

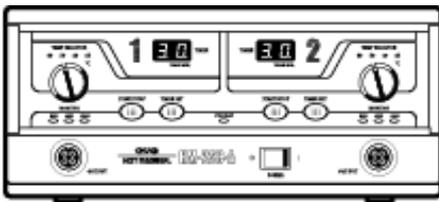
Magnetic Force + Vibration + Heat
HOT MAGNER

Owner's Manual

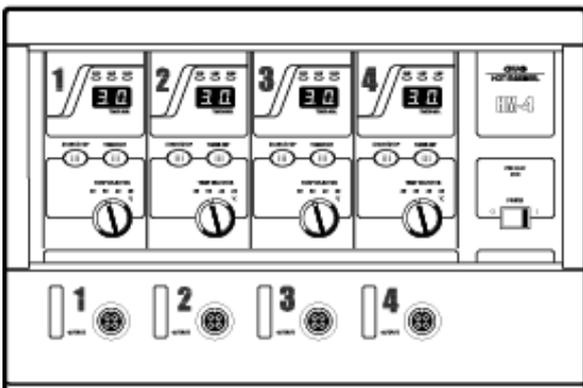
for HOT MAGNER HM-101, HM-2SC-A, HM-4
Thermal Therapy Units



HM-101



HM-2SC-A



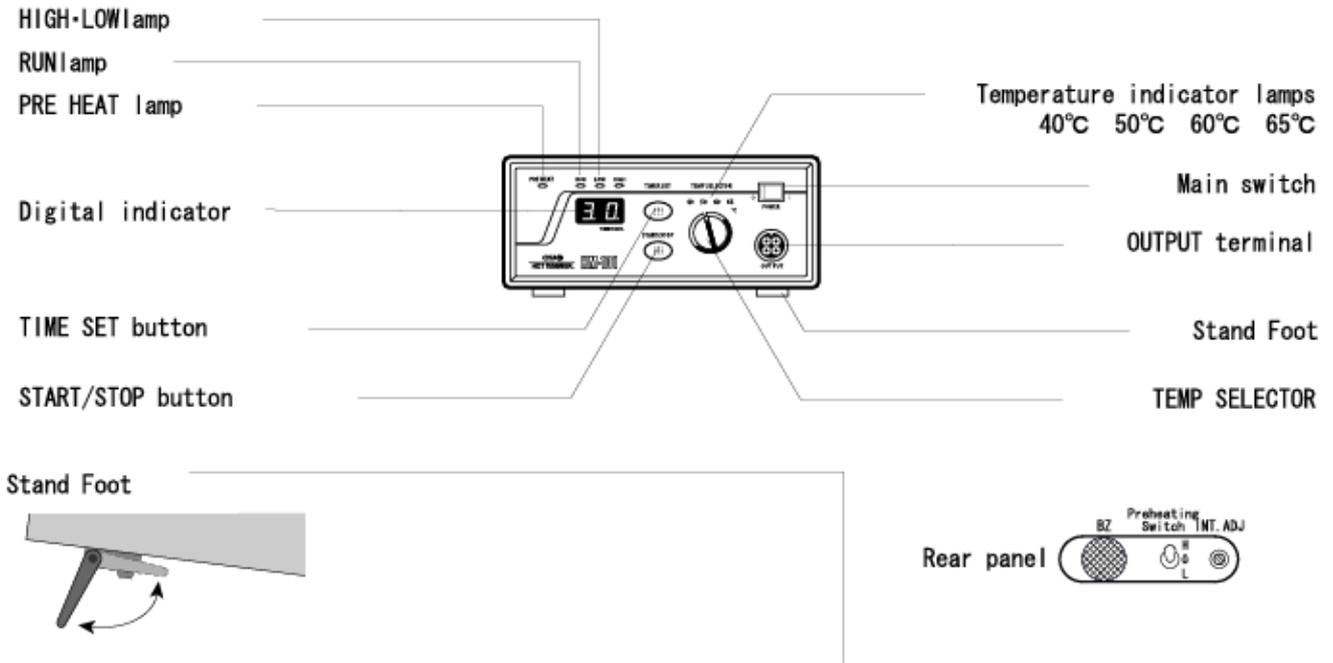
HM-4

Thank you very much for purchasing the HOT MAGNER. The HOT MAGNER was developed based on valuable advice of a number of physicians and is designed for use by clinical physicians. Kindly read this manual before you start using the equipment so that you will be able to obtain the maximum performance without trouble.

