Residential Steambath Generator Systems Installation, Operation & Maintenance Manual



Models 90E-400E Models Super 1E-6E

READ ME FIRST!

IMPORTANT NOTE: As you follow these instructions, you will notice warning and caution symbols. This blocked information is important for the safe and efficient installation and operation of this generator. These are types of potential hazards that may occur during this installation and operation:

WARNING

states a hazard may cause serious injury or death if precautions are not followed.

CAUTION

signals a situation where minor injury or product damage may occur if you do not follow instructions.

IMPORTANT NOTE: This highlights information that is especially relevant to a problem-free installation.

All information in these instructions is based on the latest product information available at the time of publication. Sussman-Automatic Corporation reserves the right to make changes at any time without notice.

When installing and using this electrical equipment, basic safety precautions should always be followed, including the following:

IMPORTANT SAFETY INSTRUCTIONS 1. READ AND FOLLOW ALL INSTRUCTIONS

2. WARNING Do not permit children under the age of 16 to use this steambath.

3. WARNING

To reduce the risk of injury:

- **A.** The wet surfaces of steam enclosures may be slippery. Use care when entering or leaving.
- **B.** The steam head is hot. Do not touch the steam head and avoid the steam near the steam head.
- **C.** Prolonged use of the steam system can raise excessively the internal human body temperature and impair the body's ability to regulate its internal temperature (hyperthermia). Limit your use of steam to 10-15 minutes until you are certain of your body's reaction.
- **D.** Excessive temperatures have a high potential for causing fetal damage during the early months of pregnancy. Pregnancy or possibly pregnant women should consult a physician regarding correct exposure.
- E. Obese persons and persons with a history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a steambath.
- F. Persons using medication should consult a physician before using a steambath since some medication may induce drowsiness while other medications may affect heart rate, blood pressure and circulation.

SAVE THESE INSTRUCTIONS

WARNING

REDUCE THE RISK OF OVERHEATING AND SCALDING

- 1. EXIT IMMEDIATELY IF UNCOMFORTABLE, DIZZY OR SLEEPY. STAYING TOO LONG IN A HEATED AREA IS CAPABLE OF CAUSING OVERHEATING.
- 2. CHILDREN UNDER THE AGE OF 16 SHOULD NOT USE THE STEAM BATH.
- 3. CHECK WITH A DOCTOR BEFORE USE IF PREGNANT, DIABETIC, IN POOR HEALTH OR UNDER MEDICAL CARE.
- 4. BREATHING HEATED AIR IN CONJUNCTION WITH CONSUMPTION OF ALCOHOL. DRUGS, OR MEDICATION IS CAPABLE OF CAUSING UNCONSCIOUSNESS.
- 5. DO NOT CONTACT STEAM HEAD OR STEAM AT THE STEAM HEAD.

REDUCE THE RISK OF SLIPPING AND FALL INJURY

1. USE CARE WHEN ENTERING OR EXITING THE STEAM ROOM. FLOOR MAY BE SLIPPERY.

NOTE: FOR ADDITIONAL SAFETY CONSIDERATIONS SEE OWNER'S MANUAL

mr_steam[®] 43-20 34th Street , Long Island City NY 11101 1 800 76 STEAM www.mrsteam.com

A peel-off warning label has been provided in the Information envelope. This label is to be applied to the wall of the installed shower or steam enclosure.

HYPERTHERMIA occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6° F. The symptoms of hyperthermia include an increase in the internal temperature of the body, dizziness, lethargy, drowsiness, and fainting. The effects of hyperthermia include:

- a) Failure to perceive heat;
- b) Failure to recognize the need to exit the steambath;

PUR100378 6.4/08

- c) Unawareness of impending risk;
- d) Fetal damage in pregnant women;
- e) Physical inability to exit the steambath; and
- f) Unconsciousness.



WARNING The use of alcohol, drugs, or medication can greatly increase the risk of hyperthermia.

mr_steam[®]

Sussman-Automatic Corporation info@mrsteam.com www.mrsteam.com

43-20 34th Street Long Island City, NY 11101 TEL: 1 800 76 STEAM FAX: 718 472 3256

9410 S. La Cienega Blvd. Inglewood CA 90301 TEL: 1 800 72 STEAM FAX: 310 216 2944



Residential Steambath Generator Systems

INSTALLATION, OPERATION & MAINTENANCE MANUAL

MODELS: MS-90E, MS-150E, MS-225E, MS-400E MS-SUPER 1E, MS-SUPER 2E, MS-SUPER 3E, MS-SUPER 4E, MS-SUPER 5E, MS-SUPER 6E

MODEL	SERIAL NO.
	• • • • • • • • • • • • • • • • • • •

TABLE OF CONTENTS

Read Me First! & Warning Sticker		•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	1
Select Your Mr.Steam Model		•		•	•	•	•	•	•	•	•	•		•	•	•	•	2

