

REMOTE SIGNAL TORQUE SCREWDRIVER MODEL RTDFH/RNTDFH

OPERATING INSTRUCTION

RTDFH/RNTDFH **RTDFH/RNTDFH Model**



To use this product properly and safely, please read this manual carefully before use. If you have any question about the product and its operations, please contact your nearest distributor or TOHNICHI MFG. CO., LTD.


Safety Precautions

To customers:

Before using this product, please read this operating instruction carefully to use it properly.

If you have any question, please contact your nearest distributor or TOHNICHI MFG. CO., LTD.

This operating instruction should be stored in a safe place.





Safety Symbol


This symbol is used for drawing attention to "safety precautions". If you see this symbol in this operating instruction, attention should be paid to safety. Take preventative actions according to the description and conduct "safe operations and proper control".

Signal Words

The signal words are the headers which indicate the level of hazard that should be known for human safety and in handling devices. The signal words for safety are "Danger", "Warning" and "Caution" depending on the level of hazard to human. The signal words are used with the safety symbol to indicate the following situations.

" **Danger**": Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

" **Warning**": Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

" **Caution**": Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

 **Warning**

- The receiver can be operated only with the power voltage of AC100V to 240V±10% specified in this operating instruction.
- Do not drop water or oil on this product. Do not use this product in an atmosphere of flammable gas and steam. Use in such an atmosphere may result in fire.
- Avoid shock or vibration to this product. It may cause a damage or failure.
- Before use, make a pre-operation inspection and check the settings.
- Be sure to conduct a periodic inspection of torque screwdrivers.
- Use a torque screwdriver within the measurement range specified in the operating instruction.

Should this product give out abnormal smell or catch fire during use, stop using it immediately and remove the AC adapter from the outlet. Then, move the product to a safe place and contact your nearest distributor or TOHNICHI MFG. CO., LTD.

 **Caution**

- Be sure to use a coin type lithium battery (CR2032) for power supply to the transmitter.
- Be sure to use a 9V alkaline battery for power supply to the setting BOX (SB-FH256).
- Avoid using the product in a place where there are metal structures around it.
- Do not install the antenna for the receiver close to any metal pole, electric wire, iron piping, etc.
 - * Especially, if the antenna and piping are positioned in parallel, the communication status may be worsened.
- Avoid using the product near welding machines, electric discharge machines or machines producing electromagnetic noise such as PC.
- If the receiver is placed adjacent to other receivers, different groups must be set between the receivers.
 - * If the receiver where the ID is set on a different channel in the same group is placed adjacent to other receivers, in extremely rare cases when "simultaneous transmission" occurs, a communication error may be caused.
- Before wiring, check that the power of the device to be connected to the receiver is in the OFF position.
- For wiring to the OUTPUT terminal, connect a 2-wire shielded cable to the GND terminal of the receiver for grounding.
- Do not handle the torque screwdriver roughly.
- Be sure to read the operating instruction of the torque screwdriver.
- When the adjusting screw of a preset type torque screwdriver is adjusted, the switch function of the transmitter may not operate properly.

In that case, the torque screwdriver must be adjusted. Contact your nearest distributor or TOHNICHI MFG. CO., LTD.

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1 Outline

This Remote Signal Torque Screwdriver RTDFH/RNTDFH can send tightening completion signals by radio waves, and it is superior to wired LS torque screwdrivers in workability.

The RTDFH/RNTDFH outputs signals received by the receiver to the POKA PATROL CNA-4mk3 (option) or outputs ID data through RS232C. Therefore, a tightening error prevention system with traceability can be established with PC, PLC, etc.

2 Features

- FHSS (Frequency Hopping Spread Spectrum) enhances reliability.

With the application of wireless equipment technologies such as Bluetooth, radio signals are received or transmitted while the frequency is switched at a high speed. If noise or interference with other radio equipment occurs at a certain frequency, the frequency is automatically switched to make it possible to receive a high reliable tightening completion signal.

- Simultaneous transmission of 256 transmitters

With this model, adoption of FHSS realizes simultaneous transmission of 256 transmitters. (Only when 256 receiver groups are set without being overlapped.) A single receiver can control the almost infinite number of transmitters. (Only when simultaneous transmission in the same group does not occur.)

- Minimum management cost

On the model RTDFH/RNTDFH, each one transmitter and receiver can support settings for all groups (256 models). Therefore, a minimum number of spare devices is required.

- Easy transmitter/receiver setting

Without removing the transmitter from the torque screwdriver or removing the receiver panel, the group and ID can be set and checked by wireless on the setting BOX (option).

Group and ID

[Group] There are 256 groups in total, with one group comprising 5ch extracted from the 78ch frequencies of 2.402 GHz to 2.479 GHz (at an interval of 1 MHz). 5ch frequencies in a group are used to send or receive radio waves.

[ID] 000 to 999 and 7-digit alphanumeric characters can be set. According to the ID, the receiver identifies a torque screwdriver.

