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**COMMAX**  
SmartHome & Security

# User Manual

Nurse call function JNS-70MN



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- Please carefully read this User's Guide (in particular, precautions for safety) before using a product and follow instructions to use a product exactly.
- The company is not responsible for any safety accidents caused by abnormal operation of the product.

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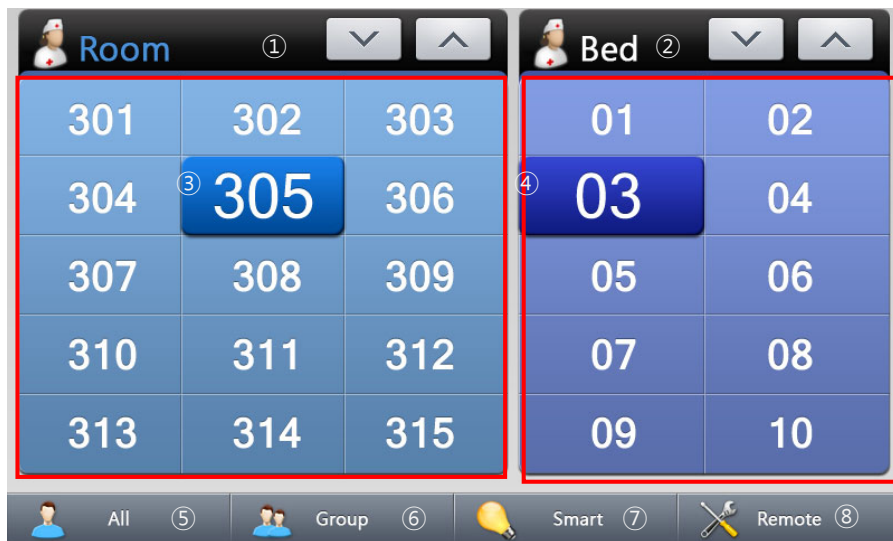
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Users notice	
<p>A class equipment (Broadcasting communication equipment for business)</p>	<p>Sellers or users should be advised of this equipment as the equipment suitable for electromagnetic waves for business use (A class) and it aims at usage in region except house.</p>

# Chapter 1. Nurse call function

1. Main screen composition
2. Conversation with an impatient
3. Receiving a call from an impatient
4. Staff call function
5. Emergency situation function
6. Simultaneous situation function
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## I. Main screen composition



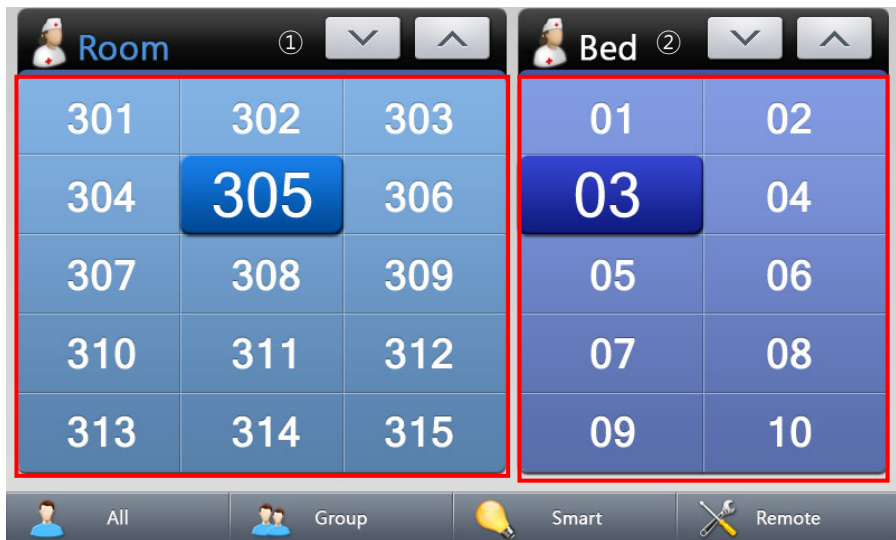
Main screen

- ① , ② Page movement
- ③ Room number
- ④ Bed number
- ⑤ Whole broadcasting
- ⑥ Group broadcasting
- ⑦ Smart control
- ⑧ Remote control



## II. Conversation with an inpatient

### 1. Using the speed dial (After setting the bed number)

1. Pick the receiver or press the speaker button in front.
2. After pressing the relevant room number, press the bed number. Then, you can speak with by calling the relevant patient. (In case of speaker phone mode, you can speak with if you pick the handset.)



Screen using the speed dial

\*   By pressing (①, ②), you can check the bed numbers of previous and next rooms. (If 12 rooms, 8 beds are inputted, max 24 rooms, 16 beds are set.)

## 2. Using dial button

1. Pick the handset or press the speaker button in front.
2. After entering the relevant room number with the button in front, press the asterisk(\*). If you press the pound button (#) after entering bed number, you can speak with the relevant patient by calling him or her. (In case of speaker phone mode, you can speak with if you pick the handset.)

