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USER MANUAL

Model M-30 Power Supply

Model 2A HOTNIFE™

MODEL 3A HOTNIFE™

MODEL 4 A/B/C HOTWEEZERS®

MODEL 7 A/B/C HOTWEEZERS®

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1. Introduction

The M-30 Power Supply is an all-new digital version that consolidates the capabilities of our two traditional power supplies, the M-10 and M-20. This advanced design offers dual functionality in a single unit, improving efficiency and simplifying both purchasing and the work bench. By combining two power supplies' features and performance, this new model delivers consistent, reliable power while minimizing space and reducing complexity. The M-30 Power Supply provides enhanced digital control, precision, adaptability and the reliability you expect from the maker of the HOTweezers.

2. Symbols, Warnings & Important Safety Instructions

IMPORTANT:

To avoid physical injury and product damage, please read these operating instructions in their entirety before using Meisei's HOTWEEZERS®, HOTNIFE™ or Power Supply units. Proper use ensures optimum performance, superior results, and long product life.

Warnings and cautions are placed at critical points in this manual to direct the operator's attention to significant items.

SYMBOL	NAME	MEANING
	CAUTION	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	WARNING	Indicates a hazardous situation that, if not avoided, may result in minor or moderate injury.
	NOTICE	(Without Safety Alert Symbol) Indicates information considered important, but not related to a potential injury (e.g. messages relating to property damage).

	CAUTION
<ul style="list-style-type: none"> To provide continued protection against risk of electric shock, connect to properly grounded outlets only. Hot Surface. Avoid Contact. To reduce the risk of electric shock disconnect from the power supply when not in use. 	

	WARNING
<p>Before turning on the unit, please take the following precautions to ensure safe product operation:</p> <ul style="list-style-type: none"> This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance. Do not use this product if not completely assembled or if any parts appear to be missing or damaged. Use of a product with missing or damaged parts could result in serious personal injury. Do not attempt to modify this product or use this product in any way other than its intended use as described in these operating instructions. Do not attempt to create and use accessories or attachments for this device or use attachments or accessories not specifically recommended by the manufacturer of this device. Do not allow familiarity with this product to make you careless. Remember a careless fraction of a second is sufficient to inflict serious injury or cause property damage. Always wear eye protection with side shields marked to comply with ANSA Z87.1. Failure to do so could result in objects and/or material striking your eyes and could cause serious injury. To reduce the risk of electric shock use only with power supply cord provided with the appliance. 	

	WARNING
<p>After the power is turned on, the blade temperature of the attached hand unit can reach temperatures as high as 1,350°F (732°C). Improper handling may cause burns, property damage and/or fire. Be sure to observe the following precautions:</p> <ul style="list-style-type: none"> Do not touch the blade or metal parts near the blade. Always assume the blades and metal parts of the hand units are hot. Do not allow the blade to come close to or touch flammable materials. Inform others in the area that the unit is hot and should not be touched. Place the hand unit blade first in the holder attached to the power supply when not in use. Turn the power off when not in use or left unattended. Turn the power off and allow the hand unit to cool down completely before removing or changing hand units. The unit is for counter, desktop or workbench use only. 	

- Do not allow minors under the age of 18 to use this product. It is not a toy and can result in serious harm or death.
- Limited cleaning and user maintenance are possible for the hand units. The power supply does not contain any user-serviceable components.