INSTALLER'S SECTION

Before Installing
Steam Head Installation7
Generator Dimensions
Electrical Specifications & Field Power Wiring9
Wiring Diagrams
Optional Tandem Cable11
Initial Start-Up & Checkout, Maintenance12
Troubleshooting / System Status Codes
Optional AutoFlush System13
Optional Drip Pan / Express Steam14
Liquid Level Control Board
Replacement Parts Diagram15
Replacement Parts List
eTEMPO [®] CONTROLS eTEMPO [®] & eTEMPO/PLUS [®] Installation Instructions 17-18 Installing the MSTS Remote Temperature Probe
STEAM GENIE [®] HOMEWIZARD [™] Control Installation

HOMEOWNER'S SECTION

STEAM GENIE [®] HOMEWIZARD [™] Control Module Interface
STEAM GENERATOR MAINTENANCE25
AROMASTEAM [™] ESSENTIAL OILS
eTEMPO [®] CONTROLS
Care Tips, Safety & Operating Information26
eTEMPO [®] Operating Instructions
eTEMPO/PLUS [®] Operating Instructions

SELECT YOUR MR.STEAM®

Materials of construction, room size and sp features such as large glass areas, <u>all affect</u>		r model selection.
1. Measure length, width & height in feet	of the steam/show	er or tub/shower
Multiply the Length x Width	x Height =	ROOM VOLUME
2. Construction Materials:		
For natural stones: natural marble, stone, shale, glass block or concrete	Add 110%	
For ceramic or porcelain tile on cement board or mortar bed	Add 40%	
3. Ceiling Height: For each foot above 8 feet	Add 15%	
4. Add all figures above to obtain the Total Roc	om Volume required	TOTAL ADJUSTED ROOM VOLUME

Compare your TOTAL ADJUSTED ROOM VOLUME to the Specification Chart below and select the appropriate model.

Visit www.mrsteam.com to size your generator online automatically.



Mr.Steam @ Your Fingertips:

Start working smarter with Mr.Steam's mobile sizing app, now available for the iPad®, iPod® and most smart phones. Visit mrsteam.com or go directly to: http://isizing.mrsteam.com

R

Residential Steam	Generators Sp	pecific	ation Chart					
	Model No.	ĸw	Amps (for 240v/1PH)†	Total Adj Room Vol.	Wire Size‡	Water Usage gallons††	Dimensions*	Shipping Wt. (lbs)**
E SHE C	MS90E	5	21	100	10	0.67	14¼2"L x 14¾"H x 6¾"D	30
3	MS150E	6	25	150	8	0.80	14¼2"L x 14¾"H x 6¾"D	30
100	MS225E	7.5	32	225	8	1.0	14¼2"L x 14¾"H x 6¾"D	30
	MS400E	9	38	360	8	1.2	14½"L x 14¾"H x 6¾"D	30
	MS SUPER 1E	10	42	475	8	1.4	17"L x 18½"H x 7%"D	40
S	MS SUPER 3E	12	63	675	4	2.0	17"L x 18½"H x 7%"D	40
	MS SUPER 4E MS SUPER 5E	20 24	84 100	875 1075	8	2.7 3.2	17"L x 18½"H x 7%"D x 17"L x 18½"H x 7%"D x	2 80
0	MS SUPER 6E	30	125	1275	4	4.0	17"L x 18½"H x 7%"D x	2 80

IMPORTANT: Add C1 suffix to Model No. for 240V/1Ph; Add B1 suffix to Model No. for 208V/1Ph. IMPORTANT: Models SUPER 1E-6E must use eTEMPO/Plus® control. IMPORTANT: All Mr.Steam MS Models are cULus Listed and CE approved.

NOTES: All MS Generators available in 240v/1PH, 208v/1PH and other voltages/phases. † Amps are for 240/1PH rated units.

‡Wire size (AWG) based on minimum 90°C rated THHN copper conductors.

Refer to the National Electrical Code for other types of conductors.

See Mr. Steam® Installation and Operation Manual for complete dimensional and installation information.

MS SUPER 4E includes two MS SUPER 1E steam generators, and require one eTEMPO/Plus® Control, and two matching steamheads. MS SUPER 5E includes two MS SUPER 2E steam generators, and require one eTEMPO/Plus® Control, and two matching steamheads. MS SUPER 6E includes two MS SUPER 3E steam generators, and require one eTEMPO/Plus® Control, and two matching steamheads.

