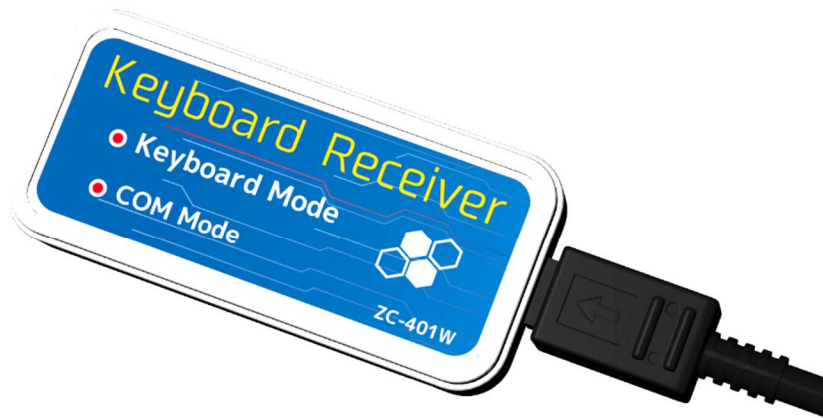

ZC-401W Instruction Manual



Adrec



Rev.1

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1 For safe use

Before using this device, please read this instruction manual carefully and use it correctly.

 Warning	Ignoring the contents of this display and handling it incorrectly indicates the possibility of death or serious injury to a person.
 Note	Ignoring the contents of this display and handling it incorrectly indicates the product may result in personal injury or physical damage.

Warning

- In the following cases, immediately disconnect the connector and contact your dealer or Adrec Corp. Continuing to use the product as is may result in fire, electric shock, accident, or malfunction.
 - If there is smoke, or if there is a strange smell or sound
 - If a foreign object such as a piece of metal or water gets inside the product or in a gap
 - If the product stops working due to being dropped, etc., or if the case is damaged
- Do not disassemble or modify the product.
Doing so may cause an accident or malfunction.
- Do not use the product in a humid place or a place where it may be splashed with water.
Doing so may cause fire, electric shock, or malfunction.
- Do not use in an environment where dew condensation occurs.
Doing so may cause fire, electric shock, or malfunction.
- Do not drop metal pieces or spill liquids such as water on the inside or gaps of the product.
Doing so may cause fire, electric shock, or malfunction.
- Do not connect or disconnect cables with wet hands.
Doing so may cause an electric shock.