IMPORTANT SAFETY INSTRUCTIONS

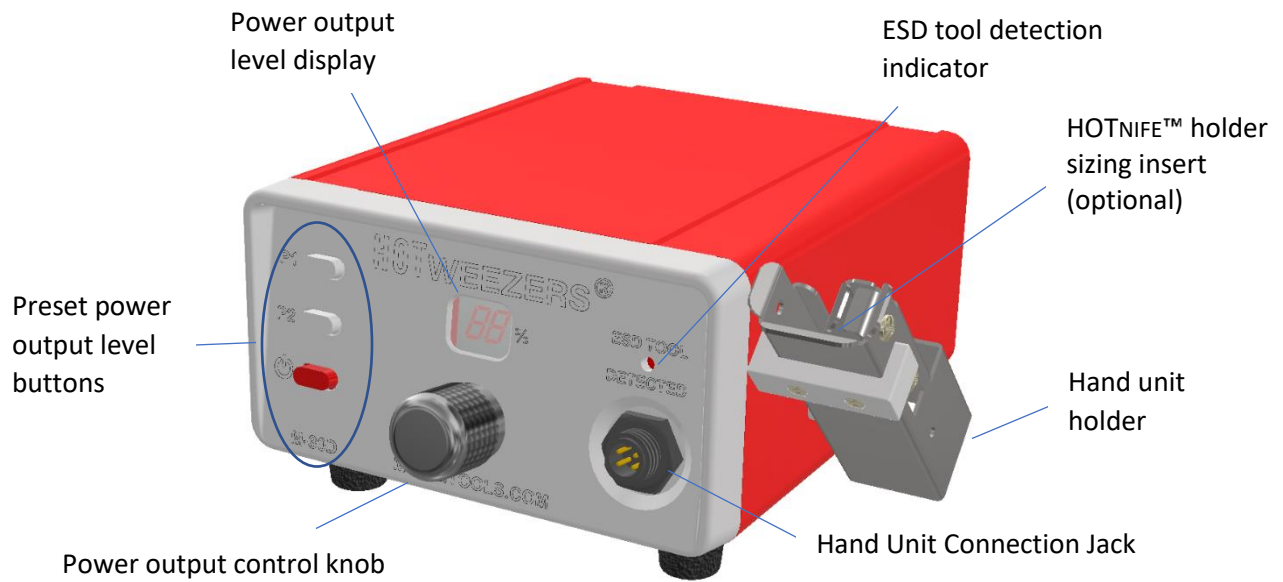
WARNING: READ ALL INSTRUCTIONS.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

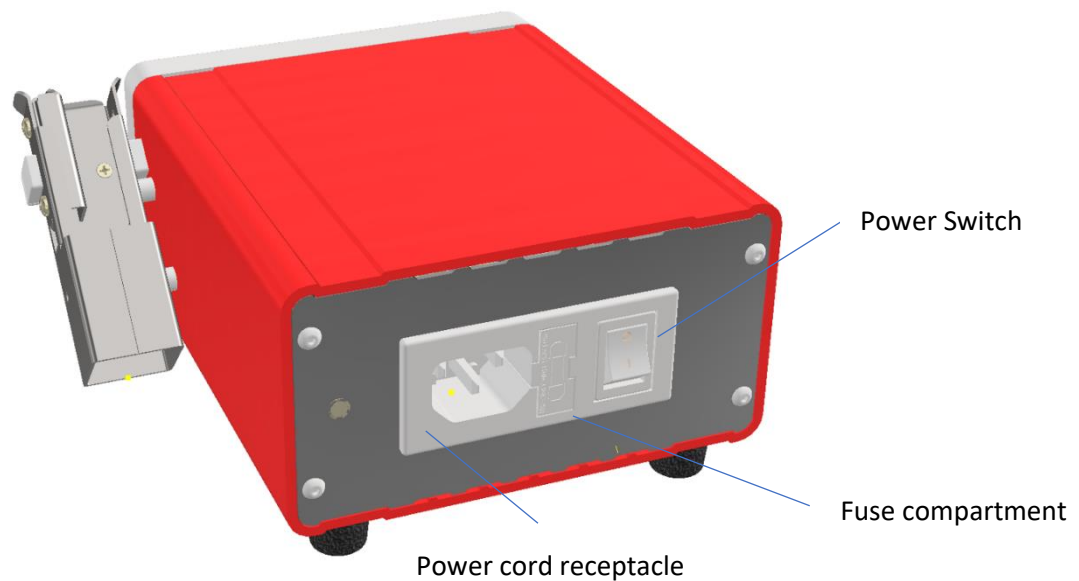
- **Know your product.** Read this user manual carefully. Learn its applications and limitations, as well as the specific potential hazards related to this product. Following this rule will reduce the risk of electric shock, fire and serious injury.
- **Always wear eye protection with side shields marked to comply with ANSI z87.1 when attaching hand units or operating the product.** Following this rule will reduce the risk of serious personal injury.
- **Do not lay a hot hand unit on any work surface.**
- **Do not touch the heated blade, tip, or metal parts of the hand unit.**
- **Use the HOTweezers® and/or HOTnife™ hand units in a well-ventilated area to avoid breathing fumes.**
- **Do not point the tip of the hand unit at another person or bring the hand unit near another person if it is on and/or hot.**
- **Do not place your hands or fingers near the tip of the hand unit.**
- **Never leave the hand unit unattended while it is powered on and/or hot.**
- **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- **Keep children and bystanders away while operating this product.** Distractions can cause you to lose control or can lead to accidents resulting in personal injury.
- **Do not allow children or minors to use this product.** It is not a toy.
- **Always assume the hand unit is hot.**
- **Do not use the HOTweezers® or HOTnife™ on live circuits.**
- **Do not alter or disassemble the tool.**
- **The HOTweezers® and HOTnife™ have sharp edges.** Do not allow the tip or metal parts to come into contact with anything other than the intended work material.
- **Only hold the hand unit by the insulated gripping surfaces (handles) when performing an operation. Do not hold the hand unit by the metal parts, cord or any other surface other than the handles.**
- **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is increased risk of electric shock if your body is earthed or grounded.
- **Do not operate this product in, or expose this product to, rain or other wet or damp conditions.**
- **Ensure the hand unit is properly and securely attached to the power supply before and during product operation. Do not use this product if the hand unit is not firmly attached to the power supply.**
- **Stay alert, watch what you are doing and use common sense when operating this product.**
- **Do not use the product while you are tired or under the influence of drugs, alcohol or medication that may impair your ability to use this tool safely.**
- **Ensure the switch on the back of the power supply is off before connecting the power supply to the electrical source, attaching/changing hand units or moving the power supply and/or hand units to a different location.**
- **Do not overreach. Keep proper footing and balance at all times. Do not use on a ladder, scaffolding or any other unstable surface.**
- **Do not wear loose clothing or jewelry when using this product. Contain long hair to prevent unintentional fire hazards.**
- **Store idle products out of the reach of minors or untrained personnel.**
- **Do not allow any persons unfamiliar with this product or these instructions to operate the product.** This product can be dangerous if used by an untrained user.
- **Check the product for any damage, loose or missing pieces before each use. If the product has any condition which suggests it could be unsafe to operate, do not use.**
- **Save these instructions.** Refer to them frequently and use them to instruct others who may use this tool. If you loan someone this tool, ensure these instructions stay with the tool and instruct the new user to read these instructions thoroughly.

