

hitoe transmitter Instruction Manual

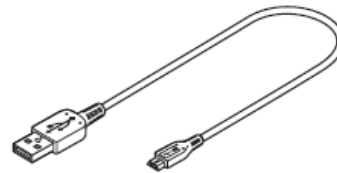
Thank you for purchasing hitoe Transmitter

Please read these instruction manuals before using the device and save them for further reference.

■ Component






hitoe transmitter








Micro USB cable

Precautions for safe handling

- Please carefully read the 'Safety precautions' before use, and use the product properly. We also recommend that you keep this manual handy for future reference.
- The safety precautions must be abided by without fail because they are for preventing harm to the users, to other people, and damage on assets.
- The following categories explain the degrees of harm and damage in case the displayed contents are not abided by and the product is used incorrectly.

 DANGER	Incorrect handling will imminently risk the users' lives or inflict severe injuries on the users'.
 WARNING	Incorrect handling could 'risk the users' lives or inflict severe injuries on the users'.
 CAUTION	Incorrect handling could 'inflict minor injuries and physical damage'.







■ Below icons show instructions to follow.

	The action is prohibited (i.e., the action must not be performed).
	Disassembling is prohibited.
	The product must not be wet while it is used.
	The product must not be handled with wet hands.
	The user is forced to perform the action (i.e., the action must be performed).




- This product contains following battery.
Displayed : Li-ion 00 Type of battery: Lithium-ion battery

Important safety instructions for hitoe transmitter and micro USB cable.





DANGER

-  DO NOT use, store or leave the product at places where temperatures become high (such as near fire or heating devices, inside a heating device, in direct sunlight, inside a car under a blazing sun).
-  DO NOT put the product into a heating cooking utensil such as microwave ovens or high-pressure containers. It could cause fires, skin burns, and injuries.
-  DO NOT disassemble or alter. It could cause fires, skin burns, injuries and electric shocks.
-  DO NOT put it into water or the sea or allow it to get wet by sweat, drinks, and pet urine.
-  DO NOT let liquid (water, drinking water, urine of pet animals, sweat, etc.) enter the terminal for external connection or plug. It could cause fires, skin burns, injuries and electric shocks.
See P.14 'Waterproof performance' for waterproof performance.
-  As for optional items for the product, those specified by XXX must be used. It could cause fires, skin burns, injuries and electric shocks

WARNING

-  DO NOT impose strong force or impact or throw the product.
It could cause fires, skin burns, injuries and electric shocks.
-  DO NOT let the terminal for external connection and plug contact electro-conductive foreign objects (e.g. pieces of metal and lead of pencils).
Further, do not let the electro-conductive foreign objects enter the product.
It could cause fires, skin burns, injuries and electric shocks.
-  DO NOT cover devices with blanket or any other cloth while charging.
It may cause fire and burn.

CAUTION

-  NEVER place the product on unstable places such as shaky or slanted stands.
It may be dropped and cause injuries.
-  DO NOT store the product at humid, dusty, or high temperature places.
It could cause fires, skin burns and electric shocks.
-  When the product is used by children, the guardians are requested to instruct them how to use it. Also during the use, check whether they are using the product by following the directions.
-  Store the product where infants cannot reach.
It could cause accidental ingestion, injuries and electric shocks.

Important safety instructions for hitoe transmitter



DANGER



DO NOT put the device in a fire or attempt to heat it.
It could cause ignition, explosion, generation of heat and leakage of liquid of the built-in battery.



DO NOT inflict excessive forces such as driving in a nail, hitting with a hammer, stepping on it, etc. It could cause ignition, explosion, generation of heat and leakage of liquid of the built-in battery



In case liquid from inside the built-in battery etc. gets in the eyes, do not rub them, wash it off with clean water and consult with a doctor immediately.
It could cause blindness.



WARNING



NEVER use the product in case of anomalies such as deformation and damage caused by dropping of the product etc.



Turn off the power of the product when boarding a plane. Because there are restrictions in the use on a plane, follow the directions of airline companies for use on a plane.

The use could have a negative impact on electronic devices on a plane.
Further, one may be legally punished for performing prohibited actions on a plane.



Follow the directions of medical institutions for use inside hospitals.
Turn off the power of the product at places where the use is prohibited.
The use could have a negative impact on electronic devices and electric medical equipment.



In case you are wearing electric medical equipment etc., check with the manufactures or sellers about the influence of radio waves.
Use of the product could have a negative impact on electric medical equipment etc.