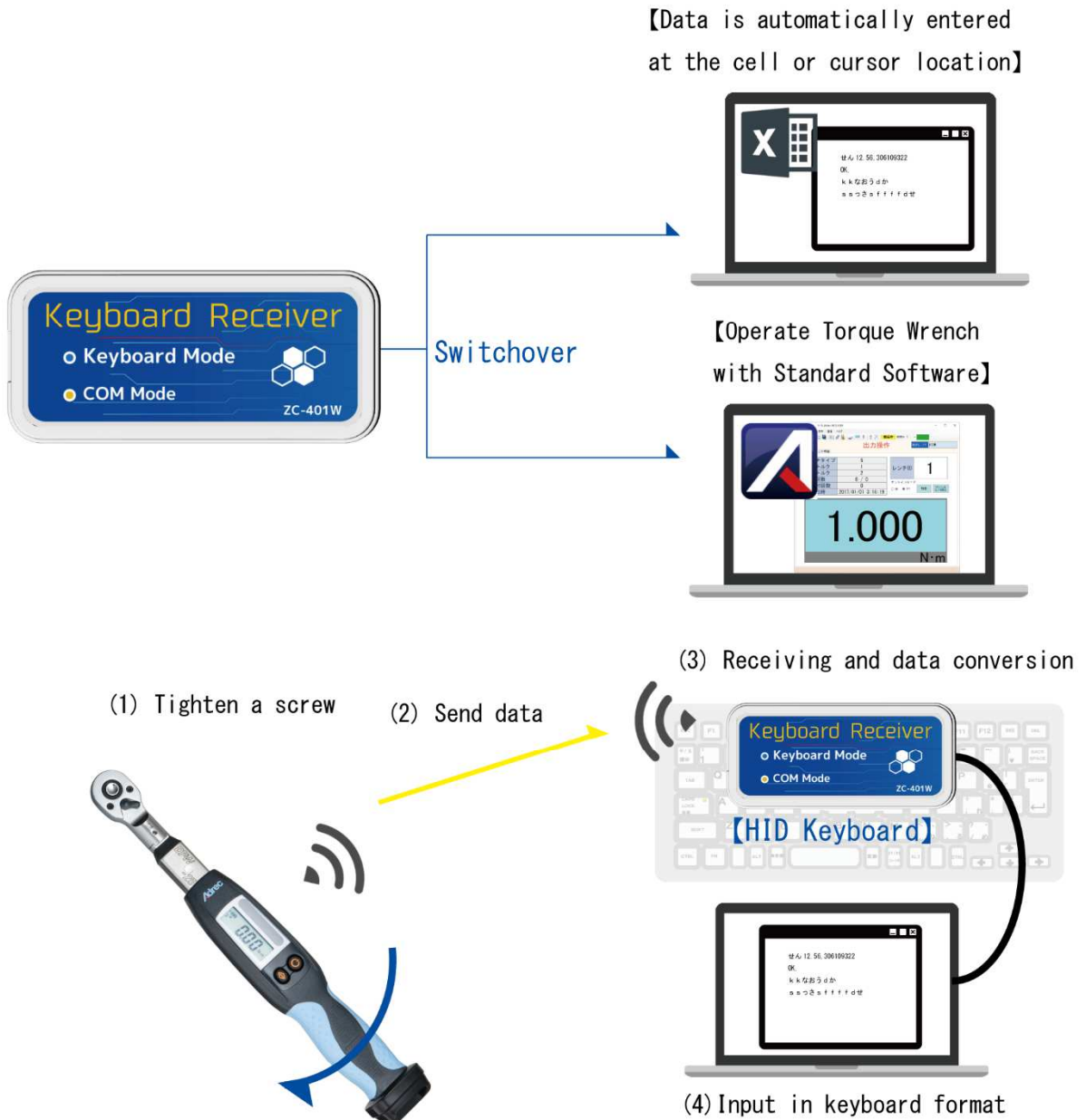
Note

- Do not use this product in any environment other than the operating environment specified in the instruction manual.
- Before using the product, perform a start-up inspection and check the settings.
- Do not step on this product or place heavy objects on it.
- Do not hit, drop, or subject the device to impact.
- Do not place the product in an unstable place.
- Be sure to perform daily and periodic inspections.

2 Overview

This product is a receiving device for automatically inputting tightening results into Excel cells, etc. as a keyboard input device using Adrec's Wireless Torque Wrench without using conventional Standard Software.

This product recognizes and operates as a HID (Human Interface Device) keyboard. Simply select the cursor and tighten the screw to automatically enter the torque value.

