



# Wireless nurse call system NC-5000

## Product Manual

### Contents

|                                                                                                    |     |
|----------------------------------------------------------------------------------------------------|-----|
| Safety Instruction .....                                                                           | 2-4 |
| Name and Function .....                                                                            | 6-7 |
| How to use the transmitters .....                                                                  | 8   |
| Before using .....                                                                                 | 9   |
| How to use .....                                                                                   | 9   |
| How to set up .....                                                                                | 10  |
| Volume setting .....                                                                               | 10  |
| To confirm the setting .....                                                                       | 10  |
| To cancel the setting .....                                                                        | 10  |
| System test .....                                                                                  | 11  |
| Informing a caregiver if a transmitter is outside of<br>a wireless signal transmission range ..... | 11  |
| Alarm sound setting .....                                                                          | 11  |
| Alarm auto stop function .....                                                                     | 11  |
| Alarm sound list .....                                                                             | 12  |
| Specification .....                                                                                | 12  |

### Before Using NC-5000

Thank you for purchasing our product "NC-5000".

Be sure to read our manual thoroughly before using and keep this manual for any future references.

NC-5000 is designed to support monitoring patients.

Using a NC-5000 will not prevent injury, and is not a guarantee of safety.



# Safety Instruction

Before using NC-5000, be sure to read this safety instruction carefully.

\*Product specifications described in this material are subject to change without notice for reasons of modification and/or improvement.







## ■ Hazard definition

The following terms are used throughout this manual to bring attention to the presence of hazards of various risk levels, or to important information concerning use of the product.

|                                                                                  |                |                                                                                                             |
|----------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------------------------------|
|  | <b>Warning</b> | Indicates an imminently hazardous situation which, if not avoided, may result in death or serious injury.   |
|  | <b>Caution</b> | Indicates a potentially hazardous situation which, if not avoided, may result in injury or property damage. |

\* “Caution” indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

## ■ Example of Picture Indication

|                                                                                   |                                                     |                                                                                    |                                                                       |
|-----------------------------------------------------------------------------------|-----------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
|   | This icon indicates “not allowed.”                  |   | This icon indicates “do not get it wet.”                              |
|   | This icon indicates disassembly is prohibited.      |   | This icon indicates to “force completion of the following procedure.” |
|  | This icon indicates “do not touch with a wet hand.” |  | This icon indicates to “unplug the AC adaptor.”                       |

## Warning

### IMPORTANT SAFETY INSTRUCTION

Unplug NC-5000 from the wall outlet and refer servicing to qualified service personnel under the following conditions.



- When smoke, an unusual noise, or an odor comes from the unit please contact the store that you purchased from for repair. Please do not attempt to repair it.
- When water or other foreign objects gets into the unit.
- When the plug-in or the cord becomes hot.
- When you drop or break the unit.



### **Do not disassemble or alter the product.**

Do not attempt to disassemble or alter the product. It may cause fire and electric shock. Contact your distributor for inspection, adjustment and repair.



### **Do not wet**

Do not wet the product. It may cause a fire and an electric shock.



### **Do not harm AC adapter's cord**

Follow instruction below; fail to do so may damage the cord.

- Do not put heavy item on the cord.
- Do not add or process the cord.
- Do not forcefully bend the cord.
- Do not harm the cord.
- Do not twist or pull the cord.
- Do not put closely to the heating materials

Ask your distributor for an exchange when the AC adapter's cord is damaged. Fail to do so may result in fire or electric shock.



### **Precautions when using the AC adapter**

- If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Do not bundle the AC power cord.
- If an extension cord is used with this product, make sure that the total of the ampere ratings on the products plugged into the extension cord do not exceed the extension cord ampere rating.



### **Operate this product only with the specified voltage**

Use NC-5000 with specified voltage. Failure to do so may cause a fire and an electric shock.



### **Inspect a plug into the outlet regularly**

Remove the dust and dirt between the plug and the outlet regularly. Failure to do so may result in short circuit and fire.



### **Do not put container filled with water or any kind of liquid on top of the product.**

If water/liquid spills or enters inside of the product, it may cause a fire and an electric shock.



## **Caution**



### **Huddle the AC adapter with caution**

- Do not plug in/out with wet hands. It may cause an electric shock.
- Never pull on the cord when unplugging from the electrical outlet. Always grasp the AC cord plug when unplugging.



### **Do not use the product with an electrical blanket or other electrical items.**

This may cause a damage to the product or an electric shock.