IMPORTANT: For steam rooms constructed of acrylic or synthetic materials, select next lowerrated MS model.

WARNING: In considering a purchase of this steambath system, please note that if you are pregnant, have a coronary condition, are in poor health, are being treated for any other medical condition, or are using medication or drugs, Mr.Steam recommends that you obtain the approval of a physician before use. For information about this product and safety issues, please call us at 1.800.76.STEAM or log onto www.mrsteam.com for a copy of the Installation, Operation & Maintenance Manual.

IMPORTANT: The total adjusted room volume allows for up to 60 feet of insulated steam line from the MS generator to the steam room. If the 60 foot line is exceeded consult with factory. When locating the steam generator consideration of control location must be taken into account, the maximum length for a control cable is 60 feet. A 30 foot cable is standard, contact Mr.Stam to purchase the optional 60 ft. cable (PN 103990-60)

*Dimensions are for generator only, without AutoFlush[®] or plumbing features. **Shipping weight and pricing are for generator

only, without control or steamhead. †† Water usage based on 20 minutes of operation.

BEFORE INSTALLING

Carefully inspect the Steam Generator and packaging for shipping damage. Please contact the carrier in the event of shipping damage, please contact the carrier for claim information. Our customer service department can assist you with any missing or damaged parts.

WARNING Never use damaged equipment, doing so may result in an inoperative or hazardous installation.

IMPORTANT NOTES:

- This document contains important safety, operation and maintenance information. Leave this document with the homeowner. Do not discard this document.
- Discontinue use of the steam generator and control if the steam generator or control are damaged or otherwise not functioning properly. Doing so may result in an inoperative or hazardous installation

IMPORTANT: The following general information should be used in conjunction with consultations with an architect, designer and contractor in determining factors necessary in providing a suitable and safe steam room.

Read these instructions before installation or service. Although this MS steambath generator has been fully qualified for shipment by Mr.Steam[®], the following must be reviewed for proper, safe and enjoyable steam bathing:

• Verify that the model and accessories are correct, including incoming line voltage.

- Insure steambath generator has been correctly sized for the steambath room. Pay particular attention to room volume and construction. If any questions, please refer to Mr. Steam sizing and selection guide on page 2.
- Marble or glass walls or ceilings, or exterior walls "ENLARGE" the room's size, requiring a generator larger than one based only on the room's cubic foot (L x H x W) volume.
- The physical size of the unit, clearance for plumbing servicing, and its distance from the steam room must all be considered before final installation.
- Consider any options and accessories before initiating installation. Read the Installation and Operation Manual of all options and accessories available at www.mrsteam.com technical downloads.

IMPORTANT: Mr.Steam units are intended to be operated with Mr.Steam eTempo/Plus[®], eTempo[®] HomeWizard[™] and Steam Genie[®] controls only, and are to be installed strictly in accordance with the specific instructions contained in this manual and as supplied in the manuals provided with the controls.

WARNING ELECTRICAL SHOCK HAZARD. Mr. Steam steam generators are connected to 240V line voltage and contain live electrical components. All installation and service to be performed by qualified and licensed electricians and plumbers only. Installation or service by unqualified persons or failure to use Mr. Steam parts may void the warranty.

STEAM ROOM GUIDELINES

- 1. Steam room must be completely enclosed, with full walls, door, floor and ceiling.
- 2. It is recommended that a gasketed door is used for heat sealing and steam containment.
- **3.** If tile-type or other smooth surfaced flooring is used provide suitable anti-skid strips or equivalent, to prevent user slipping and injury.
- 4. Walls and ceilings must be constructed of water-resistant, non-corrosive surface, such as tile, marble, molded acrylic, or other non-porous material. The ceiling should be sloped to prevent dripping of condensate.

CAUTION If acrylic, fiberglass or other non-heat resistant materials are used as part of the steam room enclosure. Consult with the material manufacture and see pg. 7, Steamhead" for additional details.

- 5. Provide a floor drain.
- **6.** No heating, venting or air conditioning devices should be installed inside the steam room.
- 7. Steam room tile construction information is available from the Tile Council of America, Inc. by purchasing the TCA Handbook for Ceramic Tile Installation. Tel: (864) 646-8453 or www.tileusa.com.
- **8.** Windows that are part of the steam room should be double paned and tempered safety glass.

- **9.** Try to limit steam room ceiling height to 8 feet. Exceeding 8 feet may require a higher-rated steam generator.
- A peel-off warning label has been provided in the Information envelope (see Warning facsimile below). This label is to be applied to the wall of the installed shower or steam enclosure.

WARNING The MS series of steam generators are for residential use only. Commercial or other nonresidential applications void the warranty and may adversely affect product performance.