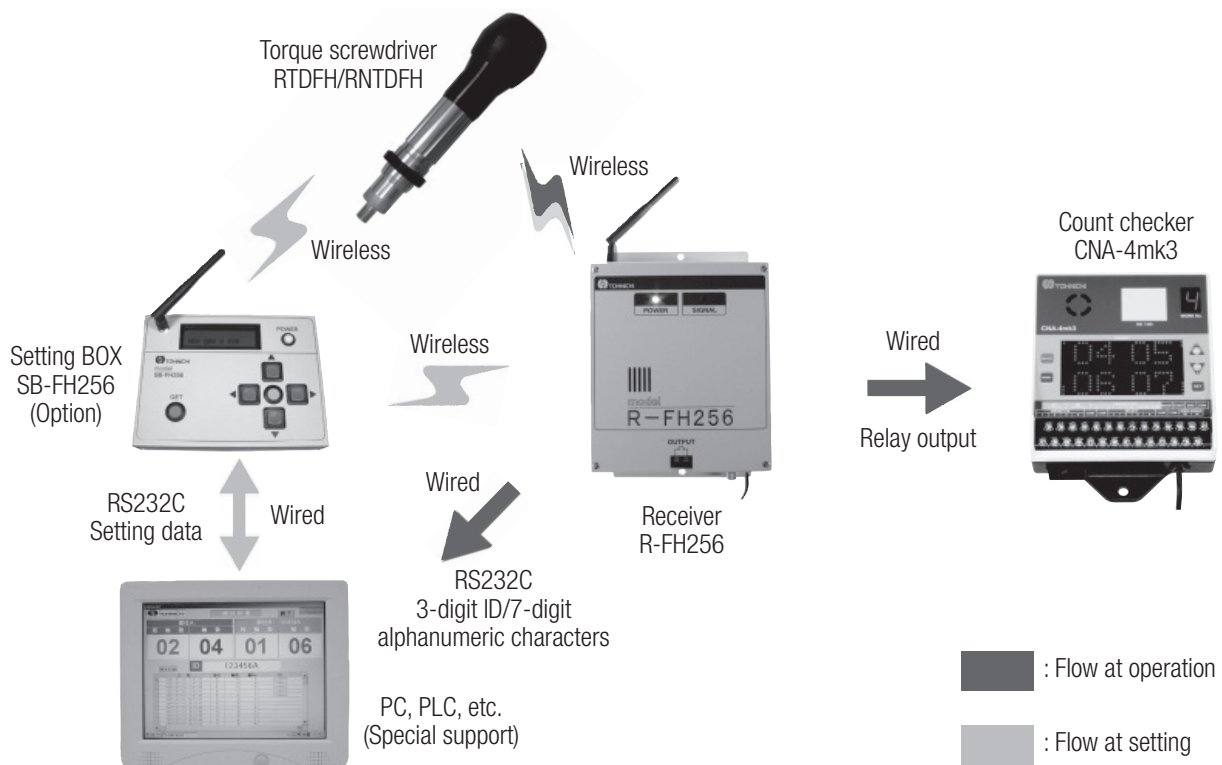
- Traceability

The serial or reference number of a torque screwdriver (7-digitalphanumeric characters) can be set as an ID and transmitted. The tightening bolt (portion) and the serial number (reference

number) are managed in combination, to ensure traceability: "Which torque screwdriver was used to tighten this bolt (portion)?" "Which torque screwdriver tester was used to calibrate this torque screwdriver?" "Which...was used to calibrate this torque screwdriver tester?"

- Adoption of answer back system enables the operator to check the communication status at hand. The RTDFH/RNTDFH adopts this answer back system. Therefore, the operator can check the communication status by the LED mounted on the transmitter, without checking the receiver or the control device.
- The battery life for over 300 thousand shots. Easy to change the battery. Use of a coin type lithium battery (CR2032) provides 3600 shots per day for approx. 4 months. With the RTDFH/RNTDFH, the battery can be easily changed with only the resin grip removed.
- Installation on LS torque screwdriver
Your LS torque screwdrivers RTDLS/RNTDLS can be modified, wired LS models to wireless FH models. For more detail, contact your nearest distributor or TOHNICHI MFG. CO., LTD.
- Use of the universal 2.4 GHz frequency band (ISM band)
The RTDFH/RNTDFH meets various standards in Japan, U.S.A., Canada, Mexico, EU, Malaysia, Indonesia, Thailand, Taiwan and Vietnam.

3 Components



4 Specifications

	Torque screwdriver	Receiver	Setting BOX
Model	RTDFH/RNTDFH	T-FH256	SB-FH256
Frequency Band	2.4 GHZ band (2.402 GHz to 2.479 GHz, 1 MHz interval, 78 kinds)		
Communication System	Spread spectrum (frequency hopping system)		
Modulation System	GFSK		
Modulation Rate	1 Mbps		
Group Channel	Gr000 to 255		
ID	3-digit (000 to 999), 7-digit (alphanumeric)		
Input/Output		No voltage contact output (1a) RS232C output	RS232C input
Power	DC3V (coin type lithium battery CR2032)	AC100 to 240V, 47 to 63Hz 0.3A	DC9V (alkaline battery)
Antenna	Pattern antenna	Dipole antenna	
Display	Communication status check LED	Power LED, Receiving LED	Power LED, LCD
Operating Temperature Range	0 to 45°C		
Transmitting/Receiving Distance	About 10 to 20 m * Note 1		
Certification Standards	Japan, U.S.A., Canada, Thailand, Malaysia, Indonesia, Taiwan, Mexico, Vietnam *1		

⚠ Note 1) The transmitting/receiving distance may be shortened depending on the surrounding radio environment.

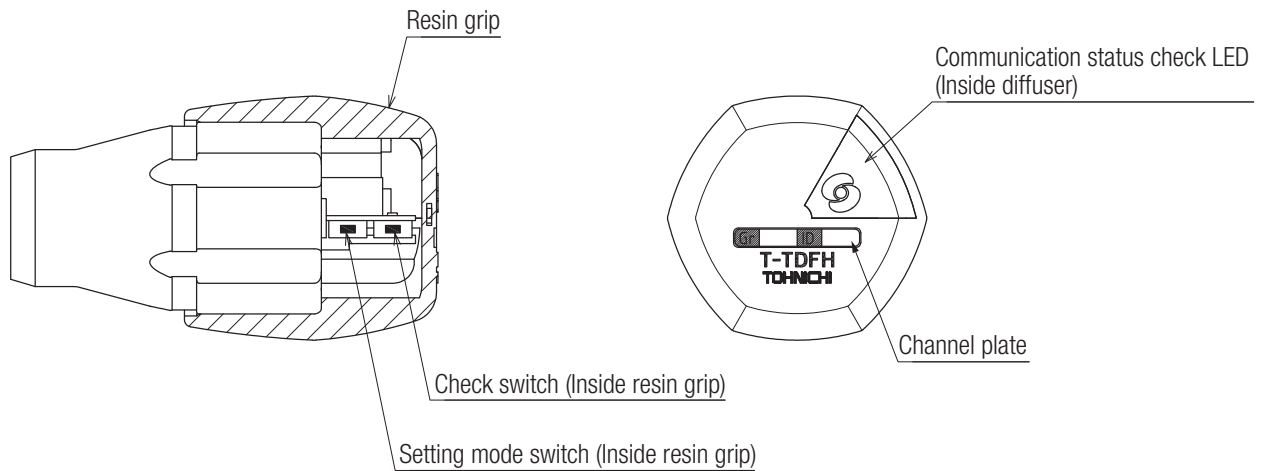
* Radio frequency communication errors may be caused by noise or a shield placed between the transmitter and the receiver. In addition, radio waves reflected by metal, concrete, etc. may interfere with radio waves directly sent to the antenna of the receiver and a dead point occurs, resulting in communication error.

⚠ Note 2) With a brand-new coin type lithium battery, about 300 thousand tightening operations can be conducted.

*1 Contact TOHNICHI MFG. CO., LTD for other standards.