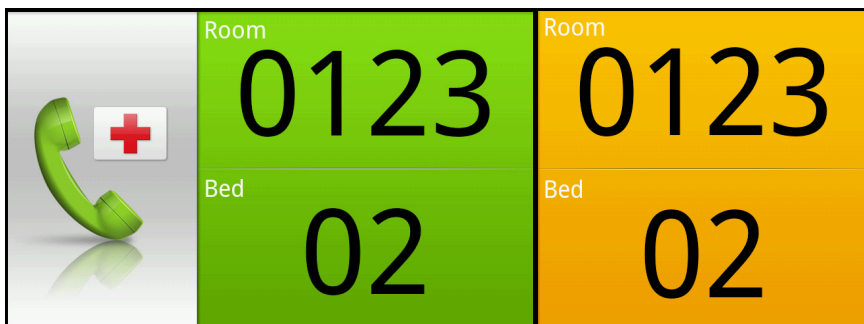


Screen using number button

### III. Receiving a call from an inpatient

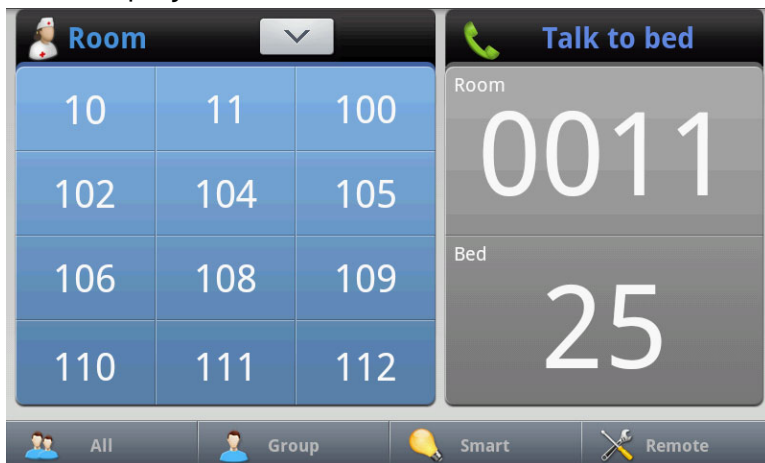
#### 1. Request of an inpatient call

1. The number of bed and room requesting call are displayed as green and yellow wall paper is switched.



Call request screen

2. If you pick the handset or press the speaker phone button, the number of bed and room requesting call are displayed.



Incoming progress screen

## 2. Seeing the stand-by call list (in case of offering bed call function)

If there's call request from another bed during the conversation with a patient, stand-by call list will be shown.

If you select the stand-by list while talking, previous call will be ended and conversation with selected bed will be started. Stand-by list will disappear when the conversation has done.



Seeing stand-by call list



### 3. Outside call(IP-Phone) function(Option function)

During the nurses' absence in the nurse station, call request is delivered by the information of nurse and schedule registered in the server(IP-PBX) to the nurse's cell phone. Once the nurse get the phone, a main receiver is displayed the number of bed on a screen. In a main receiver, outside call should be ended in order to use call function.



Mark of outside call

\* This function is needed additional devices such as IP-PBX, Media Gateway for its use.

#### IV. STAFF CALL function

In case that the nurse judges the situation as emergency when the nurse presses the presence switch from patient's call and visits the bed of the patient, in a bed if you try call request on the screen of main receiver in a nurse station the number of bed and emergency sound will break out. (Same as call request screen)



Call request screen

## V. Emergency situation function

### 1. Emergency situation notice

1. Can check emergency request occurred in a ward or outside lavatory or shower room.
2. If you press the call button once more or pull the emergency switch in the place occurred in the emergency situation, emergency will be cancelled and stand-by screen will appear.



General emergency notice screen in a ward



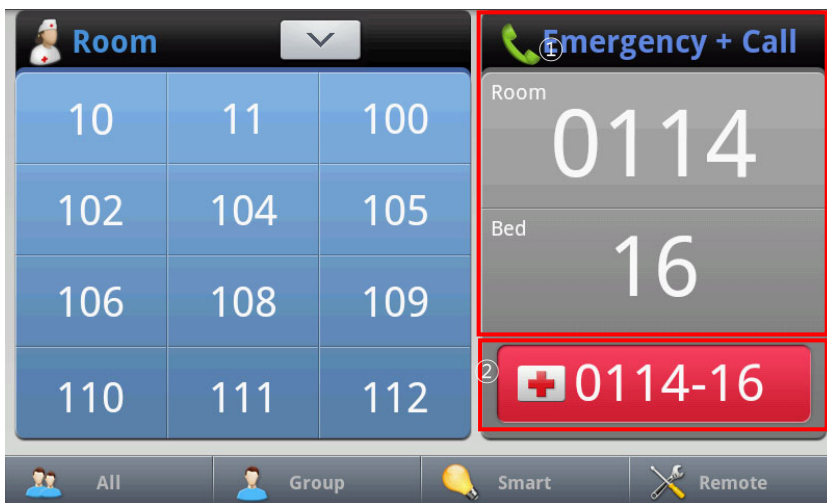
Outside emergency notice screen

\* In case of ward of general, lavatory and shower room are marked as same number. In case of outside, room number represents designated number (9997) and lavatory or shower room are marked differently in bed number

## VI. Simultaneous situation function (Emergency + Call)

### 1. Simultaneous situation notice

1. In case of emergency during conversation or incoming call in the middle of emergency, you can check them at the same time.



Simultaneous situation notice screen

① Call mark

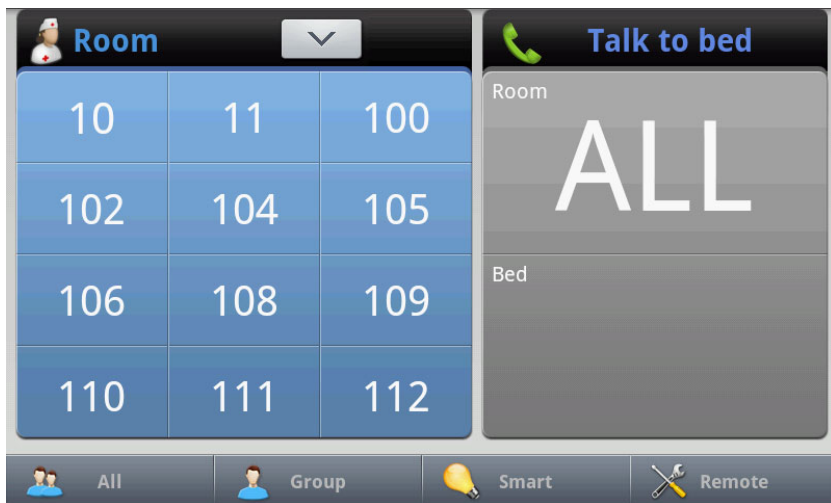
② Emergency situation notice

## VII. Broadcasting function

### 1. Whole broadcasting

**Able to broadcast for whole rooms in connection with receiver.**

1. Pick the handset or deliver a message after pressing the whole broadcasting in speaker mode.

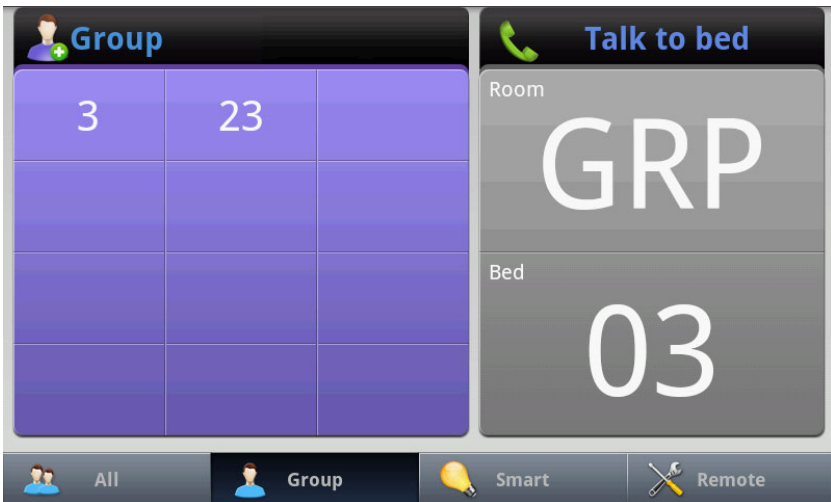


Whole broadcasting implementation screen

## 2. Group broadcasting

Can broadcast with bed in a group. (Group setting in remote control mode)

