

Electron Supplementation Device

HsD

Please read before use

Thank you for purchasing HsD.
 Be sure to read this instruction manual carefully before use and use this device appropriately.
 Keep this manual at hand for quick reference at any time necessary.

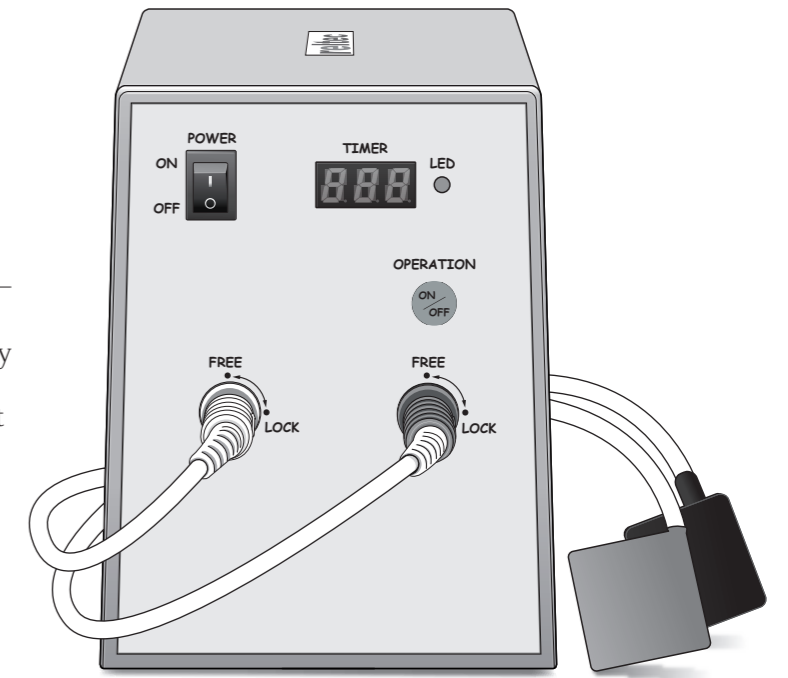


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Please fill out the following information for easy reference.
 Check the product name and serial number before contacting your dealer to place an order or ask for inspection, repair, etc.

Serial Number	Date of Purchase	Dealer
		TEL () —

Manufacturer

RELTEC Medical Devices Corporation

3795-1, Kawatsu-cho, Sakaide-shi, Kagawa, 762-0025, Japan

<https://reltec.co.jp>

Introduction

1. For proper use

Thank you for purchasing Electron Supplementation Device HsD.

Electron Supplementation Device HsD is a health-related device and is not a medical device.


This device is intended for use only for general wellbeing purposes or to encourage or maintain a healthy lifestyle, and is not intended to be used for any medical purpose (such as the detection, diagnosis, monitoring, management or treatment of any medical condition or disease).


Please consult a physician for any medical advice required.

This device is for domestic use only and must not be used outside of the country for safety and legal reasons.

Be sure to read this manual carefully before use and use this device appropriately.

The following signs indicate the possibility of causing harm or physical damage to users and other persons when the device is handled incorrectly disregarding the signs.

 **Warning** This sign indicates the possibility of causing "death or serious injury" when the device is handled incorrectly disregarding the sign.

 **Caution** This sign indicates the possibility of causing "injury or physical damage" when the device is handled incorrectly disregarding the sign.

Explanation of display marks



Prohibitions This sign indicates prohibited actions.



Compulsory This sign indicates mandatory actions.



Do not disassemble



Operator's manual



Keep fire away



Dangerous voltage



Prohibited from use in water areas




Alternating Current



Unplug the AC adapter from the outlet

Warning

 Do not use the device in combination with any of the following electronic medical devices since it may result in malfunction.

- Life-support devices such as an artificial heart-lung machine.
- Wearable electronic medical devices such as an electrocardiograph.

Do not use if you have been diagnosed with heart disease and are restricted from daily extreme exercise.

Caution



Any of the following persons who are judged to be inappropriate to use the device by a doctor must not use.

1. Person with malignant tumor.
2. Person with heart diseases. (Person with heart problems)
3. Pregnant woman (Especially person in the early stage of her pregnancy, or immediately after childbirth.)
4. Person with sensory disturbance due to advanced peripheral circulatory disorders caused by diabetes, etc.
5. Person with high fever
Person with his body temperature of 38 °C or above (incidence of fever) . (Person suffering from symptoms of severe acute inflammation) (fatigue, chill, blood pressure fluctuation, etc.) (and person who is debilitated.)
6. Person who requires bed rest.
7. Person with acute (painful) diseases such as spinal fracture, sprain and muscle strain.

When used by children, the device must be used under the supervision of a parent or guardian. Do not allow children to play with or climb on the device itself or the plate.



Keep flammable materials and cigarettes away from the device.

Keep the main body and accessories away from heaters.

Failure to do so may cause a fire or a fault.



Never open the case as high voltage is generated inside of the main body.

Do not disassemble, repair, or modify the main body and accessories.



