

WS900

Diaper Wetness Sensor for Home Care

User's Manual

FCC ID: OWGWS900TX & OWGWS900RX

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.

Any changes or modifications not expressly approved by Excel Engineering (HK) Co. Ltd. could void the user's authority to operate the equipment.

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 or 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.

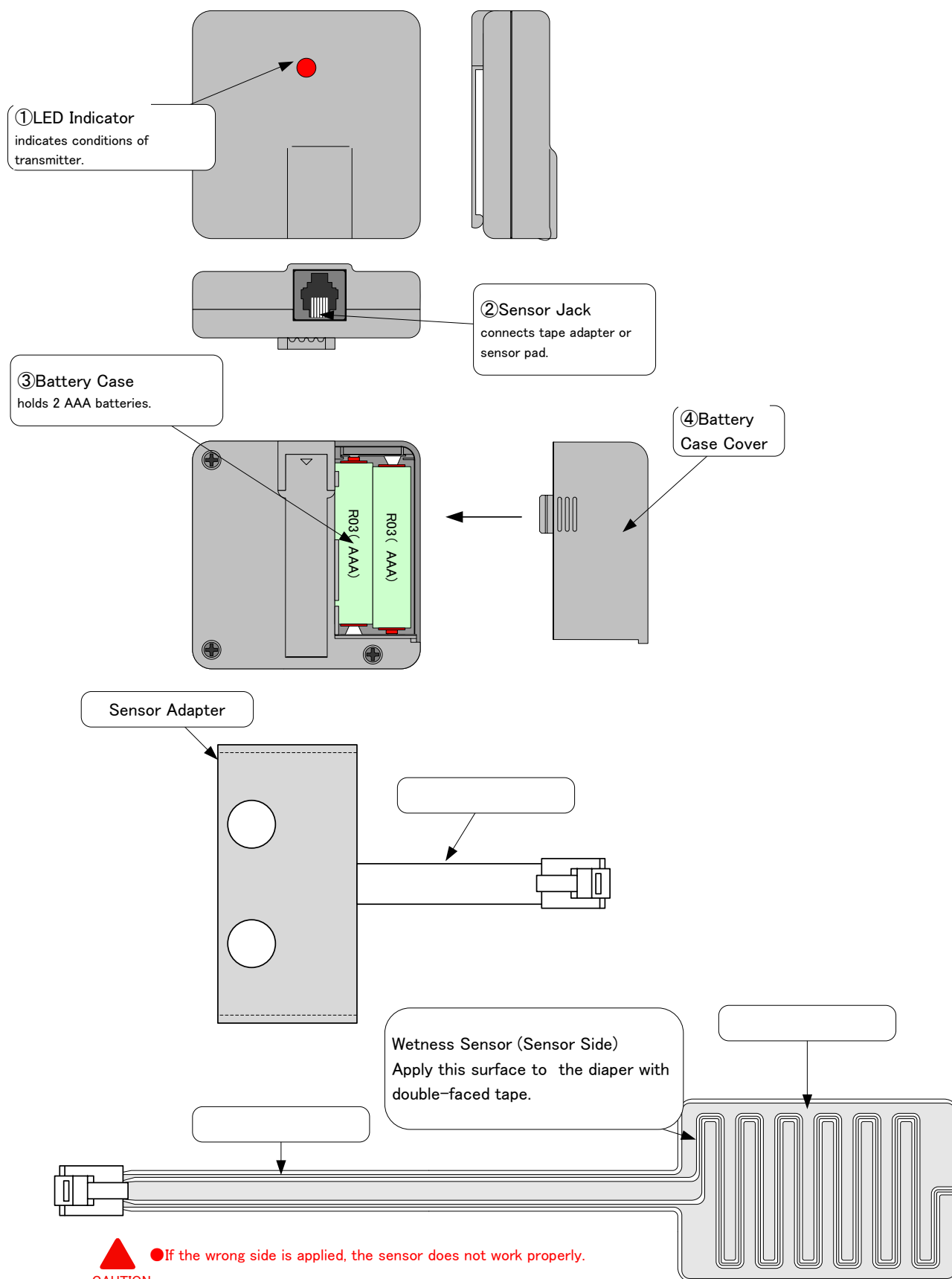
1. Specification

Item	Spec.	Comment
Frequency	907.762MHz	
Current	Within FCC Requirement (Less Than 5000uV/m) Range In-Door Approx. 50m	FCC Automatic Levels 15.231(e)
Frequency Capacity Deviation	±10ppm	
Oscillation Type	Crystal Oscillator	
Modulation Type	FM Band	
Modulation Speed	500bps	
Wetness Sensing	Volume Sensor, Resistance Sensor	
Sensor Connection	6-Line Modular	
LED Indicator	Operation Indicator, Battery Indicator	
Operating Temp.	0~45°C	
Power Supply	3V (AAA x 2)	
Battery Life	Approx. 1 Month	
Antenna	Built-In	
Case	ABS	