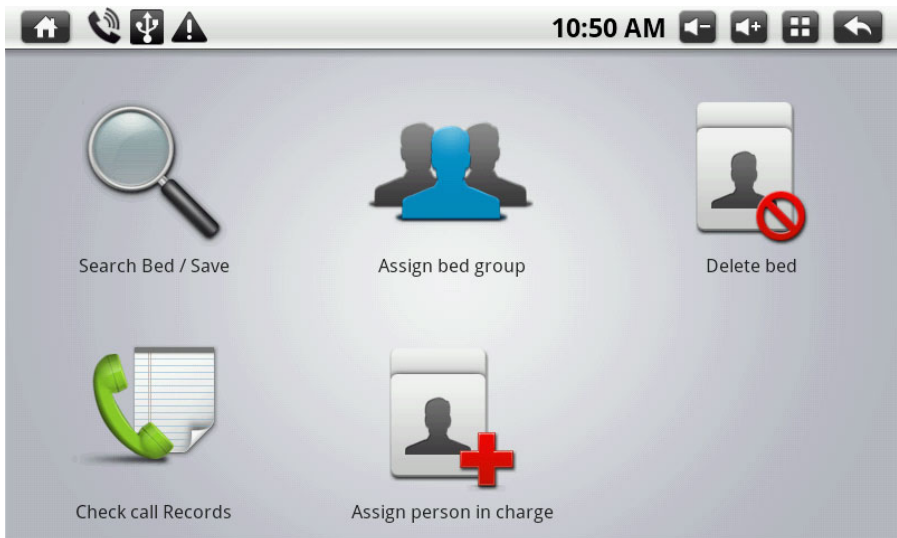
1. Pick the handset or press the group broadcasting at the bottom of menu in speaker phone mode.
2. With using the dial button in front or selecting the group to broadcast, press the group number and deliver a message after pressing group number and pound button (#).



Group broadcasting screen

## VIII. Smart control

This function is provided in order to register and change the bed phone in the main receiver. Because ID of first released bed phone is identified, each bed phone can be used through remote control.





## 1. Searching/saving the bed

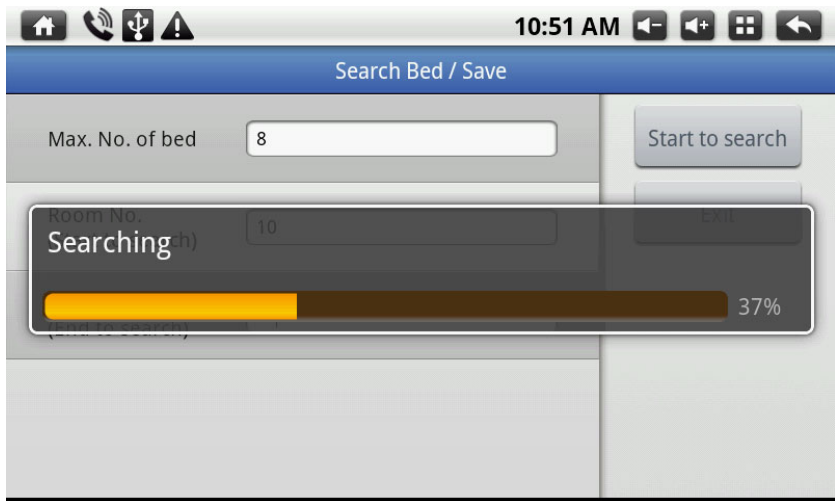
It can be registered automatically by exploring the shortcut as appointed numbers. As ID of bed telephone is identical, this function is used after ID change.

The screenshot shows a mobile application interface titled "Search Bed / Save". At the top, there is a status bar with icons for home, signal, Wi-Fi, and battery, along with the time "10:51 AM". Below the title bar, there are three input fields and two buttons. The first input field is labeled "1 Max. No. of bed" and contains the placeholder text "Input max no. of beds". The second input field is labeled "2 Room No. (Start to search)" and contains the placeholder text "Input start patient's room No.". The third input field is labeled "3 Room No. (End to search)" and contains the placeholder text "Input end patient's room No.". To the right of these fields are two buttons: "4 Start to search" and "5 Exit".

- ① Max bed numbers
- ② Ward exploration room number to start
- ③ Ward exploration room number to end
- ④ Start searching button
- ⑤ End button

1. After selecting max beds number in the blank to enter, enter the all numbers of the installed bed inside the ward. (the most installed beds number inside the ward or the highest bed number inside the ward)
2. After selecting the edit box of start room number, enter the lowest ward number in the ward.

3. Select the edit box for end room number. Then, enter the highest ward number in a ward.
4. If the three information input is completed, press the start button of exploration and then exploration will be starting.
5. After completed the exploration, press the exit button. Then, in a main screen, each bed's hot key(shortcut) registered automatically can be checked.



Exploration progress screen

ex) A certain ward in a general hospital has from second ward to fourth ward, the ward which has the most beds is No. 1010 and No. 1011 and they accommodate 8 beds.

Max bed number => Enter 8.

Ward exploration start => Enter 1001.

Ward exploration end => Enter 1020.

## 2. Designating the bed group

Able to set as identical group by selecting the bed to want number group designation of registered bed.



① Bed group filter

② Bed selection button

③ Bed ID (Room no.-Bed no.)