Do not use this device in very humid and moist places such as in a bathroom.

Failure to do so may cause injury such as electric shock or a fault.

Do not wash the main body and accessories in water.



When you notice any abnormalities such as unusual odor, abnormal sound, smoke, etc., switch off the device, unplug the AC adapter from the outlet and discontinue use.

When the device is dropped, pushed down, or subjected to a strong shock switch off the device immediately, unplug the AC adapter cord from the outlet and discontinue use.

If liquid enters the main body or accessories, switch off the device immediately unplug the AC adapter from the outlet and discontinue use.

※ Contact your dealer if you have any of the problems mentioned above.

While lightning is occurring, stop using the device and unplug the AC adapter from the outlet.

Introduction

Caution



Do not place anything on top of the device.

Keep the device away from other electrical appliances.

Do not use the device in combination with a mattress made of conductive substances such as metallic fibers.

Do not insert a metal rod, etc. into the sockets for plates.

Be careful not to apply excessive force to the plate cables and AC adapter.

The cables must not be excessively bent, pulled, twisted, or rolled up into a small bundle. In addition, do not place heavy objects on the cables.

Failure to do so may shorten the life of the cables and cause a fire, electric shock, or an accident.

Do not apply shock to the plugs as they may be damaged.

Do not use accessories other than those (AC adapter, plate ACs, BD) provided by us.

Do not use the main unit and accessories for other purposes.

Do not touch with wet hands.

Failure to do so may cause injury or malfunction such as electric shock.

Precautions before use

Caution



Please read the instruction manual before using the product for the first time.

AC adapter and plates must be connected correctly and securely.

Make sure switches, buttons, and timers are working properly.

When using device that has not been used for some time, make sure that the device is in good and safe working order.

Connect the plate and check that the switches, buttons, and timers are working properly.

Make sure to apply the plates to the body before starting operation.

If you apply the plates after starting operation, the plates may be damaged and you may feel an unpleasant electric stimulation similar to static shock.

Stop operating the device firstly in case of removing the plates from applied parts.

When applied part of the plates are wet with sweat or covered with ointment, make sure to wipe it off before use.

When a plate is wet or damp with sweat, dry it completely before use.

Never attempt to dry it using a hair dryer or heater as it may result in damage.

If any of the plates are damaged or in a fault condition, discontinue use immediately.

Consult your dealer or our company as it is dangerous to make a repair by yourself or use the device continuously.

Caution



Do not use with other electrical appliances.

Do not install or use the product in the following locations.

- Do not put the device on an inclined surface or in an unstable location where it is subjected to shock or frequent vibrations.
- Do not place the device in a hot place where there is a heater nearby or where it is exposed to direct sunlight.
- Do not put the device in a place where dust, salt, sulfur etc. may cause adverse effects.

Keep the main body and accessories away from a container of liquid such as a vase or an aquarium.

If liquid enters the device, it may cause a fire or a breakdown.

When you apply the plates to the body, be careful not to bend them too sharply by tightening them excessively.

The plates may be damaged if bent too much.

Cautions during use

Caution



When you feel any abnormalities in your body, stop using the device immediately.

People around you should not touch the person who is using the product. Also, while using the product, do not touch people or things around you.

In the event of a blackout, switch off the device immediately.

Always stop operation before using it on another part of the body or on another person while it is in use.



Do not allow metal objects (bed, chair, precious metal, etc.) to come in contact with the body and plates during use.

Do not use for more than 60 minutes at a time.

Have at least one hour between the end of the last use and the start of the next use.

Cautions after use

Caution



Please turn off the power switch on the front of the unit after use.

Before moving the unit, remove the AC adapter and the plates from the unit. In addition, hold the unit with both hands to prevent it from falling down.

If you accidentally drop the unit, be sure to contact the dealer where you purchased it for inspection.

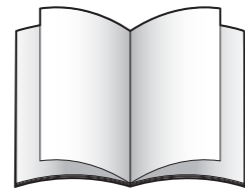
Otherwise, even if the appearance and operation are normal, there may be malfunctions and accidents in the future.

2. Configuration

※ Please check if all the components listed below are provided by checking the following boxes.



Main body (1unit)



Instruction manual (1copy)

Accessories [Not covered by warranty]

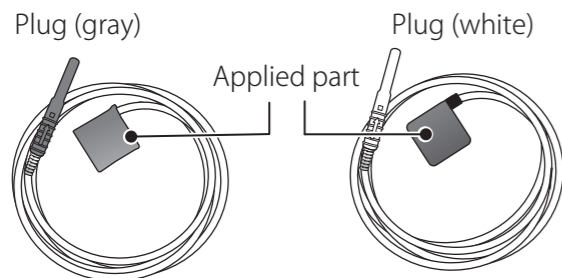
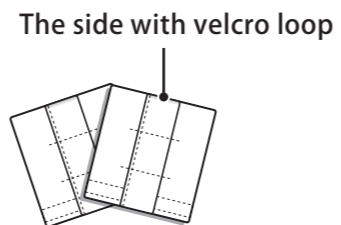