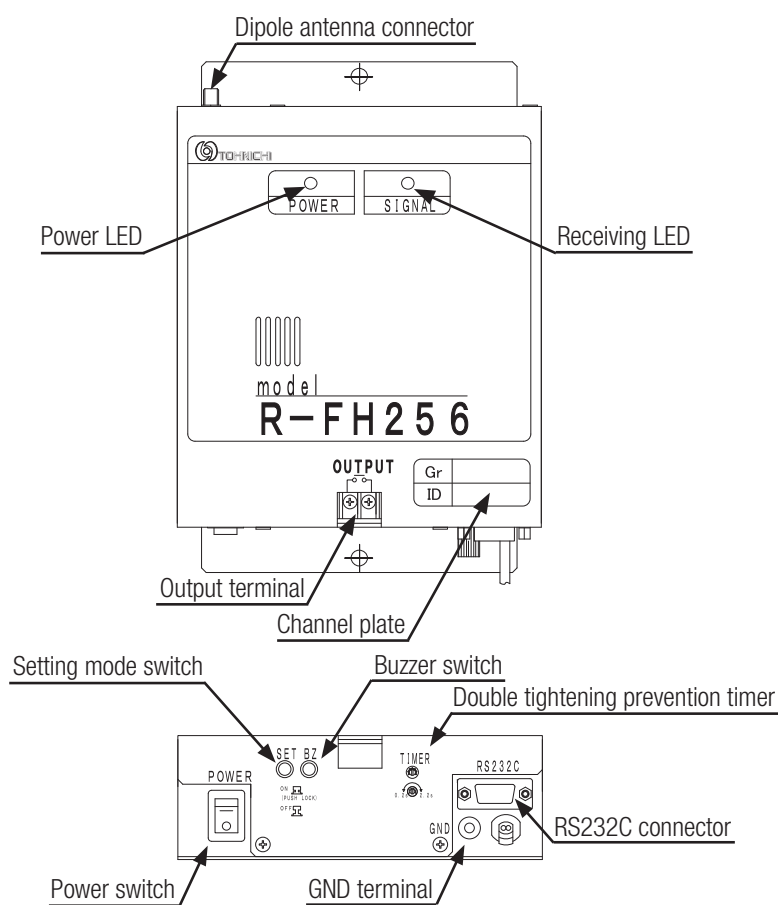
5 External View and Each Part Name

5-1. External view of transmitter and each part name



- Resin grip
To replace the battery, remove this grip.
- Communication status check LED
When communication with the receiver is normal, the LED lights up in blue. When a communication error occurs, the LED flashes in red 3 times.
- Check switch (Inside resin grip)
This is used to check the remaining battery life and for communication test.
- Setting mode switch (Inside resin grip)
This is used to set the setting mode to check or change the group/judgment code/ID.
- Channel plate
If channels are specified when you order, the group and ID will be marked on the plate.

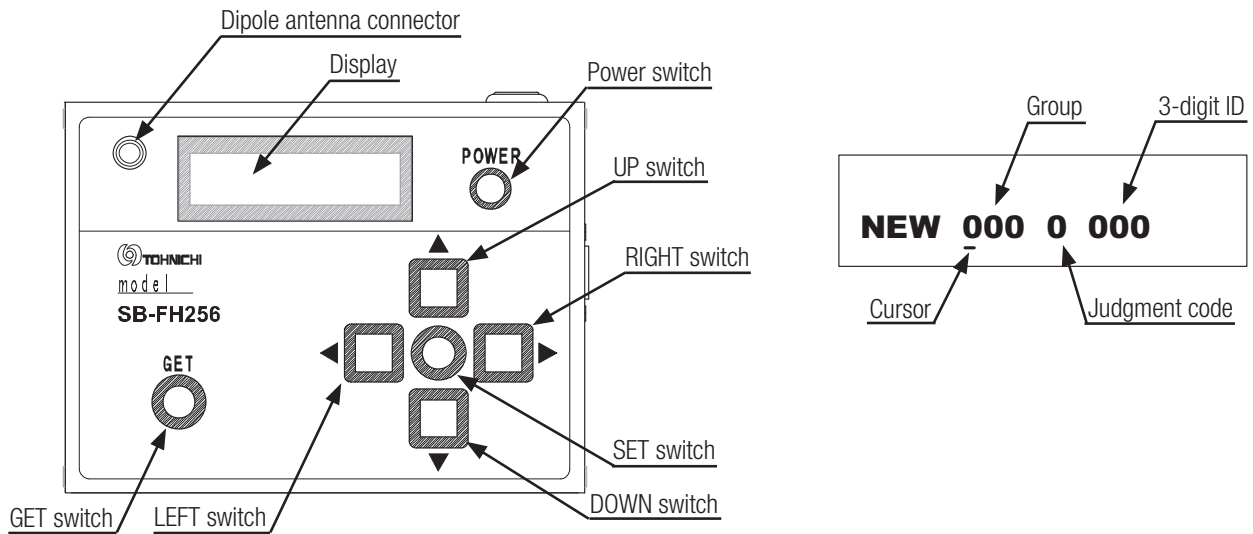
5-2. External view of receiver (R-FH256) and each part name



- Dipole antenna connector
This is used to connect a dipole antenna.
- Power LED
When the power switch is turned ON, the LED lights up.
- Receiving LED
When a signal from the torque screwdriver is received, the LED lights up.
- Output terminal
This is used for relay output of signals received from the torque screwdriver.
- Channel plate
If channels are specified when you order, the group and ID are marked on the plate.

- Power switch
This is the switch for turning ON/OFF the main unit.
- GND terminal
This is used to connect with the POKA PATROL (CNA-4mk3).
- Setting mode switch
This is used to set the setting mode to check or change the group/judgment code/ID.
- Buzzer switch
This is the switch for setting whether a buzzer is sounded when a signal is received.
- Double tightening prevention timer
This is the timer for setting the time so that only the first tightening is received when a worker conducts double tightening.
- RS232C connector
This is used for output of ID received from the torque screwdriver. Connecting an optional I/O-FH256 allows recognition of the transmitter's ID by the receiver and retrieval of contact outputs corresponding to up to 4 IDs from one receiver.

5-3. External view of setting BOX (SB-FH256) and each part name



- Dipole antenna connector
This is used to connect the dipole antenna.
- Power switch
This is the switch for turning ON/OFF the main unit.
- GET switch
This is used to check the data (group, judgment code or 3-digit ID) currently set on the transmitter and the receiver (R-FH256).
- SET switch
This is used to send new data (group, judgment code, 3-digit ID) to be set to the transmitter or the receiver (R-FH256).
- LEFT switch
This is used to move the cursor to the left.
- RIGHT switch
This is used to move the cursor to the right.
- UP switch
This is used to increment the cursor-indicated number.
- DOWN switch
This is used to decrement the cursor-indicated number.

6 Precautions for Use

6-1. Power source ⚠

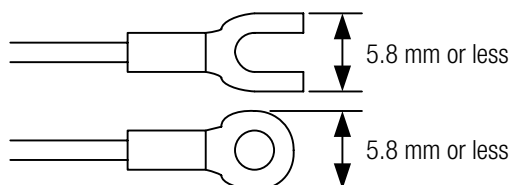
- (1) Use a coin type lithium battery CR2032 for the transmitter.
- (2) Use the receiver (R-FH256) within the range of AC100 to 240V (50/60Hz).
- (3) Use a 9V alkaline battery for the setting BOX (SB-FH256).