④ Bed group ID

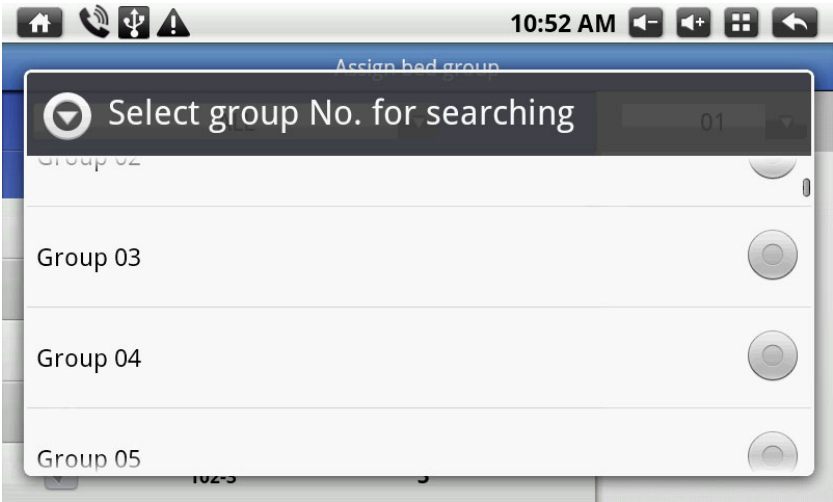
⑤ Bed group ID selection

⑥ Bed group change button

⑦ Bed group deletion button

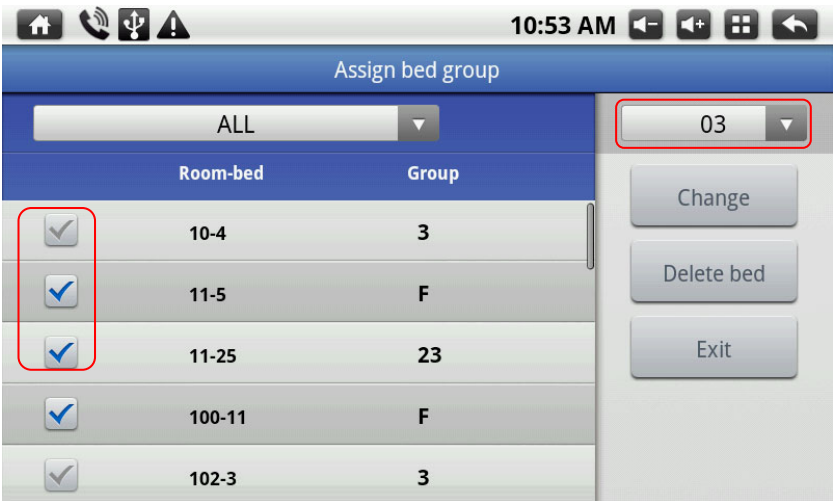
⑧ Quit button

1. Through Bed group filter, search the registered beds as all or each group.

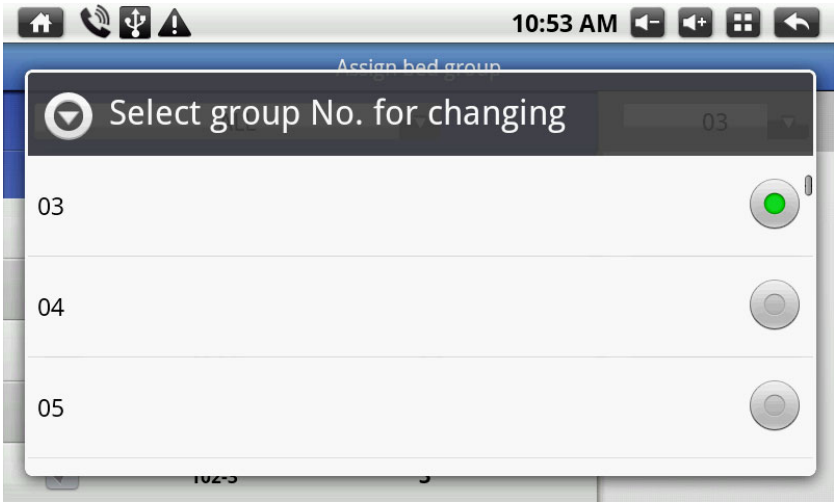


Group selection screen

2. After selecting the beds you want to change, press the Bed group ID selection button and select the group number to change. (Group F is default setting number)



Bed selection and Bed group ID selection button screen



Group Number changing screen

3. After selecting Bed ID and group number to change, press the change button. Then, group number of Bed ID is changed.




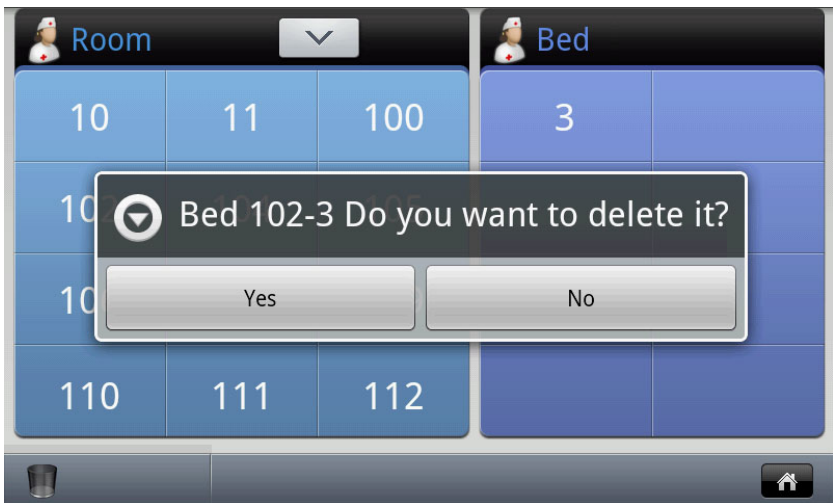
Group number change progress screen

4. If you press the delete button after selecting Bed ID and group number, group ID of default state is changed to F.



### 3. Deleting the bed

1. After selecting the room number of the ward to delete, agreement message of deletion pops up if you press the relevant bed.
2. If you press "Yes", the relevant bed is deleted.
3. In case of return to main screen, press the Home button of navigation button or  (Home) at the right bottom of the screen.



Bed deletion screen

## 4. Recent calls

Recent calls between user and patient can be checked. It can check the place to send and receive, date and time to start a call, Talk time.

	③ Room-bed	④ Received	⑤ Call time
①	0122-03	2011-11-18 14:27:40	00:02
②	0122-03	2011-11-18 14:27:34	00:03
	0000-00	2011-11-18 14:05:14	00:04
	0001-01	2011-11-18 12:18:54	00:05
	0011-25	2011-11-18 11:32:52	00:05
	0011-25	2011-11-18 11:31:30	01:00

- ① Incoming calls
- ② Outgoing calls
- ③ Bed number list
- ④ Dialing time list
- ⑤ Talk time list



## 5. Bed designation in charge

This is the function which is connected to smart phone of the nurse in charge during a nurse's absence in nurse station. This setting is possible to set with smart phone or main receiver.

※ Currently, this can be used the Database must be installed on a IP-PBX server. (PSTN approach supported later).

