

INSTRUCTION MANUAL

Professional tool REMOTE CONTROLLER



Model: RC1000

Indoor Use Only CE ESD Protection This instruction manual is written in English. ΕN Instruction manuals in other languages can be downloaded from the URL below. Ce manuel d'instructions est rédigé en anglais. Les manuels d'instructions dans d'autres langues FR 000 peuvent être téléchargés à partir de l'URL ci-dessous. Diese Bedienungsanleitung ist auf Englisch verfasst. DE Bedienungsanleitungen in anderen Sprachen können von der unten genannten URL heruntergeladen werden. Il presente manuale di istruzioni è redatto in lingua inglese. IT I manuali di istruzioni in altre lingue possono essere JANO scaricati dal sequente URL. Este manual de instrucciones está escrito en inglés. NITTO KOHKI ES En la dirección URL indicada abajo se pueden descargar 0 0 0 ^{0 0 0 0 0} los manuales de instrucciones en otros idiomas. Este manual de instruções está escrito em inglês. PT Pode descarregar os manuais de instruções nos outros idiomas a partir do URL indicado abaixo. 本说明手册的语言是英文。 SC 其他语言的说明手册可从以下 URL 下载。

http://www.nitto-kohki.co.jp/e/

[Specifications]

Model		RC1000	
Mass g (lbs)		110 (0.24)	
		(including 3 batteries that come with the controller)	
Battery		3 Alkaline AAA Batteries	
Service life	Continuous standby hours	250 hours (Please refer to p. 8 for details.)	
	No. of times infrared light is emitted	10,000 times (Please refer to p. 8 for details.)	
Compatible electric screwdriver		Refer to the attached "Electric Screwdriver Model List".	
ESD* protection		Compliant with IEC61340-5-1	

* ESD is the abbreviation of Electro-Static Discharge. It means the discharge of static electricity.

- Please read manual carefully before you attempt to use your tool so that you may use it properly and safely.
 Keep the manual handy so you can use it whenever necessary.
 - Due to continuous product development/improvement the specifications and configurations in this document are subject to change without prior notice.

Manufactured by. **NITTO KOHKI CO., LTD.** 9-4, Nakaikegami 2-chome, Ohta-ku, Tokyo, 146-8555, Japan Tel : +81-3-3755-1111 Fax : +81-3-3753-8791 Thank you very much for your purchase of this NITTO KOHKI product.

Before using your tool, please read this manual carefully so that you may use it properly to get the most out of it. **Please keep the manual handy - so you can use it whenever necessary.**

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IMPORTANT SAFETY INSTRUCTIONS

Before using your tool, to avoid personal injury always take the basic precautions explained in later sections.

General Power Tool Safety Warnings

Personal safety

A WARNING

Dress properly.

Do not wear loose clothing or jewelry. There is a danger of being caught in moving parts. Wear a pair of non-slip shoes. If your hair is long, wear a protective hair covering to contain your hair.

- Always wear eye protection. Corrective glasses are not considered eye protection. Always wear appropriate eye protection.
- Wear a dust mask. When dust is generated in the workplace, always wear a dust mask.
- When loud noise is generated in the workplace, always wear a hearing protection.
- Do not overreach. Keep proper footing and balance at all times.
- Be on your guard when working. Do not use a power tool when you are tired. When you use the tool, be sure about the handling method, how to work, and pay sufficient attention to the surrounding environment.



• Be aware of tool vibration and recoil. Some tools can cause a considerable amount of vibration. Depending on how the product is operated, the type of tool setting, and the length of operation, it could place a tremendous burden on your hands, arms and body. The tool could cause a vibration injury or tendonitis. Avoid long-term use and take appropriate breaks. Consult a doctor if you experience any discomfort or pain during operation.

Work area safety

A WARNING

- Do not use the tool at home. This is a professional tool (industrial or work tool for business). Do not bring the tool home and use it there.
- Keep the work area clean. Working in a messy work area or work table could cause an accident.
- Be cautious about the work area.
 Do not expose power tools to rain.
 Do not use the tool in a damp or wet place.
 Keep the work area well lit.
- Do not operate power tools in an explosive atmosphere, such as in the presence of flammable liquids (thinner, lacquer, gasoline, etc.) or gas.
- Do not let children come close to the work area. Keep children and bystanders away while operating tool.
- Some tools generate loud noise. Check that the noise regulations of each area are complied with.
- When work has to be done in high locations, make sure there is nobody underneath the work area.
 If the tool or material is dropped, it could cause an accident or injury.
- Before starting operation, make sure that there is no conduit, water pipe or gas pipe by your work area.
 If a tool touches a buried object, it could cause electrical shock or leakage, which could cause an accident.

Before starting to work

- Perform inspection before using the tool.
 Before using the tool, check for loose screws on the tool and for damage on the protective cover or other parts, and make sure that the tool operates normally and demonstrates prescribed functions.
 Check the position adjustment and tightening status of moving parts, parts damage, attachment status, and all other locations for issues that could affect operation.
 For parts replacement and repair, follow the instructions indicated in the instruction manual.
 If there are no instructions in the instruction manual, contact the retailer where you purchased the tool.
 Do not use the power tool if the switch does not turn it ON and OFF.
- Make sure to properly attach the tip tool. If the tip tool is not attached properly, there is a risk of jumping out or damage, which could result in injury.
- After adjustment, be sure to remove tools such as spanners, wrenches, etc.
- Use appropriate tools.

Do not force small tools to do the job of a heavy duty tool. Do not use tools for purposes not intended.

- Do not use tools in an unreasonable manner. When the specifications are followed, tools can be used efficiently and safely.
- Secure workpieces.

Where possible use clamps or a vise to hold the workpiece. It is safer than using your hand and both hands can be used for operation.



Handling tools

\land WARNING

• Storing the tool

When the tool is not used, store the tool in a dry location. Also, store the tool out of the reach of children. For some tools, the storage temperature and humidity are specified. Store the tool in an appropriate location.