3. Product Overview and Features

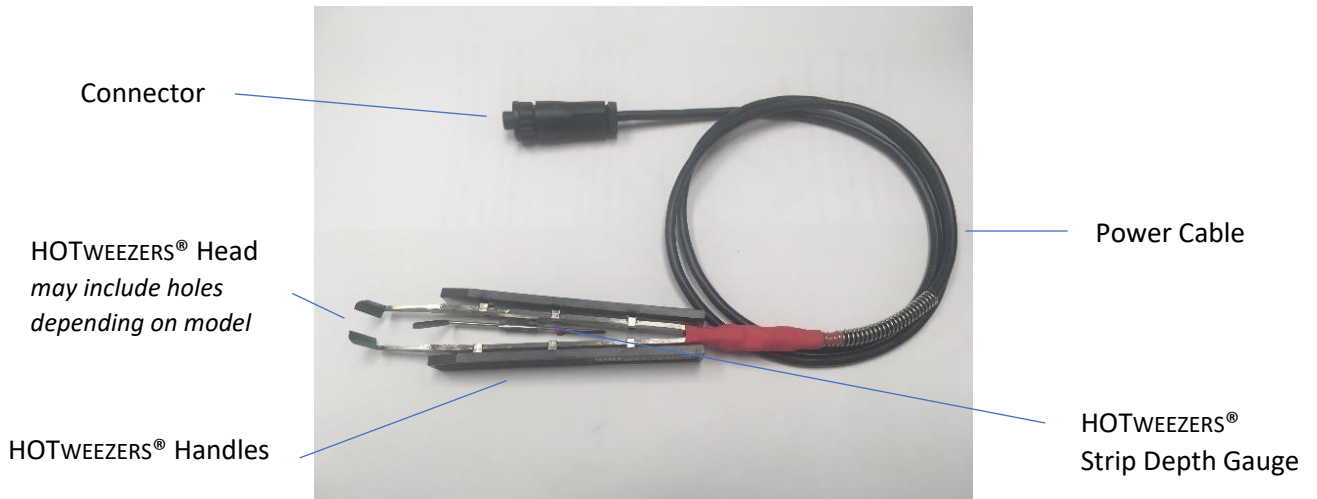
M-30 Power Supply (front)



