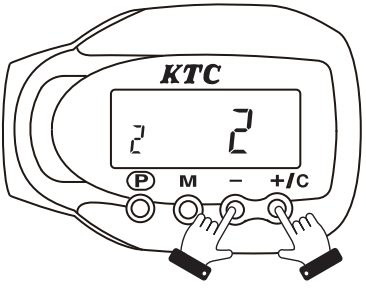
4-2. <<Custom Setting: Auto Clear Mode Setting>>



With the power turned off, press the P button while holding down the M button.



After the power is turned on, press the M button to open the setup screen. Check that the mode indicator shows "2".

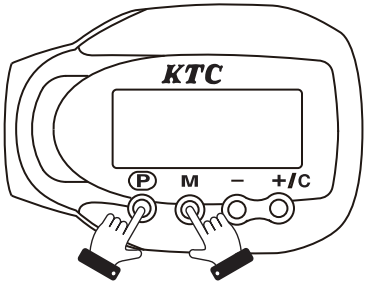


Now you can set up the time using the + (Plus)/C (Clear) and - (Minus) buttons.

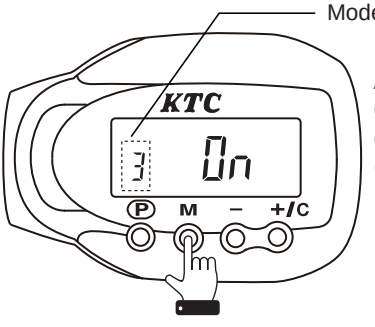
(1 to 10 seconds)

After the setting is made, press and hold the P button to turn the power off.

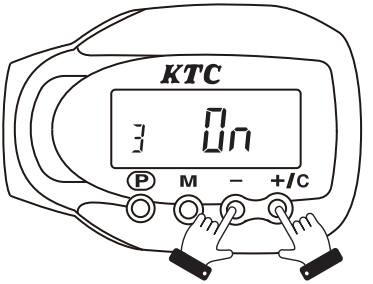
4-3. <<Custom Setting: Buzzer Sound Setting>>



With the power turned off, press the P button while holding down the M button.



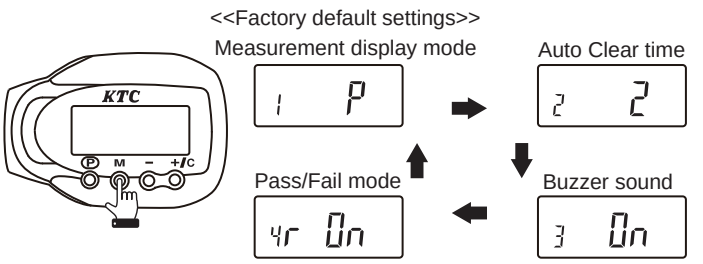
After the power is turned on, press the M button to open the setup screen. Check that the mode indicator shows "3".
Factory setting: **On**



Now you can turn ON/OFF the buzzer using the + (Plus)/C (Clear) and - (Minus) buttons.
After the setting is made, press and hold the P button to turn the power off.

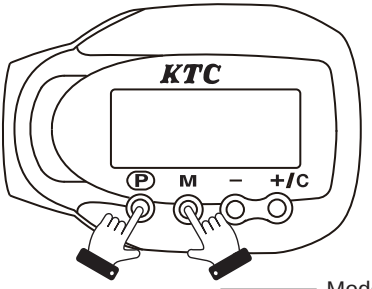
To make settings consecutively

To make the settings consecutively, press the M button after finishing the setting in each screen, which opens the next setting screen.

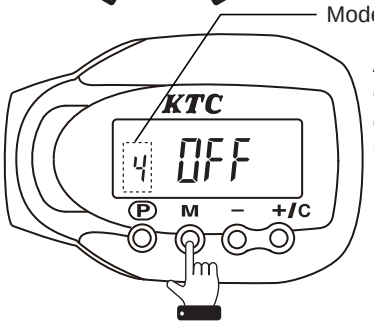


4-4. <<Custom Setting: Pass/Fail Mode Setting>>

(1) Opening the Custom Setup screen

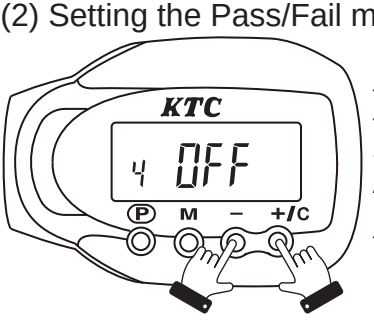


With the power turned off, press the P button while holding down the M button.