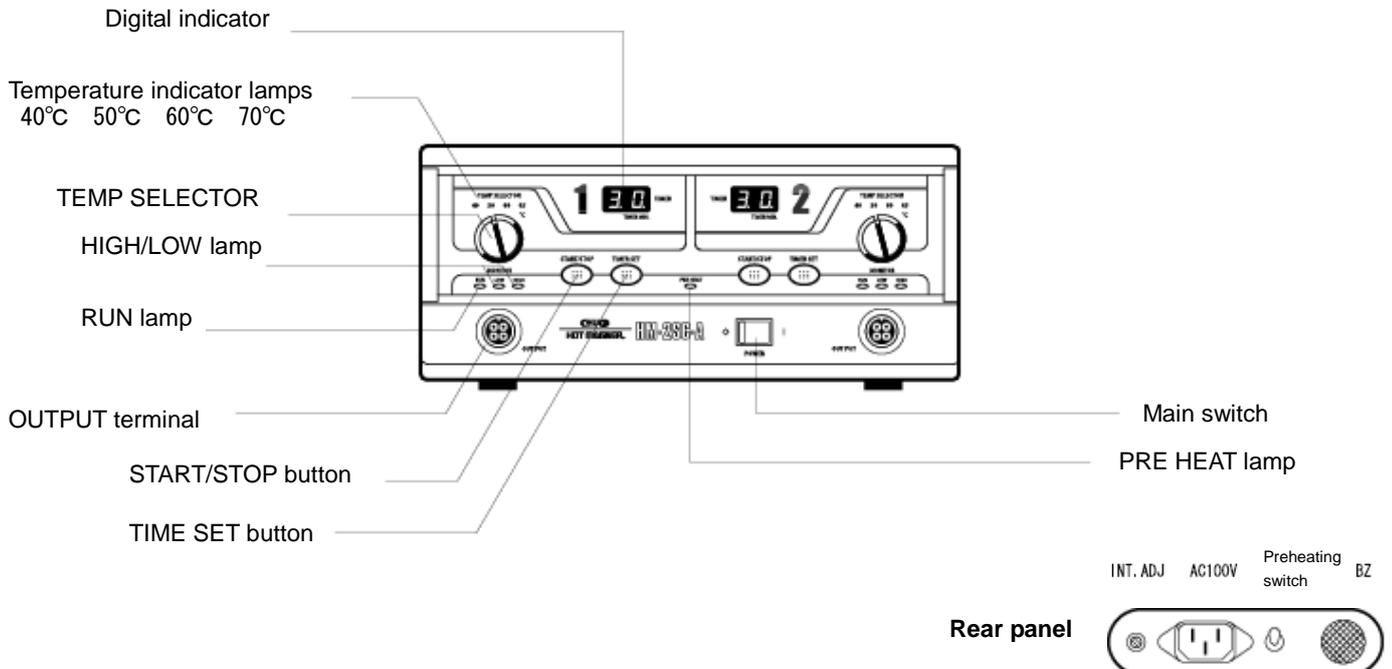
Every HOT MAGNER has been carefully tested and inspected before shipment. However, because of possible damage during shipping, distribution, or storage, the instrument should be examined before use. When unpacking, please check the list of parts to make sure that all items have been included.