6-2. Operating environment ⚠

- (1) Use the product at a place where no metal structure exists.
- (2) Do not set the antenna for the receiver close to any metal pole, electric wire, iron pipe, etc.
 - * Especially, if the antenna and piping are positioned in parallel, the communication status may be worsened.
- (3) Do not use the product around welding machines, electric discharge machines or any machine generate electromagnetic noise such as PC.
- (4) If the receiver is placed adjacent to other receivers, set different groups between the receivers.
 - * If the receiver where the ID is set to a different channel in the same group is placed adjacent to other receivers, in extremely rare cases, when "simultaneous transmission" occurs, a communication error may be caused.

6-3. Connection with other apparatus ⚠

- (1) Before wiring, check that the power of the device to be connected with the receiver is in the OFF position.
- (2) To wire to the OUTPUT terminal, use a 2-wire shielded cable, and connect a shielded wire to the GND terminal of the receiver for grounding.
- (3) Use a solderless terminal of the size as shown below.
 - * The tightening torque of the terminal block screw is $T = 50 \text{ cN}\cdot\text{m}$.



(4) Set the load of the contact output within the rated load. (Relay output rating: DC30V 1A, AC125V 0.5A) The rated contact capacity is according to resistance load. Some kinds of loads have a large difference between the steady-state current and the inrush current. Typical loads and inrush currents are as follows:

Kind of load	Inrush current
Resistance load	1 time as large as the steady-state current
Solenoid load	10 to 20 times as large as the steady-state current
Motor load	5 to 10 times as large as the steady-state current
Incandescent lamp load	10 to 15 times as large as the steady-state current
Mercury vapor lamp load	About 3 times as large as the steady-state current
Sodium-vapor lamp load	1 to 3 times as large as the steady-state current
Capacitor load	20 to 40 times as large as the steady-state current
Trans load	5 to 15 times as large as the steady-state current

(5) When the inductive load is opened or closed, a counter-electromotive voltage is generated and causes a heavy damage to the contact, resulting in a significant shortening of operating life. Therefore, a contact protection circuit is required. The examples of contact protection circuits are as shown in the table below.

Circuit example	Applicability		Features/others	Selection of element
	AC	DC		
<p>CR type</p>	<p>△*</p>	<p>○</p>	<p>If this circuit is used for timer loads, leakage current flowing through cr causes faulty operation. * If used with AC voltage, impedance of the load should be lower than impedance of cr.</p> <p>If the load is a relay or solenoid, the reset time is delayed. It is effective to connect between the loads when the power supply voltage is 24 or 48V and to connect between the contacts when the power supply voltage is 100 to 200V.</p>	<p>The standard c and r are as follows: c: 0.5 to 1 (μF) per contact current (1A), r: 0.5 to 1 (Ω) per contact voltage (1V) The above values vary depending on the property of load or variations in relay characteristic. Considering that the capacitor "c" has the effect of controlling the discharge when the contacts are open and the resistor "r" plays the role of controlling the current at the next power-on, check through experiments is required. Normally, use a capacitor with a dielectric strength between 200 to 300V. In an AC circuit, use a capacitor for AC (with no polarity).</p>
<p>Diode type</p>	<p>×</p>	<p>○</p>		

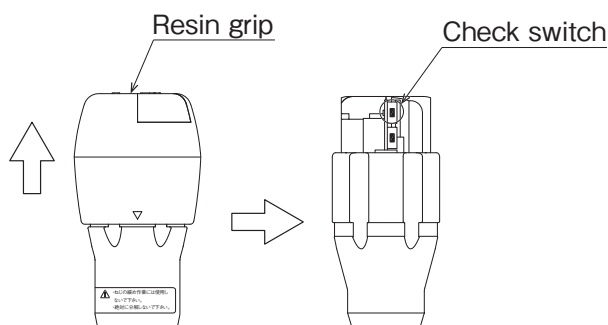
7 Handling

7-1. Precautions for handling of torque screwdriver

- (1) Do not handle the torque screwdriver roughly.
- (2) Be sure to read the operation instruction of the torque screwdriver.

7-2. Check battery level and communication test

- (1) Pull out the resin grip.



- (2) Press the check switch on the side face of the transmitter to turn it on.
- (3) If LED is lighted in blue while the switch is on.

In case it is lighted in red, change the battery. (To change the battery, see “7-3 Change of battery of transmitter.”)

 To conduct a communication test, turn on the test target receiver.

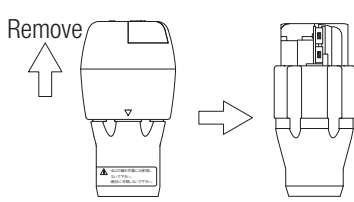
- (4) When communication is performed properly, the LED lights up in blue.

When a communication error occurs, the LED flashes on and off in red 3 times.

- (5) Align the mark ∇ of the resin grip with the mark \triangle of the torque screwdriver body, and insert the resin grip to the end. (See Photo in 7-3, (3).)

7-3. Change of battery of transmitter

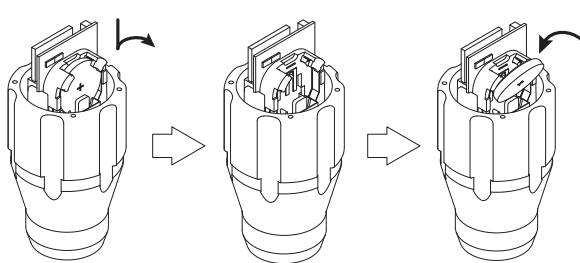
(1) Pull out the resin grip in the arrow direction.



⚠ * When removing the resin grip, ensure that you can identify a combination of the resin grip and torque screwdriver body.

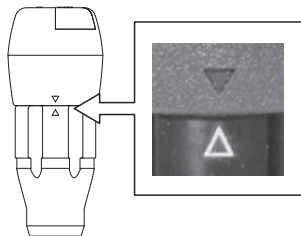
Otherwise, it may result in mismatching of the group/ID indicated on the channel plate of the resin grip with that on the torque screwdriver body.

(2) Remove an old battery and set new one correctly.



⚠ * Be sure to use the coin type lithium battery CR2032.

(3) Align the mark ∇ of the resin grip with the mark \triangle of the torque screwdriver body, and insert the resin grip to the end.