WARNING

REDUCE THE RISK OF OVERHEATING AND SCALDING

- 1. EXIT IMMEDIATELY IF UNCOMFORTABLE, DIZZY OR SLEEPY. STAYING TOO LONG IN A HEATED AREA IS CAPABLE OF CAUSING OVERHEATING.
- 2. CHILDREN UNDER THE AGE OF 16 SHOULD NOT USE THE STEAM BATH.
- 3. CHECK WITH A DOCTOR BEFORE USE IF PREGNANT, DIABETIC, IN POOR HEALTH OR UNDER MEDICAL CARE.
- 4. BREATHING HEATED AIR IN CONJUNCTION WITH CONSUMPTION OF ALCOHOL, DRUGS, OR MEDICATION IS CAPABLE OF CAUSING UNCONSCIOUSNESS.
- 5. DO NOT CONTACT STEAM HEAD OR STEAM AT THE STEAM HEAD.

REDUCE THE RISK OF SLIPPING AND FALL INJURY

1. USE CARE WHEN ENTERING OR EXITING THE STEAM ROOM. FLOOR MAY BE SLIPPERY.

PUR100378 6.4

NOTE: FOR ADDITIONAL SAFETY CONSIDERATIONS SEE OWNER'S MANUAL

mr.steam^{*} 43-20 34th Street , Long Island City NY 11101 1 800 76 STEAM www.mrsteam.com

WATER QUALITY INFORMATION

For optimum results, the water supply should be tested prior to initial startup. If the mineral content exceeds the following recommended limits, various external treatment processes may be used to correct the problem.

NOTE: An analysis of the on-site water must be made by a recognized and reliable water treatment company to ascertain the existing condition and treatment required.

Recommended Feedwater Quality

Every 2 months, or more often in "hard" water areas, the manual drain valve should be opened fully flushing out accumulated materials, salts and other particles which are natural by-products of boiling water. The optional AutoFlush System feature automatically drains the Mr.Steam[®] system following each use. A time delay allows the water to cool down (about two hours) before it drains by gravity for a safe and gentle operation.

Water quality can affect efficiency or result in boiler damage if neglected. Steam generator water contains impurities in solution and suspension. These impurities concentrate in the generator. The concentration of these impurities increases as more feedwater is introduced into the generator and steam is produced. If the suspended solids are allowed to concentrate beyond certain limits, a deposit or "scale" will form on the generator internal surfaces. This deposit can interfere with the proper generator operation and cause generator failure.

The concentration of these impurities is generally controlled by the water quality and by dranging the generator.

LOCATING THE STEAM GENERATOR UNIT

Select a location as near as practical to the steam room. Typical locations include: closet, vanity cabinet, heated attic or basement. NOTE: THE STANDARD LENGTH OF THE CABLE FOR CONNECTING THE CONTROL TO THE STEAM GENERATOR IS 30 FEET. THE STEAM GENERATOR AND CONTROL MUST BE LOCATED ACCORDINGLY. A 60 FOOT CABLE (PN 103990-60) IS AVAILABLE AS A SPECIAL ORDER PART.

WARNING (ITEMS 1-7)

- **1.** <u>DO NOT</u> install steambath generator or plumbing lines in unheated attic or any locations where water could freeze.
- **2.** <u>DO NOT</u> install steambath generator inside steam room.
- <u>DO NOT</u> install steambath generator outdoors or wherever environmental conditions may affect the safety and/or performance of the generator.
- 4. <u>DO NOT</u> install steambath generator near flammable or corrosive materials or chemicals such as gasoline, paint thinners, or the like. Installation in areas having high concentrations of chlorine (such as pool equipment room) must be avoided.
- 5. Install steambath generator on a solid and level surface. Keyhole slots are provided for wall mounting. Insure the steam generator is properly secured and level when mounting with keyhole slots.
- 6. Install steambath generator in an upright position only.
- 7. Steam line, safety valve, drain valve, plumbing and steamheads become hot during operation and remain hot after shutdown for a period of time. Provide appropriate protection, including insulating plumbing lines. Avoid plumbing runs and steamhead locations that can come in contact with bathers.

IMPORTANT: (ITEMS 8-11)

- 8. Install anti-water hammer device as necessary.
- Provide a minimum of (12) inches at both ends and top of the steam generator or as required for servicing. See page 8.
- **10.** Provide unions as required to facilitate installation and disconnection of piping.
- 11. Mr.Steam controls can be located inside the steam room or on the outside of the steam room. See CONTROL INSTALLATION section (pgs. 17-22) for specific details. If the controls are located outside the steam room, a remote sensor (PN MSTS) is required (see pgs. 21-22).

NOTE: Mr.Steam Generators (inclusive of the eTempo series Controls) are CE and UL listed.