- Be cautious about how the tool is carried. Do not carry the tool with your hand touching the operation switch.
- Do not leave the tool while the tool is still running. Do not leave the work area until you turn off the operating switch, remove the power source and the tool completely stops.
- Do not allow the following chemicals to come into contact with the tool, as parts could deteriorate. Acetone, benzine, thinner, ketone, ether, trichlorethylene and other similar chemicals

Maintenance and inspection

🛆 WARNING

- Do not disassemble or alter the tool. Using the tool after disassembling or remodeling it could cause an accident or injury.
- Inspect tip tools and accessories. Always inspect tip tools and accessories for damage or deterioration before attaching them to the tool. If there is damage or deterioration, replace or request repair from the retailer where you purchased the tool.
- Inspect for damaged sections. Sufficiently check for damage on accessories or other parts, that the tool operates normally, and that work can be performed appropriately. If there are accessories or parts that have been damaged or could hinder work, request repair from the retailer where you purchased the tool.
- Request repair from a dedicated store.

For repair or part replacement, contact the retailer where you purchased the tool. Repair requires special knowledge and skills. If repair is performed at a place other than a specialty store, the tool may not demonstrate its full performance or it could lead to an accident or injury. Request repair with the failed status kept intact. When requesting a repair, do not throw away damaged parts. It could be important information for investigating the failure cause so do not change the status.

• Use genuine parts.

If inappropriate parts are used, it could cause accident or injury.

Genuine parts are listed in the instruction manual or brochure. Contact the retailer where you purchased the tool. • Do not remove the label or nameplate on the tools.

If labels or nameplates are broken or peeling, for a replacement label or nameplate contact the retailer where you purchased the tool.

▲ WARNING

- Use the tools indoors. This tool is not dust and leak-proof. Exposure to dust, sand, or rain while using it outdoors could cause a failure.
- Store alkaline batteries out of the reach of children. Swallowing batteries could cause suffocation or could stay in the stomach, which is very dangerous. If suspected to have swallowed a battery, immediately consult a doctor.
- If the alkali solution of the alkaline battery leaks, do not touch with bare hands. If alkaline solution gets into eyes, there is a risk of blindness. Do not rub the eyes and rinse with clean water and then immediately consult a doctor. If alkali solution adheres to the skin or cloth, skin problems could occur. Immediately rise with clean water. If suspected to have skin problem such as inflammation, immediately consult a doctor.
- Do not toss alkaline batteries into a fire or water or heat, disassemble or short-circuit batteries. Also, do not perform direct soldering to batteries.

Fire or injury could be caused due to rupture of the battery or leakage of alkali solution.

- Do not charge alkaline batteries. Fire or injury could be caused due to rupture of the battery or leakage of alkali solution.
- Do not remove or damage the outer label of alkaline batteries. Doing so could cause overheating accidents.
- Be careful about the plus (+) and minus (-) orientation of alkaline batteries and set correctly as indicated on the device.

Incorrect orientation could result in fire or injury due to rupture of the battery or leakage of alkali solution.

- Do not use batteries other than alkaline batteries. Also, do not use different types of batteries together. Fire or injury could be caused due to rupture of the battery or leakage of alkali solution.
- Do not use batteries after the recommended service life displayed on the alkali battery has elapsed. Fire or injury could be caused due to rupture of the battery or leakage of alkali solution.
- Do not mix and use old (already used) and new batteries together. Fire or injury could be caused due to rupture of the battery or leakage of alkali solution.
- When the battery is used up or not used for a long time, remove the alkaline batteries. If batteries are left as is, alkali solution could leak and cause failure, fire, or injury due to overdischarge.
- When the remote controller is not used, turn OFF the power. Or, remove the alkali battery. If the tool is kept ON and the battery is left as is, alkali solution could leak and cause failure, fire, or injury due to overdischarge.
- If the tool is accidentally dropped or hit, check to ensure there is no breakage, cracking or deformation. Breakage, cracking or deformation could cause electric shock or injury.
- When the tool becomes overheated, or you notice anything abnormal during usage, switch it OFF immediately and request that the tool be repaired.

- Do not apply a shock (such as dropping) or excessive load to the LCD. The LCD uses glass. When the glass cracks, it could cause electric shock or injury.
- Be careful about storage in cold climates. The LCD could be damaged due to condensation or freezing.
- Do not apply a shock (such as dropping) or excessive load to the power supply switch and operation button. Doing so could cause a failure.
- Alkaline batteries are expendable parts. They are not covered under warranty. The alkaline battery included in the package is used for checking initial operation. The service life of the battery may be short. Use a new alkaline battery.
- The security function is not a function to prevent theft. We provide no warranty whatsoever that protects against the product being stolen.

- Pay sufficient attention when handling the password. Cancellation or extraction of passwords shall be paid services.
- Be cautious about loss or failure. There are functions provided to lock (remote keylock, security function) the electric screwdriver using a remote controller. When the remote controller is lost or fails, the screwdriver may no longer be used due to those functions. We recommend that you have a spare remote controller.

About Unit Notation

This instruction manual is written using both SI units and the imperial measurement method (yards, pounds). Numeric values outside the () are the value in SI units, while those inside the () are the imperial measurement value.



About FCC/ISEDC

 NOTE: This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient of relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.
- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
 (1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

1 Application

This is a remote controller used to set the electric screwdriver remotely using infrared communication.

2 Checking Inside the Package

When you open the package box, check the content of the package and also check for any damage caused by incidents during transportation.

If a problem is found, consult with the store where you purchased the product.

Package content and list of accessories

Package content and accessories	Quantity
Remote Controller (main unit)	1
Alkaline AAA battery	3
Instruction Manual (this book, Japanese)	2
Electric Screwdriver Model List	1

• The alkaline battery included in the package is used for checking initial operation. The service life of the battery may be short. Use a new alkaline battery.

