

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.

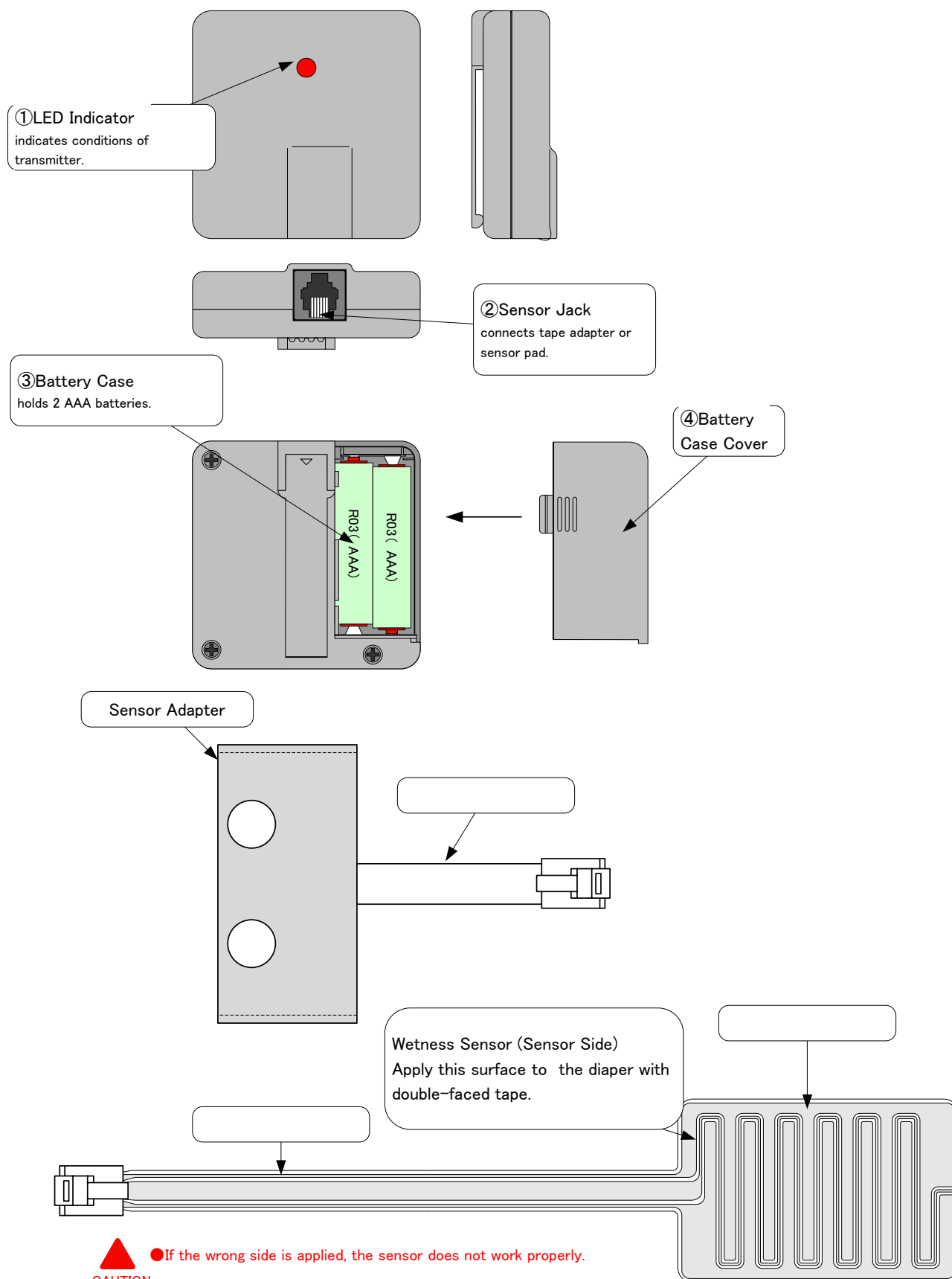
1. Specification

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	

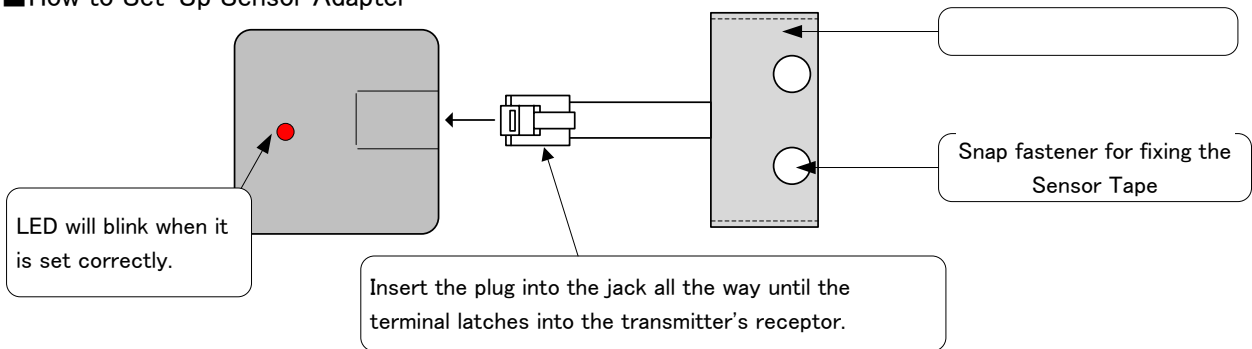
2. Function