G Suitable for operation in ambient not exceeding 45 °C (113° F)

WARNING The MS series of steam generators are for residential use only. Commercial or other nonresidential applications void the warranty and may adversely affect product performance. Use only Mr.Steam eTempo[®] series controls.



TYPICAL CONFIGURATION (shown with optional AutoFlush)

Installation Instructions for Models MS Super 4E, 5E and 6E

- Install each steam generator as in a single installation. Install generators as close as practical to each other, not exceeding 12 feet. The interconnecting cable length is 12 feet.
- IMPORTANT NOTE: Power must be disconnected at the main electrical supply. Remove steam generator covers. Retain screws and covers for reuse.
- **3.** Connect the eTEMPO/PLUS[®] control to either unit per instructions on pages 17-22.
- 4. Remove one knock-out on each generator as shown. Insert the ends of interconnecting cable provided (PN 103904) through the knock-outs as shown in diagram. Connect each end to the printed circuit board connector labeled "TANDEM" as shown.
- 5. Prevent the interconnecting cable from contacting hot surfaces such as steam outlet, safety valve and the like.
- 6. Connect separate plumbing and power supplies for each unit. Replace covers with cover screws.

NOTE: The secondary unit will de-energize when the steam room reaches steambathing temperature resulting in a more gentle and energy efficient operation.

Provide unions as required to facilitate installation and disconnection of piping



NOTE: For illustrative purposes only.

mr.steam[®] steamtherapy[®] Installation, Operation & Maintenance Manual

INSTALLATION

Plumbing

All plumbing shall be performed by a qualified licensed plumber and in accordance with applicable National and local codes.

- Use unions on all pipe connections.
- Use only brass piping or copper tubing as permitted by codes.
- Do not use black, galvanized, PVC pipe or PEX.

Water Supply (3%" NPT)

- 1. Connect hot or cold water line. If hot water line is used hot water temperature should not exceed 160° F.
- 2. Provide a shut off valve in the water supply line upstream of the steambath generator.
- 3. Do not overheat inlet solenoid valve with solder connections. Overheating will damage parts.
- 4. Flush inlet water line thoroughly before making connection to unit.
- 5. Strainer recommended upstream of feed water connection.
- 6. For best performance water pressure should be 15 to 20 psig. Reduce pressure as required.
- 7. Provide anti-water hammer device as required.
- 8. Install an approved backflow preventer as required by local codes.

Drain (½" NPT)

The drain from the generator should not share an undersink trap, unless the generator is mounted higher than the sink.

NOTE: A drain valve is provided to facilitate servicing. Provide a drain line connection from steambath generator drain valve according to National and local Codes. Check local plumbing code for receptor, trap and vent requirements. Do not connect Drain line and Safety Valve line together. **Unit drains by gravity.** Do NOT connect the drain valve into the steam line

Steam Outlet (1/2" NPT)

1. Do not install any valve in steam line. Flow of steam must be unobstructed.

2. Use 1/2-inch brass pipe or copper tubing from unit to steam head as permitted by codes.

3. Insulate steam line using pipe insulation rated 212° F or higher.

4. Pitch steam line 1/4" per foot towards steam head or steam generator to avoid valleys and trapping of condensate.

NOTE: Running the steam line down and then up will create a steam trap blocking the flow of steam. **NOTE**: A 1.5" hole in the steam room is required to mount the steamhead.

Safety Valve (3/4" NPT)

Where permitted by local codes, provide an outlet plumbing connection for safety valve.

WARNING To insure proper and automatic safety valve operation: DO NOT connect a shut off valve or a plug at safety valve outlet. DO NOT connect a shut off valve or any obstruction in steam supply pipe. Do NOT connect the safety-valve output into the steam line

Drip Pan

Mr. Steam strongly recommends the use of a drip pan in the unlikely event of a plumbing leak. Check local plumbing codes for receptor, trap and vent requirements. Drip pans drain by gravity. The drip pan is equipped with an integral 3/4" fitting. See page 14 for additional drip pan installation information.

AromaSteam[™]

If the optional AromaSteam Electronic Oil Delivery System (PN: MS AROMA) is to be installed, a 90 degree T plumbing fitting must be installed at a designated location on the steam outlet line. See the Mr.Steam AromaSteam[™] Operation and Instruction Manual (PN: 100402) for installation information before the steam line is installed at http://mrsteam.com/products/technical-downloads.html

INSTALLING THE ROUND & SQUARE AROMASTEAM[™] STEAMHEAD

Steam Head Installation (1/2" NPT)

IMPORTANT: Do not disassemble steamhead. Mr.Steam's steamhead is shipped fully assembled and requires no additional assembly.