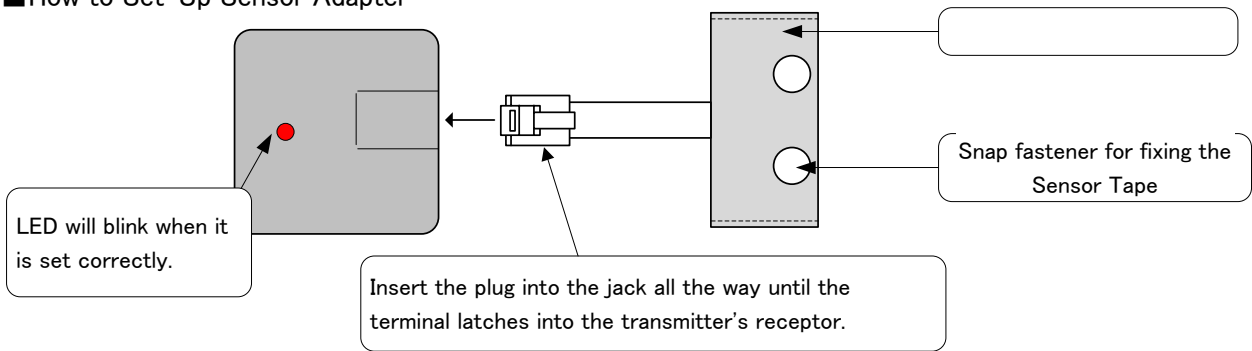
2. Function

Max ID	-----	256
ID Set-up	Type	Fixed
	Method	Written in ROM
Sensor Set-up	Type	Auto
	Method	Switch Sensor Pad & Tape Adapter
LED Indicator	Type	LED
	Condition	Wet Mode---Blink at 3 sec. cycle Operating---Automatically illuminates after installing sensor and blink at 6 sec. cycle Low Battery---Blink at 1 sec. cycle

■Parts Description & Function



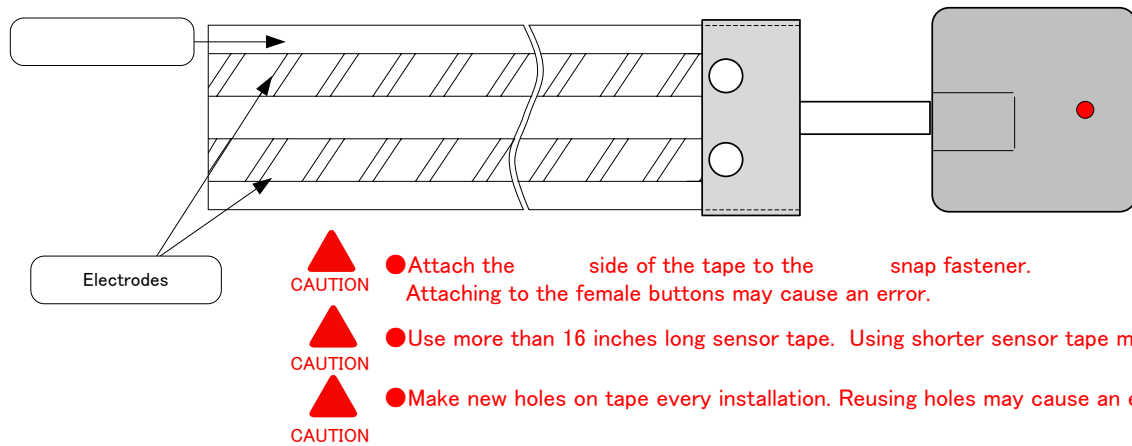
■How to Set-Up Sensor Adapter



■How to Set-Up Sensor Tape

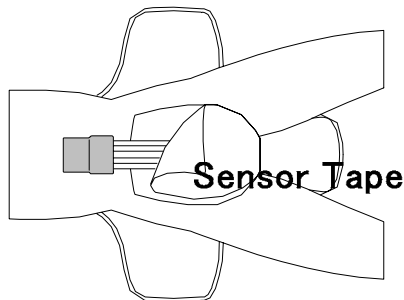
Install the sensor adapter to the sensor tape as below.

