

Electric wave Remote-control Switch

FM Remote-Control Transmitter 2.4G (7ch)

No. N-220004

01

Instruction Manual

Thank you for purchasing TOSO products. To ensure safe use of this product, please read the following thoroughly and keep this manual stored.

Guide for Distributors and Installation Contractors

This manual contains information for a user to safely operate this product.
Please provide this manual to a customer.

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CAUTIONS

* This manual contains cautions and instructions for safe use of the product.
Please read it carefully before using to ensure appropriate use.

- **This document illustrates the dangers of using this product without taking necessary precautions. Please refer to the symbols below for different types of safety points.**



Warning

Illustrates that if this product is misused, there are dangers of serious injuries or possible fatal accidents.



Caution

Illustrates that if this product is misused, there are dangers of casualties or possible physical damage of the establishment or home furniture.

- **This document illustrates safety points to be followed using the symbols below.**



Illustrates specific actions which are prohibited.



Illustrates specific guidelines which must be followed.

■ Precautions upon installing the product (Please read before installation.)



Warning

- ⊘ This product is intended for indoor use. Please do not use it for outdoor purposes.
- ⊘ Locations subject to high temperatures and high humidity, or areas where water may leak, should be avoided.
- ⊘ Do not use this product close to a TV, radio transmitting station or area with strong magnetic force. Transmitting distance may be shortened or may not operate correctly.
- ❗ When installing the product, examine the strength and quality of the backing material.
- ❗ The provided securing screws are for wood only. For other wall materials, please use the appropriate screw type.



■ Safety in Use (Please read thoroughly)



Caution

- ⊘ This product is for TOSO motorized products only. Do not use it for any other products.
- ⊘ Do not attempt to disassemble this product. For repair, consult your original retail shop.
- ⊘ This product requires two 4A dry cell batteries. Do not use any other types. Also, please be careful not to accidentally swallow the battery by small children.
- ❗ If the transmitter is not used for a long time, remove batteries from this product.
- ⊘ Do not use this product in places where it may come into direct contact with water.



Strong shocks may cause damage to this product.



Do not place this product close to a strong magnetic force. The electronic components of this transmitter may not function properly if affected by a strong magnetic force.



Please do not use this product around open flames.



Do not attempt to operate the product other than instructed.



Around the area where the motorized product is to open and close, please remember to clear all objects.



Instructions and directions for use

- This product is a radio device that uses the 2.4 GHz band.
- This product uses a frequency band utilized in many industrial, scientific, and medical devices such as microwave ovens in addition to the mobile identification internal radio stations used by factory production lines and special low-power radio stations.



Warning



Do not place or use this product near medical devices.



Do not bring this product into an operating room, ICU, or CCU, etc.



Keep this product at least 22 cm away from a person with an artificial pacemaker. Radio waves from this product can affect artificial pacemakers.



Caution



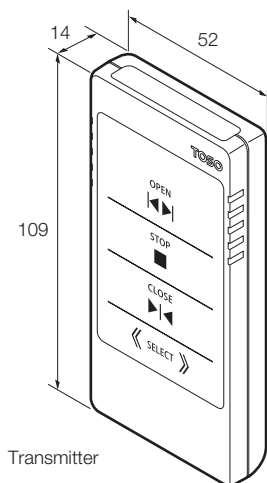
Before using this product, be sure to check that there are no mobile identification internal radio stations for factory production lines or special low-power radio station in use nearby.



To reduce radio wave interference, keep this product away from the following products as much as possible: microwave ovens, wireless LAN devices, digital cordless telephones or fax machines, audio-visual or office automation equipment with radio transmission.

