

TECHNISCHE DOKUMENTATION



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Call Button System



Call Button



Receiver



Bridge (Optional)

System Function

The call button system facilitates customer requests for robot assistance by pressing a button. It consists of three components: the call button, receiver, and optional bridge.

Customers initiate a request by pressing the call button, which sends a signal to the receiver. The receiver interprets the signal as a request and triggers the necessary actions to summon the robot. In larger environments, an optional bridge extends the transmission distance between the call button and receiver. Upon receiving the request, the robot navigates to the predetermined target point and interacts with the customer or provides the required service.

Key Features

- Internet is not required to build the connection.
- Two buttons on one call button to bind robots with different services.

Specifications

Call Button

Product Size	72*57*22mm
Product Net Weight	40g
Number of Button	3
Button Lifespan	3 Years
Surface Material of the Button	PVC
Housing Material	ABS
Working Conditions	Temperature 0°C~40°C, Humidity≤98%
Rated Voltage	12V (23A alkaline battery x 1)
Rated Current	50mA
Standby Current	None
Number of usable times	>3000 Calling(For one full battery)
Indicator Light Color	White
Prompt Tone	None

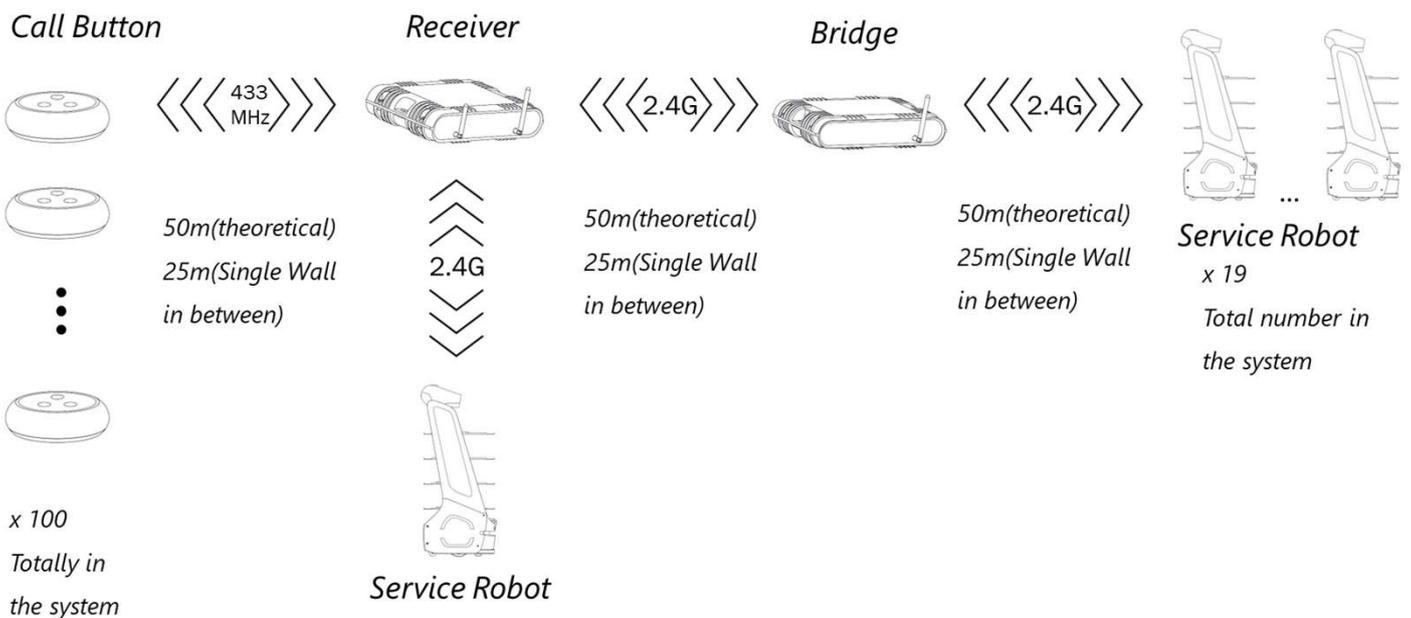
Receiver

Transmission Distance	50m(for space without walls), 25m(for single wall)
Product Size	220(W)*135(H)*48(D)mm
Product Net Weight	333g
Housing Material	ABS
Working Conditions	Temperature 0°C~40°C, Humidity≤98%
Power Supply	DC 12V 1A/12W (AC TO DC, 100~240V)
Number of Pairing with call buttons	100 call Buttons
Number of Antennas	2, The short antenna is used to receive call commands from the call button while the long antenna is used to communicate with the robot.

Bridge(Optional)

Transmission Distance	50m(for space without walls), 25m(for single wall)
Product Size	220(W)*135(H)*48(D)mm
Product Net Weight	306g
Housing Material	ABS
Working Conditions	Temperature 0°C~40°C, Humidity≤98%
Power Supply	DC 12V 1A/12W (AC TO DC, 100~240V)
Number of Antennas	1, The antenna on the front of the bridge is used for communication with the robot and the receiver.

Application



*Total number of the receivers, the bridges and the robots can not be more than 20.