### **Caution with where you set up**

- Do not set up this product in humid or dusty places. Failure to do so may be the result of fire and an electric shock.
- Do not set up in a direct sunshine area. Failure to do so may be the result of fire and trouble.



### **Do not put heavy item on the product**

This may be the result of trouble of this product.



### **Do not set up at unstable place**

Do not set up anywhere that is unstable, shaky or at a shelf. It may drop or fall down and may be the result of an injury.



### **Rechargeable Battery caution**

Follow the instruction below.

Failure to do so may lead to batteries' explosion and liquid leak of battery, which may lead to fire and injury, or cause mess and damage around the surrounding.

- Use the specified battery.
- Never disassemble the battery.
- Non-rechargeable batteries are not to be recharged.
- Remove the batteries when not using the device for an extended period of time.



### **Precaution during the time of non-operation for a long period of time, and maintenance.**

For your safety, unplug the AC adapter from the outlet.

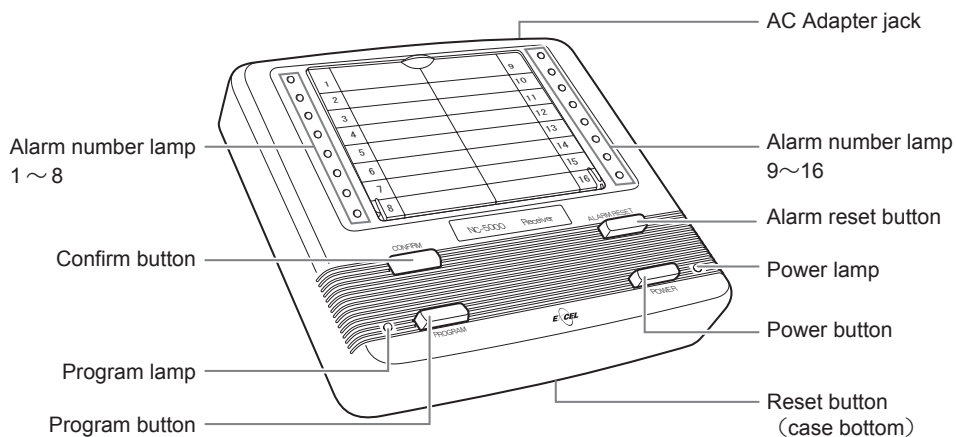
Fail to do so, it may cause a fire.

# MEMO

This image shows a full page of a worksheet designed for handwriting practice. It features 20 evenly spaced, horizontal dashed lines across the entire width of the page. The background is plain white, and there are no margins, text, or other markings present.