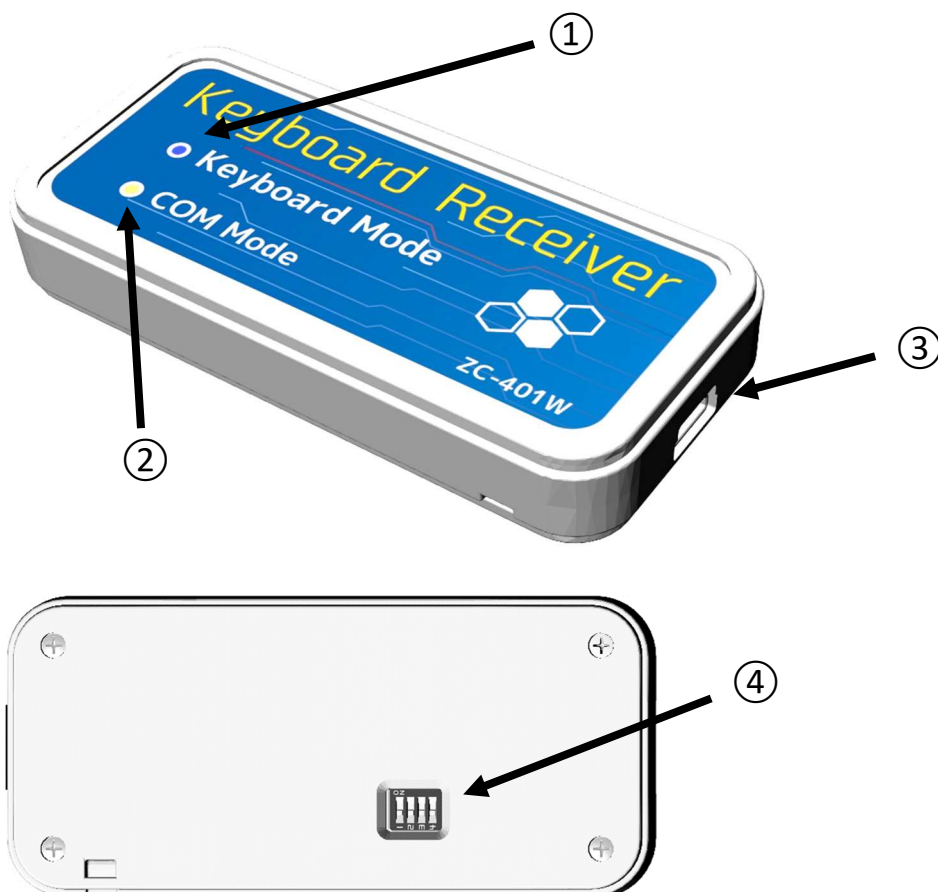


3 Specification

Product name		Wireless receiver for keyboard input
Model		ZC-401W
Wireless communication	Compliance standard	IEEE802.15.4
	Frequency band	2.4GHz band
	Number of channels	16 (11 to 26 channels)
	Connection of multiple units on the same channel	Supported by ID setting of Torque Wrench
	Maximum number of connections	16 units (fixed ID 1 to 16)
	Communication distance	Line of sight about 30 to 60m (Varies depending on the environment)
Recognition device	Keyboard input mode	HID class USB keyboard
	COM mode	USB connection Virtual serial port
Keyboard input	Compatible OS	Windows7 or later
	Correspondence keyboard setting	106/109 keyboard * 1
Power supply		USB power supply 5V / 100mA or less
Interface		USB 2.0/ 1.1
Connector shape		USB Mini-B
Outline		W43.6 × H88.4× D12 mm
Operating environment		0 to 50°C, non-condensing
Mass		about 20g
Accessories		1 USB cable (about 1.8 m)

*1 It is possible to input with keyboard settings other than Japanese, but it may not be possible to input correctly.

4 Name and description of each part



- ① Keyboard input mode LED (Blue)
Lights up during operating in keyboard input mode.
- ② COM mode LED (Orange)
Lights up during operation in COM mode (using Standard Software, etc.).
- ③ USB Mini -B connector
- ④ Switch
Switches operating modes and settings