Please make sure that the snap fasteners touch the electrodes; otherwise, it may not sense wetness.



■How to Apply to Diaper

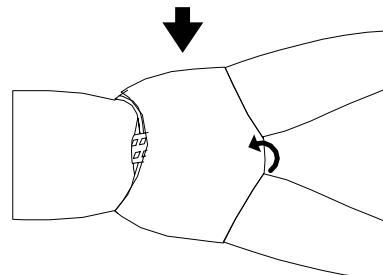
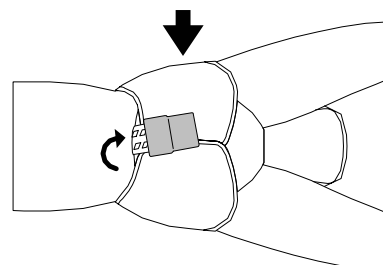
•Using Sensor Tape



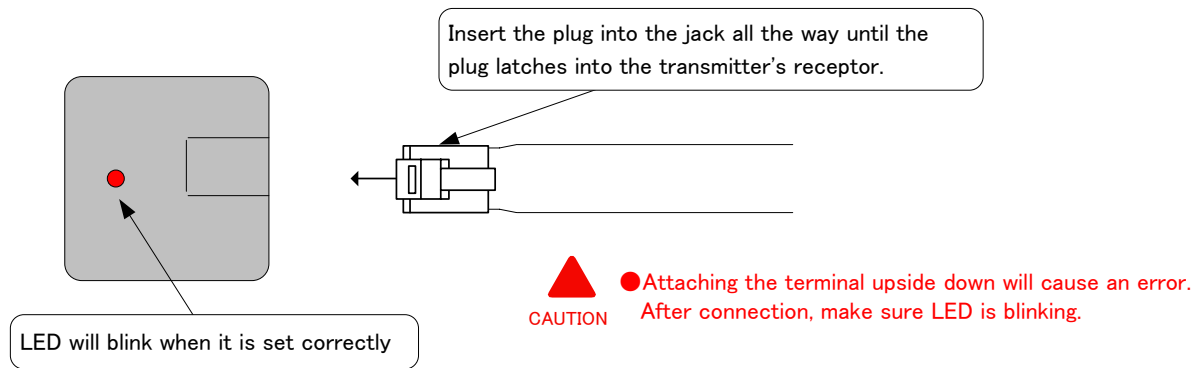
1. Apply the sensor tape between two layers of cloth diaper.

注意 Face the blue side of the sensor tape to skin. Facing the wrong side may cause an error.