3 Part Names



Name		Function
1	Power supply switch	Turns the power ON/OFF.
2	[TRANSMISSION] button	Press to send the setting data to the electric screwdriver.
3	[SELECT] button	Selects setting items.
4	Infrared transmission unit	Sends infrared light to the electric screwdriver.
5	LCD screen	Displays the settings and remote controller status.
6	[UP] button	Press to change settings.
\bigcirc	[RETURN] button	Returns to the previous setting.
8	[DOWN] button	Press to change settings.
9	[ENTER] button	Finalizes the set item.
10	Accessory attachment part	Used to attach a tag or strap.

4 Specifications

Battery level indicator

When the battery level becomes about half, a battery icon is displayed on the LCD.

The battery level is about half.
Data transmission becomes unstable. Replace the battery.

 Continuous standby time and the number of times data is transmitted are the standard reference upon starting to use a new battery. These hours and times yany depending on the frequency of hutton operation. 		
Those hours and times vary dependin	ig on the frequency of button operation.	
Continuous standby hours:	Standard reference when the button is not operated and infrared light is not emitted	
No. of times data is transmitted:	Standard reference on the condition that buttons other than data transmission are not operated	

Data transmission range

The standard range of data transmission from the device to the electric screwdriver is the following range and distance from the front of the motion setting area of the electric screwdriver.

Switch the electric screwdriver to be set to data receiving mode. It is possible to set multiple screwdrivers at the same time.

For operation of the electric screwdriver, refer to the instruction manual for the electric screwdriver.



- The range of data transmission is a standard reference. The range changes depending on the ambient environment and battery consumption.
- The back of the motion setting area, the top and bottom sides, and the sides of the electric screwdriver do not respond.
- When the battery level becomes low, the distance and range become narrower and response becomes dull. Replace with a new battery.
- If there is blocking material between the device and the electric screwdriver, the screwdriver may not respond. Also, if the surrounding wall or ceiling is black, it may be difficult for the electric screwdriver to respond.

5 Preparation

Removing the packaging sheet

The packaging sheet protects the device from scratching until the device is delivered to the customer. This sheet is not intended to protect the device from scratching during use. Remove the sheet before use.



Attaching a battery

Remove the battery cover and insert alkaline batteries. Insert batteries in the correct orientation of + and -.



6 Basic Operation

Start

When the power switch is slid to the ON side, text is displayed on the LCD and the device starts up.

When you finish using it, slide the power switch to the OFF side.



Basic usage

Use this device to make settings and send them to the electric screwdriver. To prevent inadvertent operation, the device does not respond when you lightly press the buttons. Press the buttons firmly. When a button is pressed, an electronic sound is emitted.

1 Turn ON the power switch of the remote controller

After the software version is displayed on the LCD, MAIN MENU is displayed.

2 Press the [SELECT] button to select MAIN MENU

Select from the following.

MAIN MENU	Setting details	Reference
MOTION	Sets the content of "Motion setting mode" of the electric screwdriver.	p. 14
FUNCTION	Sets the content of "Function setting mode" of the electric screwdriver.	р. 16
CH PATTERN	Sets the order of channel switching.	р. 18
KEYLOCK	Sets keylock/unlock.	р. 22
TORQUE CHECK	For torque check, operates the electric screwdriver at the final speed level.	p. 23
SECURITY	Sets the password to request the password upon power ON of the electric screwdriver.	p. 24



3 Press the [ENTER] button

4 Select the [SELECT] button to select the setting item and press the [ENTER] button

To return to the previous item, press the $\left[\text{RETURN} \right]$ button.

5 When \rightarrow is displayed on the LCD, use the [UP] button / [DOWN] button to change the value

- **6** Use the [ENTER] button to finalize the value The set value is saved. Repeat Steps 4 to 6 to set each item.
- 7 Change the electric screwdriver to set to receiving mode Change all electric screwdrivers to set to receiving mode. (p. 12) Check that the main LED of the electric screwdriver lights in yellow.
- 8 While •)) is displayed on the LCD of the remote controller, press and hold the [TRANSMISSION] button

When the screwdriver starts receiving data, the main LED lights in blue and when receiving is completed the LED flashes in blue.







Switching data receiving mode

Make all electronic screwdrivers to be set from the remote controller to data receiving status.

1 While the electric screwdriver is in screw fastening mode, press and hold the [MEMORY] button and the [DOWN] button



Press and hold at the same time

The buzzer sounds, the main LED lights in yellow and the workpiece LED goes off.

Data reception from the remote controller is awaited.

Pressing and holding the [SELECT] button cancels data receiving mode.



Receiving data from the remote controller

When the data is sent to the electronic screwdriver from the remote controller, the main LED of the electric screwdriver lights in blue.

When reception is successful, the main LED flashes in blue and the mode of the electric screwdriver returns to screw fastening mode.



When reception fails, the main LED lights in yellow again to wait for data reception again.

Initialization of settings

It is possible to initialize settings of the remote controller to the factory default.

- **1** Turn OFF the power of the remote controller
- 2 While pressing the [TRANSMISSION] button and [DOWN] button, turn on the power

Initialization completes and a beep sounds.



7 Settings

• Always record the set values. You can utilize "Setting memo" (p. 34).

If the tool fails, all settings may be initialized. Also, settings may be initialized at the time of repair in order to check operation.

Please note that there is no function to output the set values to an outside device.

MOTION settings

Using "MOTION" in MAIN MENU, you can set the content of "Motion setting mode". Setting is made for each channel.

The motion setting mode of the electric screwdriver and remote controller menu correspond as shown in the following table.

For the details of each function, refer to the instruction manual for the electric screwdriver.

Motion setting mode of the electric screwdriver		Setting of MAIN MENU "MOTION"	
No.	Function	SETUP MENU (3rd layer)	Setting items (4th layer)
1	Screw count	SCREW	SF NUMBER
2	Speed level at start	ROTATION	START_SPEED
3	Rotation time at start	ROTATION	START_TIME
4	Speed level at middle	ROTATION	MID_SPEED
5	Rotation time at middle	ROTATION	MID_TIME
6	Speed level at finish	ROTATION	FIN_SPEED
7	Lower limit of screw fastening time	SCREW	MIN_SF TIME
8	Upper limit of screw fastening time	SCREW	MAX_SF TIME
9	Auto reverse mode setting	ROTATION	AUTO REVERSE
10	Reverse speed level	ROTATION	REV_SPEED
11	Reverse rotation time	ROTATION	REV_TIME

Turn ON the power switch of the remote controller and check that MAIN MENU is "MOTION" and then press the [ENTER] button When it is not "MOTION", use the [SELECT] button to switch the display. "CH SELECT" is displayed.