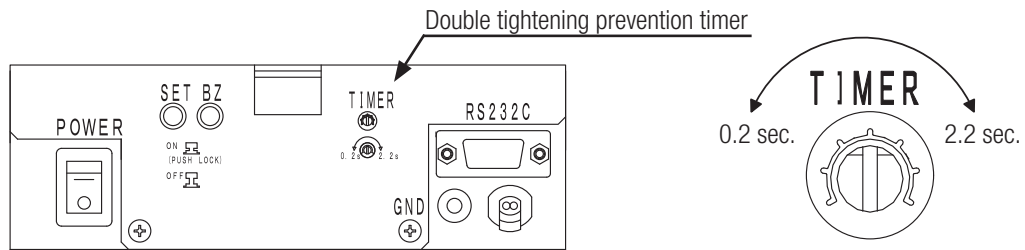
⚠ * When attaching the resin grip, ensure it is correct combination with the torque screwdriver body.

7-4. Setting of double tightening prevention timer of receiver (R-FH256)

(1) The double tightening prevention timer of the receiver is originally set at about 1 second.

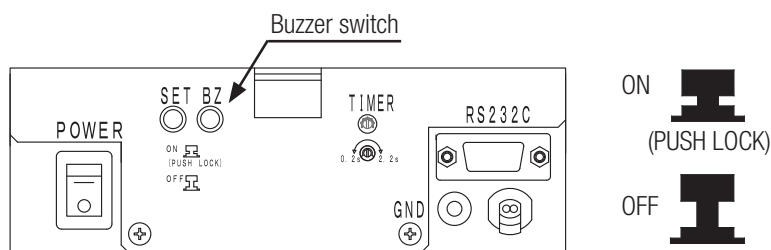
(2) To change the timer setting, turn the volume on the underside of the receiver.

(3) Time can be set in the range of 0.2 to 2.2 seconds.



7-5. Setting of buzzer ON/OFF of receiver (R-FH256)

(1) Using the buzzer switch on the underside of the receiver, the buzzer ON/OFF can be switched.



7-6. Handling of RS232C output of receiver (R-FH256)

(1) Communication condition

Baud rate	9600 bps
Parity	None
Data length	8 bits
Stop bit	1 bit
Flow control	CTS/RTS

⚠ * Any setting other than the above is available. For more detail, contact your nearest distributor or TOHNICHI MFG. CO., LTD.

(2) Data Format

R	E	,	0	0	1	,	1	2	3	4	5	6	A	CR	LF
Header		ID (000 to 999)					7-digit alphanumeric (blank when not set)							Delimiter	

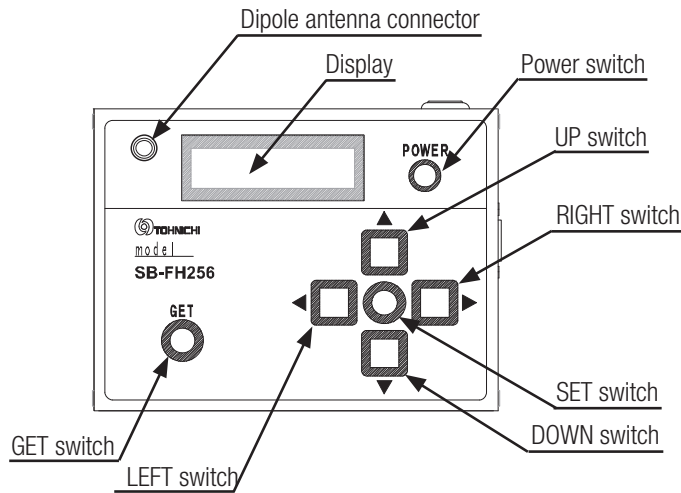
(3) Connection cable

For connection with PC, PLC, etc. use a commercially available straight cable of D-Sub 9 pin female.

7-7. Handling of SB-FH256, setting box. Setup Group, Judgment code and ID.

⚠ * Do not simultaneously operate the transmitter and the receiver (R-FH256).

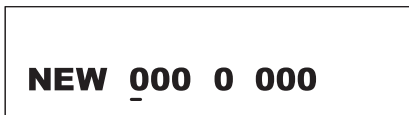
7-7-1. Preparation of setting BOX



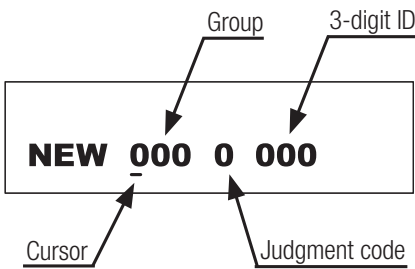
- (1) Attach the dipole antenna (accessory) to the setting BOX.
- (2) Press the power switch and check that the display is as shown below.



Display appearing when the power is turned on



Display appearing one second after the power is turned on



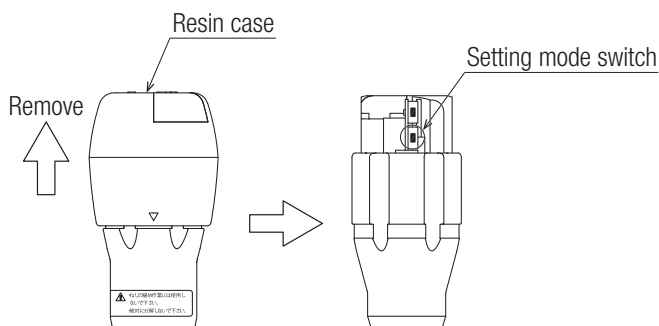
- Group
Groups from 000 to 255 can be set.
- 3-digit ID
IDs from 000 to 999 can be set.
- Cursor
With the RIGHT switch and the LEFT switch, the cursor can be moved to change the digit.

- Judgment code:
 - 0: 3-digit ID, 7-digit alphanumeric characters without identification
When multiple torque screwdrivers are used with one receiver (applicable only when simultaneous transmission is not performed)
 - 1: 3-digit ID with identification
 - 2: 7-digit alphanumeric characters with identification
 - 3: 3-digit ID, 7-digit alphanumeric characters with identification

- ⚠** *1. Set the same judgment code for the transmitter and the receiver.
 *2. Setting of 7-digit alphanumeric requires the separate application software.
 For more detail, contact your nearest distributor or TOHNICHI MFG. CO., LTD.

7-7-2. Check and change of transmitter

(1) Pull out the resin grip.



(2) Hold down the setting mode switch of the transmitter for 1 second to switch to the setting mode. (LED flashes on and off in red.)

(3) Press the GET switch of the setting BOX (SB-FH256) to display the current setting status.

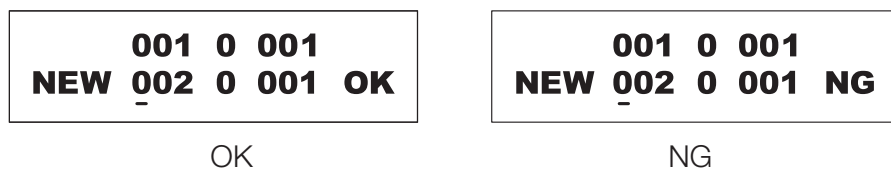


(4) To change the settings, change the group, judgment code and ID (3-digit) using the up/down switches.