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



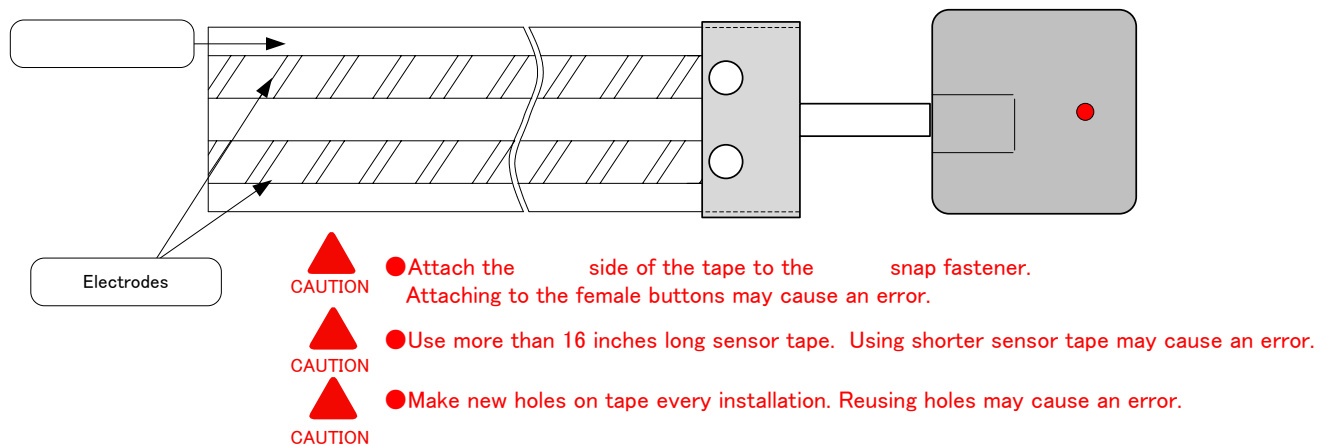
■How to Set-Up Sensor Adapter



■How to Set-Up Sensor Tape

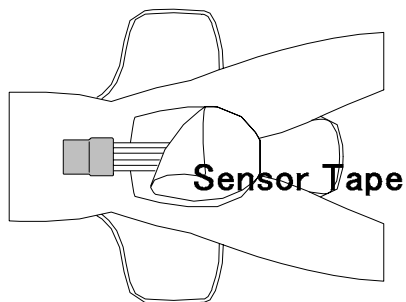
Install the sensor adapter to the sensor tape as below.