Use the [SELECT] button to select "CH_1" to "CH_8", or "CH_ALL"

and press the [ENTER] button

"SETUP MENU" is displayed.



(1st layer)



(2nd layer)

3 Use the [SELECT] button to select "ROTATION" or "SCREW" and press the [ENTER] button The set item is displayed.

When "CH_ALL" is selected, the procedure goes to Step 8.



(3rd layer)

2

ΕN

4 Use the [SELECT] button to select the item to set The following settings are available.

SETUP MENU	Setting items (4th layer)	Function	Setting range (default value)
	START_SPEED	Speed level at start	LV_1 to LV_9 (LV_9)
	START_TIME	Rotation time at start	OFF / 0.01 SEC to 9.9 SEC (OFF)
	MID_SPEED	Speed level at middle	LV_1 to LV_9 (LV_9)
POTATION	MID_TIME	Rotation time at middle	OFF / 0.01 SEC to 9.9 SEC (OFF)
RUTATION	FIN_SPEED	Speed level at finish	LV_1 to LV_9 (LV_9)
	AUTO REVERSE	Auto reverse mode setting	OFF / TORQUE UP / TIME (OFF)
	REV_SPEED	Reverse speed level	LV_1 to LV_9 (LV_9)
	REV_TIME	Reverse rotation time	OFF / 0.01 SEC to 9.9 SEC (OFF)
	SF NUMBER	Screw count	01_SCREW to 99_SCREW (01_SCREW)
SCREW	MIN_SF TIME	Lower limit of screw fastening time	OFF / 0.01 SEC to 9.9 SEC (OFF)
	MAX_SF TIME	Upper limit of screw fastening time	OFF / 0.01 SEC to 9.9 SEC (OFF)

5 Press the [ENTER] button press appears on the LCD.

6 Use the [UP]/[DOWN] buttons to change the value and then use the [ENTER] button to finalize the value The set value is saved.



7 Set other items in the same way

To return to the previous item, press the [RETURN] button.

8 While • **)**) is displayed on the LCD, press and hold the [TRANSMISSION] button The settings of the channel selected in Step 2 are sent collectively.

When "CH_ALL" is selected in Step 2, the settings of all channels are sent collectively.



FUNCTION settings

Using "FUNCTION" in MAIN MENU, you can set the content of "Function setting mode".

The function setting mode of the electric screwdriver and remote controller menu correspond as shown in the following table.

For the details of each function, refer to the instruction manual for the electric screwdriver.

	Function setting mode of the electric screwdriver	Setting of MAIN MENU "FUNCTION"	
No.	Function	SETUP MENU (2nd layer)	Setting items (3rd layer)
1	Workpiece signal	WORK	WORK SIGNAL
2	Workpiece setup time	WORK	SETUP TIME
3	Start timing of workpiece setup NG	WORK	NG SIGNAL TIMING
4	Screw fastening confirmation time	DRIVER	CONFIRM SF_TIME
5	OK signal output timing	WORK	OK SIGNAL TIMING
6	NG signal output time	DRIVER	NG SIGNAL_TIME
7	NG display	DRIVER	NG DISPLAY
8	NG signal output selection	EXTERNAL SIGNAL	NG SIGNAL SELECT
9	Count return function	DRIVER	COUNT RETURN
10	Count method	DRIVER	COUNT METHOD
11	Bit Breaks function	DRIVER	BIT BRAKES
12	Channel switching method	EXTERNAL SIGNAL	CH SWITCHING
13	Pin No. 7 output switching	EXTERNAL SIGNAL	NO.7 PIN SIGNAL
14	Pin No. 4 input switching	EXTERNAL SIGNAL	NO.4 PIN SIGNAL
15	Screw fastening completion sound setting	SOUND	TORQUE UP
16	OK sound setting	SOUND	OK
17	Workpiece setup NG sound setting	SOUND	NG_WORK
18	Screwdriver NG sound setting	SOUND	NG_DRIVER

1 From MAIN MENU, press the [SELECT] button to select "FUNCTION" and press the [ENTER] button "SETUP MENU" is displayed.



(1st layer)

Use the [SELECT] button to select "DRIVER", "WORK", "EXTERNAL SIGNAL", or "SOUND" and then press the [ENTER] button The set item is displayed.



(2nd layer)

2

EN

3 Use the [SELECT] button to select the item to set The following settings are available.

SETUP MENU	Setting items (3rd layer)	Function	Set value (default)
	CONFIRM SF_TIME	Screw fastening confirmation time	OFF / 0.1 SEC to 9.9 SEC (OFF)
	NG SIGNAL_TIME	NG signal output time	OFF / 0.1 SEC to 9.9 SEC (0.1 SEC)
DRIVER	NG DISPLAY	NG display	OFF / CONTINUE (OFF)
	COUNT RETURN	Count return function	OFF / ON (OFF)
	COUNT METHOD	Count method	DOWN / UP (DOWN)
	BIT BRAKES	Bit Breaks function	OFF / ON (OFF)
	WORK SIGNAL	Workpiece signal	OFF / ON (OFF)
	SETUP TIME	Workpiece setup time	OFF / 0.1 SEC to 9.9 SEC (OFF)
WORK	NG SIGNAL TIMING	Start timing of workpiece setup NG	SETUP / SETUP \rightarrow DRIVER ON (SETUP)
	OK SIGNAL TIMING	OK signal output timing	FIN CT / FIN CT \rightarrow REL (FIN CT)
	NG SIGNAL SELECT	NG signal output selection	ALL / DRIVER / WORK (ALL)
	CH SWITCHING	Channel switching method	INTERNAL / EXTERNAL (INTERNAL)
SIGNAL	NO.7 PIN SIGNAL	Pin No. 7 output switching	CH SWITCHING / LINK OUT (CH SWITCHING)
	NO.4 PIN SIGNAL	Pin No. 4 input switching	STOP SIGNAL / LINK IN (STOP SIGNAL)
	TORQUE UP	Screw fastening completion sound setting	OFF / ON (ON)
SOLIND	OK	OK sound setting	OFF / 1 to 5 (1)
SOUND	NG_WORK	Workpiece setup NG sound setting	OFF / 1 to 5 (1)
	NG_DRIVER	Screwdriver NG sound setting	OFF / 1 to 5 (1)