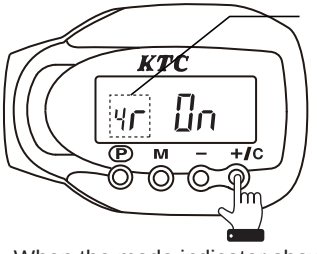
After the power is turned on, press the M button to open the setup screen. Check that the mode indicator shows "4". Factory setting: **OFF**

(2) Setting the Pass/Fail mode

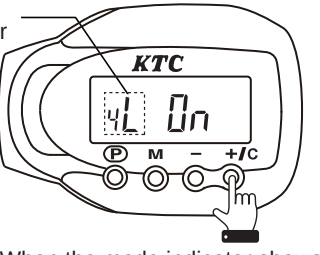


Now you can turn ON/OFF the Pass/Fail mode using the + (Plus)/C (Clear) and - (Minus) buttons.
After the setting is made, press and hold the P button to turn the power off.

The criteria for determining pass or fail are set for each direction of turning bolts or nuts.



When the mode indicator shows "4r", pass or fail is determined in the right-turning direction in the Pass/Fail mode.

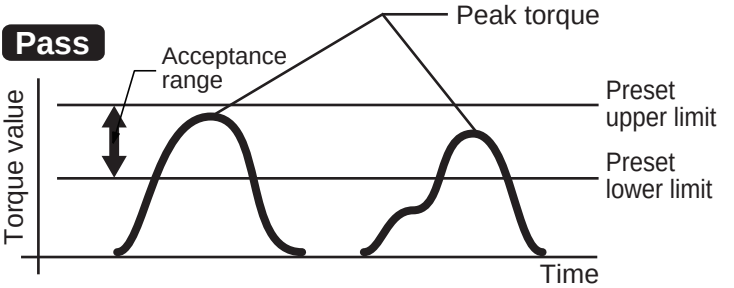


When the mode indicator shows "4L", pass or fail is determined in the left-turning direction in the Pass/Fail mode.

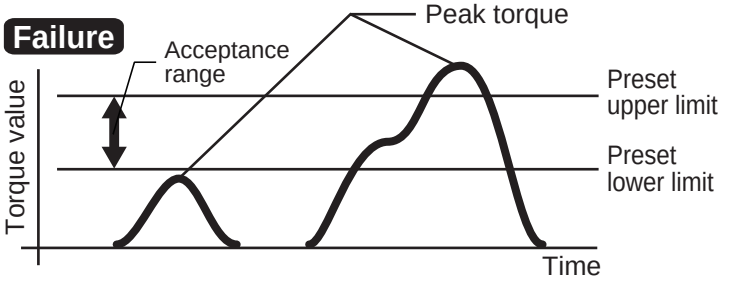
5. <<Custom Setting: How to Use the Pass/Fail Mode>>

What is the Pass/Fail mode?

This is the function to check if the instrument has been used within the preset torque range.
It records how many bolts and nuts have been processed correctly in the history (count).

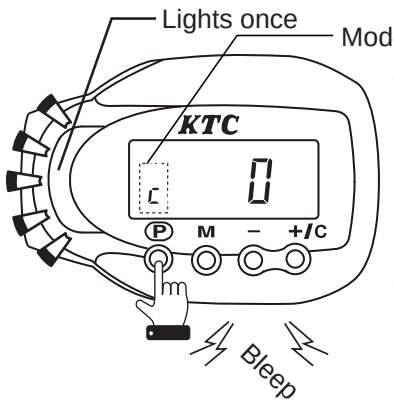


If a torque peak falls within the preset torque range, it passes the criteria, increasing the pass count.



If a torque peak does not fall within the preset torque range, it fails the criteria, and does not increase the pass count.

(1) Power ON



The instrument enters the Pass/Fail mode when the power is turned off and on after it is set to the Pass/Fail mode as described in 4-4. The mode indicator shows "C". The number shown in the "C" display is the pass count.

5. <<Custom Setting: How to Use the Pass/Fail Mode>>

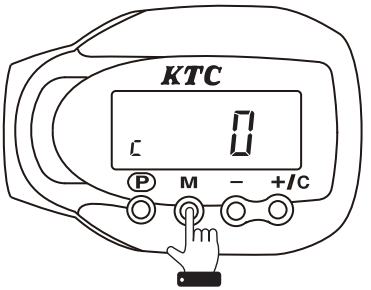
Pass/Fail mode display
(With no load applied)

NOTE
If an error code appears, troubleshoot it referring to 8.