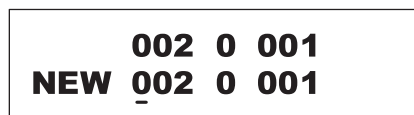


(5) Press the SET switch.

When the setting is completed correctly, the communication status check LED of the transmitter is lighted in blue for about 1 second and "OK" is displayed on the right of the lower column on the display. If an error occurs in setting, "NG" is displayed.



(6) To check that the setting has been completed correctly, press the GET switch and confirm that the same data is displayed on the upper and lower columns.

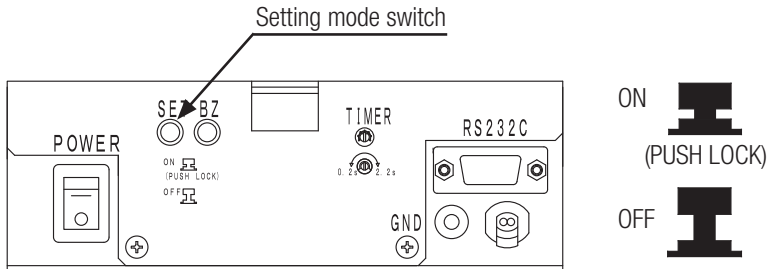


(7) After the completion of setting, press the setting mode switch of the transmitter. (The flashing LED goes off and it is ready for tightening work.)

7-7-3. Check and change of receiver

(1) Turn on the setting mode switch of the receiver to switch to the setting mode.

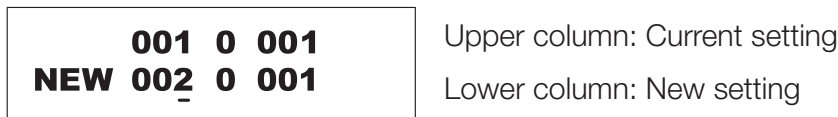
(The SIGNAL LED flashes on and off.)



(2) Press the GET switch of the setting BOX (SB-FH256) to display the current setting status.

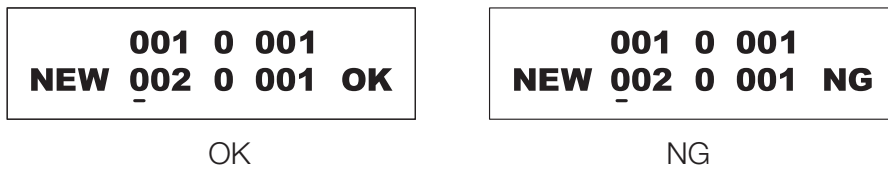


(3) To change the setting, change the group, judgment code or ID (3-digit) using the up/down switches.

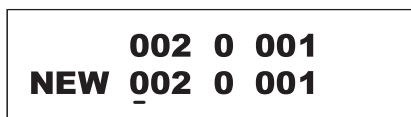


(4) Press the SET switch.

When the setting is completed correctly, the buzzer of the receiver sounds and "OK" is displayed on the right of the lower column on the display. If an error occurs in setting, "NG" is displayed. (If the buzzer switch of the receiver is in the OFF position, the buzzer does not sound.)



(5) To check that the setting has been completed correctly, press the GET switch and confirm that the same data is displayed on the upper and lower columns.



(6) After the completion of setting, return the setting mode switch of the receiver to the original position. (The flashing SIGNAL LED goes off and it is ready for tightening work.)

7-8. Battery replacement of SB-FH256, setting box

In case the yellow LED of the POWER button or LCD display on at power-on, replace the battery.

- (1) Remove the 4 screws on the side panel of the unit.
- (2) Open the cover and change the battery. * Use a 9V alkaline battery.
- (3) Put the cover and tighten the 4 screws on the side panel.

7-9. Connection to POKA PATROL (CNA-4mk3) and multi-contact BOX (I/O-FH256)

By connecting the receiver to a multifunctional counter POKA PATROL (CNA-4mk3), you can count the number of tightened screws, preventing from mis-tightening. Furthermore, use of multi-contact BOX (I/O-FH256) allows up to 4 contact outputs from one receiver. A combination of the receiver, POKA PATROL (CNA-4mk3) and Multi-contact BOX (I/O-FH256) constructs a verification system to prevent from mis-tightening.

7-9-1. Connection of receiver to POKA PATROL

Connect the OUTPUT terminal of the receiver and the WRENCH No. terminal (one of Nos.1 to 4) and the COM terminal of the CNA-4mk3 using a 2-wire shielded cable. Connect a shield wires to the GND terminal of the R-FH256.


 * The tightening torque of the terminal block screw is $T = 50 \text{ cN}\cdot\text{m}$.

7-9-2. Connection of receiver to multi-contact BOX

Connect the RS232C connector (female) of the I/O-FH256 to that (male) of the receiver. Turn a fixing screw in the clockwise direction to fix. Fix a spacer to a mounting hole in the lower part of the receiver with a spacer fixing screw.