Turn off the power of the product near electronic devices which perform high precision control and treat weak signals. The use could have a negative impact such as malfunction of electronic devices.

※Example of electronic devices to be careful about:

Electric medical equipment such as hearing aids, implanted pacemakers and implanted defibrillators, and other automatically controlled devices such as fire alarms and automatic doors.

In case the user of the product is using electric medical equipment such as an implanted pacemaker or implanted defibrillator, check with the corresponding electric medical equipment manufactures or sellers about the influence of radio waves.



In case there is leakage or odor from the built-in battery, stop using the product immediately and keep it away from flames.
The leaked liquid could catch fire and cause ignition and explosion



Make sure that pet animals do not bite on the product
It could cause ignition, explosion, generation of heat and leakage of liquid of the built-in battery.



In case anomalies such as generation of heat are experienced, stop using the product immediately and keep it away from body.
It could cause skin burns etc.



CAUTION



DO NOT use the product when it is damaged..
It could cause fires, skin burns, injuries and electric shocks.



DO NOT throw away the product together with regular garbage.
It could cause ignition and environmental destruction.



When the product is used in a car, check with the manufacture or sellers about the influence of radio waves before using it.
Rarely, depending on models of cars, the product could have a negative impact on the car-mount electronic devices, in which case, stop using it immediately.




Depending on the physical dispositions and conditions of the customer, itchiness, skin rashes, eczema, etc. could occur. In case of anomaly, stop using it immediately and consult with a doctor.
See P.9 'List of materials' for materials used in different parts of the product.





In case there is leakage etc. from the inside of the built-in battery, do not put it on the face, hands, etc.
It could cause blindness and damage on the skin.
In case liquid etc. gets in the eyes or mouth, or adheres to skin or clothes, wash it off with clean water immediately.
Further, in case the liquid etc. gets in the eyes or mouth, wash it off with clean water and consult with a doctor immediately.


Important safety instructions for micro USB cable


WARNING


-  DO NOT use damaged USB cable.
It could cause fires, skin burns and electric shocks.


-  DO NOT use the micro USB cable at places where humidity is high, such as in the bathroom.
It could cause fires, skin burns and electric shocks.


-  When thunder is started to be heard, do not touch the micro USB cable.
It could cause electric shocks.


-  DO NOT short-circuit the plug while connecting it to the corresponding device.
Further, do not let parts of the user's body such as hands and fingers touch the plug.
It could cause fires, skin burns and electric shocks.


-  DO NOT put heavy stuff on the micro USB cable.
It could cause fires, skin burns and electric shocks.


-  When inserting/removing the micro USB cable into/from the corresponding device, do not let metal items such as metal straps touch it.
It could cause fires, skin burns and electric shocks.

-  Do not inflict excessive forces to the corresponding device in various directions while the micro USB cable is connected.
It could cause fires, skin burns, injuries and electric shocks.

-  DO NOT touch the micro USB cable or plug with wet hands.
It could cause fires, skin burns and electric shocks.

-  Wipe off the dust on the plug.
It could cause fires, skin burns and electric shock.

-  Make sure to insert the micro USB cable into the corresponding device properly.
It could cause fires, skin burns and electric shocks.

-  When removing the micro USB cable from the corresponding device, do not pull the micro USB cable forcibly; pull it by holding the plug.
It could cause fires, skin burns and electric shocks.



When inserting/removing the micro USB cable into/from the corresponding device, do so horizontally and by not inflicting excessive forces.
It could cause fires, skin burns, injuries and electric shocks.



When the corresponding device is not used for long hours, pull out the micro USB cable from the device.
It could cause fires, skin burns and electric shock.



Should liquid such as water enters inside the corresponding device, remove the micro USB cable from the device immediately.
It could cause fires, skin burns and electric shocks



Remove the micro USB cable from the corresponding device when cleaning it.
It could cause fires, skin burns and electric shocks



CAUTION



DO NOT touch the micro USB cable connected to the device for long hour.
It could cause skin burns etc.

