

# TS02ENH-8sw

## Specification



**Nomura Engineering Co., Ltd.**  
**Since 1997**

Please do not apply this product in a way that its failures and errors may involve human lives..

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## Introduction

TS02ENH-8sw is operated in the 429MHz ISM band. It is a handheld to control up to 8 RX output. It is housed in a waterproof and dust-proof case . Please use the exclusive AC adapter. It charges quickly.

## Features

RoHS compliant.

429 MHz ISM band, 10mW, continuous transmission.

Technical regulation conformity certification has been acquired. The license application is unnecessary. You can use it immediately.

multi-channel access: 5channels

Rechargeable: Long life of more than 1000 times charge and discharge.

Quick charge.

More than 20 hours @continuous transmission

I conducted a durability test of 100,000 times or more for the button.

Waterproof : It passed the submergence test of IP67 for 1 hour.

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## Electrical Characteristic

Transmitter frequency	4 2 9.2 5 0 0 MHz ~ 4 2 9.7 3 7 5 MHz
RF output power	1 0 mW + 1 0 / - 3 0 (%)
Frequency stability	± 3.5 ppm以内 (-20 to + 70 °C)
MCA number of channels	5 @standard / 3 @LDM
battery	size AAA rechargeable battery
battery life	more than 20hours@continuous transmission
antenna	board antenna
Operating temperature range	-20 to + 70 °C
Storage temperature range	-30 to + 80 °C
ケース	waterproofing IP67
寸法	44*129*15.5 (mm)
weight	93 g
button ;	power supply button "PWR" and operation button
LED ;	
power supply	"PWR" : red
charge	"CHG" : orange

★Don't change the battery yourself.

## Charger : CHG

input	1 0 0 ~ 2 4 0 V A C
output	5V / 1A switching
recharge time	3 hours

AC adapter is certified to safety standards such as "PSE" , "UL" and "CE".

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## Handling Method

When turning the power on:

If you press the power button for one second, PWR LED (red) will light and flash by intervals of one second. It starts the standby mode.

When you turn the power off:

If you press the power button for one second, PWR LED is four times fast blinking and turns off.

When you press the button in standby mode, it searches an idle channel automatically and transmits to the receiver. PWR LED lights during transmission.

You can select the mode which turns off its power supply automatically when no operation for a certain period of time, or remains the power ON.

When it comes to low battery condition, PWR LED will be two-flash about one second during standby. It becomes the two-flash period of half (0.5 seconds) during transmission.

If you use it for a while in a low battery state and its battery becomes empty, PWR LED will turn off and stop transmission.

Please charge as soon as possible when it becomes a low battery.

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## Charger : CHG

Using adsorption of a magnet, a dedicated adapter is attached to the back of a transmitter remote control(Please see the photograph).

“CHG”LED ;

When to connect the charging adapter, it lights about 3 seconds.

Charging the battery begins, it blinks slowly(once about one second interval), and becomes the two-flash gradually. It lights up when charging is completed.

In the case of charging failure, it becomes fast flashing(about 0.3 second intervals). Charging the battery will stop.

Thermal shutdown circuit is activated even if the heat generation such as failure of the charging circuit. Charging the battery will be stopped forcibly.Failure code is recorded in the internal non-volatile memory when charging failure.



----- If you can not charge... -----

Remove the dust of the magnet.

Trouble of the transmitter body or charger is considered when the malfunction of the following occur.Please contact us.

- Even if several attempts to connect charging adapter, charging doesn't start.
- After charging is completed successfully, the battery is lost as soon as it is used.
- It will be extremely hot during charging.

----- Attention -----

Use the dedicated charger.

Charge the battery at 0-40 °C of ambient temperature.

It causes the trouble when you short-circuit deliberately.

When not in use, please be sure that the probe surface of the charging adapter doesn't short-circuit.

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## Channel group setting

40 available channels were divided into four groups (each to 5 channels).

Both transmitter and receiver, please set to the same channel group.

When you use a lot of pairs of transmitters and receivers in the same area, I recommend that you set each pairs to the different channel group.

For example, you set channel group '1' to a pair of transmitter and receiver 'A' , and set channel group '2' to 'B' , and so on.

## How to set channel group

While holding down the button '1' and button '2', then press the power button.

PWR LED will flash quickly.

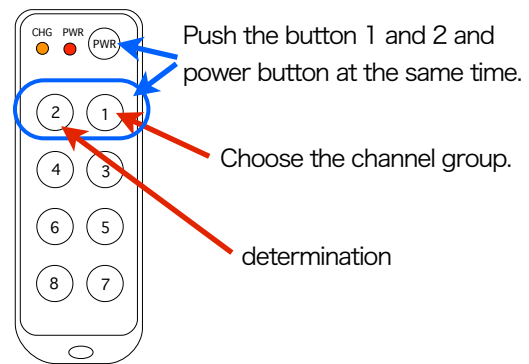
When you release the button of all, PWR LED will change to blinking period of any of the 1-4 times. The number of flashes at this time represents the channel group.