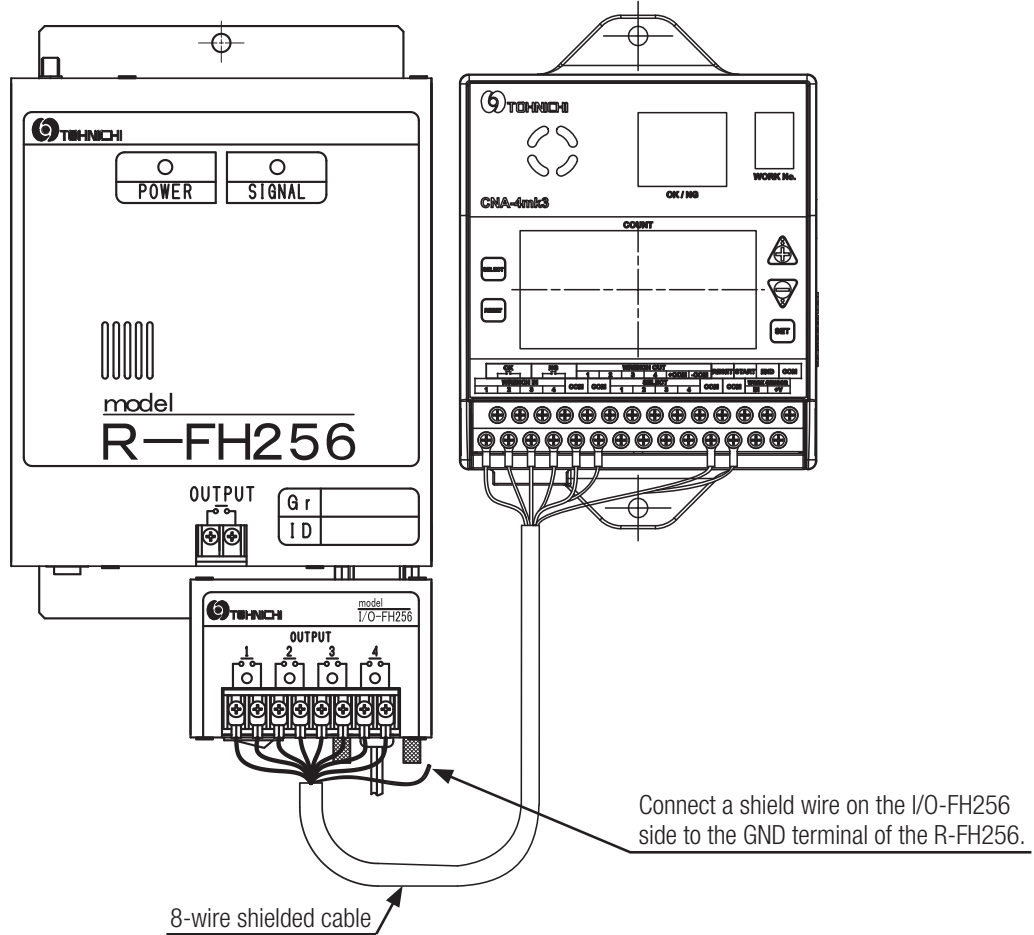
7-9-3. Connection of multi-contact BOX to POKA PATROL

Connect the OUTPUT terminal (Nos.1 to 4) of the I/O-FH256 and the WRENCH No. terminal (Nos.1 to 4) and the COM terminal of the CNA-4mk3 using a 2-wire shielded cable. (Connect the shield wires to the GND terminals of the respective cases.)

 * Making the group of the transmitter identical with that of the receiver, match the ID with the OUTPUT terminal No. of multi-contact BOX from 001 to 004. Note that no output is obtained by other ID.

* The tightening torque of the terminal block screw is $T = 50 \text{ cN}\cdot\text{m}$.

Connection Example of Receiver, POKA PATROL and Multi-contact BOX when Connecting 4 Torque Screwdrivers.



⚠ * For detailed connections, see the operating instructions of POKA PATROL (CNA-4mk3) and multi-contact BOX (I/O-FH256).

8 Troubleshooting

Symptoms	Causes	Corrective actions
The communication status check LED does not light up after the torque screwdriver is activated.	The battery is dead.	Check the battery level. If the communication status check LED is red, replace the battery with a new one.
	No battery	Set a battery.
	The switch function is abnormal.	Check the remaining battery life. If the communication status check LED is blue, there is a trouble in the switch function. Send it for repair.
After the torque screwdriver is activated, the communication status check LED flashes on and off in red 3 times.	Group Error	Check the settings on the setting BOX. If there is any wrong, reset it.
	ID Error	
	Judgment Code Error	
	The receiver is not powered on.	Turn the power switch of the receiver to ON.
	Radio wave environment problem	Change the group.
The receiving distance is short.	Poor connection of the receiver antenna	Ensure that the antenna is connected properly.
	The installation location of the receiver is improper.	If there is a metal pole or iron piping close to the antenna for the receiver, move the receiver to a different place.
	There is a shield between the transmitter and the receiver.	Move the shield or the receiver to a different place.
	Radio wave environment problem	Change the group.
The receiving status is not stable.	The setting of the double tightening prevention timer is not proper.	Readjust the double tightening prevention timer.
	Radio wave environment problem	Change the group.
The settings cannot be changed.	The unit is not in the setting mode.	Set the setting mode switch to the setting mode position.
	Multiple models are set in the setting mode.	Set only one model to the setting mode.

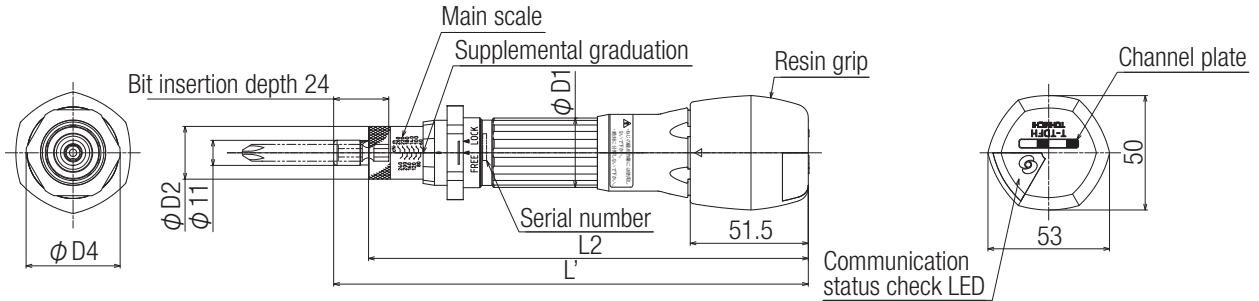
 * Periodically check the transmitting and receiving status.

* If you have any question, contact your nearest distributor or TOHNICHI MFG. CO., LTD.

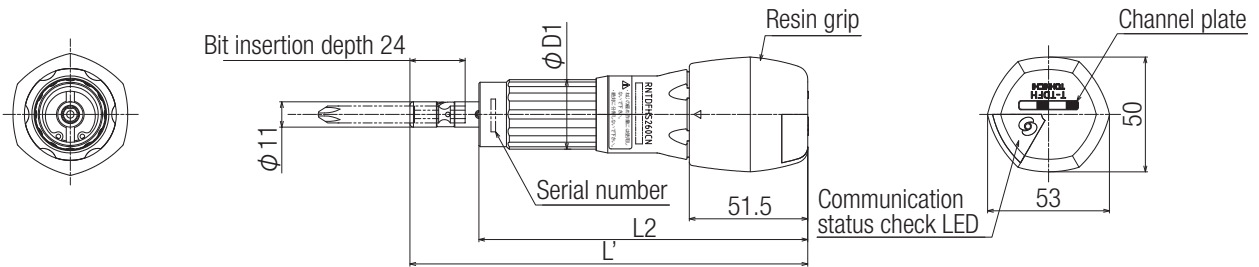
9 Dimensions

9-1. RTDFH/RNTDFH dimension drawing

RTDFH



RNTDFH



Accuracy ±3%

Model	Torque Range				Applicable Screws (Reference)	
	S.I. Model		Metric Model	American Model	Machine Screw	Tapping Screw
	Min.-Max.	Grad.	Min.-Max.	Min.-Max.		
	[cN·m]	[cN·m]	[kgf·cm]	[lbf·in]		
RTDFH120CN	20-120	1	-	-	(M3.5)	M3, (M3.5)
RTDFH260CN	60-260	2	-	-	M4, (M4.5)	M4
RTDFH500CN	100-500	5	-	-	M5, M6	(M4.5)
RNTDFH120CN	40-120	-	4-12	4-10	(M3.5)	M3, (M3.5)
RNTDFH260CN	100-260	-	10-26	10-22	M4, (M4.5)	M4
RNTDFH500CN	200-500	-	20-50	20-40	M5, M6	(M4.5)