Description of Instruments

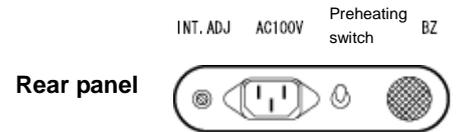
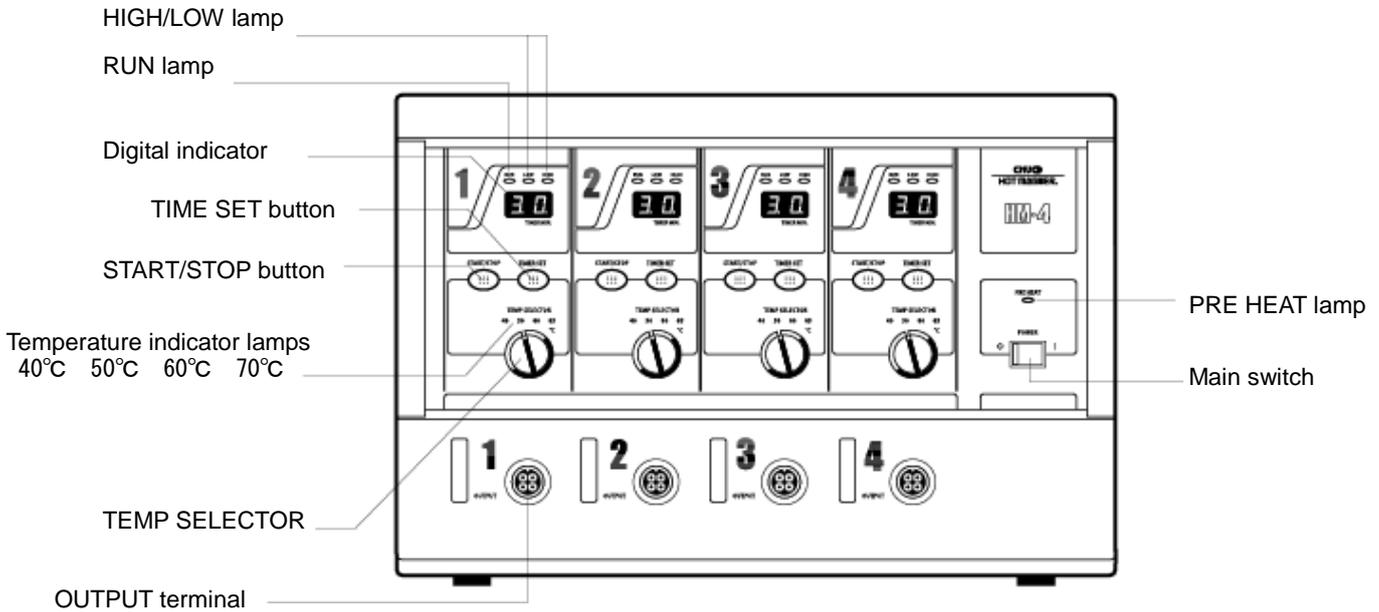
HM-101



HM-2SC-A



HM-4



Rear Panel

INT.ADJ	Adjust intervals of vibration, when LOW lamp is on.
AC.V	Socket for the power cable. (HM-2SC-A/HM-4)
Preheating switch	Three-position switch for preheating. Set it according to the room temperature. High, Off and Low, from top to bottom.
BZ	Buzzer sounds when therapy ends.

Front Panel

Description	Function
Main switch	The lamp turns on when the switch is pressed. The preheating circuit is triggered
PRE HEAT lamp	Turns on when preheating switch is set to HIGH or LOW and turns off when set to OFF. (HM-2SC-A/HM-4) Turns on when preheating switch is set to HIGH or LOW and turns off when work. (HM-101)
Digital indicator	Displays therapy time. Indicates time remaining for therapy.
TIME SET button	Sets therapy time. Press it 1 time to SETTING mode, and then set time from 1 to 30 minutes in a 1-minute interval step.

TEMP SELECTOR	Sets temperature at: 40°C, 50°C, 60°C and 65°C. Selected temperature indicator lamp turns on.
START/STOP button	Press it for starting and press it again for stopping.
HIGH/LOW lamp	Indicates temperature status of the Magner Pack. The HIGH lamp continuously lights until temperature reaches the set level, and, thereafter, the low lamp turns on.
RUN lamp	Turns on (preheating) and blinks (temp reaches the set level) during therapy. (Before or after therapy, Run lamp in HM-101 turns on in green when preheating switch is set to ON).
OUTPUT terminal	For connection of the Magner Pack. For safety reasons the unit does not work when the Magner Pack is not connected.

Operating procedures

Before use

1. Connecting power cable

Firmly plug the power cable into the connector located at the rear panel of the main unit. The grounding terminal of the plug must be securely grounded. (HM-2SC-A/HM-4)

2. Connecting the Magner Pack

Insert the plug of the Magner Pack cable to the OUTPUT terminal of the main unit.

3. Setting preheating temperature

The preheating temperature can be set at high, low or off. Set it to an appropriate temperature according to the room temperature. The Magner Pack will be Heated and maintained at a designated temperature.

- Heating begin when the main switch is turned on.
- The RUN lamp turns on in yellow. It turns off when choosing “off” .

4. Setting intervals for vibration

Intervals for vibration can be adjusted by manipulating the INT.ADJ knob located at the rear panel of the main unit. Intervals become longer as the knob is turned to the right direction.

- Vibration intervals can be set when the Magner Pack is heated to the set temperature (when the LOW lamp is on) and the RUN lamp blinks. While the RUN lamp is kept on, vibration intervals cannot be set.