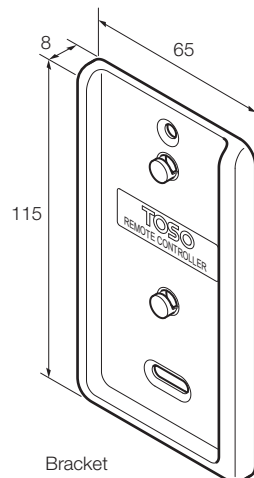
Product View and Part Names

Product View

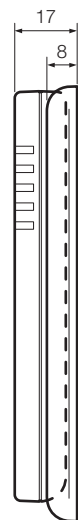


Transmitter

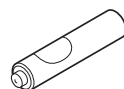
Accessories



Bracket

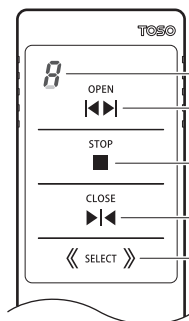


Fixing Screw
(Flat head Ø4x14.....2 pieces)



Battery
(for operation check)
(4A dry cell batteries • • • 2 pieces)

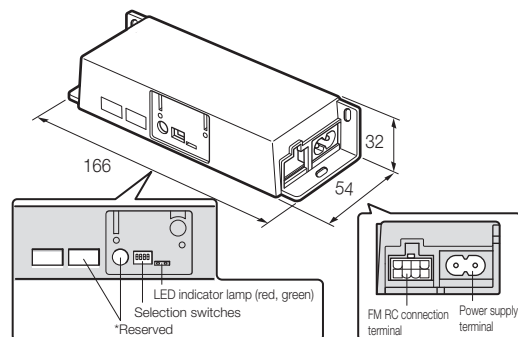
Parts Name



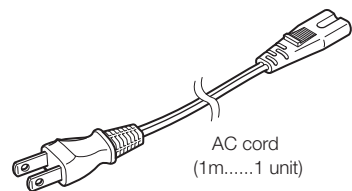
- Address display LED : LED will light in green for the specified address No.
- Open button : To open the motorized product.
- Stop button : To stop the operation of the motorized product.
- Close button : To close the motorized product.
- Address No. setting button : To specify Address No. of the motorized product.

FM Remote-control receiver 2.4G (Sold separately)

Product View/Part Names



Accessories



AC cord
(1m.....1 unit)



Fixing Screw
(Round head Ø4x20.....for receiver, 2 pieces)

Installation

- Mount a Transmitter Bracket to a wall with fixing screws.



Caution

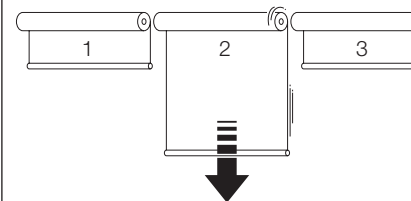
- ⊘ The provided securing screws are for wood only. For other wall materials, please use the appropriate screw type.

Operation Methods

- FM Remote-control transmitter 2.4G and FM Remote-control receiver 2.4G can be operated in the following method.

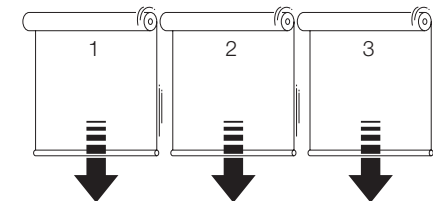
Single operation

- When operating a single item from several products.

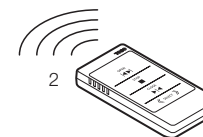


Simultaneous operation

- When operating several items at the same time.



or



How to operate the transmitter

- 1 Open the battery cover on the back of the transmitter.
- 2 Set the batteries (2 pcs x4A dry cell batteries) into the transmitter.

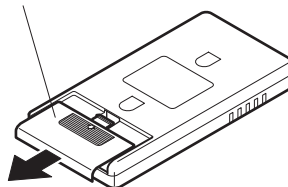


Caution

- Place batteries in the correct direction in the corresponding plus and minus sign as indicated.

* Batteries provided with the product are for test run purposes only. When you use this product, prepare new batteries.

Slide the cover down to remove it.



How to set the number of address numbers (Address display LEDs)

* "8" is displayed on Address display LED in the factory setting.

Press the right side of the «SELECT» Address No. setting button changes the displayed address number in order.

EX) → ALL → 1 → 2 → 3 → 4 → 5 → 6 → 7

Press the left side of the «SELECT» Address No. setting button changes the displayed address number in reverse.