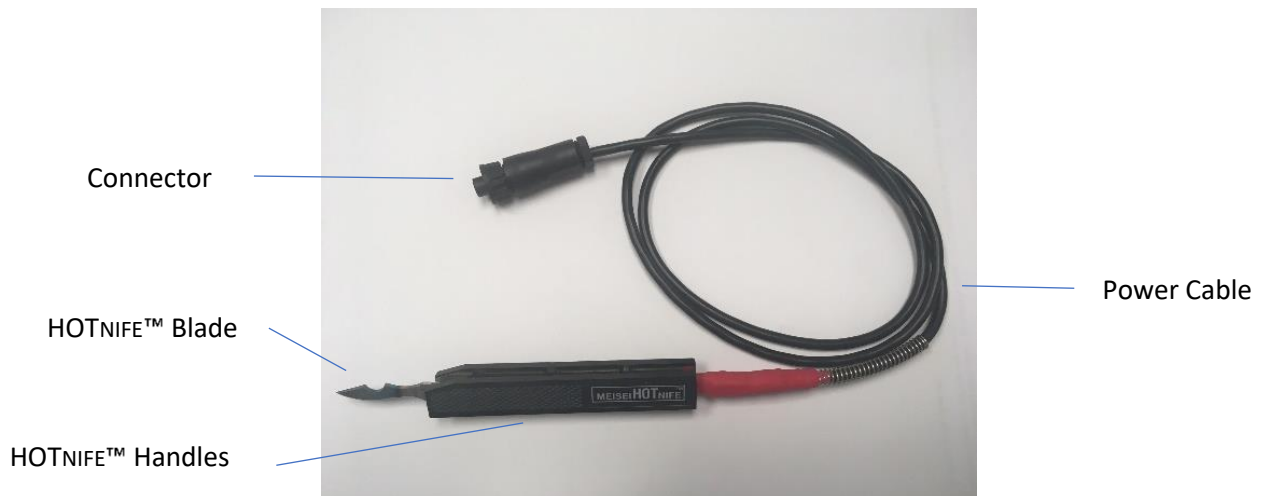
M-30 Power Supply (rear)