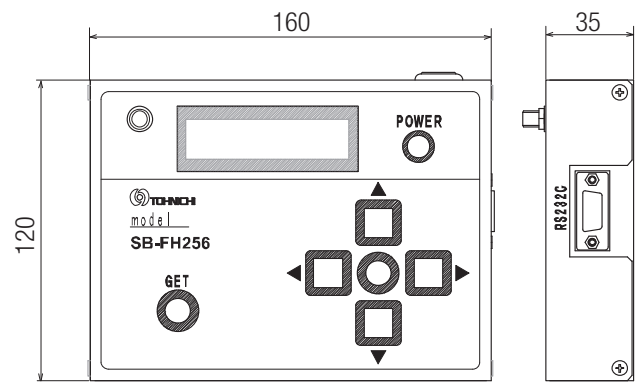
Model	Dimension [mm]					Weight [kg]
	L'	D1	D2	D4	L2	
RTDFH120CN	190.5	24	18	33	164-174	0.28
RTDFH260CN	207.5	30	23	41	181.8-191.8	0.38
RTDFH500CN	218.5	33	25.5	45	193-205	0.49
RNTDFH120CN	172.5	24	-	-	140	0.26
RNTDFH260CN	173.5	30	-	-	143	0.32
RNTDFH500CN	181.5	33	-	-	151.3	0.43

Note) A preset hook spanner is standard accessory for RTDFH260/500CN.

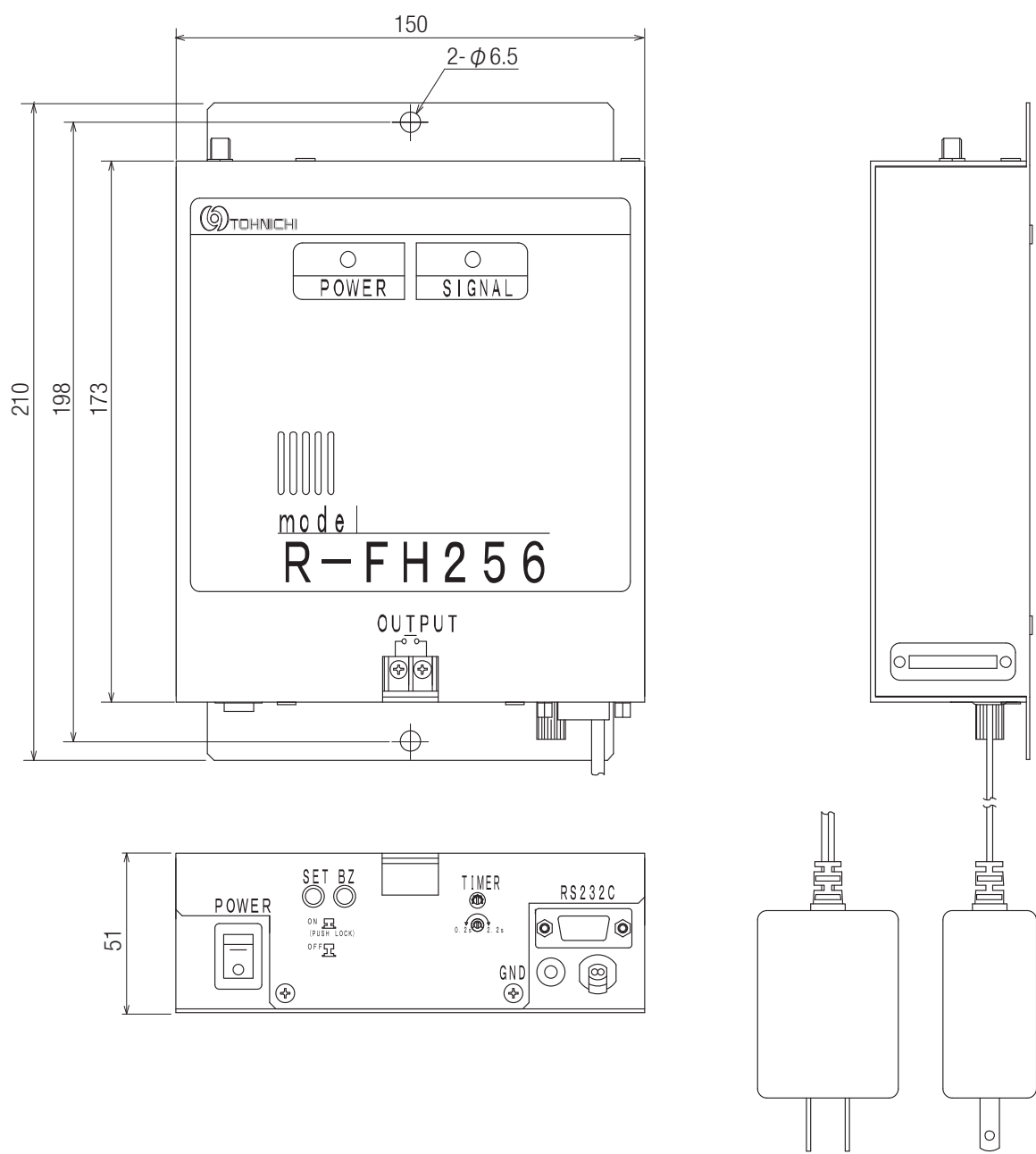
No standard accessory for RNTDFH260/500CN.

In case you need an auxiliary tightening tool, for RTDFH/RNTDFH500CN, #32 is available.

9-2. SB-FH256 Setting BOX dimension



9-3. R-FH256 receiver dimension



Parts/Options/Related Products

Auxiliary tightening tool (Catalog No. 32)



- Facilitates tightening operation of the RTDFH/RNTDFH500CN. (Common with the auxiliary tightening tool for the LTD/NTD1000CN and FTD8N/16N)

I/O-FH256



- Allowing recognition of the transmitter's ID corresponding to up to 4 IDs from one receiver.

CNA-4mk3



- Connecting to the receiver (R-FH256), the count checker CNA-4mk3 counts the number of tightened screws, preventing from mis-tightening.

RTDLS, RNTDLS



- Wired torque screwdriver capable of outputting a tightening completion signal.

Designs and specifications are subject to change without notice.



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