### 5-1. User registration

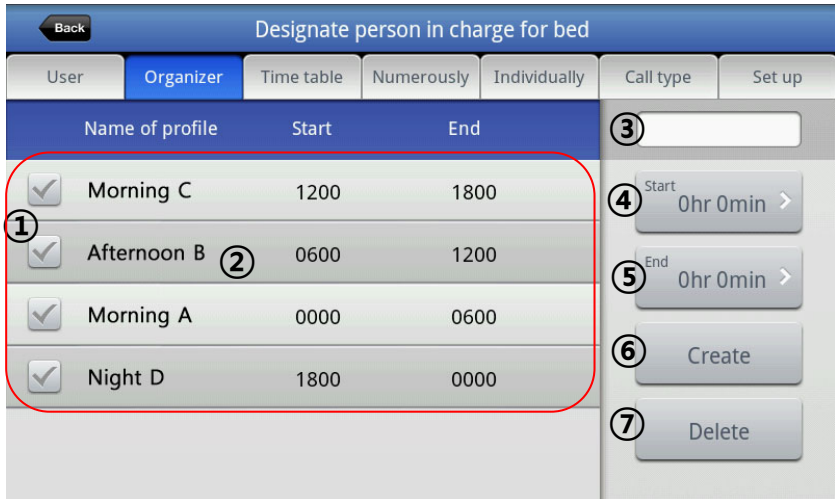
The screenshot shows a mobile application interface for designating a person in charge for a bed. The title bar is blue and contains a 'Back' button and the text 'Designate person in charge for bed'. Below the title bar are several tabs: 'User' (selected), 'Organizer', 'Time table', 'Numerously', 'Individually', 'Call type', and 'Set up'. The main area is divided into two sections. The top section has two input fields: 'Telephone No.' with a circled '1' and 'Name' with a circled '2'. Below this is a list of users, each with a checked checkbox, a name, a telephone number, and a star icon. A red circle highlights the list area, with a circled '3' next to the first checkbox. A circled '4' is next to the name 'Bae', and a circled '5' is next to the star icon for 'Kim'. To the right of the list are three buttons: '6 Create', '7 Modify', and '8 Delete'.

Telephone No.	Name	Star Icon
	Kim	★
	Park	★
	Bae	★
	Choi	★
	Shin	★

- |                         |                                 |
|-------------------------|---------------------------------|
| ① Telephone number box  | ⑤ User employment status button |
| ② Name box              | ⑥ User creation button          |
| ③ Nurse select button   | ⑦ User Info. Edit button        |
| ④ Users list (Red part) | ⑧ User Info delete button       |

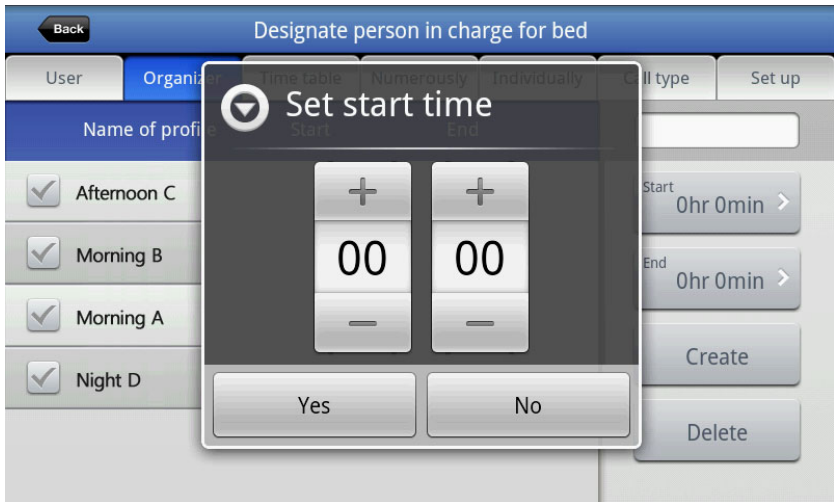
- A. After entering the name and phone number of a nurse, press the create button. Then, the contents in a list will be shown
- B. If you want to edit the information of a nurse, select a nurse in the list. Then, the name and phone number of the selected nurse are shown in a blank to enter at the top. After editing the contents by selecting the blank to enter, press the edit button. Then, the contents will be modified.
- C. In case of deleting the information for the saved nurse, after selecting the information of a nurse to delete in the list, press the delete button. Then, the information of the nurse in the list will be disappeared.
- D. It can be set the employment status with the user employment status. The nurse who is not set cannot receive a call.

## 5-2. Time organization



- ① Time arrangement list select button
- ② Time arrangement list (MAX 4)
- ③ Profile name box
- ④ Start time setting button
- ⑤ End time setting button
- ⑥ Creation button
- ⑦ Delete button

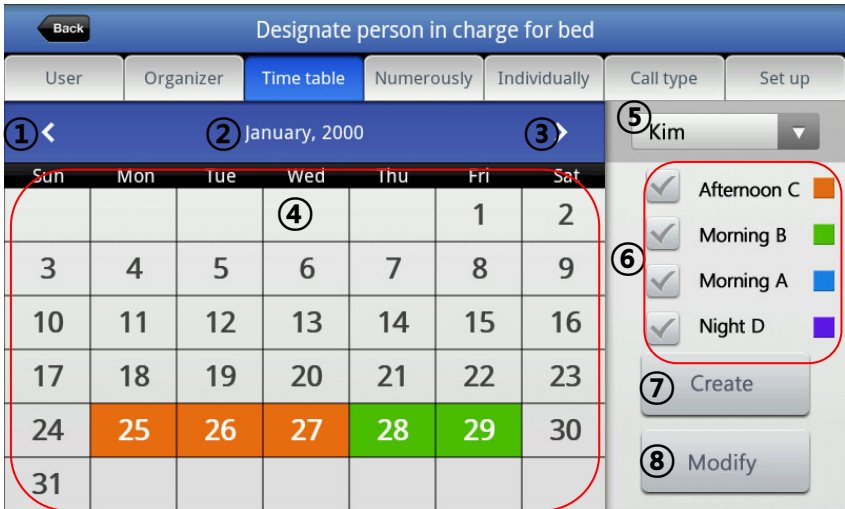
E. After entering a name in a blank to enter of profile name, enter the star time by pressing the start time setting button. After entering the end time with pressing the end time setting button, press the creation button. Then, it is added in the list. (Max 4)



Screen of start time setting

- F. In case of editing the information, if you select the profile to edit in the list, the selected name is shown in the edit box of the profile name. If you set the time with time setting button, the changed contents in the list can be checked.
- G. In case of deleting the information, if you press the delete button after selecting the profile to delete in the list, it is deleted from the list.