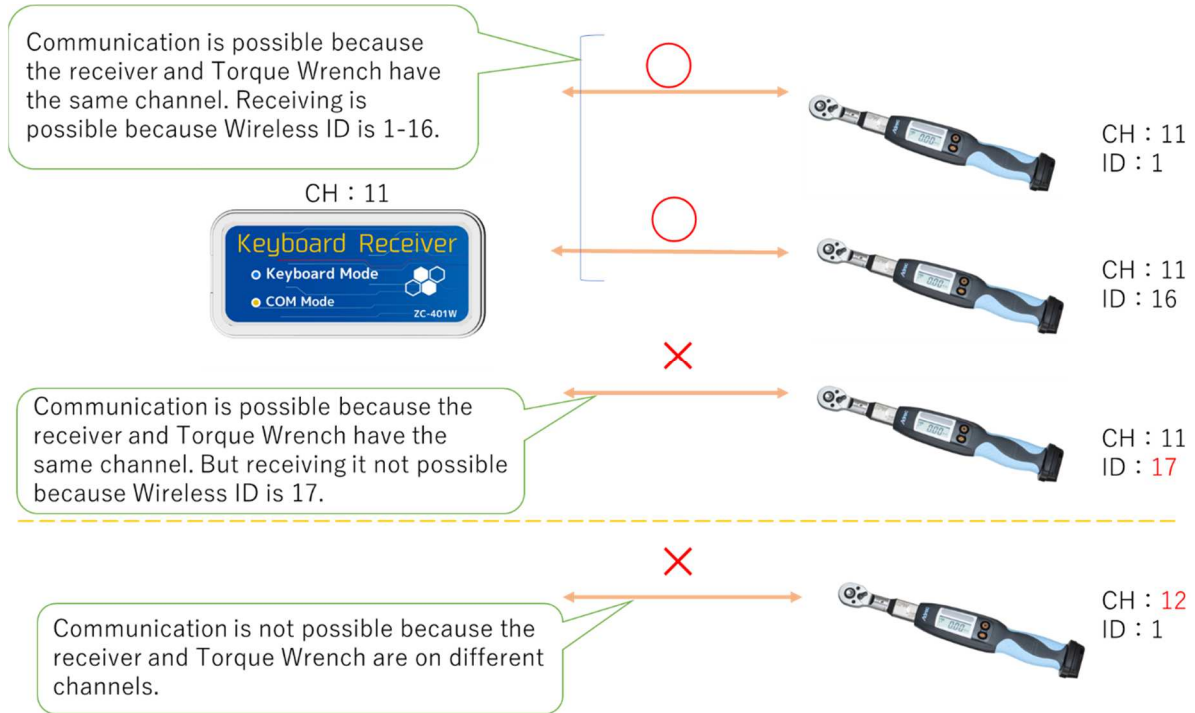
Switch function

Switch number	Content
1	Switching Keyboard input/ COM mode
2	(Spare) *Leave it OFF
3	(Spare) *Leave it OFF
4	(Spare) *Leave it OFF

5 Communication with Torque Wrench

Communication is possible by matching the wireless channel (CH) of the Torque Wrench and this receiver. Also, set the wireless ID of the Torque Wrench to 1 to 16 in addition to the wireless channel.

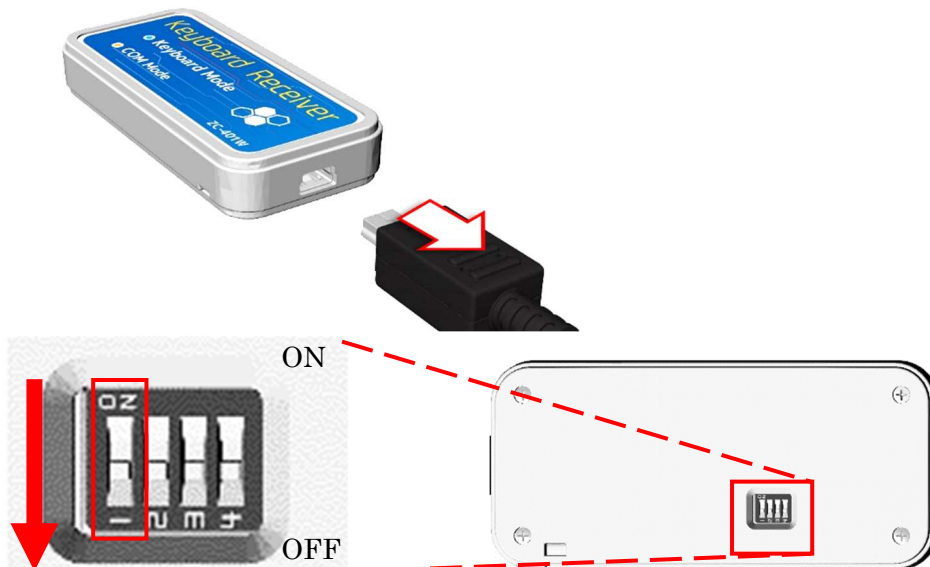
*Wireless ID restrictions apply when using keyboard input mode.