Plate ACs (1 pc)

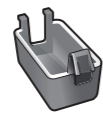
Plate BD (1 pc)



Cover with velcro loop (4 pcs)



AC adapter (1 pc)



DC plug cover (1 pc)



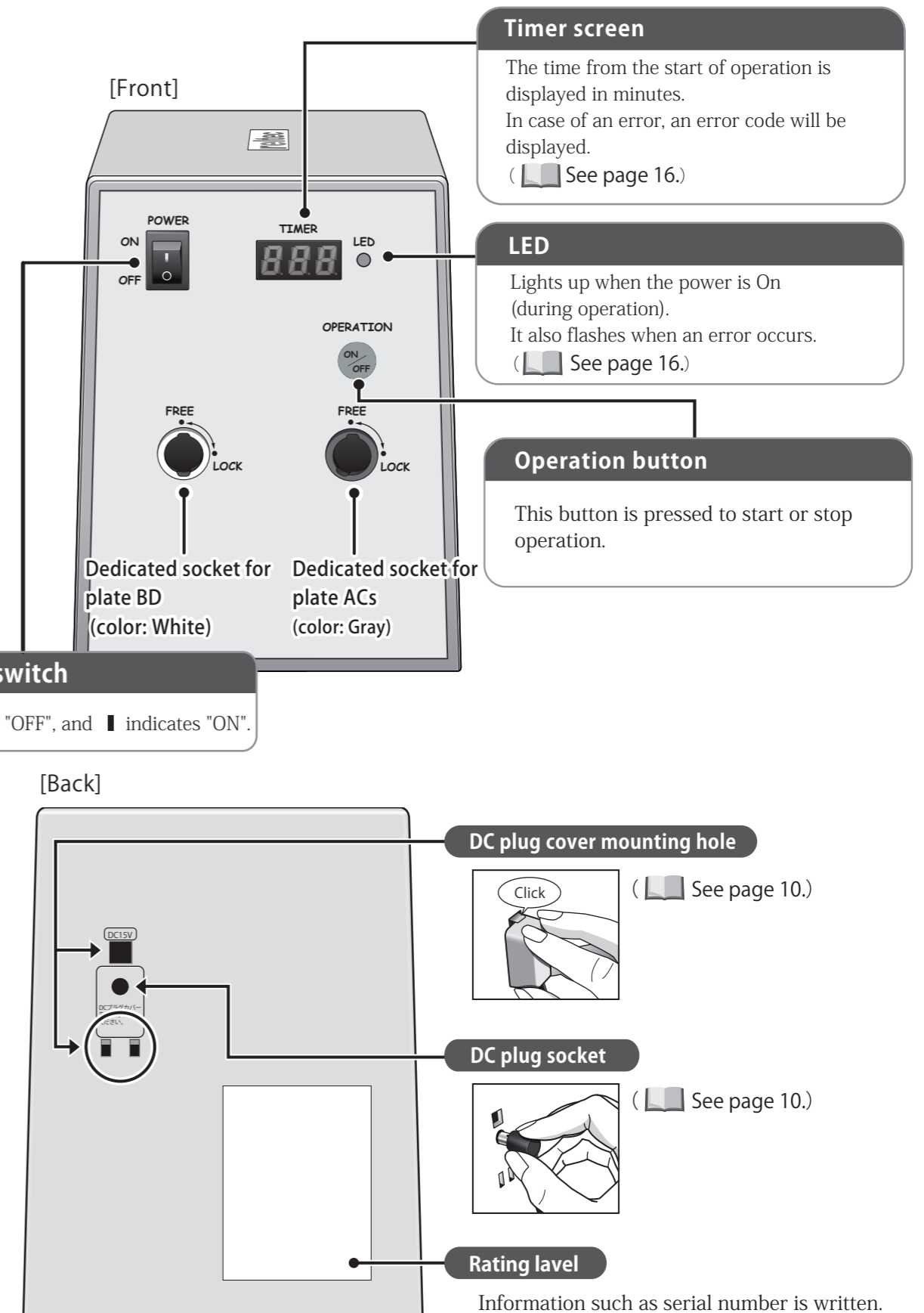
Spiral tube (5 pcs)



Velcro with square buckle (1 pc)

※All of the accessories in the box are consumables and are not covered by warranty.

3. Name and function of each part of the main body



Before use

1. How to connect plates

Insert the plug while holding the main body so that it does not move.

Plate BD
[Color : White]

① Hold the plate BD plug (white) with ↑ (arrow) facing up and insert it all the way into the socket (white) straight and firmly.

② ↑ (arrow) is rotated 90 degrees to the right so that it is in the LOCK position.

Caution

- Make sure to turn the plug 90 degrees to the right. Otherwise, the plug cannot be firmly fixed and it may fall from the socket.
- Please match the colors of the plug and socket when you insert. Inserting the plug into incorrect socket may result in damage or inability to pull out the plug.