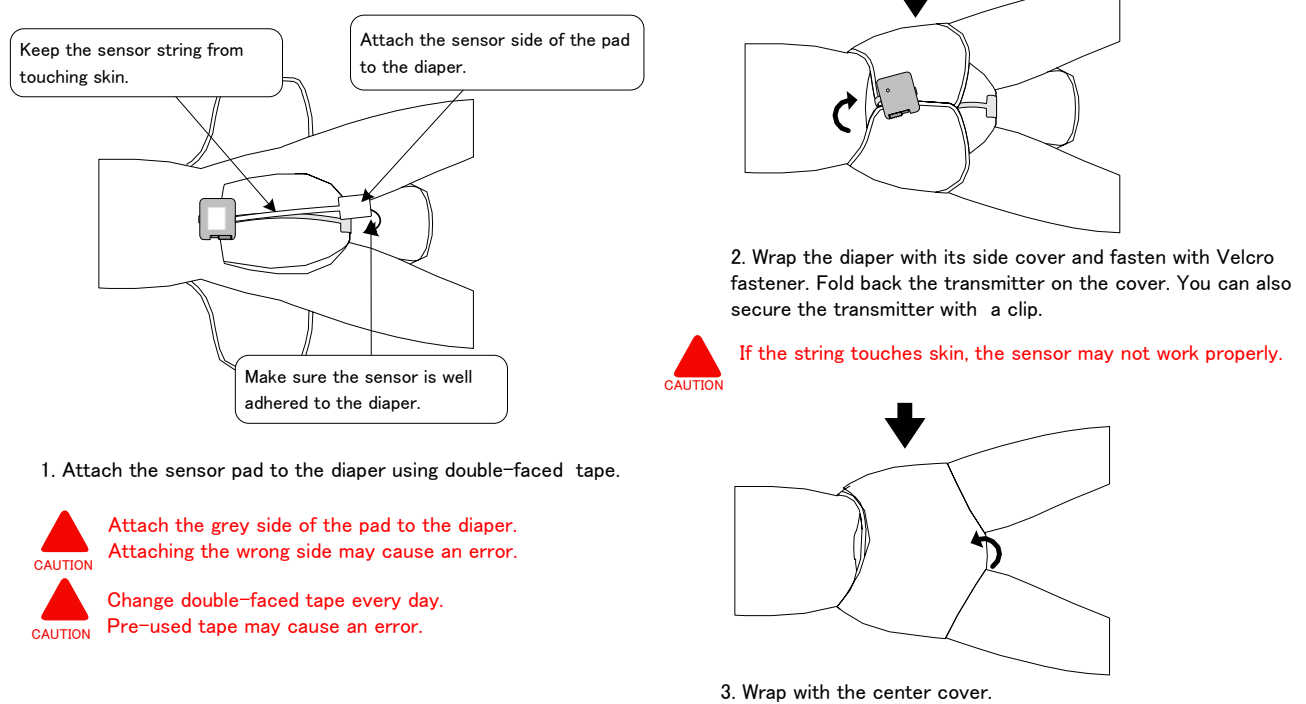
注意 The sensor tape is only for one time use. Discard the used tape as combustible.



■How to Set-Up Sensor Pad

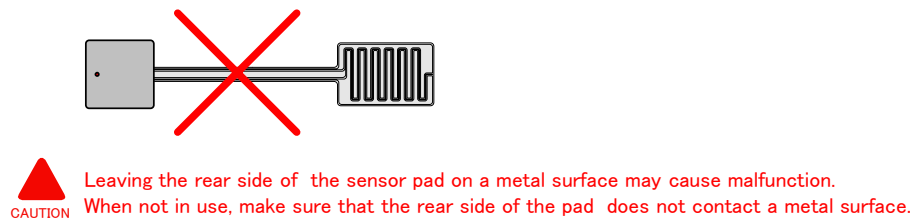


■How to Apply to the Diaper



■Storage Caution

- When storing, detach the sensor pad from the transmitter, or remove batteries.