## 5-3. Time table



- ① Previous month change button
- ② Present month
- ③ Next month change button
- ④ Present month schedule
- ⑤ User select button
- ⑥ Time arrangement list and button
- ⑦ Creation button
- ⑧ Edit button

H. To set the working schedule, select the relevant time zone in the time schedule list(⑥) after selecting the saved user(⑤) to set the working schedule of the user. If you press the creation button after designating the month to work in the relevant time zone and date, it is completed.

- I. In order to edit the working schedule of user, press the edit button after selecting the user to change in the list(⑤) and then it is completed.

Caution) Creation button is needed first once a month at least. Since then, the schedule changes of the relevant month will be edited.

## 5-4. Majority designation

In case that user's responsible beds are same, you can set it easily through not individual designation but majority designation.

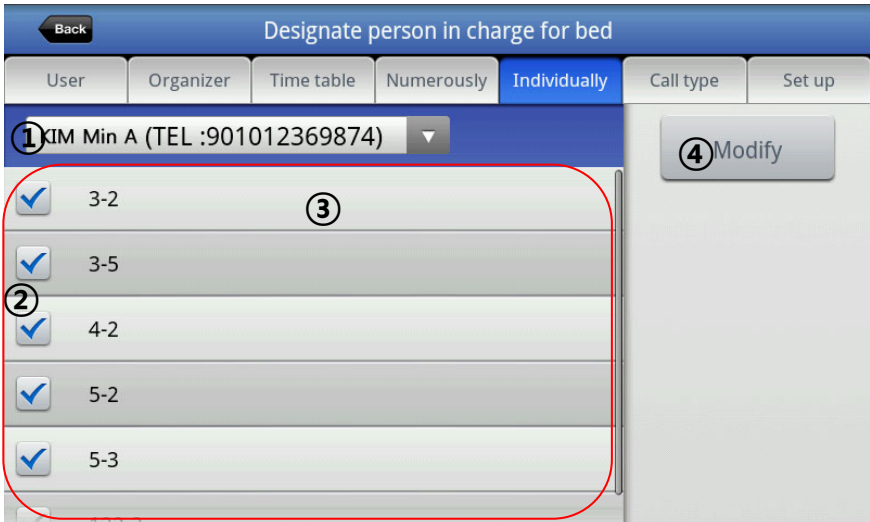


- ① Bed select button
- ② Room list (Red part)
- ③ Bed list (Red part)
- ④ Setting button
- ⑤ Select all beds button
- ⑥ User select button
- ⑦ User list

J. After selecting the bed and room to set, choose the relevant user in the users' list. Then press the setting button and responsible user for the relevant bed will be saved.

## 5-5. Individual designation

Able to set the responsible bed of a nurse individually.



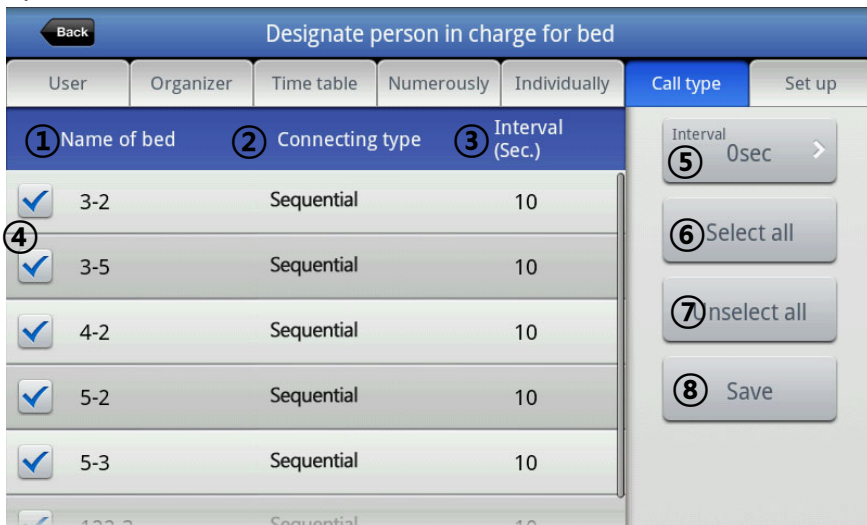
- ① User select button
- ② Bed select button
- ③ Whole bed list
- ④ Edit button

K. After selecting the user to set, choose the bed in charge. Then press the edit button and it will be saved.



## 5-6. Call type

Able to select call system in order and concurrently of call connection system with responsible nurse's smart phone.



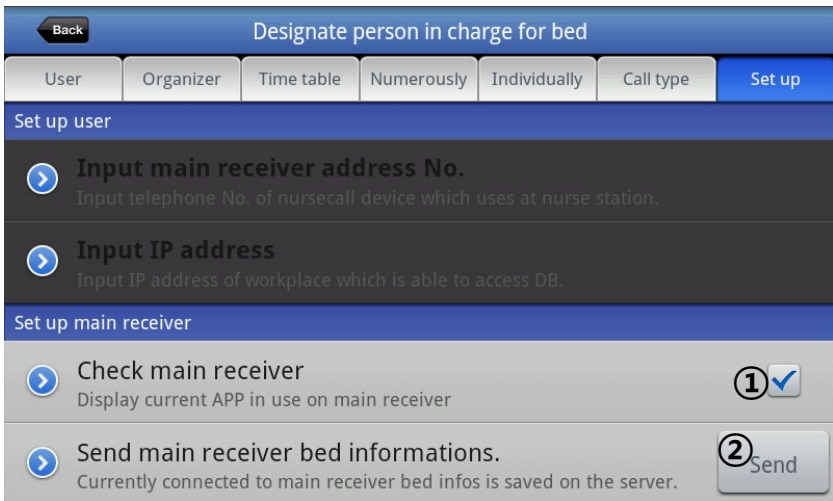
- |                        |                       |
|------------------------|-----------------------|
| ① Bed name             | ⑤ Interval set button |
| ② Connection form      | ⑥ Select all button   |
| ③ Time interval        | ⑦ Delete all button   |
| ④ Bed selection button | ⑧ Setting button      |

- L. After checking the bed number to set(④), select the concurrence or not by pressing next setting button. In case of editing the time interval, press the time interval setting button(⑤) and set the interval.