Plate ACs
[Color : Gray]

① Hold the plate ACs plug (gray) with ↑ (arrow) facing up and insert it all the way into the socket (gray) straight and firmly.

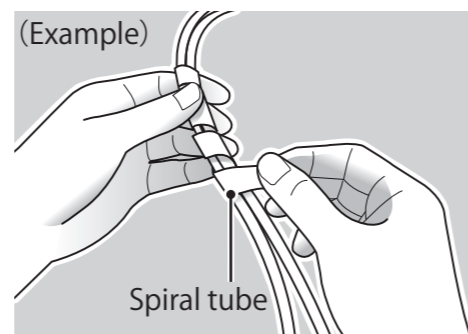
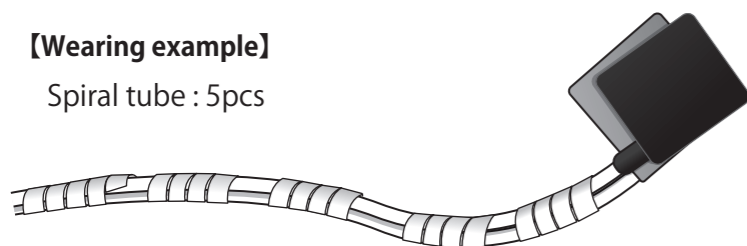
② ↑ (arrow) is rotated 90 degrees to the right so that it is in the LOCK position.

2. How to wrap with spiral tubes

Wrap the plate cables with the provided spiral tubes in spots.

[Wearing example]

Spiral tube : 5pcs

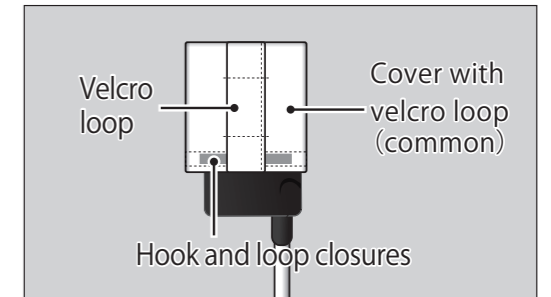


3. How to fit the cover with velcro loop

Fit a provided cover with velcro loop.

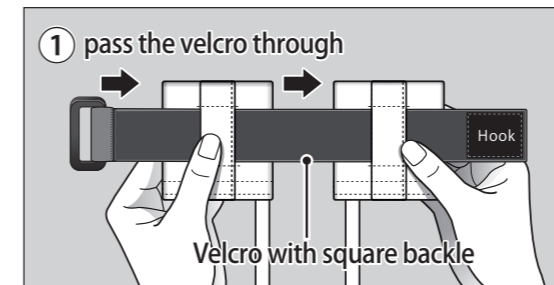
Open the hook and loop closure on one side of the cover with velcro loop, and insert the plate in it.

Then close the hook and loop closure.

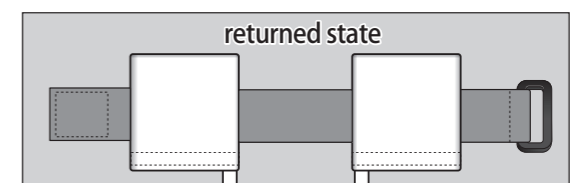
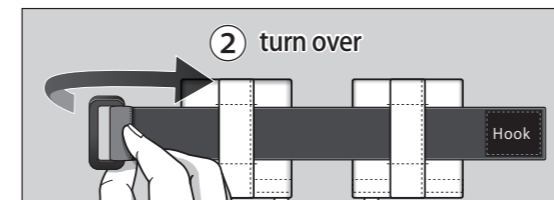


4. How to fit the velcro with square buckle

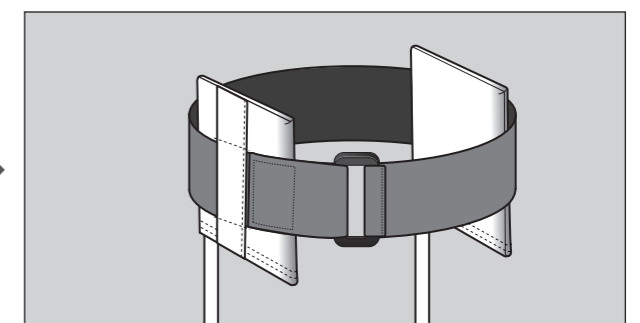
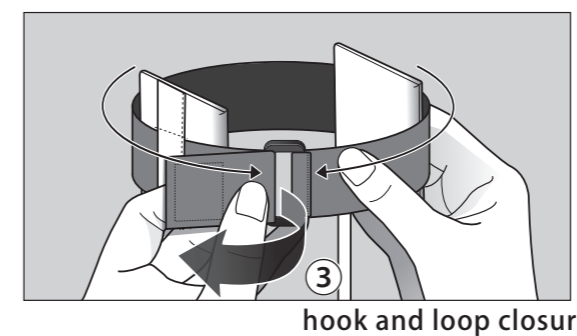
- 1 Pass the velcro through the velcro loop of the cover with velcro loop as shown in the figure on the right. Pay attention to the orientation of the velcro and cover.