EX) → ALL → 7 → 6 → 5 → 4 → 3 → 2 → 1

* Without pressing the button on the transmitter, the LED will turn off in about 30 seconds.

* Only the address number to be used can be displayed on Address display LED.

EX) When using three address numbers

For progressive: → ALL → 1 → 2 → 3

How to set the number of address numbers to be displayed

- 1 Press (▶▶) open button, (◀◀) close button, and right side of «SELECT» Address No. setting button simultaneously for 1 second causes "8" to blink in Address display LED.

- 2 Press the «SELECT» Address No. setting button, set the address indication LED to "8", and press any of the (▶▶) open button, (■) stop button, or (◀◀) close button for about 1 second, "8" will blink and then the currently set address number will be displayed.

- 3 Press the «SELECT» Address No. setting button to specify the biggest address number you want to display, and then press any of the (▶▶) open button, (■) stop button, or (◀◀) close button for about 1 second. "8" blinks and the setting is completed.

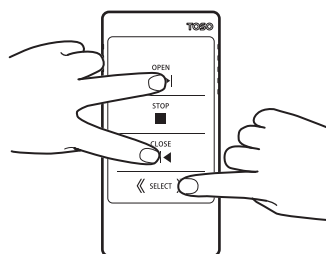
* Without pressing the button on the transmitter, the LED will turn off in about 30 seconds.

* The number to be displayed is always from "8" to the specified address number.

EX) When three address numbers are used (address number 3 is specified)

For progressive: → ALL → 1 → 2 → 3

* "8" (ALL) is not displayed when the address number to be displayed is set to "8" only.



Radio Strength Confirmation Method

- This function receives radio waves sent from another FM remote control transmitter 2.4G and displays the signal strength in a simple manner.



Caution

- This product serves as a receiver and is a function to measure the radio wave intensity emitted from another transmitter. However, note that it does not guarantee radio wave intensity or operation.

- 1 "8" flashes on Address display LED when the (▶▶) open button, (◀◀) close button, and the right side of «SELECT» Address No. setting button are pressed simultaneously for 1 second.
- 2 Press the «SELECT» Address No. setting button, set the address indication LED to "8", and then press any of the (▶▶) open button, (■) stop button, and (◀◀) close button for approximately 1 second, "8" will blink and then "8" will blink.
- 3 When radio waves transmitted from another transmitter are received, the display of Address display LED is overwritten as shown below, and the strength of the radio waves is displayed in a simple manner.

"8" Very weak
(or not receiving)
 "8" Weak
 "8" Normal
 "8" Strong

"8" is an environment where the signal strength is weak and not suitable for operation.

"8" indicates low signal strength and may cause instability.

"8" "8" is an environment with strong signal strength and suitable for operation.

- 4 If you press the open button, (◀◀) close button, and the right side of «SELECT» Address No. setting button simultaneously for 1 second after the (▶▶) operation is completed, Address display LED returns to the original address number and enters normal mode.

* The normal mode can also be restored by inserting or removing the battery. The number of address numbers displayed does not disappear.

To change the number of address numbers to be displayed

- Follow the setting method to set again.

Setting of Address No. of FM Remote control receiver 2.4G (sold separately)

- See the FM Remote control receiver 2.4G's operation manual for setting procedure and set the address No.

Connecting with Motorized Product of FM Remote control receiver 2.4G (sold separately)

- See the FM Remote control receiver 2.4G's operation manual for setting procedure and set the receiver to the motorized product.

Operation method (Single/Simultaneous operation)

- Use each button to operate the motorized product.

* Approx. 30 seconds after ending the transmitter operation, LED address lights will automatically turn OFF.
* When you press the button on the transmitter again, the LED indicator for the last address No. will light.

- 1 Press  Address No. setting button until the LED indicates the Address No. of the product you operate.
- 2 (If ALL is indicated, all of the transmitter can operate at the same time)
Press  open button or  close button to operate the motorized product. If  stop button is pressed during operation, the product stops operating.

EX 1) to operate a motorized product set Address "No. 3".