CAUTION Because the steam head and direct steam emissions are very hot, locate the steam head where incidental contact by bather with the steam head or direct steam emission cannot occur.

NOTE: A 1.5" clearance hole around the steam pipe is needed to mount the steamhead.

STEP 1

Locate steam head 6-12 inches above floor, except for:

- Tub/shower enclosures, install 6 inches above tub top edge.
- For enclosures with acrylic or other non-heat resistant flooring install Acrylic Shield Part Number MS-103938.

STEP 2

Install steamhead with the oil well facing up as shown. Hand tightening is sufficient when teflon or equal pipe thread sealing compound is used.

IMPORTANT NOTE: To preserve steam head finish, do not use wrench or other tools to tighten. DO NOT use abrasive cleansers or chemicals. Use only water with mild soap and a non-abrasive sponge.

CAUTION Consult with supplier of acrylic, fiberglass and other non-heat resistant enclosures for recommended steamhead location. Use Acrylic Shield PN MS-103938. See instructions provided with steam shield.

STEP 3

Secure a bronze drop ear fitting to a header and run a 1/2" copper steam line from the steam generator to the drop ear fitting. Install a temporary nipple (6" or longer)in the drop ear fitting to locate the steamhead after the wall is finished.

STEP 4

After the wall has been finished, mark on the nipple where the surface of the wall is. Remove the nipple and measure the portion that was in the wall (the end to your mark). Subtract ${}^{1}\!/\!_{a}$ " from that dimension and select a brass nipple of that length to finish the installation.

STEP 5

Wrap teflon tape around the threads of the new nipple and screw the nipple into the steamhead. Do not use wrenches or tools which would damage the steamhead's finish. Wrap teflon tape around the threads of the nipple and screw the nipple and steamhead assembly you just made into the drop ear fitting in the wall. The steamhead should be flush with the wall and the well must be facing up.



installer

mr.steam[®] steamtherapy[®] Installation, Operation & Maintenance Manual

GENERATOR DIAGRAM

5

D

D

 \square

 \boldsymbol{a}

Δ

Δ

Side Elen ∇ \square \square Π ∇ \square Π \cap \square

IMPORTANT NOTE: Provide a minimum of (12) inches at both ends and top of the steam generator or as required for servicing. Alternately, provide unions as required to facilitate installation and disconnection of the steam generator.

IMPORTANT NOTE: The minimum clearance from combustible surfaces is zero all around.

TO AVOID EQUIPMENT DAMAGE DO NOT CONNECT **POWER SUPPLY DIRECTLY TO ELEMENTS !!!**

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY.

Cor Acc Cor Ste	ater Inlet ntrol & cessory nnections eam Outlet afety Valve utoFlush Drain Valve H H
	MS 90E- MS 400EMS SUPER 1E-3EA5 (127) $7^1/4$ (184) B $8^1/8$ (206) $9^7/8$ (251) C $11^1/4$ (392) $15^1/2$ (394) D $14^1/4$ (392) $18^3/4$ (476) E $1^7/8$ (48) $1^1/4$ (32) F2 (51) $2^1/4$ (57) G $5^7/8$ (149) 6 (152) H5 (127) $4^7/8$ (124) I $6^7/8$ (175) $7^7/8$ (200) J2 (51) 2 (51) K $14^1/2$ (368) 17 (432) L $2^1/2$ (64) $2^1/2$ (64) M $6^3/8$ (162) $6^3/8$ (162)

→ E →

NOTES:

1. M = Optional AutoFlush

2. All units in inches (MM)

3. MS Super 4E includes (2) MS Super 1E units

4. MS Super 5E includes (2) MS Super 2E units

5. MS Super 6E includes (2) MS Super 3E units

WATER INLET	3/8" NPT
STEAM OUTLET	¹ /2" NPT
SAFETY VALVE	3/4" NPT
MANUAL DRAIN VALVE	¹ /2" NPT
AUTOFLUSH VALVE	¹ /2" NPT

Installation, Operation & Maintenance Manual

installer

ELECTRICAL

All electrical wiring to be installed by a qualified licensed electrician in accordance with National Electrical Code and local electrical code.

Power Wiring

See "Field Power Wiring" Diagrams (below)

- Check power voltage. Use 240V rated unit when supply is greater than 208V. (Most homes have 240V, 1PH service). Use 208V rated unit for 208V power.
- 2. Use minimum 90° C/300V rated insulated copper conductors only, sized in accordance with National Electrical Code and local electrical code for the current in Ampere Chart. If allowed by codes, NM cable may require a larger wire size than as listed on the chart.
- 3. Connect suitably sized equipment grounding wire to ground terminal provided.
- **4.** Install a separate circuit breaker between supply and unit. Provide a power supply disconnect within sight of the steam generator or one that is capable of being locked in the open position.
- 5. For single phase units, use two-wire supply source and equipment grounding wire. Neutral (white) wire is not required.