5. Turn on the main switch (power switch)

When the POWER switch is pressed on, the lamp of the switch turns on and the PRE HEAT lamp turns on in green. (RUN lamp in HM-101 turns on in green) (It turns off when the preheating switch is turned off).

The set time is displayed on digital indicator.

- The Magner Pack generates weak magnetic flux and vibrations. (No output is generated when the preheating switch is off).

Start of therapy

Apply the Magner Pack to a treatment point.
The Magner Pack can be applied over clothing.

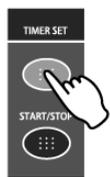
Examples of Magner Pack application.



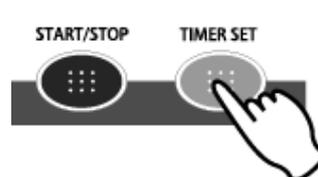
Setting therapy time

Press the TIME SET button to set the time for therapy.

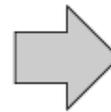
- Press the TIME SET button 1 time to SETTING mode.
 - At this time digital indication blinks.
 - ※ If not to operate within 3 seconds, SETTING mode will be disappeared.



HM-101



HM-2SC-A / HM-4



- Set time from 1 to 30 minutes in a 1-minute interval step.
 - ※ After setting, SETTING mode will be over in 3 seconds.



Caution: The therapy time should be within 30min. to avoid low temperature burns.



Setting temperature for therapy

Temperature selector

Temperature is set by the temperature selector in four steps of 40°C, 50°C, 60°C, and 70°C.
The designated temperature indicator lamp turns on.

- Automatic regulator maintains the selected temperature.

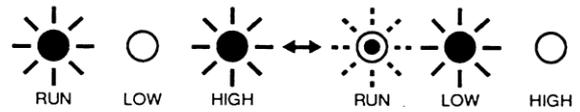
HIGH/LOW lamp

The High lamp continues to turn on until temperature of the Magner Pack reaches the set temperature.

The LOW lamp turns on when the Magner Pack reaches the set temperature.

- Magner flux, vibration and heat are changed simultaneously as switching from the HIGH lamp to the LOW takes place.

Lamp on	Temperature	Vibration	Magnetic flux	RUN lamp
HIGH lamp	rising	continuous	alternating	on
LOW lamp	maintaining	intermittent	pulse	blinking

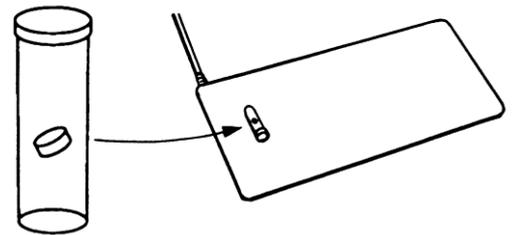


Generation of magnetic flux

Generation of magnetic flux can be checked by magnetic detector.

A small magnet piece in the detector violently vibrates when it approaches the Magner Pack.

- The magner moves discernibly when approaching the edge of the Magner Pack. At the center of the pack, alternating magnetic flux cancel out each other, resulting in slow or non movement of the magnet.
- The cord neither heats nor oscillates magnetic flux.



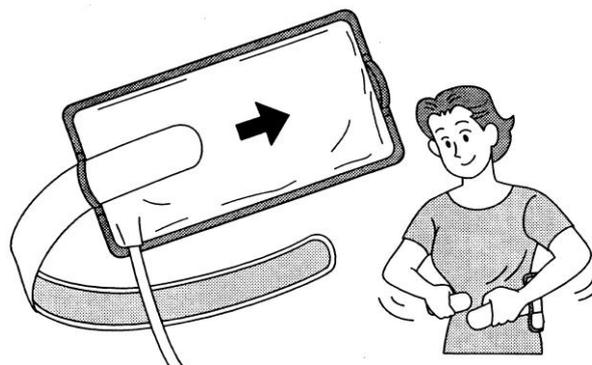
End of operation

When the set time is over, the timer is turned off and the buzzer sounds to inform of completion of operation. Simultaneously the temperature indicator lamp and the output level indicator lamp (HIGH or LOW) turn off. The RUN lamp turns to green (turns off when the preheating switch is off).

About Magner Pack

Applying the Magner Pack

- Do not apply the pack directly to the skin. Use the pack cover or a towel.
- Use of the velcro-belt prevents slipping of the pack and assures a close contact with the skin. Please pay attention to low-temperature burns at same time.