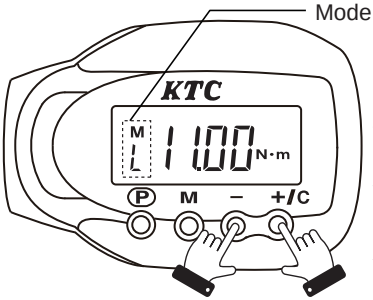
Be sure to not to apply any force to the instrument after turning it on until the display displays "0". If it is turned ON with some force applied, it may not indicate the torque correctly.
When you use it in a place where it is exposed to sudden changes in temperature, turn it OFF and ON frequently.

(2) Setting a target torque

Setting the lower limit for acceptance

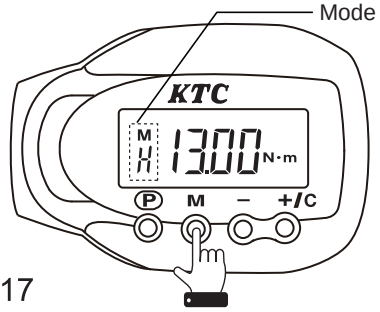


After turning on the power, press the M button once to set the target torque range.



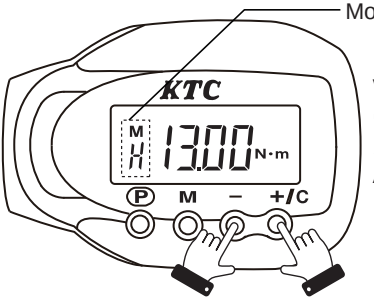
Check that the mode indicator is in the state as shown left. "L" denotes that the lower limit is being set. Now you can set a torque value using the + (Plus)/C (Clear) and - (Minus) buttons. After the setting is made, press and hold the M button to register the value.

Setting the upper limit for acceptance



Press the M button to set the upper limit. Check that the mode indicator is in the state as shown left. "H" denotes that the upper limit is being set.

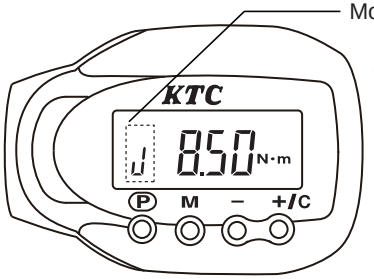
Setting the lower limit for acceptance (continued)



Now you can set a torque value using the + (Plus)/C (Clear) and - (Minus) buttons.
After the setting is made, press and hold the M button to register the value.

Every time the M button is pressed, the display changes as shown above.

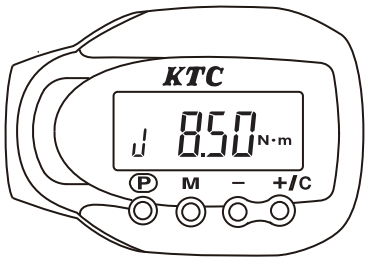
Measurement in the Pass/Fail mode



Applying a torque on the instrument causes it to display the measured torque on the display with the mode indicator showing "J".

NOTE The torque value is displayed according to the setting made in **4-1**.
Peak Hold mode ⇒ The value is maintained until it is canceled.
Auto Clear mode ⇒ The value is cleared after the specified time has elapsed.
Track mode ⇒ The torque value applied is displayed at all times.

Measurement in the Pass/Fail mode (when the measurement is less than 90% of the preset lower limit torque)

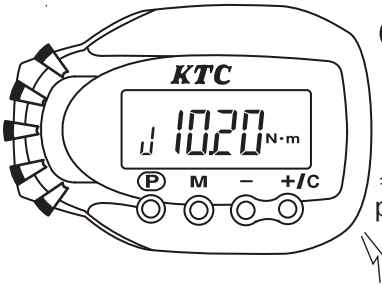


Failure

The LED does not light and the buzzer does not sound.

5. <<Custom Setting: How to Use the Pass/Fail Mode>>

Measurement in the Pass/Fail mode (when the measurement is 90% to 100% of the preset lower limit torque)

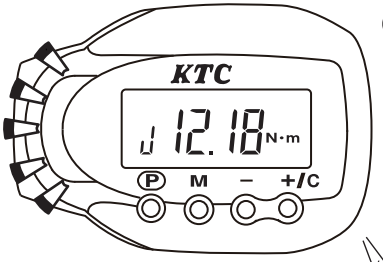


Failure

The LED lights and the buzzer (intermittent blip sound) sounds.

pip,pip,pip,pip,pip...