6 Keyboard input method (Keyboard input mode)

(1) With the USB cable unplugged, switch No. 1 of the switch to OFF.

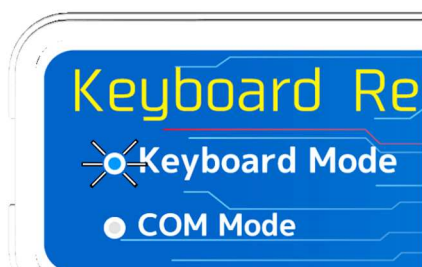
* Use a sharp object such as the tip of a ballpoint pen to operate the switch.



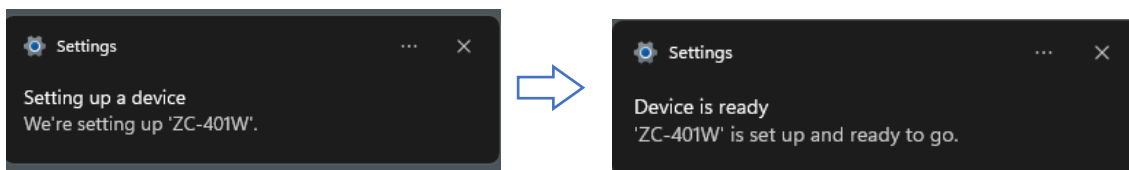
- (2) Connect this device and a PC, etc. with a USB cable.



- (3) The keyboard input mode LED blinks at intervals of 1 second, and switches to lighting when the connection is completed.



* Setup will be performed automatically when connecting for the first time (using the standard driver built into the OS).



- (4) Open the Excel file or software where you want to enter the tightening data, and move the cursor to the place (select the cell) where you want to enter the data.
- (5) Switch the keyboard setting to half-width alphanumeric characters.



*For Windows 10

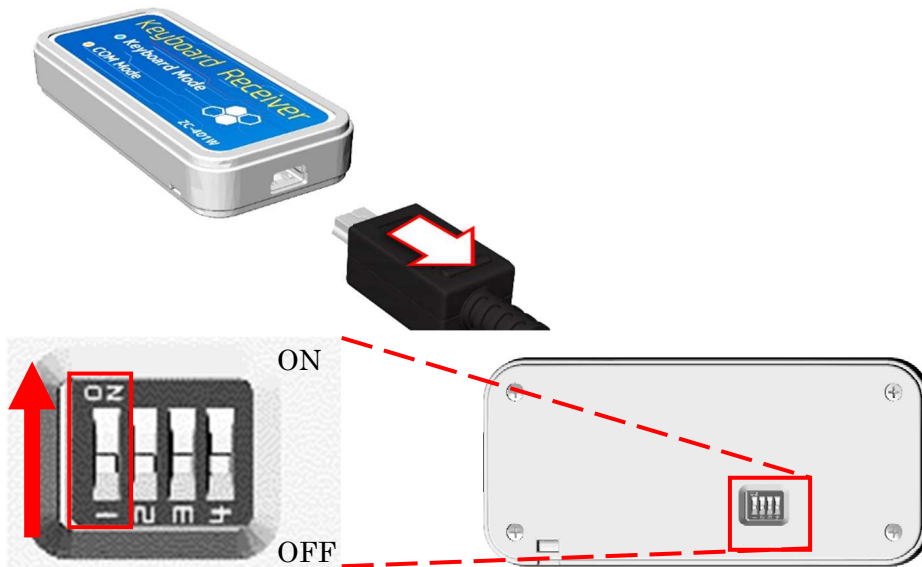
- (6) When the Torque Wrench tightening is completed, the tightening result is automatically entered at the cursor location.

	A	B
1		Results
2	assembly1	1.234,306123456789
3	assembly2	
4	assembly3	

7 Communication method with Standard Software (COM mode)

(7) With the USB cable unplugged, switch No. 1 of the switch to ON.