			C	HART			
MODEL NO.	MAX ROOM VOL (CU. FT.*)	ĸw	VOLTS [†]	PHASE	AMPS	Wire Size (AWG)for 40° C Ambient	Wire Size (AWG) for 45° C Ambient
MS-90E	100	5.0	208 240	1 3 1 3	24 14 21 12	10 12 10 12	8 12 10 12
MS-150E	150	6.0	208 240	1 3 1 3	29 17 25 14	8 10 8 12	8 10 8 12
MS-225E	225	7.5	208 240	1 3 1 3	36 21 32 18	8 10 8 10	8 10 8 10
MS-400E	360	9.0	208 240	1 3 1 3	44 25 38 22	8 8 8 10	6 8 8 10
MS-Super 1E	475	10.0	208 240	1 3 1 3	49 28 42 24	6 8 8 8	6 8 6 8
MS-Super 2E	575	12.0	208 240	1 3 1 3	58 34 50 29	6 8 6 8	4 8 6 8
MS-Super 3E	675	15.0	208 240	1 3 1 3	73 42 63 36	4 8 4 8	3 6 4 8

CULADT

*See page 2 for room sizing.

[†]All specifications shown are for 208V and 240V Consult factory for other voltage specifications.

Provide a power supply disconnect within sight of the steam generator or one that is capable of being locked in the open position as permitted by code.

Contactor FIELD POWER WIRING Liquid Level Control Board 0 Transforme Water Feed Solenoid Liquid Level Probe TO AVOID EQUIPMENT DAMAGE DO Power Supply Knock-Out NOT CONNECT POWER SUPPLY **DIRECTLY TO ELEMENTS!!!** 0 0 Water Feed Field Wiring AutoFlush® Plug and Play Connectio (see page 13) L1, L2, GROUND TO BE FIELD WIRED Steam Outlet Models MS 90E–MS 400E (single phase wiring shown) Power Block Liquid Level Control Board Fuses Liquid Level Probe NOTE: SUPER 1E 240/1 MODELS Contactor Transformer ARE NOT SUPPLIED WITH Power Supply Knock-Out Water Feed Solenoid **INTERNAL FUSING. Field Wiring** Water Feed NOTE: FOR ILLUSTRATIVE PURPOSES ONLY. CONSULT WITH QUALIFIED AutoFlush[®] Plug and B Play Connection (see page 13) LICENSED ELECTRICIAN FOR **ELECTRICAL INSTALLATION.** Steam Outlet Models MS Super 1E-6E (single phase wiring shown)

mr.steam[®] steamtherapy[®] Installation, Operation & Maintenance Manual

SINGLE PHASE 208/240 VOLT WIRING DIAGRAMS



THREE PHASE 208/240 VOLT WIRING DIAGRAM



INSTALLATION INSTRUCTIONS FOR MODELS: MS-SUPER 4E, MS-SUPER 5E AND MS-SUPER 6E

- 1. Install each unit as in a single installation as close to each other as possible.
- 2. IMPORTANT Power must be disconnected at the main electrical supply. Remove steam generator covers.
- 3. Connect the eTEMPO/PLUS[®] control to either unit per instructions supplied with the eTEMPO/PLUS[®] control.
- 4. Remove one knock-out on each generator as shown. Insert the ends of interconnecting cable provided (PN 103904) through the knock-outs as shown in diagram A, page 6. Connect each end to the printed circuit board as shown.
- 5. Connect separate plumbing and power supplies for each unit.



OPTIONAL TANDEM CABLE

For connecting more than 2 steam generators in tandem



INITIAL START-UP AND CHECKOUT

- 1. Turn on control. Follow specific instructions pages 17-22 or those provided with controls.
- 2. Steam will begin to appear in approximately 5 minutes (unless equipped with factoryinstalled Express Steam option) at the steam head. Steam will shut off when desired temperature is reached and will automatically resume when room temperature drops below set point.
- 3 .Steam will shut off automatically when control counts down to zero. To shut steam off manually, turn control OFF. To clear steam from enclosure area, turn shower on before opening door.
- If unit does not start and control does not turn ON (control display does not light up) then turn breaker off for 20 seconds and try again.

OPTIONAL & ACCESSORY EQUIPMENT

Refer to specific instruction sheets for installation, operation and maintenance of optional equipment and accessories such as eTempo/Plus[®], eTempo[®], HomeWizard[™], SteamGenie[®] and MSTS.