When it is used around medical equipment



WARNING



In case electric medical equipment other than implanted pacemakers and implanted defibrillators are used outside of medical institutions for recuperation at home etc., consult with electric medical equipment manufactures etc. about impact by radio waves.
Radio waves could have a negative impact on the behaviors of electric medical equipment



As for use of the product inside medical institutions, follow the direction of the corresponding of medical institutions

List of materials

■ hitoe transmitter

Location-of-use		Materials/Surface processing
External component		PA
External connection terminal		Stainless/
Cover for terminal for external connection	Main body	PC
	Fitting pin part	Elastomer
	Packing	Silicon rubber
Snap Button		Brass/Copper tin plating
Screw cap, Button, Label		PET

■ micro USB cable

Point-of-use		Material/Surface treatment
Cable		PA
USB plug Micro USB plug	Metal part	Iron/Nickel- plated
	Resin part	Elastomer

Precautions for use

Common requests

- The product is waterproofed, however, do not immerse inside the product in water, and do not sprinkle water over the attachments and optional items. The micro USB cable is not waterproofed.
- Do not use the product at places where humidity is high, such as in the bathroom, and avoid rain. Further, when the product is worn, the inside may be corroded due to humidity caused by sweat, which can cause trouble. Note that in case results of investigations show that trouble was caused by such water damage, it may be considered outside the scope of warranty and may not be repaired. Note also that even when the trouble which is outside the scope of warranty can be repaired, it will be charged.
- Clean the product with soft cloth such as that for eyeglasses. Prints may disappear or fade in case alcohol, thinner, petroleum ether, soap, etc. are used.
- Clean the terminal and plug from time to time with dry cotton swab etc. Uncleaned terminal and plug may cause bad connection, which could cause insufficient charging. Therefore, they must be pulled out and cleaned with dry cotton swab. When cleaning them, make sure that they are not damaged.
- DO NOT place the product near the wind outlet of air conditioners. Drastic temperature change causes condensation, corrodes inside the product and causes trouble.
- Do not pressurize the product.
- Putting the product in packed baggage, sitting on it by putting it in a pocket, etc. cause damage and trouble of the substrates, built-in battery, etc. Further, in case the external connection device is inserted to the terminal for external connection, pressure causes damage and trouble.
- Please read the handling manual attached to each optional item carefully.

Requests on hitoe Transmitter

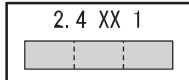
- Avoid extremely high and low temperatures.
Use the product in the temperature range of 0°C~40°C and in the humidity range of 20%~80%.
- Fixed-line phones, TVs and radios have a negative impact, therefore, the product must be used as far from those devices as possible.
- Do not drop or inflict an impact on the product. They cause trouble and breakage.
- When connecting the external connection device to the terminal for external connection, do not insert it in a slanted fashion or do not pull it while being inserted. They cause trouble and breakage.
- While charging, the product may become warm, but it is not abnormal and can be used as it is.
- Normally, use the terminal for external connection with the cover being closed. Because dust and water cause trouble.
- Do not bring magnetized items close to the product. Because strong magnetism nearby causes malfunctioning.
- The built-in battery is a nondurable.
This depends on how the product is used, however, if the usable time of the product becomes extremely short even after sufficient charging, it could be the end of the life of the built-in battery.
- Charging must be done at places with appropriate ambient temperatures (10°C~35°C).
- Usable time of the built-in battery varies depending on the usage environment and degree of deterioration of the built-in battery.
- When storing the product, the following should be avoided because they degrade the performance of the built-in battery and shorten its life.
 - Storing the product when the battery is fully charged (i.e., right after the completion of charging)
 - Storing the product with no remaining battery (i.e., the battery has been consumed to the extent that its power cannot be turned on)
- Approximate amount of remaining battery suitable for storage is when the state display lamp is lit in orange.


Requests on hitoe Transmitter

- Charging must be done at places with appropriate ambient temperatures (10°C~35°C).
- Do not charge at the following places:
 - Places where there is a lot of humidity, dust and vibrations.
 - Near fixed-line phones, TVs and radios
- While charging, the product may become warm, but it is not abnormal and can be used as it is.
- Do not inflict an impact on the cable and do not deform the plug. Because they cause trouble.

Requests in case Bluetooth ®functions are used

- As for security during communications using Bluetooth, the product supports the security functions compliant with the Bluetooth standard specification. However, depending on the setting, security may not be sufficient. Therefore, caution must be exercised when communicating by using the Bluetooth functions.
- Note that XX is not responsible for data and information leakage during communications using the Bluetooth functions.
- The following is the frequency band used by the Bluetooth functions of the product.



- 2.4 : Indicates that the radio facility uses the 2400MHz band
- XX : Indicates that the modulation scheme is other schemes.
- 1 : Indicates that assumed interfering distance is 10 m or less.
-  : Means that the entire band of 2400MHz~2483.5MHz is used and that the bands for mobile system identification devices cannot be avoided.
Check with airline companies before using the product during a flight.