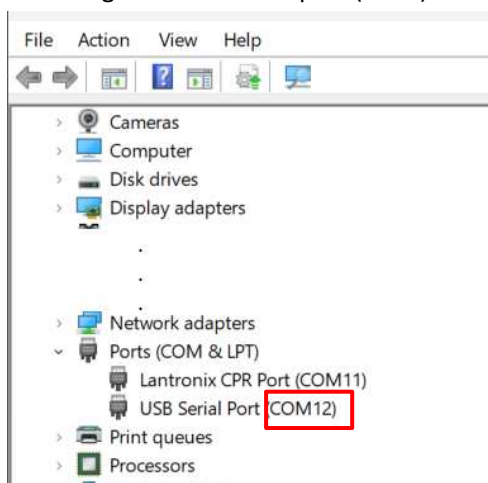
* Use a sharp object such as the tip of a ballpoint pen to operate the switch.



(1) Connect this device and a PC, etc. with a USB cable. (COM mode LED lights up.)



(2) Recognized as a serial port (COM).



*Refer to each manual for the communication method with Standard Software.

8 Setting the keyboard input mode

By using Standard Software, you can set the input method in keyboard input mode.

8.1 Setting method

- (1) Switch the receiver to COM mode.
→Refer to 7. Communication method with Standard Software (COM mode).
- (2) Start Standard Software [Adrec.Net].

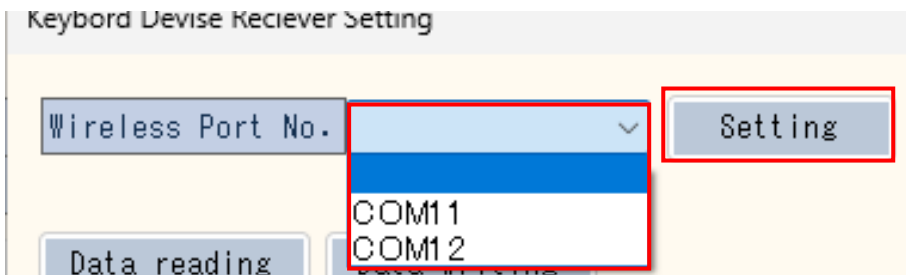


Adrec.Net

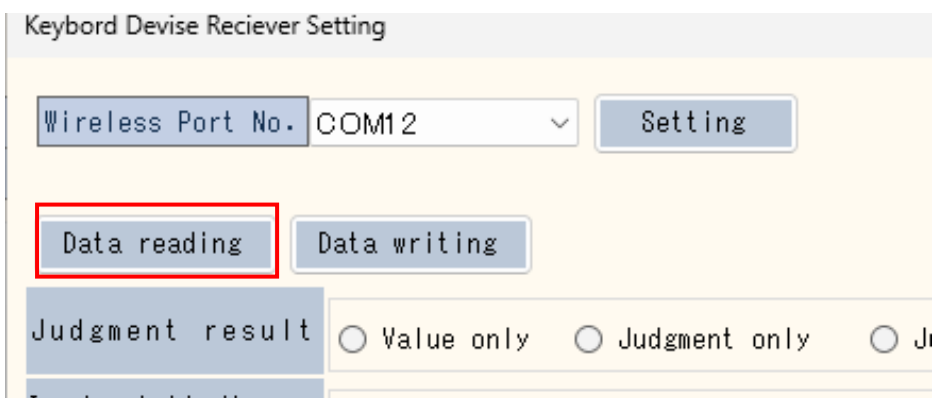
- (3) Select [**Keyboard input receiver settings**] under [**Settings**] tab.