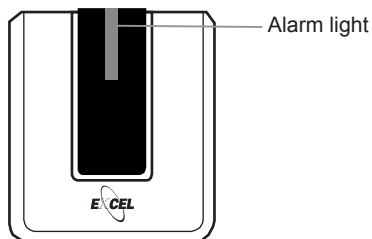
# Name and function

## Receiver

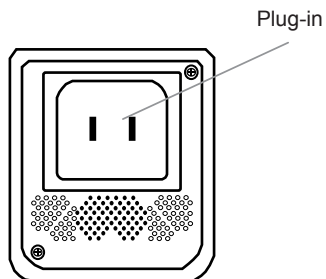


## Repeater

Front view



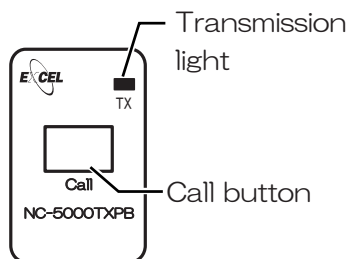
Back view



# Name and function

## Portable nurse call button

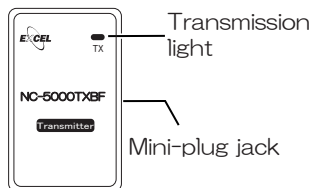
---



## Sensor connection transmitter

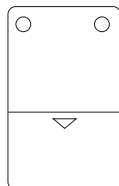
---

Front view



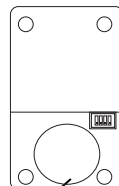
Back view

With a cover view



Battery holder

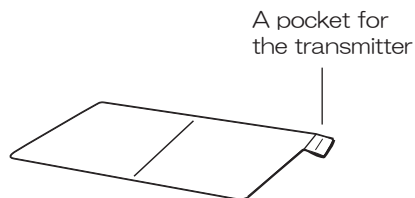
Without a cover view



Setting switch

## Bed sensor pad

---



# How to use the transmitters

## How to use sensor connection transmitter









Excel' s bed and/or floor sensor can be connected to the transmitters. For the bed sensor, when an individual' s body weight decreases on the bed (e.g., sitting up or moving close to the edge of the bed) the sensor delivers an alert signal to the receiver wirelessly. When the weight turns back to on the bed, the sensor delivers a reset signal\* to the receiver. For the floor sensor mat, when an individual' s weight creates a pressure on the mat (e.g., stepping on the mat) the sensor deliver an alert signal to the receiver wirelessly.

\* Reset signal can' t make pair with the receiver.

Step 1: Based on the sensor that you use, select one of the detection modes by changing the switch positions on the back of the transmitter (please see the diagram below).

Step 2: When appropriate positions of the switches are selected connect the transmitter to the detection sensor and place the transmitter in the pocket.

Step 3: Register or pair the detection sensors with the receiver. Please refer to each receiver' s manual for the pairing process.

|                        |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Switch positions       |  |  |  |  |  |  |  |  |
| Detection modes        | —                                                                                 |                                                                                   |                                                                                   |                                                                                   | Departing from the bed                                                            | Wandering                                                                         | —                                                                                 |                                                                                    |
| Alert delay duration   | 0 sec                                                                             | 1 sec                                                                             | 2 sec                                                                             | 4 sec                                                                             | —                                                                                 |                                                                                   |                                                                                   |                                                                                    |
| Out of range Detection | —                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | OFF                                                                               | ON                                                                                 |

Factory settings

Bed sensor: Departing from the bed mode with an alert delay time of 2 sec.

Floor sensor and side-rail pads: Wandering mode with a delay time of 0 sec.

In normal use, the switch 3 is always ON. If you don' t need detection outside of a wireless signal transmission range\*\*, you can disable it by switching the switch 3 to OFF. After switching the switch 3, you must turn the power off (eject sensor plug) and wait for 10 seconds to shut down completely, and turn the power on(insert sensor plug) again.

\*\* Please refer to page.12 or page.16 about this feature.



## Before using

**Before using this product, please read the following and prepare the system.**

**Please refer to the explanation of each item for detail.**

1. To turn on receiver /repeater go to "Turn on receiver/repeater".
2. To set up transmitter ID on the receiver go to "How to set up ID".
3. To set up the system go to "How to set up".
4. To test NC-5000 go to "System test".

### Turn on Receiver

1. Insert the AC adapter into receiver's jack and insert the AC adapter plug into power socket.
2. Turn on the power button and the power lamp turns on.

### Turn on Repeater

1. Simply, the repeater can be plugged in an existing power outlet.

### Set up NC-5000

#### **Receiver:**

Hang receiver on the wall with attached screws place it on the desk.

#### **Repeater:**

Install repeater between receiver and transmitter.

Multiple repeaters can be linked.

#### **Portable nurse call button:**

Portable call button can be worn as a pendant or hung in appropriate place.

## How to use

#### **Portable nurse call button:**

Push the call button and transmission light lit and alarm on the receiver will sound.

#### **Receiver:**

The alarm number lamp on the receiver will blink and alarm will sound upon receiving signal from transmitter.

Press the alarm reset button to stop the alarm sound and reset the alarm number lamp.

#### **Repeater:**

Alarm lamp will blink for one second upon receiving a signal from transmitter.

## How to set up

### To set up the Portable nurse call button:

1. Turn on the receiver and program lamp will blink. The lamp won't blink when any ID is already set up.
2. Press and hold the program button. It makes a beep sound and smallest number of the alarm number lamp available will blink.
3. The next available alarm number lamp will blink upon pressing the program button again. Repeat this step as needed to select the desired number.
4. Select the number and press the call button on the portable call button. It makes a beep sound and alarm number lamp will stop blinking and stay lit.
5. It makes a beep sound upon pressing the confirmation button and then program lamp will turn off.



To continue setting up multiple ID repeat step 3 and 4 as needed and proceed step 5. This receiver is designed to be set up up to 16 ID.



There is no need to set up repeater.

## Volume setting

1. Press the power button to turn on receiver while pressing the confirm button.
2. There is 12 level of alarm volume. The alarm sound will get louder every time pressing the alarm reset button.
3. Press the confirm button and reset button together and alarm sound will stop and volume setting is done.