- Precautions for use of Bluetooth devices: In the frequency band in which the product is operated, in addition to electric household devices such as microwave ovens and industrial, scientific, and medical equipment, licensed premises radio stations for mobile system identification devices used in production lines of factories, unlicensed special low power radio stations, amateur radio stations etc. (hereafter called 'other radio stations') are operated.
 1. Before using the product, confirm that 'other radio stations' are not operated nearby.
 2. Should there be interference between the product and 'other radio stations', immediately avoid it by changing the place of used or by 'turn off the power'.
 3. If you have any questions, please contact the 'Inquires' indicated at the back of the handling manual.

- The product and all the devices with Bluetooth functions have been confirmed that they are compliant with the Bluetooth standard specification by employing the methods specified by Bluetooth SIG and have been certified. However, depending on the characteristics and specifications of devices, operation methods may be different or, even while being connected, data may not be exchanged

Caution

- Never use the altered product. Use of altered devices infringes the radio law. The product abides by the rules concerning the technical standards conformity certification etc. of specified radio equipment based on the radio law. As a proof, the 'technical standards conformity certification mark' is displayed on the name sticker on the product. If inside the product is altered by unscrewing the screws, the technical standards conformity certification etc. will become invalid. Use of the product with invalidated technical standards conformity certification infringes the radio law, so we strong request never to use it.
- Use the Bluetooth functions in only Japan and the U.S. The Bluetooth functions for this product is compliant with Japanese and American radio specifications only and have been certified accordingly. Users may be punished for using this product overseas elsewhere.

Caution

The product has the IPX5※1 and IPX7※2 waterproof performance when the cover of the terminal for external connection is tightly closed without openings or gaps.

※1.IPX5 means that functions are protected from water jets created with a water nozzle of the inside diameter of 6.3mm with 12.5L/min. of water coming from the distance of approx. 3m for at least 3 minutes from any direction.

※2.IPX7 means that functions are protected when products are dropped in 1 m-deep normal temperature, tap and still water gently and picked up in approx. 30 min.

(Note) They do not guarantee all the operations in all the conditions. Therefore, in order to prevent entering of water and foreign substances, and use the product safely, read the manual carefully before use.

■ Important items to check before use

- Tightly close the cover for the terminal for external connection before use. Even a small gap made by small objects (e.g. thin fiber, hair, sand, etc.) could cause water and dust to enter the product.
When closing the cover for the terminal for external connection, check that dust and dirt are not clinging to the area around the cover (especially to the packing).
- Check that the cover for the terminal for external connection is tightly closed without openings or gaps. If it is not tightly closed, water may enter.

■ Precautions

- Do not wash in a washing machine or supersonic washing machine.
- Never charge when the product is wet.
- Do not leave the product with drops of water on the product.
- Do not drop or inflict an impact on the product.
- Do not dip the product in hot water, use it in a sauna or blow a hair dryer's hot air on it.
- Do not directly splash water stronger than the specification (P.14) on the product or sink it in water.
- Do not directly put the product on a sandy beach etc.
- Do not open/close the cover for the terminal for external connection with putting gloves etc. on.
Small dust may cling to the joining surface of the packing.
- When wiping off water with dry and clean cloth, make sure that fiber does not cling to the packing of the cover for the terminal for external connection.
- Do not remove the packing. Further, do not insert items with sharp edge to the cover for the terminal for external connection.
The packing becomes damaged and causes water to enter.

- Damaged or deformed packing of the cover for the terminal for external connection causes entering of liquid such as water inside the product.
- In case liquid such as water is splashed when the cover for the terminal for external connection is open, the liquid enters inside the product and causes electric shocks or trouble. Turn the power off immediately and do not use it.
- For practical usage, not all the behaviors under all the conditions are guaranteed. Note that in case results of investigations show that trouble was caused by customer's mishandling, it is considered outside the scope of warranty.

■ If the product is wet by water;

- Make sure to wipe off the water on the surface of the product with dry and clean cloth.
- Wipe off the water on the surface of the snap button by lightly pressing dry and clean cloth on it.