4 Press the [ENTER] button appears on the LCD.

5 Use the [UP]/[DOWN] buttons to change the value and then use the [ENTER] button to finalize the value

The set value is saved.

6 Set other items in the same way

To return to the previous item, press the [RETURN] button.

7 While • **)**) is displayed on the LCD, press and hold the [TRANSMISSION] button The settings of MAIN MENU "FUNCTION" are sent collectively.



800 •,)) CONFIRM SF_TIME ON

8 Using Channel Patterns

It is possible to register a series of patterns that is a combination of each channel set using "MOTION" in MAIN MENU. One pattern can be switched up to 8 times.

Registering channel patterns

When using one channel pattern or using the link function, it is possible to use channel pattern A only. When using channel pattern A to D, an external signal is connected. In order to link with workpiece signals, each channel pattern is assigned to four types of work.

Record the registered channel pattern in "Setting memo" (p. 35).

1 From MAIN MENU, press the [SELECT] button to select "CH PATTERN" and then press the [ENTER] button "SETUP MENU" is displayed.



(1st layer)



"PATTERN SELECT" is displayed.











(4th layer)



(5th layer)

3 Use the [SELECT] button to select "CH PATTERN_A" to "CH PATTERN_D", and then press the [ENTER] button When setting only one pattern, select "CH PATTERN_A". The channel registered in NO. 1 is displayed.



5 Use the [UP]/[DOWN] buttons to select the first channel and then press the [ENTER] button The NO. 1 channel is registered. The display returns to Step 4.

6 Use the [SELECT] button to select the next number and then press the [ENTER] button

Use the [UP]/[DOWN] buttons to select the next channel to register and then press the [ENTER] button

Repeat Steps 6 to 7 to register order of channel switching.

When completing switching in less than 8 times, register CH_FIN as the number following the final number.

Example of setting: When operating $CH1 \rightarrow CH3 \rightarrow CH2 \rightarrow CH1$, in that order NO.1: CH1, NO.2: CH3, NO.3: CH2, NO.4: CH1, NO.5: CH FIN

- 8 When setting channel pattern B to D, repeat Steps 3 to 7
- 9 While •)) is displayed on the LCD, press and hold the [TRANSMISSION] button All channel pattern settings are sent.





Canceling the channel pattern

When setting the channel pattern to ON, the electric screwdriver operates as set with the channel pattern. It is not possible to turn OFF the channel pattern by operating buttons on the electric screwdriver.

- From MAIN MENU, press the [SELECT] button to select "CH PATTERN" and then press the [ENTER] button "SETUP MENU" is displayed.
- **2** Press the [SELECT] button to select "CH PATTERN_OFF" and then press the [ENTER] button



3 While •**1**) is displayed on the LCD, press and hold the [TRANSMISSION] button The channel pattern is canceled.



Setting the electric screwdriver

Use the electric screwdriver or remote controller to change the following settings.

Channel switching method

Set "Channel switching method" (CH SWITCHING) of the external signal setting (EXTERNAL SIGNAL) to "Inside screwdriver" (INTERNAL).

When the channel pattern is set to ON, you cannot switch the channel using the buttons on the electric screwdriver.

Workpiece signal

To connect an external signal to use multiple channel patterns, set "Workpiece signal" (WORK SIGNAL) to "Input" (ON).

Signal output

When each channel ends, a channel switching signal is output. When all channel patterns end, the OK signal is output.

Returning channel

While in screw fastening mode of the electric screwdriver, you can check the current channel and set value. Press and hold the [SELECT] button of the electric screwdriver to reset the screw count.

- 1 [SELECT] button \rightarrow Returns to the initial screw count of the current channel
- 2 [SELECT] button \rightarrow Returns to the last screw count of the previous channel
- 3 [SELECT] button \rightarrow Returns to the initial screw count of the previous channel

When the remote keylock is set to ON, it is not possible to return the channel. (p. 22)

Connecting external signal

Connect workpiece detection sensors such as switches and the external power supply and reset switch. When you register a channel pattern and set the channel switching method to "Inside screwdriver" (INTERNAL) and the workpiece signal to "Input" (ON), channel A/B/C of the external signal is switched to the workpiece signal, respectively.

Also, channel patterns A to D are switched interlocked with each workpiece signal.

Signal	Workpiece signal	Workpiece signal B (Channel A)	Workpiece signal C (Channel B)	Workpiece signal D (Channel C)	
Wiring color	White	Peach	Purple	Yellow-green	
Pin No.	2	9	10	11	
Channel pattern	A	В	С	D	

- Always connect an external power supply and reset switch.
- Do not turn ON each workpiece detection sensor (or switch, etc.) at the same time.
- If a workpiece signal for which the channel pattern has not been set is turned ON, the parameter LED of the electric screwdriver displays "E3".
 - Check the setting and connection.
- For the method and cautions of connecting external signal, refer to the instruction manual for the electric screwdriver.



Switching the channel pattern

(1) The current channel pattern ends \rightarrow OK signal is output

2 Turn OFF the workpiece signal of the channel pattern

③ Turn ON the workpiece signal of the channel pattern to be used next

Switching the channel pattern in halfway through

① Turn ON the reset switch (continuously ON)

2 Turn OFF the workpiece signal of the current channel pattern

③ Turn ON the workpiece signal of the channel pattern to be used next

④ Turn OFF the reset switch

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9 Remote Keylock

It is possible to use the remote controller to lock the buttons operation of the electric screwdriver to prevent the settings being changed by a worker other than the work manager.