Main Unit

Receiver

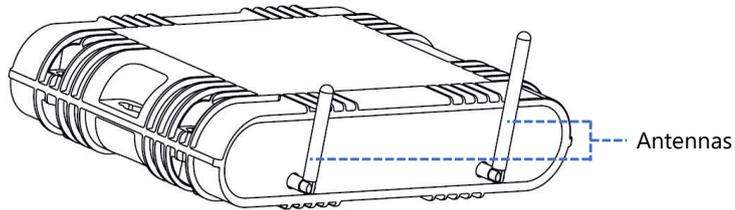


Figure 5 Front view of the receiver

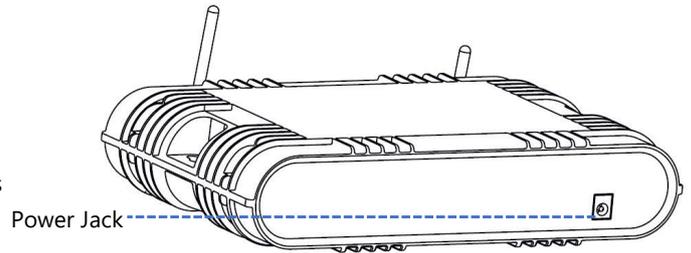


Figure 6 Back view of the receiver

Bridge(Optional)

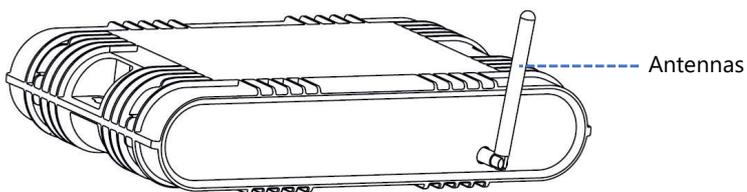


Figure 7 Front view of the bridge

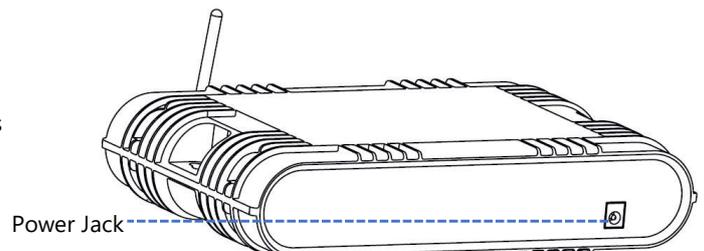
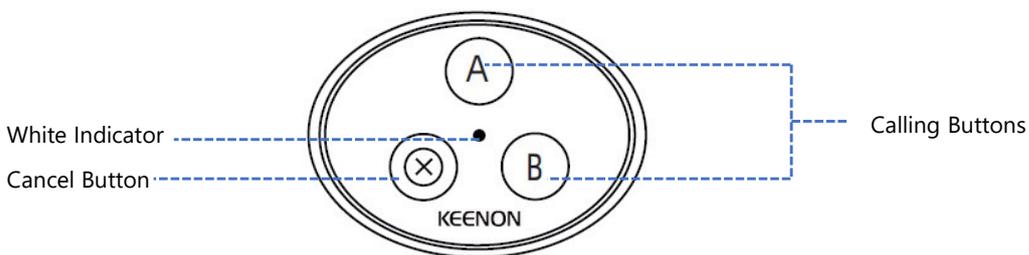


Figure 8 Back view of the bridge

Call Button



Components *Call Button*

Three Buttons

Bottom left button is fixed for 'Cancel'.
Different stickers can be used on the other two buttons according to the actual use.

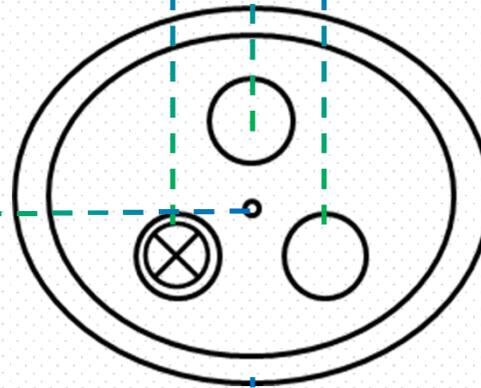
One White Light Indicator

The indicator will be on when the button is pressed and will be off when the button is released.

Double-side Tape on the back

To easily fix the Call Button on the table or the wall.

*Screws can also be used to fix the Call Button.



Call Button Data

Product Size	72 x 57 x 22mm
Net Weight	40g
Button Quantity	3
Lifespan of Button	Million Times
Surface Material of Button	PVC
Shell Material	ABS
Operating Temperature, Humidity	0 - 40°C, RH: <=98%
Battery Required	12V 23A x 1
Working Current	50mA
Battery Life	> 3000 times press

Components *Receiver*

Antenna

Two antennas on the front panel of the receiver.
The left one (when facing the receiver) is used to connect the Call Button and the right, the robot.

Power Supply

Stable power supply is required during the operation of the receiver.

Suggested Deployment Location

It is suggested that put the receiver in the center of the service area and fix it on the ceiling so the receiver will provide the maximum possible coverage.



Receiver Data	
Product Size	220 (W) *135 (H) *48 (D) mm
Net Weight	333g
Shell Material	ABS
Operating Temperature, Humidity	0 - 40°C, RH: <=98%
Power Supply	DC 12V 1A/12W (AC TO DC, 100~240V)
Maximum Pairing with Call Button	100
Antenna Quantity	2

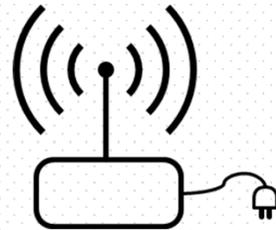
Components *Bridge*

Antenna

One antenna on the front panel of the bridge to connect to the robot.

Power Supply

Stable power supply is required during the operation of the bridge.



Bridge Data

Product Size	220 (W) *135 (H) *48 (D) mm
Net Weight	306g
Shell Material	ABS
Operating Temperature, Humidity	0 - 40°C, RH: <=98%
Power Supply	DC 12V 1A/12W (AC TO DC, 100~240V)
Antenna Quantity	1