Indications

Symptom	Treatment area	Temp. selector	Time (min)
Stiff should	Around the affected part	· · 50°C	10~15
Sequela of fractures	Fractured part	· · 50°C	10~15
Neuritis & neuralgia	Affected part	· · 50°C	10~15
Bronchitis	Affected part	· · 50°C	10~15
Chronic constipation	Around the affected part	· · 50°C	10~15
Lumbago	Waist	· · 50°C	10~15
Arthralgia	Affected part	· · 50°C	10~15
Gonarthrosis deformans	Around the affected part	· · 50°C	10~15
Hernia of intervertebral disc	Around the affected part	· · 50°C	10~15
Chronic diarrhea	Abdomen	· · 50°C	10~15
Infantile nocturnal enuresis	Abdomen	· · 50°C	10~15

- (1) When treating patients continuously, please pay attention to the temperature of the Magner Pack, which cannot respond instantly to a resetting lower temperature.
- (2) Choose an appropriate temperature according to the individual patient or the part to be treated.
- (3) Appropriate treatment time is less than 30 minutes. The patient may feel extremely tired after prolonged treatment.

Contraindications, Cautions

WARNING:

- Do not apply the HOT MAGNER to acute inflammations and suppurative diseases.
- Contraindications; NEVER apply the appliance to the following patients:
 - Patients with implanted electronic devices (pacemakers)
 - Patients with implanted metallic devices such as artificial joints.

CAUTIONS: Patients with following symptoms may only be treated after seeking medical advice

1. Acute disease
2. Malignant tumor
3. Pregnancy
4. Skin sensitivity disorders/Bad skin conditions
5. Infant or the one who cannot indicate his intention
6. Heart disorder
7. Fever
8. Patient under other treatment

Specifications

Model	HM-101	HM-2SC-A	HM-4
Power source	AC 100-240V, 50/60Hz		
Power consumption	200VA	340VA	740VA
Temperature control	40,50,60,70°C ± 5°C, adjustable in 4 steps (automatic temperature control built-in)		
Micro vibrations	50~120 times per second		
Dimensions	260(W) × 225(D) × 125(H)mm	450(W) × 300(D) × 205(H)mm	600(W) × 315(D) × 415(H)mm
Weight	5kg (main unit)	12kg (main unit)	24kg (main unit)
Standard accessories	Magner pack L X 1 Magic belt S 1 Power cable 2.5m 1 Magnetic detector 1	Magner pack L X 2 Magic belt S 2 Pack Holder 1 Power cable 2.5m 1 Magnetic detector 1	Magner pack L X 4 Magic belt S 4 Pack Holder 2 Power cable 2.5m 1 Magnetic detector 1

Design and specifications subject to change without advance notice.

Cautions for use

The instrument must be operated by skilled staffs only

Observe following cautions for installation.

- (1) Install the HOT MAGNER at a place free from a splash of water.
- (2) Avoid installing the HOT MAGNER at places in the environment subject to undue humidity, temperature, dust, air containing salt or sulfur, or places exposed to direct sunbeam.
- (3) Install at flat stable places free from inclination, vibration and shock. The same applies to transport.
- (4) Do not install the instrument at storage places of Chemicals and pharmaceuticals, or at places subject to gas generation.
- (5) Observe the ratings of frequency, voltage and amperage of power.
- (6) Check batteries (discharging and polarity) when using batteries as a power source.
- (7) Make sure that grounding is made firmly and correctly.

Before operation

- (1) Check switches, dials and their settings, and confirm that the instrument functions properly.
- (2) Confirm that grounding has been made correctly.
- (3) Check that all cables are correctly and safely connected.
- (4) Take extra care when using the instrument together with other equipment as it may cause trouble.

During operation

- (1) Please do not pull the Magner Pack cable, Hold the Magner Pack itself to carry.
- (2) Avoid using the instrument on patients wearing metal accessories.
- (3) Keep watches or magnetic credit cards away during operation.
- (4) Use a cover or towel when applying the Magner Pack directly to the skin.
- (5) Observe the treatment not to exceed the designated time and dose.
- (6) Always monitor the instrument and patient for safety.
- (7) When malfunctions or abnormalities should occur, cease therapeutic operation while confirming patient's safety or take other proper actions.
- (8) Observe the patient not to be contacted directly with the instrument.