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



■How to Apply to Diaper

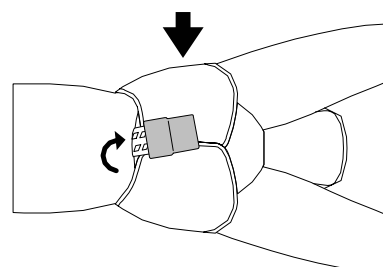
•Using Sensor Tape



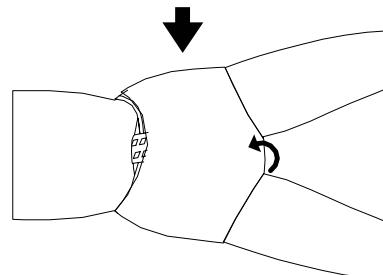
1. Apply the sensor tape between two layers of cloth diaper.

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.

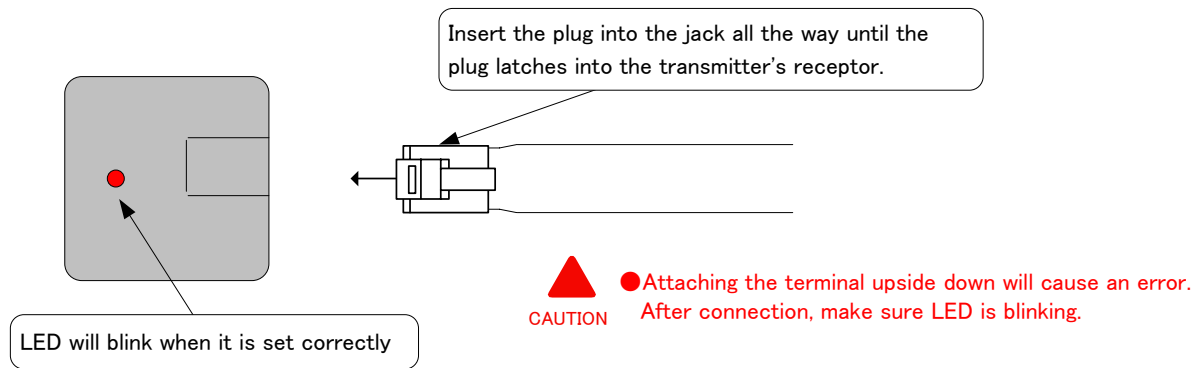


2. Wrap the diaper with its side cover and fasten with Velcro fastener. Fold back the transmitter on the cover.

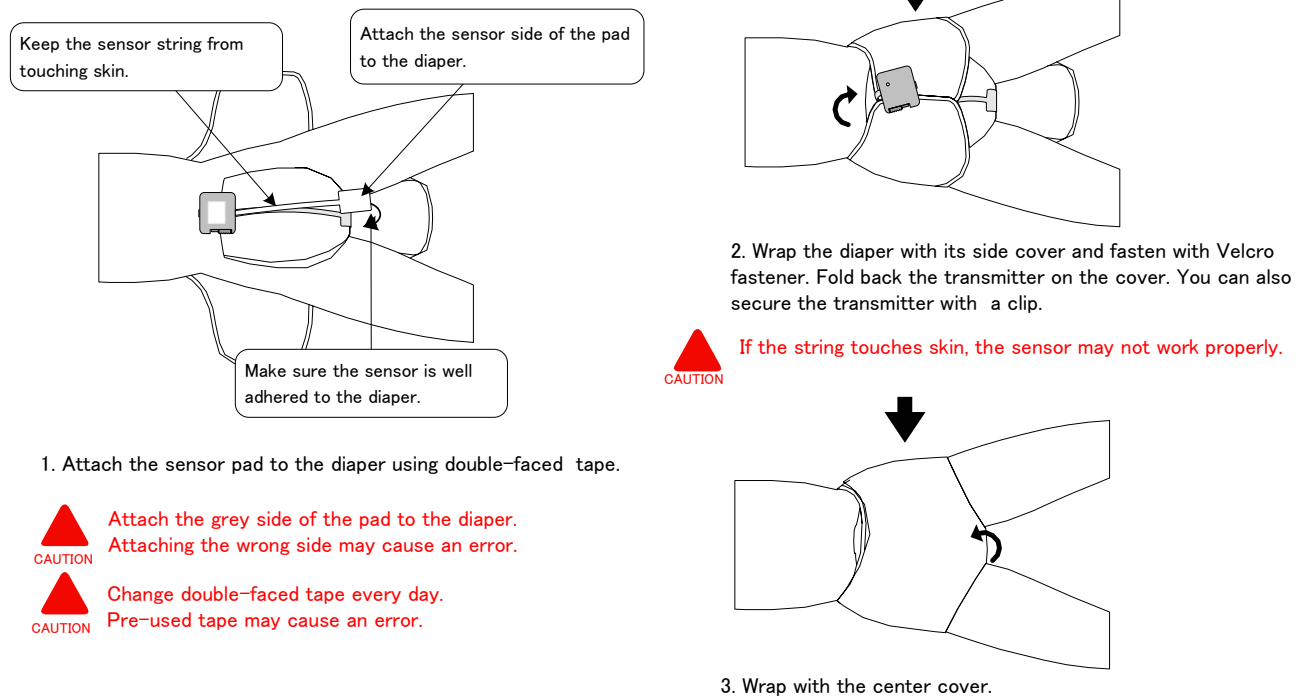


3. Wrap with the center cover.

■How to Set-Up Sensor Pad

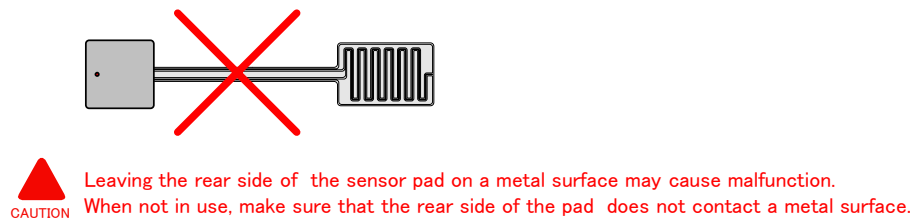


■How to Apply to the Diaper



■Storage Caution

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



1. Specification

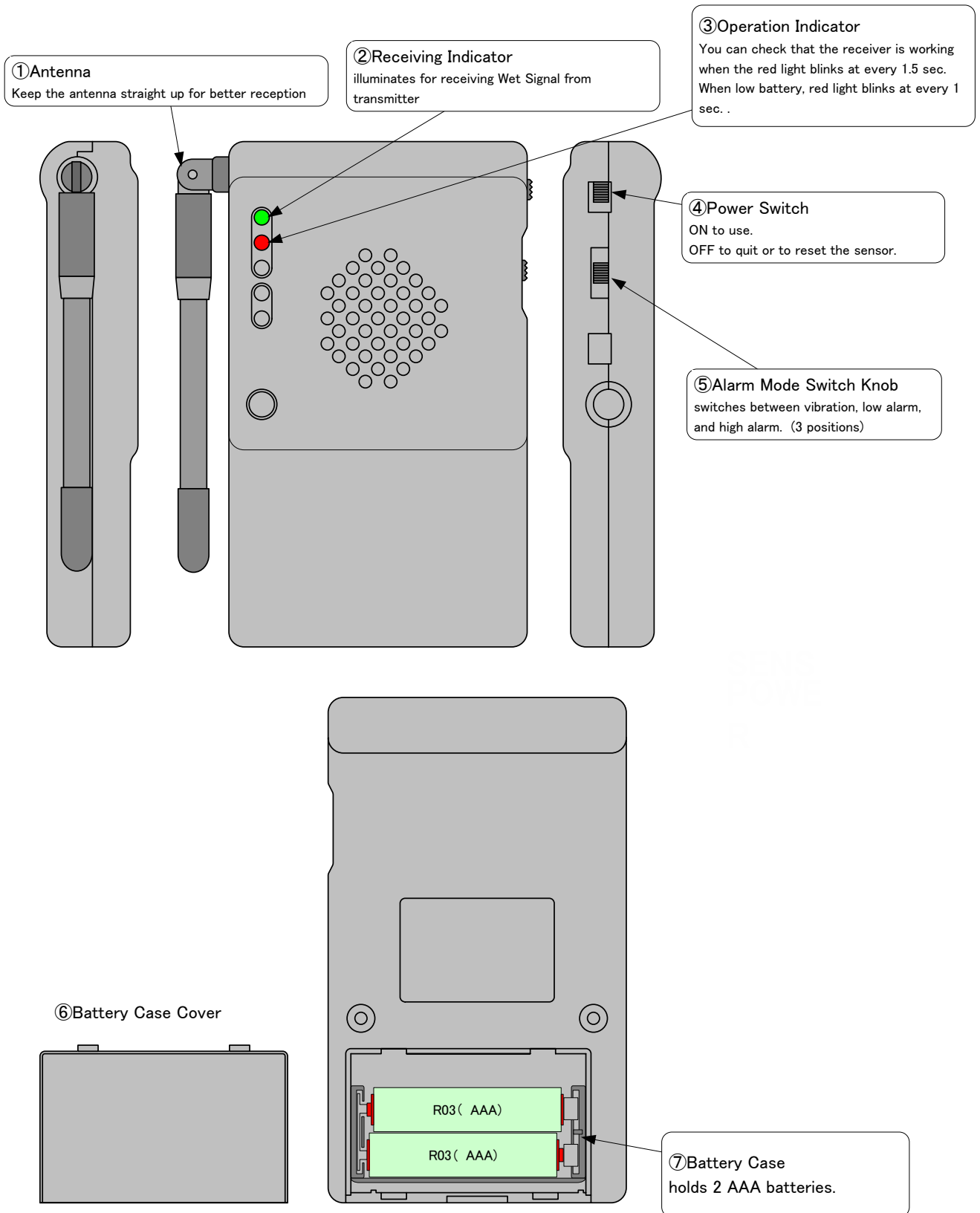
Item	Spec.	Comment
Receiving Frequency	907.762MHz	
Sensitivity	Indoor Approx. 50m 100dBu(12dBSINAD)	
Receiving Type	FM Band	