■ At the time of charging

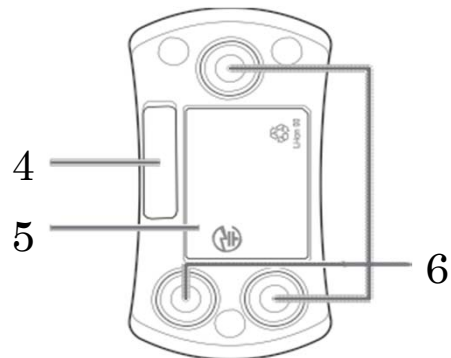
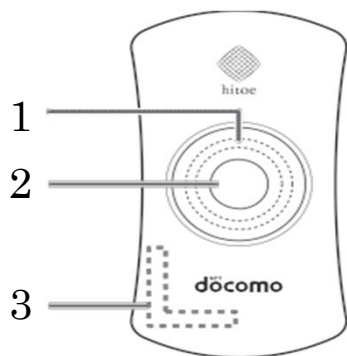
Attachments and optional items are not waterproofed. Check the following while and after charging.

- Never charge the product when it is wet. If the product is wet, wipe it off with dry and clean cloth before charging.
- After charging, tightly close the cover for the terminal for external connection.
- Do not touch the micro USB cable with wet hands.
- Do not charge near water such as bathrooms, shower rooms, kitchen and sink.

FCC caution

- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- 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.
- 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.
- This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.
- This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment has very low levels of RF energy that is deemed to comply without testing of specific absorption rate(SAR).

Names of parts



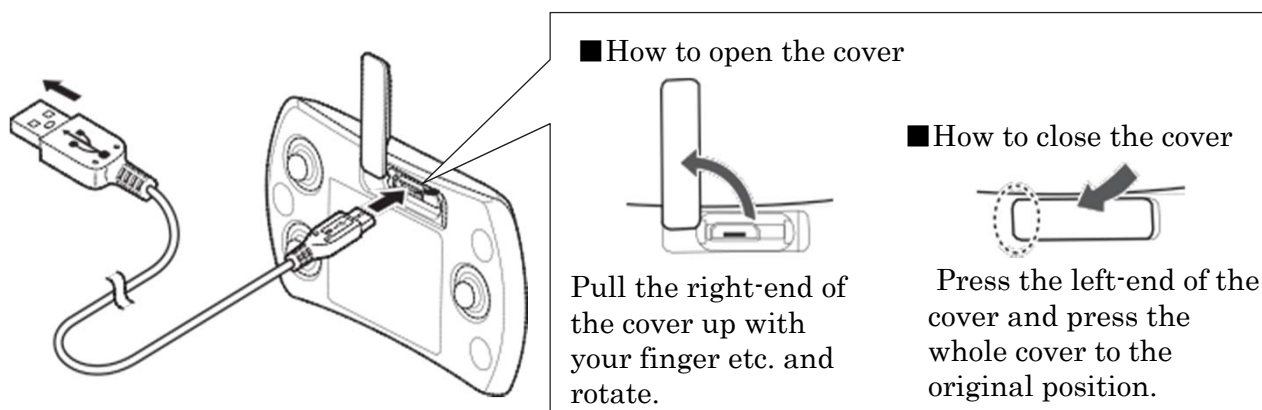
- 1 State display lamp
- 2 Button
- 3 Bluetooth antenna※
- 4 Terminal for external connection
- 5 Name sticker
- 6 Snap button

※The antenna is built-in. Covering the area where the antenna is installed with hands could impact the quality.

How to use

Charge

- When you use the product for the first time, you have not used it for a long time, or the state display lamp on the battery remainder display is lit in red, make sure to charge before start to use.
- When you charge, remove this product from the hiteo wear.
- ※Even when charging is done with power turned on, the power will be turned off in approx. 10 min.
- Here is the procedure to charge by using the micro USB comes as an attachment and a PC



1. Insert the micro USB plug of the micro USB cable into the terminal for external connection horizontally with the USB mark facing upward.
2. Insert the USB plug of the micro USB cable into the PC's USB connector horizontally
 - When charging starts, the state display lamp is lit in red, and when the charging is completed, the state display lamp is turned off.
 - In case charging is started with the state of out of battery, the state display lamp may not be lit in red immediately.
3. When charging is completed, pull out the micro USB cable from the product and PC.
 - The micro USB cable must be horizontally pulled out by holding the plug.
 - Forcible removal of the cable could cause trouble.

■ Approximate amount of remaining battery

Approximate amount of remaining battery can be checked on the state display lamp. With power turned on, press the button and the state display lamp will display the approximate amount of remaining battery for approx. 2 sec.

If the state display lamp is not lit even the button is pressed, it means that power is off.

● Depending of the usage, display of the amount of remaining battery could change dramatically.