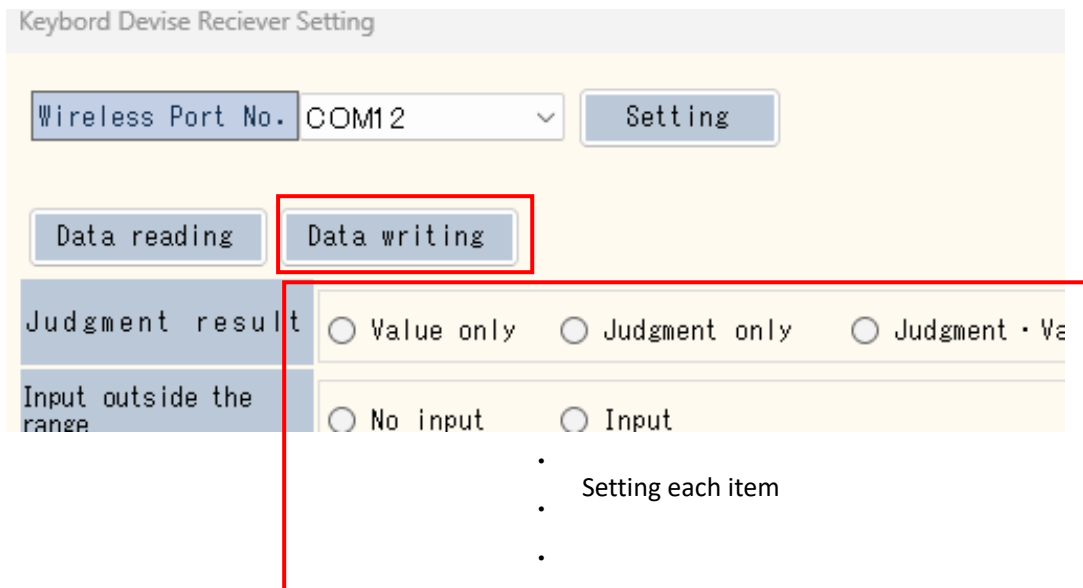
- (4) Select the COM number of the receiver from the wireless port number, and click [**Setup**].



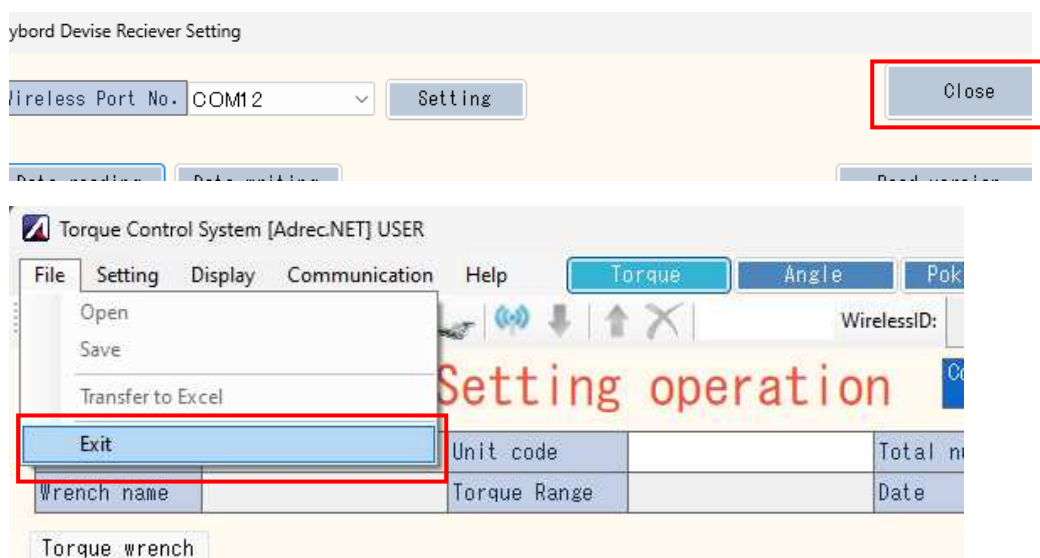
- (5) Click [**Read out settings**] to load the current settings.



- (6) Select and switch settings for each item, and click **[Write Settings]** to rewrite the settings.



- (7) Click **[Close]** to close the screen, and then exit the software with selecting **[Finish]** under **[File]** tab.