After operation

- (1) Follow the designated procedures to set the switches and dials to their respective home positions, and then switch the power off.
- (2) Do not apply undue force to the cables when dismantling. Do not pull the cables when disconnecting(hold the connectors).
- (3) Storage.
 - a. Store the Hot MAGNER at a place not subject to splashing water.
 - b. Avoid storing the instrument at places in the environment subject to undue humidity, temperatur, dust, air containing salt or sulfur, or places exposed to direct sunbeam.
 - c. Store the instrument at flat stable places free from inclination, vibration, and shock.
 - d. Do not install the instrument at storage places of chemicals and pharmaceuticals, or at places subject to gas generation.
- (4) Clean the accessories, cables and Magner Pack and store them in an appropriate place.

In case of malfunctions do not try to repair the unit by yourself. Hand the unit with a detailed description of the problem to an authorized specialist.

Do not try to modify the instrument.

Maintenance

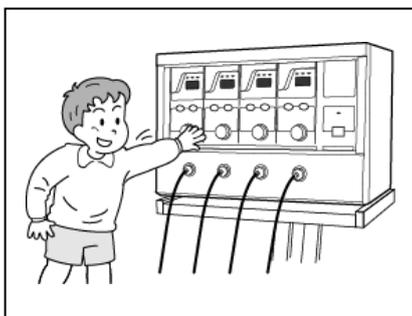
- (1) Recommend to conduct period instrument checking
- (2) Confirm that the instrument functions properly and safely before using it again after a long time of nonuse.

Others

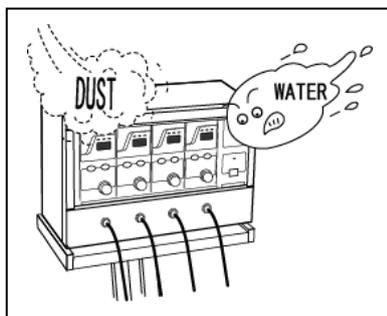
Please follow instructions of the manual for proper operations.



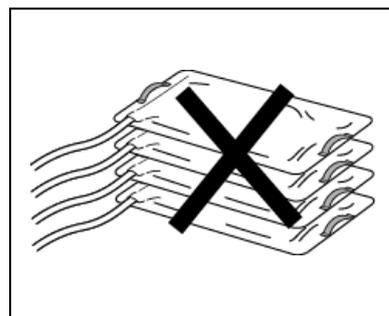
Attention Please!!



The HOT MAGNER should be operated by skilled persons only.



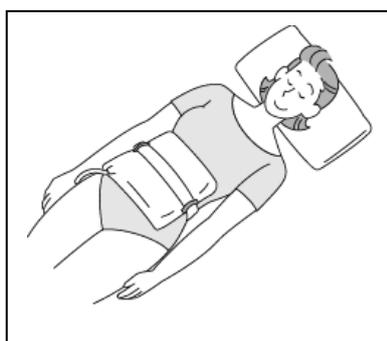
Do not install the HOT MAGNER in the environment subject to dust, undue humidity, direct sun or other conditions adversely affecting the instrument. Install the instrument at places free from a splash of water. Firmly ground the instrument.



Do not pile up the Magner Packs during heating.



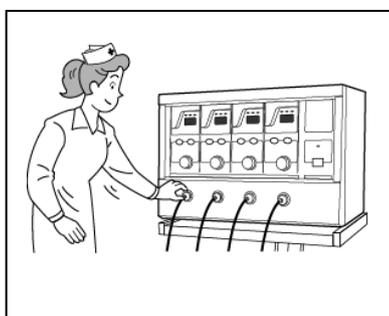
Placing the Magner Pack directly on the treatment site may cause low-temperature burns. Please use a cover or towel, or use the instrument at a lower temperature.



The appropriate treatment time is less than 30 minutes. The patient may feel tired after prolonged treatment.



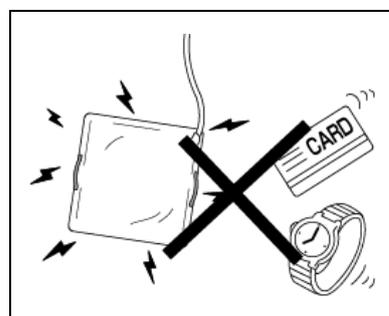
Please do not carry the Magner Pack by connecting cable. This may cause troubles. Hold the Magner Pack itself.



For safety, designate the connecting cable to be plugged off easily when it is hooked. Please make sure to firmly plug in the cable before use.



Do not drop or jar the Magner Pack. Otherwise internal wires may break and, through a short circuit, fire may occur.



Please do not leave watches or magnetic credit cards around the Magner Pack as they are subject to the magnetic influence.

Do not use the equipment in the vicinity of short wave or microwave equipment.

The address of legal:

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