- 2 Turn it over so that the surface of the cover is facing you.

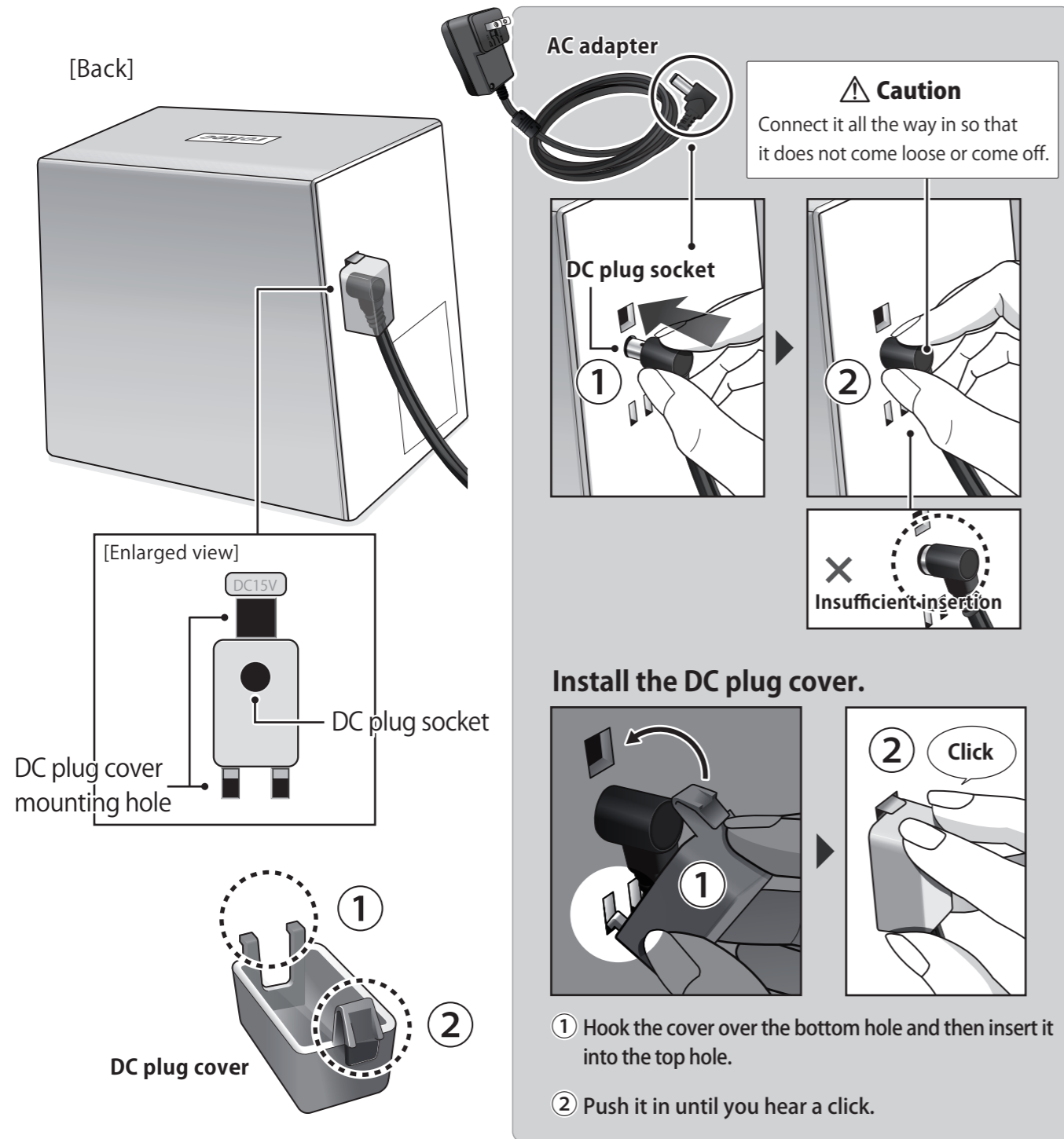


- 3 Secure the velcro through the square buckle with hook and loop closure.



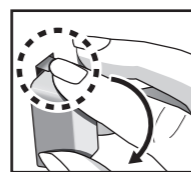
5. How to connect AC adapter

Connect the DC plug of the AC adapter into the DC plug socket on the back of the main body.



! Compulsory

The DC plug cover must be installed because direct contact with the DC plug may adversely affect the inside of the equipment due to static electricity, etc.



[If you have to remove it for transportation or other reasons...]

While pressing down on the tabs, pull the DC plug cover as shown by the arrow to release it.

※The basics should not be removed as shown in the left sentence.

Insert the AC plug into the outlet

- ① Put the equipment on a fixed, stable and flat place avoiding direct sunlight.
- ② Hold the AC adapter plug and insert it all the way into the outlet (household 100-240V AC) straight and firmly to avoid loosening or disconnecting.