M. It will be set at once with Select all(⑥), Cancel all button(⑦)

## 5-7. Setting

Bed list should be saved in the server so that the user selects the relevant bed with main receiver. Designation in charge for bed function can be used if this process is preceded.

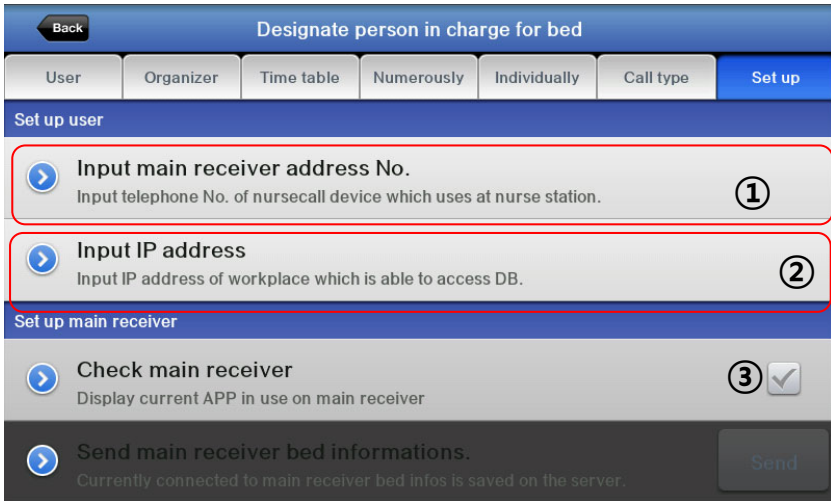


Set screen through main receiver

- ① Mark of main receiver confirmation      ② Send button

N. In case of setting in the main receiver, check mark(①) is shown.

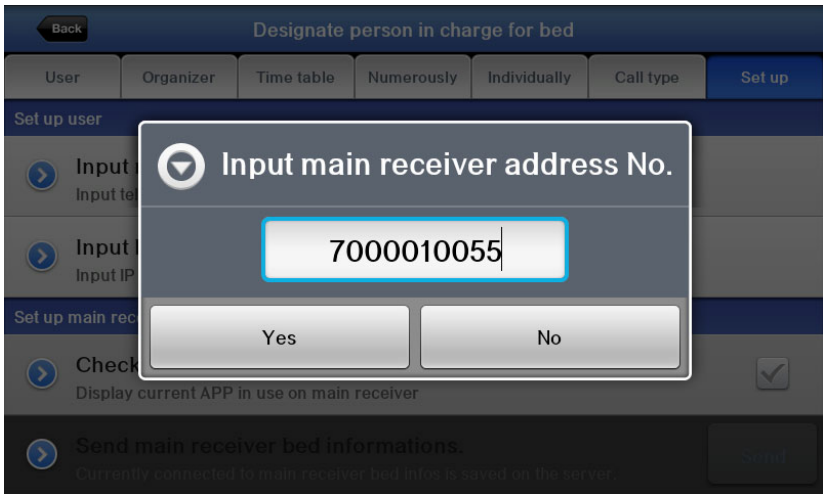
- O. In order to saving all bed list connected with the main receiver to the server, press the transmission button(②) and then it will be saved in the server.



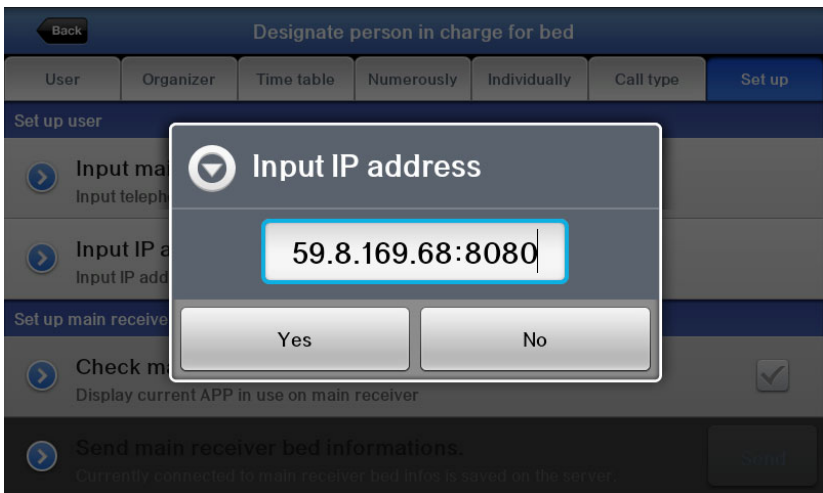
Set screen through smart phone

- ① Enter the number of main receiver.  
② Enter IP address  
③ Main receiver confirmation mark

- A. To user the designation function for the bed in the smart phone, select the assigned number of the main receiver(①) and enter the assigned phone number.



- B. For the saved bed list in the server, the record of user, loading the time organization history, press the relevant server IP and port number.



- C. During setting a smart phone, confirmation mark(③) of the main receiver is shown as unchecked.

## IX. Bed, group number setting

### 1. To set the number

1. Press the remote control in the main screen while talking on the phone and select the number to change. (Bed number, group number)
2. Check the existing number in ③(Before) and correct the number in ④(After) and press ⑤(OK). Then the value will be changed.
3. To change the bed number, enter the room number and after pressing the asterisk(\*) button, enter the bed number and OK button.
4. To change the group number, enter the new group number and press the OK button.
5. Press the remote control again and confirm the changed number.



<Number setting screen>

## 2. Reset

1. This is the function to reset the power of bed connected with the main receiver.

2. Press the ⑥ OK button and 'Yes' button. Then, you can reset the power of the bed.



# Chapter 2 . Configuration

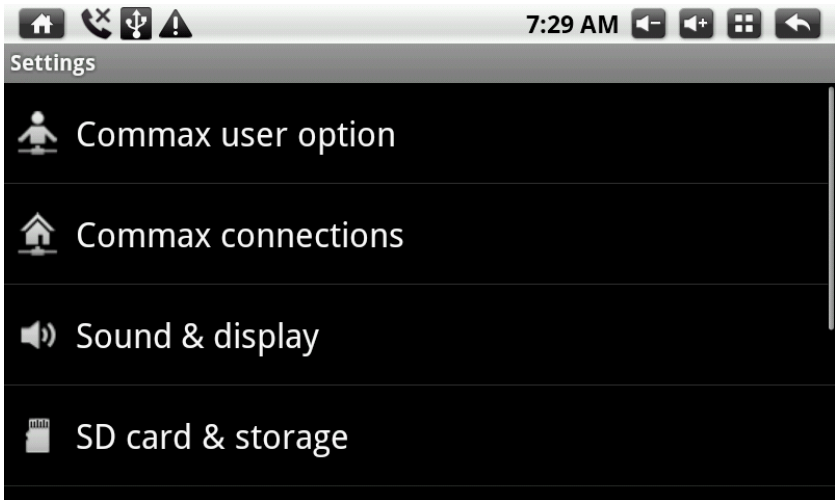


# I. Configuration

## 1. Setting the environment

In the mode of environment setting, you can move to stand-by screen and previous screen by pressing

 (HOME) or  (BACK) button on the top of the screen.