- (8) After switching the receiver to the keyboard input mode, perform tightening operation and confirm that the input contents have been switched as set.

8.2 Explanation of setting items

● Judgment result

Compare the measured value with the setting range, and set the input method of the judgment result. "OK" is entered if the judgment result is within the setting range, and "NG" is entered if the judgment result is outside the setting range.

Setting	Input example Torque: 12.34Nm
Measured value only	12.34
Judgment result only	OK
Judgment result/ Measured value	OK, 12.34
Measured value/ Judgment result	12.34, OK

● Input when measured value is out of range

Sets whether or not to input when the measured value is out of range.

Setting	How to be input
No setting	Nothing is entered.
Set	The measured value is entered.

● Torque Wrench identification

Select what you want to enter to identify your Torque Wrench.

Setting	Input example Torque: 12.34Nm, Serial number: 40612345678, ID: 1
Serial number	12.34, 40612345678
Wireless ID number	12.34, 1
None	12.34

● **Date input**

Enter the date and time of tightening.

* Enter the date and time the Torque Wrench was set. (It is not the date and time of the PC.)

Setting	Input example Torque: 12.34Nm, Date: 2 02 1/2/10 9:45:47
None	OK, 12.34
Yes (Date and time placed in front)	2021/2/10, 9:45:47, OK, 12.34
Yes (Date and time placed behind)	OK,12.34,2021/2/10,9:45:47

● **Delimiter**

Choose a delimiter for each data.

Setting	Input example Torque: 12.34Nm
Comma	OK, 12.34
Space	OK 12.34
Tab	OK <u>(Tab)</u> 12.34 <u>(Tab)</u>

● **Suffix**

Select the symbol to be added at the end of data entry.

Setting	Input example Torque: 12.34Nm
Enter	12.34↵
Tab	12.34 <u>(Tab)</u>
Comma	12.34,
None	12.34

- **Display of unit**

Select whether or not to enter the unit of torque value.

*In the case of angle data, no unit is entered.

Setting	Input example Torque: 12.34Nm
None	12.34
With unit	12.34 Nm

- **Angle**

Select the measured value input method and display order in the angle wrench mode.

Setting	Input example Torque: 12.34Nm, Angle value: 45.6°
Angle only	45.6
Torque/Angle	12.34, 45.6
Angle/Torque	45.6, 12.34

- **Double tightening/ Screw tightening inspection**

Select the measured value input method and display order in the Double tightening/ Screw tightening inspection mode.

Setting	Input example Torque: 12.34Nm, Angle value: 45.6°
Torque only	12.34
Torque/Angle	12.34, 45.6
Angle/Torque	45.6, 12.34

9 Change channel

Channels can be changed using Standard Software while in COM mode.

For details on how to change, refer to the instruction manual of the Standard Software.

10 Troubleshooting

Cannot communicate with Torque Wrench	➤ Make sure that the wireless channels of the receiver and Torque Wrench match.
No tightening results entered	➤ Check if the wireless ID of the Torque Wrench is within the specifications. ➤ Make sure the cursor is at the input location.
Blue LED flashes rapidly	➤ Multiple tightening data are sent at the same time and cannot be input in time. Check the number of torque wrenches to be used and the tightening timing.
Can not turn on	➤ Try a different PC or a USB cable. ➤ Check if the USB connector is deformed.
No line breaks after data entry	➤ Please check if it is not set to full-width input. ➤ Make sure that the suffix setting of the receiver is set to "Enter".
Date and time of tightening result differs from that of PC	➤ Reset the date and time of the Torque Wrench.

11 Warranty

The warranty period for this product is one year from the date of shipping. Any failure within the scope of normal use during the warranty period will be repaired free of charge or replaced with a substitute product. However, please note that in the following cases, we will charge a fee even within the warranty period.

- ① When the cause of failure is careless handling
- ② In the event of impact during transportation or movement by the customer
- ③ Failure and damage due to natural disasters, pollution, abnormal voltage and other external factors
- ④ If it is determined that the customer has modified or repaired the product