6. Method of use

Typical use case

Period	Single use time	If you feel temporary body sluggishness, shorten the duration of each use.	Use per day 1 to 5 times (standard)	Single use time 5 to 60 min (standard)
Day 1 - Day 3	5 to 10 min			
Day 4 - Day 7	10 to 15 min			
Day 8 ~	15 to 60 min			

- ① The above table is an example of standard use.
Please adjust the duration of use and the number of times per day according to your physical condition.
- ② Allow at least one hour after each use before the next use.
- ③ When using the product for the first time, use it for a short time (5 to 10 minutes) and gradually acclimate your body to it through repeated use.
- ④ If you feel temporary weakness, shorten the duration of each use or reduce the number of times you use it in a day.
- ⑤ Depending on the age, physical strength, and weight of the user, such as children and the frail, adjust the duration of use appropriately, such as 20 minutes or less per use.
- ⑥ If you feel any physical abnormality, discontinue use immediately.
- ⑦ Stop the operation before using the conductor for another person.
- ⑧ Recommend using the front and back plates alternately.
- ⑨ If you have not used the conductor for a month or more, use it for a short period of time (5 to 10 minutes) and gradually acclimate yourself to it through repeated use.

How to apply

Before starting operation, appropriately apply plates ACs and BD to the body using the provided velcro.

1 Pass it around the wrist

2 Fix the temporarily attached velcro to match the width of your wrist.

3 Fixed state

※Don't touch each other

Caution
Don't hold the cable

Apply plates ACs and BD so as not to come in contact with each other.

Set the plates so that they are on the inside and outside of the wrist, respectively, and tighten the belt to fix the plates.

Outside Inside

Plate BD Velcro Plate ACs

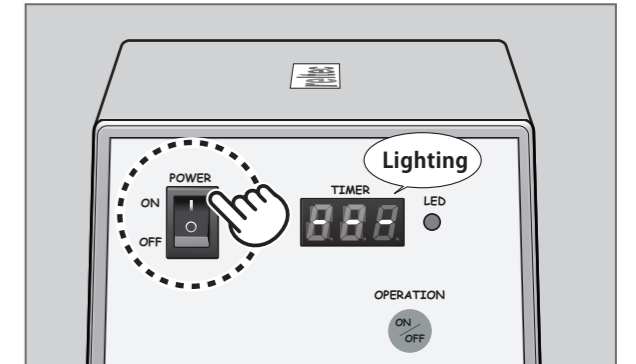
Set the plates ACs and BD so that they are on the inside and outside of your wrist.

How to use

How to operate

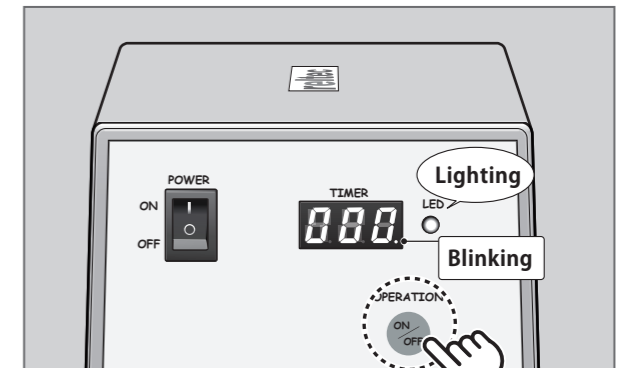
1. Turn on the power supply

Turn the power switch on the front of the main unit to the "ON" position.
The timer display will show "---" to indicate that the unit is in standby mode.



2. Start operation

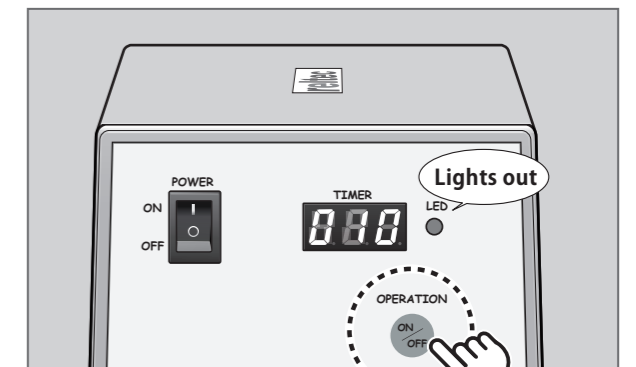
When the operation button is pressed, the LED lights up and operation starts.
The timer changes to display "000" and starts counting up.
During operation, the dot at the lower right end of the timer display blinks.



Be sure to operate with the plate ACs and the plate BD attached to the body.