Lock and unlock are performed using the remote controller. Lock and unlock can also be performed using other spare remote controllers as well.

- Remote keylock cannot be canceled using the electric screwdriver.
 Be careful about loss or failure of the remote controller. When the remote controller is lost or has failed, settings can no longer be changed.
 As a precaution, we recommend that you have a spare remote controller.
- Service to unlock the remote keylock will be provided for a fee.
- From MAIN MENU, press the [SELECT] button to select "KEYLOCK" and then press the [ENTER] button "SETUP MENU" is displayed.
- 2 Check that "KEYLOCK_ON" is displayed and then press the [ENTER] button

When canceling the lock, use the [SELECT] button to select "KEYLOCK_ OFF".

3 While • **)**) is displayed on the LCD, press and hold the [TRANSMISSION] button Remote keylock is turned ON.

When "KEY LOCK_OFF" is selected in Step 2, remote keylock is turned OFF.

Even though keys have been locked by the remote controller, the following functions are available.

- [DOWN] button of count return function
- [MEMORY] button + [DOWN] button of data receiving mode
- [UP] button during screw fastening confirmation time
- [UP] button during continuous NG display







10 Torque Check Mode

It is possible to check the torque by operating the electric screwdriver at the finish (last) speed level. In torque check mode, settings other than the finish speed level (FIN_SPEED) are invalid.

- 1 From MAIN MENU, press the [SELECT] button to select "TORQUE CHECK" and press the [ENTER] button "SETUP MENU" is displayed.
- 2 Check that "TORQUE CHECK_ON" is displayed and then press the [ENTER] button
- **3** While •**1**) is displayed on the LCD, press and hold the [TRANSMISSION] button

Δ

the electric screwdriver

Torque check mode is canceled.

The electric screwdriver enters the torque check mode. "tc" is displayed on the parameter LED of the electric screwdriver and the mode LED lights in red.

When torque check ends, press and hold the [SELECT] button of



MODE WORK





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MAIN MENU TORQUE CHECK

SETUP MENU Torque Check_on



11 Security Settings

You can set it so that a password is requested when the electric screwdriver is turned ON. When a password is set, the electric screwdriver cannot be operated until the correct password is sent from the remote controller.

- This function is not a function to prevent theft. We provide no warranty whatsoever that protects against the product being stolen.
- We cannot overwrite, change or delete the password. Even when the settings of the electric screwdriver are initialized, the password will not be deleted. Make sure to properly manage the password set for each electric screwdriver.
- Deletion, cancellation or extraction of passwords shall be paid services.
- Be careful about loss or failure of the remote controller. To cancel the password, the remote controller is required. When the remote controller is lost or has failed, the electric screwdriver cannot be used.

As a precaution, we recommend that you have a spare remote controller.

Setting the password

One password can be set for one electric screwdriver.

1 From MAIN MENU, press the [SELECT] button to select "SECURITY" and then press the [ENTER] button "SETUP MENU" is displayed.









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	ا PASSWORD_SET 8888	

- **2** Press the [SELECT] button to select "PASSWORD_SET" and then press the [ENTER] button "PASSWORD SET" is displayed.
- **3** Press the [ENTER] button The screen for entering the password is displayed.
- 4 Use the [SELECT] button to select 1 to 4 digits and use the [UP]/ [DOWN] buttons to specify a number, using 0 to 9 "0000" cannot be set.
- 5 When the 4-digit number is entered, press the [ENTER] button
- 6 While •)) is displayed on the LCD, press and hold the [TRANSMISSION] button The password is set for the electric screwdriver.

Enabling the password

- 1 From MAIN MENU, press the [SELECT] button to select "SECURITY" and then press the [ENTER] button "SETUP MENU" is displayed.
- **2** Press the [SELECT] button to select "SECURITY_ON" and then press the [ENTER] button
- **3** While •**i**)) is displayed on the LCD, press and hold the **[TRANSMISSION] button** The password is enabled.

Disabling the password

- From MAIN MENU, press the [SELECT] button to select "SECURITY" and then press the [ENTER] button "SETUP MENU" is displayed.
- **2** Press the [SELECT] button to select "SECURITY_OFF" and then press the [ENTER] button
- **3** While •**i**) is displayed on the LCD, press and hold the [TRANSMISSION] button The password is disabled.



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MAIN MENU SECURITY









Entering the password

This section explains how to start the electric screwdriver with the password set.

1 Turn OFF the power of the electric screwdriver and turn it ON again The parameter LED of the electric screwdriver displays "PS" and the main LED lights in yellow to enter password input waiting status.

- 2 From MAIN MENU of the remote controller, press the [SELECT] button to select "SECURITY" and then press the [ENTER] button "SETUP MENU" is displayed.
- **3** Check that "PASSWORD_ENTER" is displayed and then press the [ENTER] button
- **4 Press the [ENTER] button** The screen for entering the password is displayed.
- 5 Use the [SELECT] button to select 1 to 4 digits and use the [UP]/ [DOWN] buttons to input the password set
- **6** When the password is entered, press the [ENTER] button
- 7 Check that •1)) is displayed on the LCD, then press and hold the [TRANSMISSION] button

The password is sent to the electric screwdriver. When the correct password is input, the electric screwdriver enters screw fastening mode.

• You cannot use the remote controller to set "SECURITY_OFF" while the electric screwdriver is waiting for the password to be entered.