1. Specification

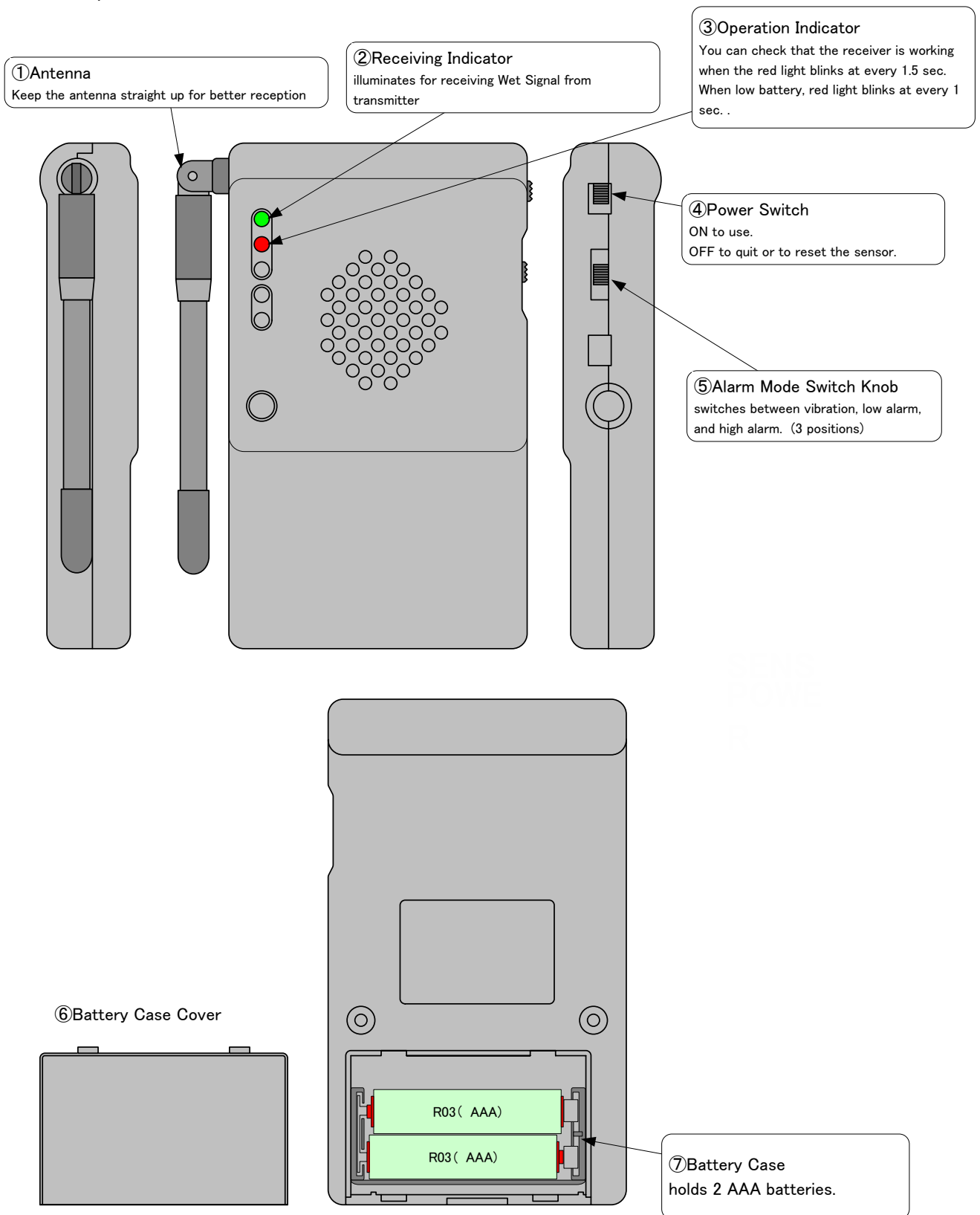
Item	Spec.	Comment
Receiving Frequency	907.762MHz	
Sensitivity	Indoor Approx. 50m 100dBu(12dBSINAD)	
Receiving Type	FM Band	
Unwanted Emission	Within FCC	
ID Channel	Select 1 of 256	Written in ROM
LED Indicator	Operation Indicator, Receiving Indicator	
Alarm	Switch Hi-Low (Volume Hi—Low)	
Vibrator	Intermittent Vibration	
Operating Temp.	0~45°C	
Power Supply	3V (AAA × 2)	Alkaline AAA Battery x 2
Battery Life	Approx. 1 Month	
Antenna	1/2 λ (External)	Can swivel
Case	ABS L100 × W59 × H19.5	Modified the existing case

【Receiver

2. Function

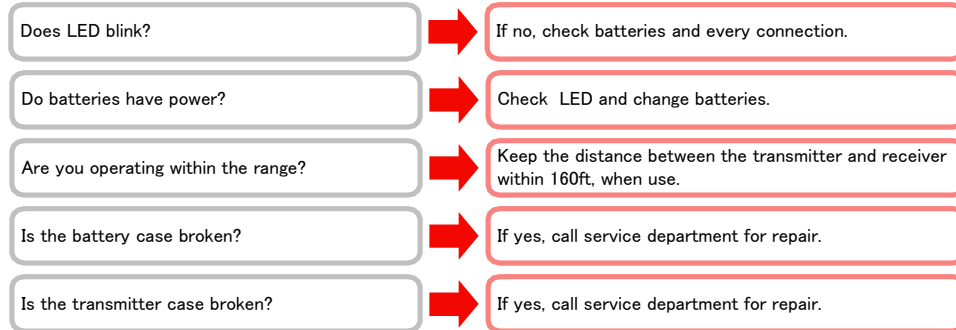
Max D	-----	256
ID Set-up	Type	Fixed
	Method	Written in ROM
Alarm Set-up Vibrator Set-up	Type	Side-Mounted Switch
	Method	Hi-Low
Alarm Mode	Type	Side-Mounted Switch
	Method	Vibration Alarm - Low Alarm - High Alarm
LED Indicator	Type	LED
	Condition	Wet Mode---LED (Green) illuminates Operating---LED (Red) blinks at every 1.5 sec. Low Battery---LED (Red) blinks at every 1 sec.