Display	Amount of remaining battery
Lit in yellow-green	Sufficient amount of battery
Lit in orange	Amount of battery is being reduced
Lit in red	Hardly any battery remaining (Please charge)

Power on/ off

■ Turn the power on

1. Press the button for 2 sec. or longer.

- The state display lamp blinks in yellow-green (approx. 2 sec.), the Bluetooth function is turned on and connection-waiting state starts.

■ Turn the power off

1. When power is on, press the button for 3 sec. or longer.

- Power is turned off after alternate blinking (approx. 2 sec.) of the yellow-green/orange state display lamp.

Measure hear rates

● The product transmits measured data to a smartphone via the Bluetooth function.

● To use the product, installed the corresponding application before use.

※ Check the corresponding application for its operation.

※ See the handling manual of smartphones for the operation of smartphones.

1. Turn the power of for the product.

2. Attach the product to the hitoe wear.

- See the handling manual of the hitoe wear for how to attach the product to the hitoe wear.

3. Wear the hitoe wear.

4. Start the application on the smartphone.

- Operate by following the instructions on the screens.

5. When the measurement is completed, take off the hitoe wear, detach the product from the hitoe wear and turn the power off.

List of main displays of state display lamps

Display		State
Yellow-green	Lighting (approx. 2 sec.)	When Bluetooth connection is completed.
	Blinking (approx. 2 sec.)	When power is turned on.
	Blinking	When standing-by for Bluetooth connection.
Red	Lighting	When being charged.
	Blinking	When data cannot be measured. (Bluetooth-connected) ※ Power is lost when blinking continues for approx. 10 min.
Yellow-green/ Orange	Alternate blinking (approx. 2 sec.)	When running out of power.
Yellow-green/ Red	Alternate blinking	When data cannot be measured. (Waiting for Bluetooth connection) ※ Power is lost when blinking continues for approx. 10 min.

Trouble?

Please take the following measures, and if the trouble still remains, please contact the 'Trouble inquires'

Phenomenon	Possible causes and how to fix them
Cannot turn on power	<ul style="list-style-type: none"> • Out of battery? →Recharge the battery. ※Out of battery in case the state display lamp is not lit even when the button is pressed.
Cannot recharge/Charging is not displayed	<ul style="list-style-type: none"> • Is the micro USB cable properly inserted to the product and PC? →Properly insert it. • In case the remainder display of the built-in battery is lit in yellow-green, the charging may not be displayed even when charging is being done.
Charging time is short/long	<ul style="list-style-type: none"> • Charging time becomes short in case there is remaining charge in the built-in battery. • Is the ambient temperature within the range of 10°C~35°C? →Use the product at normal temperatures.
Cannot transmit measured data.	<ul style="list-style-type: none"> • Is the product connected to a smartphone? →Connect it to a smartphone. • Isn't the distance between the product and a smartphone too large? →Place the product and smartphone closer to each other.
Cannot Bluetooth connection.	<ul style="list-style-type: none"> • Turn the power on again.

Trademark

- ‘ hitoe’ is the trademark by Toray Industries, Inc. and Nippon Telegraph and Telephone Corporation.
- The word-mark and logo of Bluetooth® are registered trademarks owned by Bluetooth SIG, Inc., and NTT DOCOMO, INC. use them based on the license.
Other trademarks and trade names belong to their owners are registered trademarks.
- Other company names and product names indicated in the handling manual are trademarks or registered trademarks of the individual companies.

Main specifications

■ hitoe Transmitter

Size	Height: approx. 70mm Width: approx.37mm Thickness: approx. 9.6mm	
Mass	Approx. 24g	
Built-in battery	Battery	Li-ion (lithium-ion) battery
	Voltage	3.7V
	Capacity	250mAh
Duration of continuous operation	40 hours or longer	
Charging hours※1	approx. 200 min.	
Bluetooth function	Version	Compliant to Bluetooth standard specification Ver.4.0Low Energy
	Distance of communication	LOS, approx. 10m (max.)
	Supported profile※2	HRP
	Device name	hitoe tx01XXXXXX (XXXXXX is a character string specific to the device)

※1.The approximate charging hours is in case charging from when the built-in battery is empty.

※2. Connection procedures of Bluetooth functions standardized per product characteristic.

- Duration of continuous operation means approximate time that product can be used when radio signals are normally transmitted and received. Thus, the values may change depending on how the product is used.
- The specifications and external appearance may be changed to enhance the performance without prior notice.