Enter the correct password, switch the electric screwdriver to the data receiving mode and then set "SECURITY_ OFF". (p. 25)













Troubleshooting

Symptoms	Location to investigate	Solution			
	Has the battery life expired?	Replace with a new battery. (p. 9)			
The remote controller does not operate	Is the battery type or orientation correct?	Check the battery type and orientation of the battery. (p. 9)			
	Is the power switch set to OFF?	Set the power switch to ON. (p. 10)			
Operation button response is dull	Did you firmly press buttons?	To prevent inadvertent operation, the device does not respond when you lightly press the operation buttons. Press the buttons firmly.			
	Has the battery life expired?	When the battery level becomes low, emission of infrared light becomes unstable. Replace with a new battery. (p. 9)			
Data cannot be	Does the setting phase allow data transmission?	Depending on the setting, the setting phase in which data can be sent differs. Data can be sent when the data sending icon is displayed on the LCD. (p. 11)			
[TRANSMISSION]	Is the electric screwdriver in data receiving mode?	Switch the electric screwdriver to data receiving mode. (p. 12)			
	Are you operating the device within the data transmission range?	Check the data transmission range between the remote controller and the electric screwdriver. (p. 8) The transmission range is a standard reference. The range changes depending on the ambient environment and battery status.			
The setting conditions are unknown	Did you make a note of the settings?	Initialize the device and make settings again. (p. 13) When you set it, write down the settings on the setting memo. (p. 34)			

Maintenance and inspection

▲ WARNING

- Before performing maintenance and inspection, always turn off the power.
- Do not disassemble or alter the tool.
- Use genuine parts.

- For repair or part replacement, contact the retailer where you purchased the tool. Repair requires special knowledge and skills. If repair is performed at a place other than a specialty store, the tool may not demonstrate its full performance or it could lead to an accident or injury.
- Request repair with the failed status kept intact. When requesting a repair, do not throw away damaged parts. It could be important information for investigating the failure cause so do not change the status.

Inspection locations	CAUTION
Main unit	 Check for damage, cracks or breaks on the main unit. Check the screws on the main unit. If screws are loose, tighten them.
Battery	 If the battery icon is displayed on the LCD, replace the battery with a new one. (p. 8)
Care	 If the main unit is stained, use a cloth soaked in soapy water and wrung out well to wipe off the stain. The tool does not have a waterproof structure and if water enters inside, it could fail. Because the main unit uses plastic, the following chemicals cannot be used. Acetone, benzine, thinner, ketone, ether, trichlorethylene and other similar chemicals

Disposal

- Separate power tools, accessories, and packing materials for environmentally-friendly recycling.
- Do not dispose of the power tool as household garbage.
- When disposing of electric tools, give them to NITTO KOHKI or your dealer.
- Within the EU region, Waste Electrical and Electronic Equipment (WEEE) Directive 2002/96/EC is rolled out in domestic laws and it is prescribed to separately collect power tools, which are recycled and reused.



External dimensions





Screen display list

Screen display	Details	Reference				
	Auto reverse mode setting					
AUTO REVERSE	A mode which automatically change the rotation of the electric screwdriver to	p. 15				
	the reverse direction					
	Bit Breaks function					
BIT BRAKES	A function to prevent the bit from inertial rotation when the start switch is	p. 17				
	released					
	Channel					
СН	The folder in which the motion settings are saved	p. 14				
CH PATTERN	Channel pattern setting	p. 18				
	Channel switching method					
CH SWITCHING	Specify the channel switching method					
CH SELECT	Channel selection	p. 14				
	Screw fastening confirmation time					
CONFIRM SF TIME	Time to check the screw tightening after the screw count is reached	p. 17				
	During this time, the tool operates (rotates) freely					
CONTINUE	NG display continues	p. 17				
	Count method					
COUNT METHOD	The method of counting screw tightened	p. 17				
	Count return function					
COUNT RETURN	A function to return the screw count by one screw	p. 17				
DRIVER	Screwdriver setting	p. 17				
EXTERNAL	External	p. 17				
EXTERNAL SIGNAL	External signal	p. 17				
FIN CT	When the set count ends	p. 17				
FIN CT \rightarrow REL	When the set count ends and the workpiece is removed	p. 17				
FIN SPEED	Speed level at finish	p. 15				
FUNCTION	Function setting mode	p. 16				
INTERNAL	Screwdriver internal	p. 17				
KEYLOCK	Remote kevlock	p. 22				
	LINK-IN					
LINK IN	Signal input to all electric screwdrivers in the prior stage of the last electric					
	screwdriver in a link connection					
	LINK-OUT	47				
LINK OUT	Signal output by the last electric screwdriver in a link connection	p. 17				
1.1.4	Speed level	45				
LV	Select from LV1 to LV9	p. 15				
MAIN MENU	Main menu	p. 10				
MAX_SF TIME	Upper limit of screw fastening time	p. 15				
MID_SPEED	Speed level at middle	p. 15				
MID_TIME	Rotation time at middle	p. 15				
MIN_SF TIME	Lower limit of screw fastening time	p. 15				
MOTION	Motion setting mode	p. 14				
NG DISPLAY	NG display	p. 17				
	NG signal output selection					
NG SIGNAL SELECT	Select ALL (outputs all NGs), DRIVER (outputs screwdriver NG), or WORK	p. 17				
	(outputs workpiece setup NG)					
NG SIGNAL TIMING	Start timing of workpiece setup NG	p. 17				
	NG signal output time					
NG SIGNAL_TIME	Time to output NG signal	p. 17				
_	The electric screwdriver does not operate (rotate) within this period					
NG_DRIVER	Screwdriver NG sound setting	p. 17				