3. Stop operation

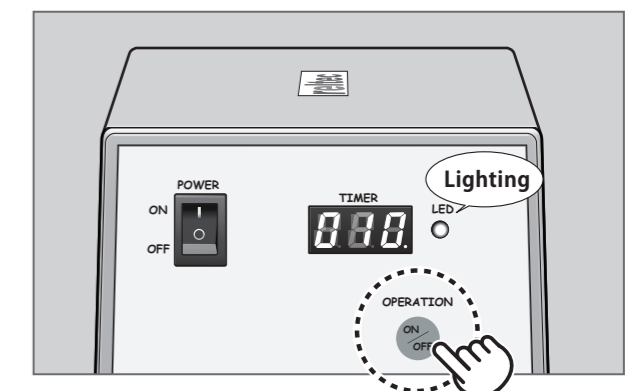
If the operation button is pressed again during operation, the LED turns off and operation is stopped (Operation is suspended).
At this time, the timer is not reset and the timer is displayed as it was when operation was stopped.



When operation is stopped after 10 minutes

When resuming operation ••

When the operation button is pressed again, the LED lights up and starts counting up from the time when operation was stopped.



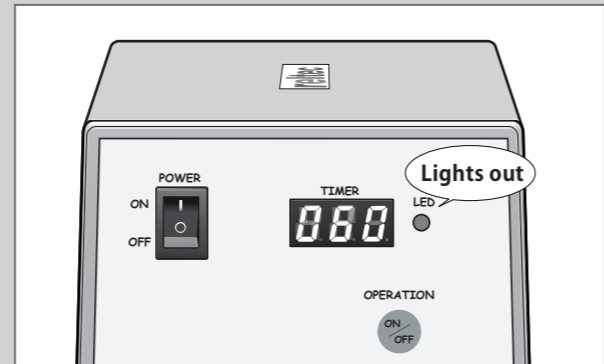
How to use

How to operate

Maximum operating time is 60 min

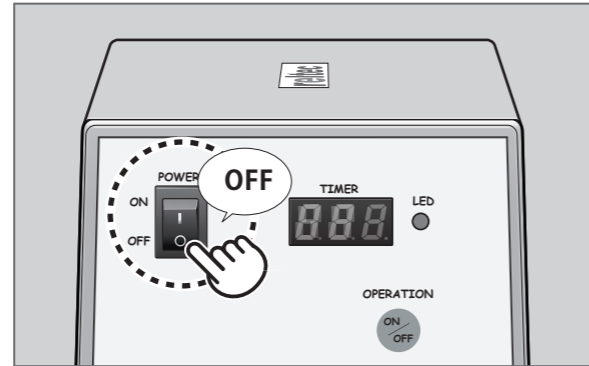
End of operation

When the maximum operating time is reached, an end tone sounds, the LED turns off, and operation is stopped.



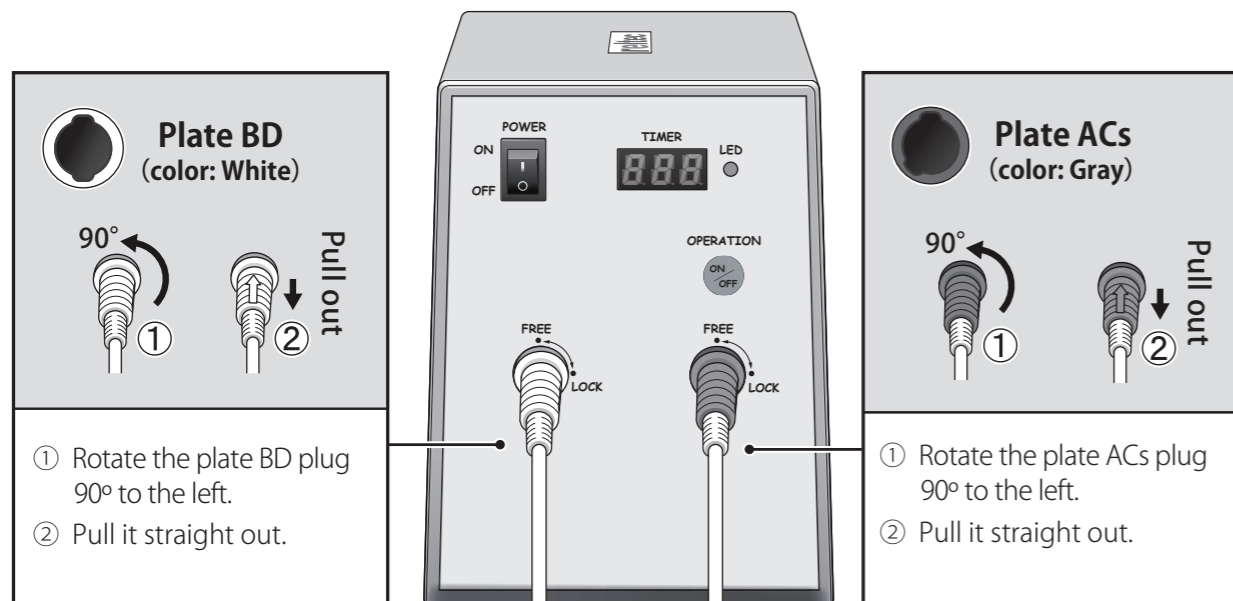
4. Turn off power

Please turn off the power switch on the front of the unit.



Remove the plates ACs and BD

Please make sure to remove the plug from the main unit, holding down the main unit so that it will not slip out of place.