■Parts Description & Function

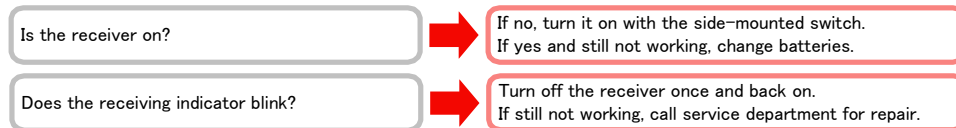


■ Can Not Detect Wetness

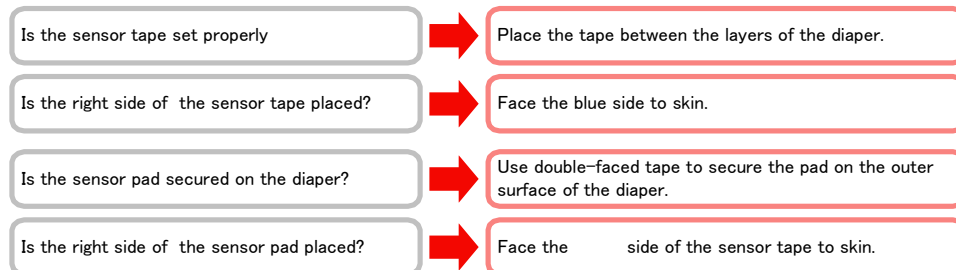
● Transmitter Problem ?



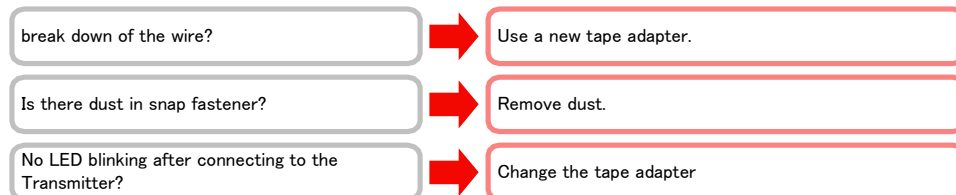
● Receiver Problem ?



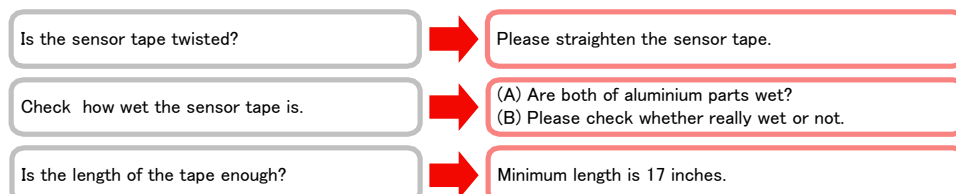
● Diaper Problem ?



● Tape Adapter Problem ?



● Sensor Tape Problem?



【Tro

● Sensor Pad Problem?

Sensor pad is broken?

Change the sensor pad.

Using the sensor pad over one month?

Change the sensor pad.

Check where is wet.

Apply the sensor pad where gets wet.

Sensor pad is apart from the diaper.

Fix the side of sensor pad on to the outer surface of the diaper firmly with double-faced tape.

■ The sensor comes on when the diaper is actually dry

● Transmitter problem?

Is it wet near the snap fastener?

If yes, use after dry the hook.
Use slow dry method.

Any suspicion of a short-circuited?

You need to replace the sensor

The sensor terminal on the plug is dirty.

Use after cleaning.

Storing with the battery and sensor in?

Store the transmitter after removing the battery and sensor

● Receiver problem?

CPU is out of control?

Turn it off and remove the battery.
Insert the battery after 10 seconds and turn it on.

● Sensor tape adapter problem?

Is it wet near the snap fastener of tape adapter?

If yes, use after dry the tape adapter.
Use slow dry method.

● Sensor tape problem?

Is the tape wet?

If yes, change the sensor tape

● Sensor pad problem?

Is the sensor pad wet?

If yes, use after drying the sensor pad.
Use slow dry method.

Is the sensor pad broken?

If yes, change the sensor pad.

Using the sensor pad over one month?

If yes, change the sensor pad.

Is the sensor pad attached to the skin?

If yes, attach the sensor pad outside of the diaper.