Screen display	Details	Reference				
NG_WORK	Workpiece setup NG sound setting	p. 17				
	Pin No. 4 input switching	n 17				
NO.4 PIN SIGNAL	Select STOP SIGNAL (forced stop signal) or LINK IN	p. 17				
	Pin No. 7 output switching	n 17				
NO.7 PIN SIGNAL	Select CH SWITCHING (outputs the channel switching signal) or LINK OUT	p. 17				
	OK signal output timing					
OK SIGNAL TIMING	Select FIN CT (when the set count ends) or FIN CT \rightarrow REL (when the set					
	count ends and the workpiece is removed)					
PASSWORD_ENTER	Password entering	p. 26				
	Password setting	- 04				
PASSWORD_SET	Set between 0000 and 9999	p. 24				
	Channel pattern selection	~ 10				
PATTERN SELECT	Select between CH PATTERN_A and CH PATTERN_D	p. 10				
REV_SPEED	Reverse speed level	p. 15				
REV_TIME	Reverse rotation time	р. 15				
ROTATION	Speed setting	p. 15				
SCREW	Set screw count and screw fastening time	p. 15				
SEC	Second	p. 15				
SECURITY	Security setting	p. 24				
SETUP MENU	Menu setting item	p. 11				
	Workpiece setup time					
	A period during which whether the workpiece is incorrectly set up is checked	n 17				
SETUP TIME	During this period, even when the workpiece is removed, NG does not occur	p. 17				
	(the electric screwdriver does not operate)					
SF NUMBER	Screw count	p. 15				
SOUND	Sound setting	p. 17				
START_SPEED	Speed level at start	p. 15				
START_TIME	Rotation time at start	p. 15				
STOP SIGNAL	Forced stop signal	p. 17				
TORQUE CHECK	Torque check	p. 23				
	Reverses rotation after (AUTO REVERSE) torque-up	p. 15				
TORQUE UP	(SOUND) screw fastening completion sound setting	p. 17				
TRANSMISSION	Sends data to the electric screwdriver	p. 11				
WORK	Workpiece setting	p. 17				
	Workpiece signal	n 17				
WORK SIGNAL	Signal input when workpiece is set up					

Glossary

Term	Description
[DOWN] button	Decreases the set value number
[ENTER] button	Finalizes the set item
Initialization	Returns the settings to the default status
Link function Link connection	Function that links multiple electric screwdrivers
Remote keylock	Locks electric screwdriver button operations by the remote controller
[RETURN] button	Returns the set item
Screw fastening mode	The state in which the electric screwdriver can operate (rotates)
[SELECT] button	Selects a setting
Torque check mode	Operates (rotates) at the finish speed level to measure the output torque of the electric screwdriver
[TRANSMISSION] button	Sends the set data to the electric screwdriver
[UP] button	Increases the set value number

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Setting memo

MAIN MENU "MOTION" (Motion settings)

SETUP MENU	Setting items	Motion No. of electric screwdriver	Setting range (default)	CH_1	CH_2	CH_3	CH_4	CH_5	CH_6	CH_7	CH_8
	START_SPEED Speed level at start	2	LV_1 - LV_9 (LV_9)								
	START_TIME Rotation time at start	3	OFF / 0.01 - 9.9 SEC (OFF)								
	MID_SPEED Speed level at middle	4	LV_1 - LV_9 (LV_9)								
ROTATION	MID_TIME Rotation time at middle	5	OFF / 0.01 SEC to 9.9 SEC (OFF)								
	FIN_SPEED Speed level at finish	6	LV_1 - LV_9 (LV_9)								
	AUTO REVERSE Auto reverse mode setting	9	OFF / TORQUE UP / TIME (OFF)								
	REV_SPEED Reverse speed level	10	LV_1 - LV_9 (LV_9)								
	REV_TIME Reverse rotation time	11	OFF / 0.01 - 9.9 SEC (OFF)								
	SF NUMBER Screw count	1	01 - 99_SCREW (01_SCREW)								
SCREW	MIN_SF TIME Lower limit of screw fastening time	7	OFF / 0.01 - 9.9 SEC (OFF)								
	MAX_SF TIME Upper limit of screw fastening time	8	OFF / 0.01 - 9.9 SEC (OFF)								

MAIN MENU "FUNCTION" (Function settings)

SETUP MENU	Setting items	Motion No. of electric screwdriver	Set value (default)	Set value
	CONFIRM SF_TIME Screw fastening confirmation time	4	OFF / 0.1 - 9.9 SEC (OFF)	
	NG SIGNAL_TIME NG signal output time	6	OFF / 0.1 - 9.9 SEC (0.1 SEC)	
DRIVER	NG DISPLAY NG display	7	OFF / CONTINUE (OFF)	
DRIVER	COUNT RETURN Count return function	9	OFF / ON (OFF)	
	COUNT METHOD Count method	10	DOWN / UP (DOWN)	
	BIT BRAKES Bit Breaks function	11	OFF / ON (OFF)	
	WORK SIGNAL Workpiece signal	1	OFF / ON (OFF)	
WORK	SETUP TIME Workpiece setup time	2	OFF / 0.1 - 9.9 SEC (OFF)	
WORK	NG SIGNAL TIMING Start timing of workpiece setup NG	3	SETUP / SETUP \rightarrow DRIVER ON (SETUP)	
	OK SIGNAL TIMING OK signal output timing	5	FIN CT / FIN CT \rightarrow REL (FIN CT)	
	NG SIGNAL SELECT NG signal output selection	8	ALL / DRIVER / WORK (ALL)	
EXTERNAL SIGNAL	CH SWITCHING Channel switching method	12	INTERNAL / EXTERNAL (INTERNAL)	
	NO.7 PIN SIGNAL Pin No. 7 output switching	13	CH SWITCHING / LINK OUT (CH SWITCHING)	
	NO.4 PIN SIGNAL Pin No. 4 input switching	14	STOP SIGNAL / LINK IN (STOP SIGNAL)	
SOUND	TORQUE UP Screw fastening completion sound setting	15	OFF / ON (ON)	
	OK OK sound setting	16	OFF / 1 - 5 (1)	
	NG_WORK Workpiece setup NG sound setting	17	OFF / 1 - 5 (1)	
	NG_DRIVER Screwdriver NG sound setting	18	OFF / 1 - 5 (1)	

MAIN MENU "CH PATTERN" (Channel pattern settings)

Channel nattorn	Channel operation order								
Channel pattern	NO.1	NO.2	NO.3	NO.4	NO.5	NO.6	NO.7	NO.8	
CH PATTERN_A									
CH PATTERN_B									
CH PATTERN_C									
CH PATTERN_D									