Measurement in the Pass/Fail mode (When the measurement is between the preset lower limit torque and upper limit torque)

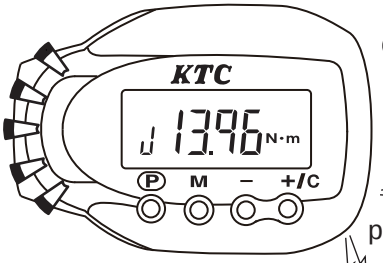


Pass

The LED lights and the buzzer (continuous beep sound) sounds.

Bleep!

Measurement in the Pass/Fail mode (when the measurement has exceeded the upper limit torque)

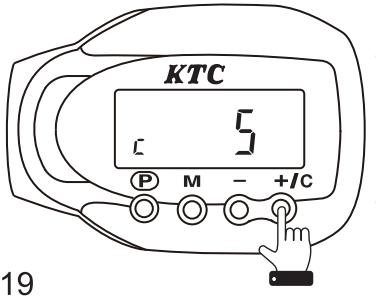


Failure

The LED lights and the buzzer (intermittent, quick blip sound) sounds.

pip,pip,pip,pip,pip...

Measurement results in the Pass/Fail mode



The number of times that the measurement has passed the acceptance criteria is automatically counted.
To cancel the count, press the + (Plus)/C (Clear) button.

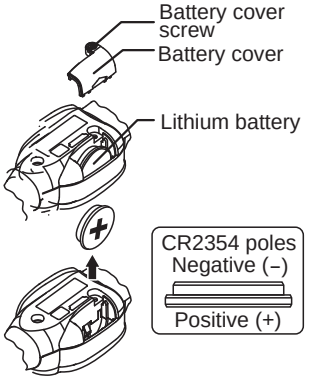
6. <<Functions of Modes and Buttons>>

Mode	State	Buttons and Functions	
Power OFF		P	Power ON
		P+M	Opens the Custom Setup screen
Measurement mode	When no load is applied	P	Turns OFF the power (press and hold)
		M	Switches the Preset mode
Preset mod	Setting state	P	Switches the unit of display
		P	Turns OFF the power (press and hold)
		M	Switches the memory numbers
		M	Registers the value into memory (press and hold)
		+/C	Increases the torque value/Increases it faster by pressing it longer
		−	Decreases the torque value/Decreases it faster by pressing it longer
	Measuring state	P	Turns OFF the power (press and hold)
		+/C	Increases the torque value/Increases it faster by pressing it longer
		−	Decreases the torque value/Decreases it faster by pressing it longer
Common in Measurement and Preset modes	In the Peak Hold mode	P	Switches the unit of display
		P	Turns OFF the power (press and hold)
		+/C	Cancels/Clears a numeric value
Pass/Fail mode	When no load is applied	P	Turns OFF the power (press and hold)
		+/C	Cancels/Clears a numeric value
	Setting state	M	Switches between the upper limit and lower limit
		M	Registers the value into memory (press and hold)
		+/C	Increases the torque value/Increases it faster by pressing it longer
		−	Decreases the torque value/Decreases it faster by pressing it longer
Custom settings	Measurement display mode	M	Selects the setup screens
		+/C / −	Changes the setting
		P	Finish the setting/Turns OFF the power (press and hold)
	Auto Clear mode	M	Selects the setup screens
		+/C / −	Time setting
		P	Finish the setting/Turns OFF the power (press and hold)
	Buzzer setting	M	Selects the setup screens
		+/C / −	ON/OFF setting
		P	Finish the setting/Turns OFF the power (press and hold)
	Pass/Fail mode	M	Selects the setup screens
		+/C / −	Pass/Fail ON/OFF
		P	Finish the setting/Turns OFF the power (press and hold)

7. Replacing and Disposing of Lithium Battery

(1) To replace the battery:

The battery requires replacement when the whole area of the display has started flashing.



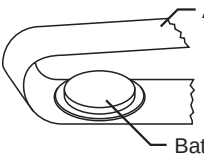
Loosen the battery cover screw at the back of the body using a Philips screwdriver and remove the battery cover to replace the battery.

After replacing the battery, attach the cover and tighten the screw firmly. (The screw does not come off the cover.)