## ➤ **COMMAX user option**

**Able to change password.**

### **I. Password change**

**You can change the password to off emergency situation and go out mode.**

- ◆ **Click the password-changing button.**
- ◆ **If the entering password screen is displayed, click the password box. Then you can use virtual keyboard mode.**
- ◆ **Enter the current password and then click the next button.**
- ◆ **Enter the new password and click the next button, enter the new password again to verify whether the password you enter earlier is correct.**
- ◆ **After clicking the complete button, you can go back to the password changing mode.**
  - ◆ **Press the OK button to complete new password changing.**

※ Do not forget the password.

※ Password is 4 digit number.

※ In case of inconsistency with previous password, password is not changed.

※ In case that new password and new password confirmation are different each other, password is not changed.

※ In case that server is not connectable, icons are inactivated and cannot set.

## ➤ **COMMAX connection**

To COMMAX connection, configuration can be set. Do not operate the setting except for installers. In case that right value is not entered, COMMAX connection and management are not operated properly.

### **I. Server IP setting**

Able to set local server, SIP server, update, CCTV server, device server, IP address of home server

- ◆ Press the icon to set
- ◆ Enter the relevant IP address after pressing the screen to input if the window to input is marked.

### **II. Call prix fixe setting**

- ◆ Press the call prix fixe to select in the menu.
- ◆ If call prix fixe input screen is displayed, enter the relevant number and press the OK button.

## ➤ **Network**

Cable network to use the COMMAX connection and management can be set.



### **I. Cable connection**

- ◆ Enter the IP address, gate way, net mask, DNS  
(Inquire to installation manager)

## ➤ **Sound and display**

### **I. Mute mode**

Able to convert into Mute mode. (Except for media and alarm)

- ◆ Press the mute mode.
- ◆ If mute mode is checked, sound setting icon at the bottom is inactivated. And  is displayed the task bar on the top of the screen. . If checking of the mute mode is cancelled, the icon of the sound set at the bottom is activated and  in the task bar of the top is removed.

## II. Bell sound/media volume

- ◆ Press the bell sound volume or media volume.
- ◆ Adjust the volume by moving the stick if the window for volume is marked in a screen.
- ◆ By pressing the Okay button, setting is saved.

## III. Call/Alarm bell sound

- ◆ Press the call bell sound or alarm bell sound.
- ◆ In case of telephone bell sound, list screen of caller's location is displayed. (In case of bell sound, select the list right)
- ◆ After selecting the location to set, select the bell sound. (Can here the bell sound in advance)
- ◆ Press the Okay button to set the selected bell sound.

## IV. Screen brightness

- ◆ Press the brightness.
- ◆ Bright window is displayed on a screen.
- ◆ Adjust the volume by moving the tool.
- ◆ Setting is saved by pressing the Okay button.

## V. Setting the automatic OFF time of the screen

- ◆ Press the time restriction on the screen.

- ◆ The list which can restrict the time on the screen is marked.
- ◆ If you press the time to want, the setting is saved. If you press the cancellation button, it is not set.

#### VI. Touch screen correction

- ◆ Press the correction of touch screen.
- ◆ According to the guide of screen, press the cross icon in order.
- ◆ If the correction is completed, completion of correction is marked.

#### ➤ Space to save

The space to save of the product can be checked. SD card, whole size of internal space to save and size of the saving space available are marked.

#### ➤ Language and keyboard

The language marked in the equipment and simulated keyboard can be set.

##### I. Change of language

- ◆ Press the language selection.
- ◆ Select the language to set in the list.

##### II. Key board setting

When entering the text, decide the default keyboard to be marked. In case that additional keyboard is supported except for Android keyboard (English input), when entering the text, it can be used as the keyboard the user

want. If you check the keyboard to use as default keyboard, when entering the text, the relevant keyboard is marked.

- ◆ Check the keyboard to use as a basic keyboard.
- ◆ When entering the text, checked keyboard is marked.

## ➤ **Date and time**

**Set the date and time.**

### **I. Date and time setting automatically**

- ◆ Check the auto
- ◆ Time server (NTP) and synchronization interval icon are activated.
- ◆ After pressing the time server (NTP), enter the time server. If it is connected with the entered time server rightly, it is changed to the current time.
- ◆ Synchronizing with server every time set at an interval of synchronization.

### **II. Date and time setting manually**

- ◆ Cancel the check automatically.
- ◆ Date and time setting icon are activated.
- ◆ Press the date setting
- ◆ If the window of date setting is displayed, set the time with + button and – button and press the OK button.
- ◆ By pressing the time setting, set screen is marked.
- ◆ Set the time on reference to the date setting.

### **III. Designating time zone**

- ◆ Press the time zone.

### **IV. In the list, select the time zone of the city that host lives currently.**

**V. Designating the 24hours form**

- ◆ Check or cancel the 24hours form
- ◆ If checked, the time is marked as 24hours. If cancelled, the time is marked as 12 hours.
- ◆ Press the date form selection.
- ◆ The date form selection window is marked on a screen.
- ◆ Press the form to set.

➤ **System Info.**

Able to check the component installed in system and product firmware info.

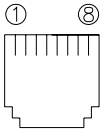
**I. Checking component version**

- ◆ Press the component.
- ◆ The version of installed component is marked.

**II. Checking product firmware info.**

- ◆ The version of Boot loader Kernel and Build number are marked.

**\* Diagram**



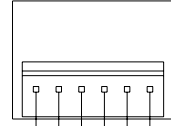
LAN



USB



EXT.



DC 24V  
GND  
Talk\_Tx  
N/A  
N/A  
Talk\_Rx

- ① TX+
- ② TX-
- ③ RX+
- ④ ] NC
- ⑤ ]
- ⑥ RX-
- ⑦ ] NC
- ⑧ ]

- **Product name : nurse calling device**
- **Line item : JNS-70MN**
- **Power source : DC24V**
- **Max current consumption : 400mA**



# **COMMAX**

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