Unwanted Emission	Within FCC	
ID Channel	Select 1 of 256	Written in ROM
LED Indicator	Operation Indicator, Receiving Indicator	
Alarm	Switch Hi-Low (Volume Hi—Low)	
Vibrator	Intermittent 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 ?

Does LED blink?	→	If no, check batteries and every connection.
Do batteries have power?	→	Check LED and change batteries.
Are you operating within the range?	→	Keep the distance between the transmitter and receiver within 160ft, when use.
Is the battery case broken?	→	If yes, call service department for repair.
Is the transmitter case broken?	→	If yes, call service department for repair.

● Receiver Problem ?

Is the receiver on?	→	If no, turn it on with the side-mounted switch. If yes and still not working, change batteries.
Does the receiving indicator blink?	→	Turn off the receiver once and back on. If still not working, call service department for repair.

● Diaper Problem ?

Is the sensor tape set properly	→	Place the tape between the layers of the diaper.
Is the right side of the sensor tape placed?	→	Face the blue side to skin.
Is the sensor pad secured on the diaper?	→	Use double-faced tape to secure the pad on the outer surface of the diaper.
Is the right side of the sensor pad placed?	→	Face the side of the sensor tape to skin.

● Tape Adapter Problem ?

break down of the wire?	→	Use a new tape adapter.
Is there dust in snap fastener?	→	Remove dust.
No LED blinking after connecting to the Transmitter?	→	Change the tape adapter

● Sensor Tape Problem?

Is the sensor tape twisted?	→	Please straighten the sensor tape.
Check how wet the sensor tape is.	→	(A) Are both of aluminium parts wet? (B) Please check whether really wet or not.
Is the length of the tape enough?	→	Minimum length is 17 inches.

【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.