> ❗ Be sure to use the designated battery, lithium coin battery CR2354.

> ⚠ **CAUTION**
>
> Orient the battery to the designated direction. Otherwise, it may cause malfunctions or accidents.

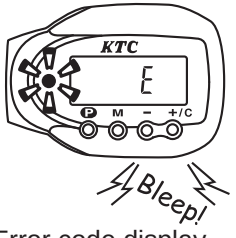
(2) To dispose of the battery:



> ❗ When disposing of the battery, be sure to wrap it with adhesive tape or the like to insulate it from other objects.

8. Error Display

When the torque has exceeded the operating range:

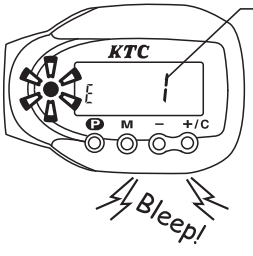


Applying a torque more than the preset limit for the **Digital Ratchet** produces an error.

If it happens, the **Digital Ratchet** shows "E" on the indicator along with a sound of buzzer and flashing of the LED lamp to denote that an error has occurred.

You can release the error state by pressing the +/C button.

Error code display



Error code

When an error code is shown after the power is turned on with a sound of buzzer and flashing of the LED lamp, troubleshoot it referring to the table below.

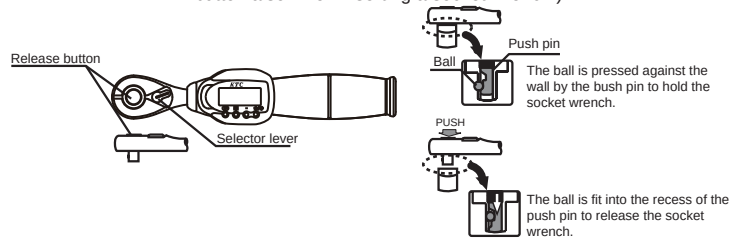
Error code	Remedy
E1	Turn the power off and on again.
E2	Turn the power off and on again.
E3	Requires repair.
E4	Requires repair.
E5	Requires repair.
E6	Turn the power off and on again.
E7	Turn the power off and on again.

> ❗ Error codes E1, E2, and E6 may appear when turning on the instrument near strong electromagnetic sources. Turn the power off and on again after taking a distance from any electromagnetic source or turning it off.

> ❗ If the error persists even after taking the measures described above, the instrument needs to be repaired. Contact your local **KTC** distributor for repair.

9. Union Mechanism

• Union mechanism : The union mechanism ensures that the socket wrench does not come off unless the release button is pressed. (Press the release button also when inserting a socket wrench.)



• Selector lever : Make sure that the selector lever is operated properly and not positioned halfway. Otherwise, the gear inside the mechanism will be damaged, making the union mechanism ineffective. If the union mechanism is made defective from any damage on the gear or another inner part, replace the damaged part.
No. BR3E-K: Inner parts for No. BR3E (9.5sq ratchet handle)

10. Troubleshooting

Trouble		Cause	Remedy
Instrument cannot be powered.		Insulating sheet has not been removed.	Pull out the insulating sheet (see "Preparation").
		Battery has run out.	Replace the battery (see **7**).
Display is flashing.	Whole area	Battery has run out.	Replace the battery (see **7**).
	M	Registered value and set value are contradicting each other.	Match the registered and set values (see **3**-(4)).
	Unit	All values other than N-m are reference values.	Indicator flashes to denote a reference value.
Reading is unreliable and has significant error.		Excessive force was applied on the grip during measurement.	Apply a force on the grip slowly when taking measurements (see **1**-(2)).
		Load had been applied when the power was turned on.	Do not apply any force on the grip when turning the power on (see **1**-(1)).
		Temperature changed suddenly when the power was turned on.	Turn the power off and on again in a place where the temperature is close to the ambient temperature of the operating environment.
		Measurement was taken while a point other than the grip was being held.	Apply a force to the input point of the grip (see **1**-(2)).
No measurement can be made.		The handle is in the Peak Hold mode.	Cancel the measured value by pressing the +/C button.
		The handle is in the setting state of Preset mode.	Wait for 3 seconds for the handle to enter the measurement state (see **3**-(3)).
Error state cannot be released.			Refer to the error list (see **8**).

11. Cleaning

To clean the instrument, wipe it lightly with dry soft cloth.

⃠ Do not use benzene, thinner, or automobile cleaner for cleaning. Otherwise, the instrument may be deformed or damaged.