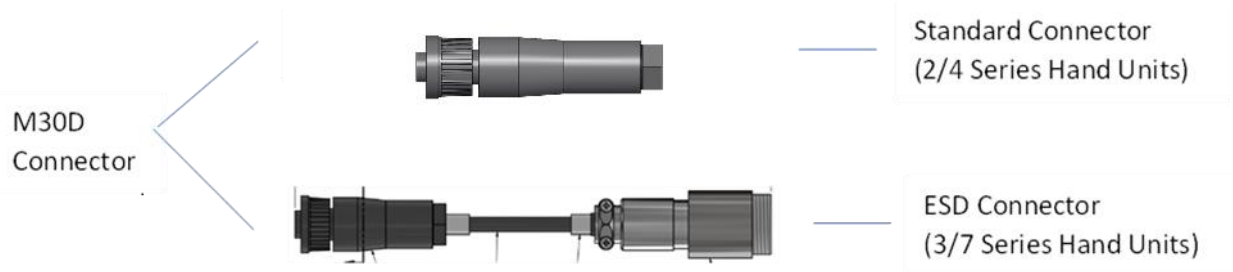
4/7 Series HOTweezers®



2/3 Series HOTnife™



Adaptors



4. Set-Up

 **WARNING:** Carefully inspect all equipment before each use. Do not use the equipment if any damage is detected.

- Determine if Meisei Tools' HOTweezers® or HOTNIFE™ will be used.
 -  If a HOTNIFE™ will be used, insert HOTNIFE™ holder sizing insert into the holder and secure with two screws (provided).
 -  If HOTNIFE™ insert is present in holder and a HOTWEEZERS® hand unit will be used, remove the two retaining screws and remove the HOTNIFE™ sizing insert.
 -  **WARNING:** Always ensure the power is turned off and hand unit, if attached, is allowed to cool completely before installing or removing the HOTNIFE™ sizing insert into the holder.
- Plug power cord into back of power supply.
 -  **CAUTION:** The M-30 Power Supply is compatible with electrical systems operating at 100v – 240v and either 50Hz or 60Hz. Do not use the M-30 if the available electrical supply falls outside of these parameters.
 -  **WARNING:** To reduce the risk of electric shock use only with the power supply cord provided with this product.
- Plug power cord into a properly grounded electrical outlet.
 -  **WARNING:** DO NOT USE IN AN UNGROUNDED OUTLET. DO NOT REMOVE THE GROUNDING PIN FROM THE ELECTRICAL PLUG OR MAKE ANY OTHER MODIFICATIONS WHICH WOULD DEFEAT THE GROUNDING FUNCTION OF THE M-30 POWER SUPPLY.
- Place the hand unit into holder inserting the tweezer heads or blade first.
- Insert the hand unit plug into the connection jack on the front of the M-30 Power Supply. Secure the connector by turning the locking nut clockwise until snug. Do not overtighten.

NOTICE: If the supply cord connected to the hand unit is damaged or does not seat properly with the Hand Unit Connection Jack, it must be replaced before using the equipment. Please contact Meisei Tools LLC for a replacement cord.

5. Operation

- Turn on power switch on back of M-30 power supply.

NOTICE: The ESD LED on the front of the power supply will illuminate if an ESD tool is connected.

- Grasp the hand unit by the insulated handles and remove from the holder.
- Adjust the hand unit to the desired temperature by adjusting the power output. The power supply can be set by using either the power control knob or pressing one of the power preset buttons, or a combination of both.
- The power level will appear on the two-digit display on the front of the M-30 Power Supply. The power level can range from 0 (indicating power to the hand unit is turned off) to 99.
- Presets - Hold down P1/P2 for 3 seconds to store a power setting. (The ESD LED will blink to confirm a preset has been stored)
- Return hand unit to holder when not in use.

 **WARNING:** The hand unit must be placed in the holder when not in use.

NOTICE: Continuous use of the hand unit at high power output levels may reduce the life of the hand unit.

POWER OUTPUT AND TEMPERATURE SETTINGS

As the composition and thickness of different conductors, materials and cables varies, new users should experiment with a sample of the material being stripped to find the ideal settings.

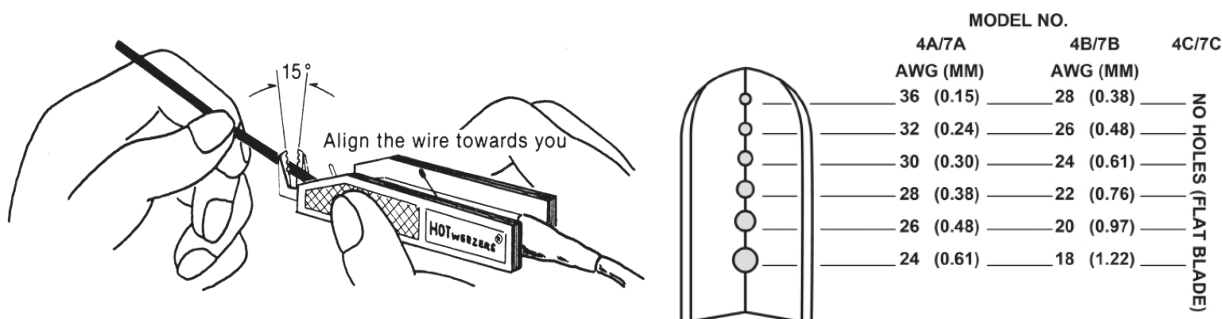
At the ideal setting the stripper will be just hot enough to pierce the insulation without melting or burning, and the slug of stripped insulation should not stick to the stripper.