- 1 Press  Address No. setting button until the LED indicates the Address "No. 3".
- 2 Press  open button to open the product.

EX 2) to operate products at the same time.

- 1 Press  Address No. setting button until the LED indicates "ALL".
- 2 Press  open button or  close button to operate the motorized product. If  stop button is pressed during operation, the product stops operating.

N Intest SW, Venewood AT

* Operation method vary for N Intest SW.

* For N Intest SW, FM Remote control transmitter, 3 button and 5 button cannot be used alternately.

- 1 See the FM Remote control receiver 2.4G's operation manual for setting procedure and set the NO. 3 switch to ON.
- 2 Press  Address No. setting button until the LED indicates the Address No. of the product you operate. (If ALL is indicated, all of the motorized products can operate at the same time)
- 3 Press  open button and the slat will start tilting. It opens automatically when the tilting completes.
* When the concave side of slat is open and facing the indoor, it will open by itself.
Press  close button and the slat will start tilting. It closes automatically when the turn completes.
* When the convex side of slat is open and facing the indoor, it will close by itself.
- 4 Press  stop button while slat is tilting or lifting/lowering and the operation will stop.

* If you want to adjust the angle of the slat, press  stop button while the slat is tilting.

Troubleshooting

Condition		Possible Causes and Solution
Not operating	Transmitter's Address display LED does not light	● Batteries not placed. ⇒ Please fit in batteries. ● Batteries placed in reverse direction. ⇒ Please place batteries in correct direction.
	Address display LED is blinking	● Error is occurring ⇒ Take out the batteries to restore the error and fit the batteries again correctly.
	Receiver's LED green light does not blink when transmitter's button is pressed.	● Address No registered in the receiver has not been set. ⇒ See p.6 in the "Setting of address number" of the FM Remote control receiver 2.4G's operation manual for setting procedure and set the Address No. in the receiver.
	Others	● Receiver is not properly connected to the motorized product. ⇒ See p.7 in the "Connection Method" of the FM Remote control receiver 2.4G's operation manual for setting procedure and properly connect the receiver to the product. ● Receiver is set near a metal or concrete object that reflect electromagnetic waves. ⇒ Place the receiver 1m or more away from the object that reflect electromagnetic waves. ● 2 or more receivers are set close to one another. ⇒ Set apart the receivers at least 1m away from each other. ● Receiver is set close to electrical and electronic equipment. ⇒ Set apart the receivers at least 1m away from electrical and electronic equipment.
Unstable operation	Transmitter's Address display LED ON and OFF intermittently.	● Batteries are old. ⇒ Replace old batteries with new batteries. ● The product hasn't been used for a long time, and batteries have been left installed during that period. ⇒ Check contact points of the batteries. Clean the areas if necessary.
	Others	● Receiver is set near a metal or concrete object that reflect electromagnetic waves. ⇒ Place the receiver 1m or more away from the object that reflect electromagnetic waves. ● 2 or more receivers are set close to one another. ⇒ Set apart the receivers at least 1m away from each other. ● Receiver is set close to electrical and electronic equipment. ⇒ Set apart the receivers at least 1m away from electrical and electronic equipment.

Battery Replacement

- Batteries can last approximately one year, depending on frequency of use.
- If batteries are old, please replace them with new two 4A dry cell batteries.

Product Specification

Source Voltage	DC3V (4A dry cell batteries x 2)
Source Current	30 mA or lower
Wave Frequency	2.4 GHz
Modulation	FSK
Number of Channel	1~7·ALL for 7 CH
Ambient Temperature	-10~50 °C (Non-condensing)
Reaching Distance	30 m (varies depending on the condition)
Product Size	W 52 mm x H 109 mm x D 14 mm
Product Weight	Approx. 48 g

Cleaning

- Whenever necessary, wipe the product with dry, clean, and soft cloth.
- Refrain from directly applying water, thinner or other chemicals to the product. Those materials may cause damages, discoloring, and distortion to the product.

Disposal of Packing Materials

- Do not leave packing material at the installation site.
- Separate combustible cardboard from noncombustible waste.
- Observe the local waster separation regulations when disposing of the materials.