Care and storage

How to care

- The main body should be wiped dry with a soft cloth, etc.
If the surface is heavily soiled, wipe it with a cloth soaked in diluted neutral detergent, and then wipe it thoroughly with a dry cloth.
- Keep the plates ACs and BD apart and let them dry naturally.
- Please wash the velcro and covers frequently as sweat components will adhere to them.

⚠ Cautions for care

Never use benzine or thinner for cleaning.

When removing cords, do not apply excessive force to the connections, such as by holding the cord and pulling it out.

Before cleaning, hold the AC adapter plug and disconnect it from the outlet as it may cause electric shock.

How to store the device

- Keep the body unit and accessories clean, wash covers, etc. and then store them in a dry place in order so that they work properly when used next time.
- Please keep the product away from dust and insects.
- Please remove dust between outlet and AC adapter plug.

⚠ Storage Precautions

When you use the device after a long period of storage, contact your dealer and have it inspected.

Do not store in the following places.

- Please keep the product away from fire or heat source.
- Do not store the products in precarious places.
- Do not expose the product to direct sunlight.
- Please keep the product out of reach of child.

How to dispose of or transfer the device

- If you wish to dispose of or transfer the device, contact your dealer for safety and legal reasons.

Troubleshooting

When an error code is displayed



Plate ACs side (Gray)
connection error



Please insert the gray plug properly.

(See page 8 .)



Plate BD side (White)
connection error



Please insert the white plug properly.

(See page 8 .)

In the above cases, the error LED will flash and the buzzer makes sound.

When the plug is correctly connected, the LED will turn off and the error will be cleared.

Just clearing the error does not resume operation.

Press the operation button to resume.

In case of an in-use error, the operation will resume from the time when it was stopped.



Output abnormalities
of the main unit



Please contact your dealer or
RELTEC Medical Devices Corporation



If you think something is wrong

Fault	Possible causes and remedies	Reference page
The unit is not energized after the power switch is turned on. The display screen area is off.	<p>The AC adapter is not connected correctly.</p> <ul style="list-style-type: none"> → Insert the plug of the AC adapter into the special socket on the back of the unit. → Plug the AC adapter into the socket (100-240VAC). 	10

Frequently Asked Questions

Question	Answer
No or low sound from the plates.	<p>The sound coming from a plate is a discharge sound generated when electrons pass through inside space of the plate. It varies depending on various reasons such as the usage environment and deterioration of the plate.</p> <p>The loudness of the sound cannot be used as a criterion for output as it varies depending on the environment.</p>

Specifications

*Please note that the product specifications and appearance may be subject to change for reasons such as improvement, etc. without prior notice.

Brand Name	HsD
Model	HsD
External dimensions	140(W) × 180(H) × 200(D)(mm) (Does not include DC plug cover)
Mains voltage	100-240 V ~
Rated frequency	50-60 Hz
Rated consumption	3W
Weight	Approx. 1.4Kg (main body)
Treatment time	Max 60 minutes
Output voltage	DC-4500V ± 900V
Safety features	<ul style="list-style-type: none"> •The device automatically stops when a plate plug is disconnected. •The device automatically stops when a plate plug is not properly inserted. •The device automatically stops when the main body is installed improperly. •The device automatically stops when output is abnormal

● The service life of the product is 7 years.

Accessories	Quantity
Plate ACs (2.5m)	1 pc
Plate BD (2.5m)	1 pc
Cover with velcro loop	4 pcs
Velcro with square buckle (30cm)	1 pc
AC adapter (1.30m)	1 pc
Instruction manual	1 copy
Spiral tube	5 pcs
DC plug cover	1 pc

Other information

Replacement of consumables (Not covered by warranty)

- The plate is consumable.
- To maintain full performance, it is recommended that plate ACs be replaced every year.
- If you use a broken or damaged plate BD, you may receive an electric shock, so we recommend that you inspect the plate BD every 1 to 2 years.
- When the AC adapter or any of the plates is damaged, discontinue use as it is dangerous to use it continuously. Replace damaged one with new one.
- A plate which has been used for many years may cause burns, electric shock or fire due to cable breakage, etc.

After-Sales Service

If you find anything wrong with the main unit, please contact your dealer. Before requesting repair, please refer to "If you think something is wrong" on page 16.

If you still find something wrong, stop using the product, unplug the AC adapter, and contact the dealer where you purchased it.

Maintenance list

Please maintain your device in accordance with the following table for proper and safe use. If you find any abnormalities, discontinue use and unplug the power cord. Then contact your dealer.

	Check items	What to check
Semi-annual check	Cleaning of body unit	The exterior must not have cracking, breakage, etc.
	AC adapter	Is the AC adapter free of lacerations or broken wires?
		Is the AC adapter so hot that you cannot touch it?
		Is there dust between the AC adapter and the outlet?
Weekly Check	Plates	Do you feel a shock similar to an electric shock during operation?
		Is there any breakage, cut, or deformation in the plates (applied parts) and the plate cables?

MEMO