The following are suggested starting points to determine the optimal temperature per material:

Material	
PVC	9 - 13
Polyethylene	11 - 14
Teflon FEP	13 - 21
Nylon	14 - 17
Kynar	15 - 19
Tefzel	16 - 20
Silicone	80 - 87
Rubber	51 - 59
Teflon PTFE	85 - 91
Silicon	83 - 89
Kapton	81 - 99

STRIPPING A WIRE (HOTWEEZERS® only)

- 1) Hold the HOTWEEZERS® as you would a pencil (see diagram below), with the tweezer blades pointing up. The rear face of the blades should be facing toward you as you align the conductor to be stripped with the correct gauge hole.
- 2) Determine the appropriate holes to use based on the gauge of conductor being stripped. Both Standard (4 Series HOTWEEZERS®) and ESD (7 Series HOTWEEZERS®) models have holes sized as shown in the diagram below.



- 3) Close the jaws together around the wire using the selected hole and rotate the HOTWEEZERS® about 15° to ensure complete separation of the insulation and eliminate any insulation "tails".

Remove the wire from the HOTWEEZERS® and pull off the insulation slug by hand. Do not pull off the slug with the stripper head to avoid damage to the metal conductor.

STRIP LENGTH GAUGE (HOTWEEZERS® only)

To avoid injury, always turn the Power Supply off and allow the HOTWEEZERS® to fully cool down before adjusting the strip length gauge. Hold the depth gauge by the red tip and adjust to the proper strip length. Never grasp the front stop plate as this may cause misalignment of the plate and damage to the HOTWEEZERS®. If the gauge is not needed, fully retract it so that it does not interfere with operator performance.

MAINTENANCE

The HOTWEEZERS® and HOTNIFE™ are designed for long service but should be handled with reasonable care. Mishandling the hand units can cause damage or in the case of the HOTWEEZERS®, misalign the stripping head. Occasional cleaning of the stripping head or blade is the only maintenance required. To remove large pieces of insulation and residue, use a soft metal bristle brush – brushes with brass bristles tend to work best.

NEVER clean HOTWEEZERS® or HOTNIFE™ with a file.

6. Idle and Sleep Modes

The M-30 has the following automatic idle and sleep modes:

Idle Mode

If the M-30 Power Supply is set to a power level higher than 25, it will drop to 25 (idle mode) after a hand tool is left in the tool holder for 30 seconds.

It will resume its normal set temperature once the tool is removed from the holder.

Sleep Mode

The M-30 Power Supply will enter sleep mode under two conditions.

- I. If the hand unit is in the holder for more than 60 minutes, the M-30 Power Supply will enter sleep mode and the power output will be set to 0. A flashing 'SL' on the display indicates the Power Supply is in sleep mode.

To wake the Power Supply from sleep mode, remove the hand unit from the holder and reset the power output level as described above.

- II. If the hand unit is out of the holder for more than 60 minutes **and** there has been no change to the power output level (either by moving the knob or pressing one of the preset buttons), the M-30 Power Supply will enter sleep mode and the power output will be set to 0. A flashing 'SL' on the display indicates the Power Supply is in sleep mode.

To wake the Power Supply from sleep mode, either turn the power control knob or push one of the preset power level buttons, and reset the power output level to the desired level as described above.

NOTICE: When the power supply is not in use, the detachable power supply cord should be removed and stored in a safe location which will protect the cord from damage.

To remove the detachable power supply cord, grasp the connector adjacent to the power supply unit and pull the cord out of the power connection module.

7. Trouble Shooting

Power supply fails to turn on:

- Confirm the power cord is firmly connected to the M-30 Power Supply and is properly plugged into a working electrical outlet.
- If the power supply is still not working, remove the power cord from the back of the M-30 Power Supply and replace the fuse.
- If the power supply is still not working, please contact the manufacturer.

One of the following codes shows on the display:

DISPLAY	CODE MEANING	RESOLUTION
SL	Sleep Mode	Reset power output as described in the Operations section above.
E2	Error Code 2: Open Circuit - or - Idle Switch Failure	Turn power supply off using the power switch on the back of the power supply. Replace the hand unit with a different working hand unit. Turn power supply on using the power switch on the back of the power supply. If the error code no longer displays, there is an internal failure in the original hand unit. Please contact the manufacturer. If the error code remains, there is an issue with the power supply. Please contact the manufacturer.