12. After-Sales Service

Inspection record

Inspection record is a certificate that shows the results of inspections on the accuracy and performance of the product, which is conducted before shipment in accordance with the KTC internal criteria.

To maintain the torque wrench accuracy

We recommend to have your torque wrench checked for accuracy (calibrate and adjust it as necessary) periodically (once per year or more) to maintain the accuracy of the torque wrench.
We calibate and adjust your torque wrenches as a paid service.
For more information, contact your local KTC distributor.

After-sales services

・Damages to the ratchet inner parts such as drive gear
We offer no free-of-charge replacement for ratchet inner parts since their spare parts are provided as Ratchet Head Repair Kit. Please order the Repair Kit compatible with your Digital Ratchet for replacement of damaged parts referring to the table below.

Part No.	Ratchet Head Repair Kit	
GEK030-R2	For 1/4" sq. model	No.BR2E-K
GEK030-C3	For 3/8" sq. compact model	No.BRC3-K
GEK060-R3	For 3/8" sq. model	No.BR3E-K
GEK085-R3		
GEK085-R4	For 1/2" sq. model	No.BR4E-K
GEK135-R4		
GEK200-R4		

* You need not check the accuracy of the ratchet after replacing its head parts with the corresponding parts included in the Ratchet Head Repair Kit.

・Calibration and adjustment
We calibrate (accuracy check) and adjust your Digital Ratchet as a paid service.

・Issue of calibration certificate
Calibration certificate is provided for certifying that the measuring instrument has been calibrated with a derivative standard traceable to the international standard. It is used to show the accuracy and performance of the instrument to external entities and the public. A calibration certificate provides the following information.
a. Inspection record b. Inspection date
c. Declaration of traceability against the international standard
d. Description of the calibrated instrument (control number, product name, model number, and serial number)
e. Description of the standard used for calibration (product name, model number, capacity, calibration date of the standard itself, and the next planned calibration date)

* Difference between inspection records and calibration certificates
Inspection records document the results of KTC internal accuracy inspections conducted before shipment. On the other hand, calibration certificates document b. through e. above other than inspection record.
For inquiries on repair and others, contact your local KTC distributor.

Memo

Calibration (adjustment) history

Perform the calibration (adjustment) periodically for accurate torque measurement.

1st time	Date	6th time	Date
2nd time	Date	7th time	Date
3rd time	Date	8th time	Date
4th time	Date	9th time	Date
5th time	Date	10th time	Date

Features

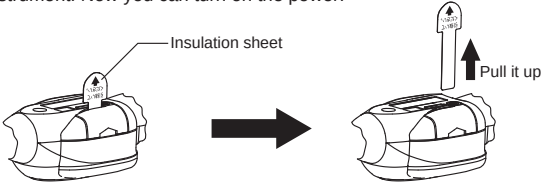
- The Digital Ratchet is a ratchet handle that combines the digital capability for accurate measurement display and the preset capability for excellent operability.
- It notifies the torque using light and sound.
- Its fixed grip and digital display allow you to measure the torque precisely.
- Advanced torque measurement function that conforms to the international standard (ISO).
- The torque can be measured in either direction, right-turning or left-turning.
- You can register up to 5 target torques (preset values).

Usages

- Measurement of tightening and loosening torques of right-turning and left-turning screws.
- Tightening and loosening at a preset torque.
- Tightening and loosening as a ratchet wrench.

Preparation

After unpacking the product, pull the insulation sheet from the battery cover on the rear of the instrument. Now you can turn on the power.



Caution The battery that comes with the product is provided for checking purpose only. You cannot expect the battery to serve for its full useful life.

Digital Ratchet **GEK series serves as:**

Torque wrench

- Custom settings
  You can customize the settings such as measurement display mode and alarm sound (ON/OFF) to fit your purposes.
- Auto Clear mode that make continuous operations possible
  In this mode, the display is cleared after a certain period of time. It is unnecessary to press the Clear button after every measurement.
- Pass/Fail mode
  This mode allows you to preset the upper and lower limits and count the operations that passed the criteria.
- Track mode
  This mode displays the torque value all the time. When no load is applied, the display shows "0".

Ratchet handle

⃠ • The grip may break if a strong force is applied to a point other than the center line of the grip.

Country of manufacture: Japan
Location and name of distributor:

Contact your local **KTC** distributor for inquiries on this product.

* The specifications and appearance of the product is subject to change without notice.