Press the button '1' for more than one second, and release it, flashing count is incremented by one. (1.2.3.4.1.2.3.4.1 . . .)

Please choose the channel group you want.

Press button '2' about one second, PWR LED flashes four times. Channel group is confirmed. And It will turn off.

When you turn on the power again, it can be used in the channel group that you set.



The relation of the number of times of blink of a channel group and PWR LED ;

The number of times

of blink of PWR LED	Channel Group
1	1 *Default
2	2
3	3
4	4

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### Time to power off setting

While holding down the button '1' and button '3', then press the power button.

Press the button '1' for more than one second, and release it, flashing count is incremented by one. (1.2.3.4.1.2.3.4.1 . . .)

Please choose the Time to power off you want.

Press button '3' about one second, PWR LED flashes four times. Time to power off is confirmed. And It will turn off.

Turn on the power again, and use it.

### The number of times

of blink of PWR LED	transmission time	Time to power off※
1	5seconds	30minutes *Default
2	10minutes	30minutes
3	A power supply is always ON.	
4	not use	

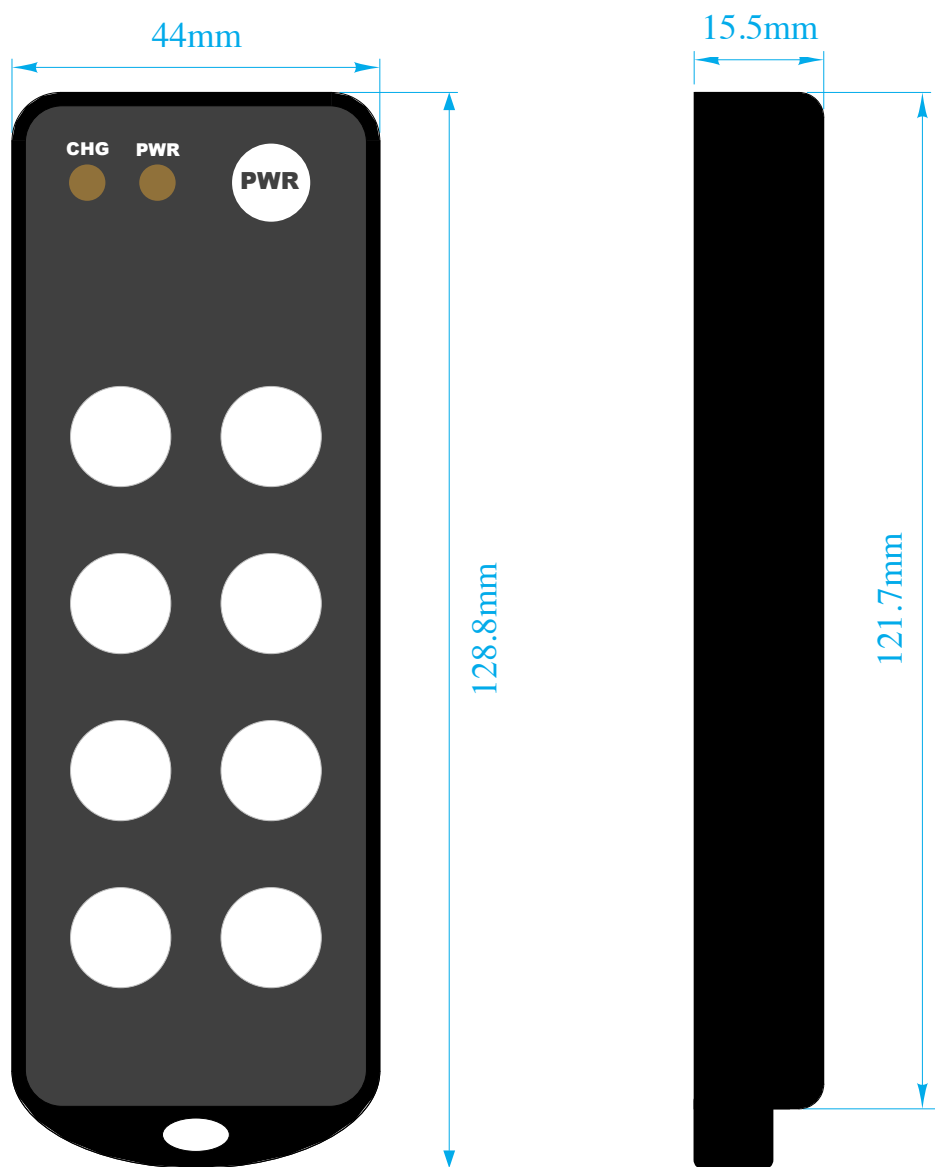
※"Time to power off" is the time from the last operation to the power supply turns OFF.

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## Dimensions



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