## To confirm the setting

Press and hold the confirm button on receiver to see how alarm number settings are done. It makes a beep sound and all the programmed alarm number lamp will lit for 4 sec.(appx.) and then turn off.

## To cancell the number setting

### To reset all the programmed number

1. Turn off and turn on the receiver while pushing the pinhole reset button located back of the receiver with a paper clip or pencil end.
2. Keep pushing the pinhole reset button until the power lamp is lit and program lamp starts blinking.
3. Reset will be done when the program lamp starts blinking.

### To reset the desired number

1. Press and hold the program button and alarm reset button together.
2. It makes a beep sound and the program lamp will lit, and the smallest number of the programmed alarm number lamp will blink.
3. The next programmed number lamp will blink upon pressing the program button again. It makes a beep sound every time pressing the program button. Repeat this step as needed to select the desired number.
4. Press the alarm button confirming the desired number is blinking. It makes a beep sound and the number is cancelled.
5. It makes a beep sound upon pressing the confirm button and then program lamp will turn off. Alarm umber reset is done.

## Sytem test

Test receiver, transmitter, before using.

1. Turn on the power of the receiver and power lamp will lit.
2. Press the call button on the Portable nurse call button. Alarm lamp on the repeater will lit and alarm on the receiver will sound.  
Press the alarm reset button to stop the alarm.

### Informing a caregiver if a transmitter is outside of a wireless signal transmission range

When a paired transmitter is outside of the wireless signal transmission range or not functioning properly and no wireless signal transmission is detected for longer than 1 minute, the receiver will corresponding transmission light starts flashing\*. When the transmitter is back into the wireless signal range or starts functioning properly the flashing stops automatically\*\*.

\*The flashing speed is faster than that of when the transmitter' s battery is low

\*\* It may up to 30 seconds when the transmitter is back into the wireless signal range or start functioning properly.

## Alarm sound setting

Select alarm sound for each alarm number from 8 kinds of melodies and 8 kinds of buzzer sound.

1. Turn on the power of the receiver while pressing the confirm button.
2. Alarm number 1 lamp will start blinking and alarm sound goes off. Alarm number 2 lamp will blink upon pressing the program button. Press the program button until desired number lamp blinks.
3. Press the confirm button making sure the desired alarm number lamp is blinking. Alarm sound will change every time pressing the confirm button. Select the desired melody or buzzer sound.
4. Press the confirm button and alarm button together and alarm sound will stop. Alarm sound setting is done.



Initial setting is "For Elise"



The alarm sound will be back to "For Elise" after resetting all the programmed number.

## Alarm auto stop function

When paired transmitter with the bed sensor sends a reset signal while the receiver is alarming by same transmitter's alarm signal, the receiver will stop alarming from same transmitter automatically.

# Alarm sound list

|   | <b>Melody</b>                | <b>Buzzer</b>     |
|---|------------------------------|-------------------|
| 1 | For Elise                    | Pi----- Pi        |
| 2 | Long Long Ago                | Pi Pi Pi Pi       |
| 3 | Valse du Petit Chien         | PPi PPi           |
| 4 | Humoresque                   | Pi-Pi Pi-Pi       |
| 5 | Chopin Nocturne Op9 #2       | Pi-Pi-Pi Pi-Pi-Pi |
| 6 | Lightly Row (Hanschen klein) | Pi---ro Pi---ro   |
| 7 | Tanuki pup                   | Piro Piro Piro    |
| 8 | Mary had a Little Lamb       | Piropiropiropi    |

## Specification

| Product Name        | Receiver                                    | Repeater     | Portable nurse call button | Transmitter for Sensor |
|---------------------|---------------------------------------------|--------------|----------------------------|------------------------|
| Power               | AC Adapter<br>100-240V 50/60Hz<br>DC5V300mA | Plug-in      | 2 N batteries              | CR2032(3V)             |
| Size (mm)           | 160 x 140 x 30                              | 77 x 86 x 37 | 50 x 85 x 18               | 41 x 69 x 9            |
| Weight (g)          | 252                                         | 90           | 56                         | 23                     |
| Operating condition | Temperature: 5 ~ 40°C Humidity: 45 ~ 85%    |              |                            |                        |
| Frequency           | 2.4 GHz band range                          |              |                            |                        |
| Battery life        | ————                                        | ————         | one year (appx.)           |                        |