TROUBLESHOOTING

STEP 1 Check your main incoming power to the unit.

STEP 2 Verify the transformer is receiving 208/240 VAC.

STEP 3 Verify that you have 24VAC coming out of the transformer, WHT & WHT/BLU wires, into the board.

STEP 4 Verify that you have the green light on the PC board.

STEP 5 Push the white test button to run the generator on a 10 minute test cycle.

STEP 6 Verify that you have 24 VAC to the water feed solenoid, GRY & WHT/GRY wires (will fill when needed).

STEP 7 Short out the WLS (Purple wire) and GND (Green wire) terminals and verify the contactor engages.



STEP 8 When the red light is on, verify that you have 24 VAC, RED & WHT/RED wires, to the contactor.

STEP 9 Check to see that you have your main voltage on the load side of the contactor when it is engaged.

STEP 10 If all steps on the power path were verified, turn off power to the unit and pull the heating element via the left hand access panel for inspection.

SYSTEM STATUS CODES

The control (either eTempo or eTempo/Plus) may display a status code if the steam generator is not functioning properly.

Code	Code Meaning	Probable Cause	Suggested Remedy
H20	Water level is not	Water Supply is off	Turn on Water Supply
	satisfied within 5 min.	Defective water feed solenoid	Check/replace water solenoid valve
		Water feed probe not functioning	Check/clean probe. Check probe wiring.
		Drain Valve Open	Check/Close drain valve
		AutoFlush not functioning	Check/Replace AutoFlush
Prrl	Temperature Probe Error	Control cable/MSTS cable cut	Replace control cable/MSTS
or Prr2		Internal problem with control/MSTS	Replace control / MSTS
Errl	Incorrect Field Supply Voltage (green light on liquid level control board will be off)	Incorrect voltage supplied to Generator	Supply steam generator with the correct voltage noted on the data plate label.
Err2	Button on control is pressed	Control cover misalignment	Remove and reinstall control cover
	for more than 5 minutes	Debris behind control cover	Remove control cover and clean cover, control and keypad with a damp cloth
Errb	Water level not satisfied in a tandem set	: up - Check secondary generators, see H20.	
Err7	Liquid Level Control Board malfunction	Memory error in LLCB	Press ON/OFF to clear. Replace control if code remains.

installer

OPTIONAL AUTOFLUSH®

Box Contents

- AutoFlush[®] Valve with Cord
- Installation instructions.

Operation

The optional AutoFlush System feature automatically drains the Mr.Steam[®] system following each use. A time delay allows the water to cool down (about two hours) before it drains by gravity for a safe and gentle operation.

NOTE: If the Express Steam option has been installed, the AutoFlush will drain for ten minutes then refill with fresh water to begin the pre-heat cycle.

INSTALLATION INSTRUCTIONS

- Plumbing to be performed by a qualified plumber and shall be in accordance with applicable national and local codes. Unit drains by gravity. A drain line that is lower than the AutoFlush® assembly must be available. The AutoFlush System valve outlet is threaded ½" NPT. Check plumbing code for receptor, trap and vent requirements.
- **2.** Use copper or brass nipple $\frac{1}{2}$ " NPT x $\frac{3}{2}$ " or longer (not supplied) to connect AutoFlush valve (end "B") to the Drain Valve (valve end "A" and "B" are indicated on bottom of AutoFlush Valve)

CAUTION DO NOT REMOVE THE DRAIN VALVE Removal may cause equipment and property damage. If there is not enough room for the valve, an elbow and a short nipple (not provided) can be added.

- 3. Open Drain Valve (handle must be aligned with brass nipple).
- **4.** Connect the AutoFlush System cord connector to the three pin connector as shown.

WARNING Do not drain into a steam enclosure or any location where accidental contact with drain water may occur. In the event of a power failure the AutoFlush System valve will open and may discharge boiling water.

Sweat Fittings

When using sweat fittings use only tin base solder with a melting point below 600 degrees F. Do not overheat. Ends of water supply tubing must be thoroughly clean for a minimum distance of 1" from ends. Do not remove valve cover.

To Check Operation

- 1. Turn on Mr.Steam and allow tank to fill with water.
- 2. Turn off Mr.Steam control. Water should stay in tank.
- **3.** Turn off power at the panel box. Water should discharge from tank.
- 4. Turn on power at panel box.
- 5. Repeat



AutoFlush Shown Fully Assembled





PROVIDE DRAIN PLUMBING ACCORDING TO LOCAL CODES. PLUMB AS REQUIRED FOR AUTOFLUSH SYSTEM.

mr.steam[®] steamtherapy[®] Installation, Operation & Maintenance Manual

OPTIONAL DRIP PAN

Mr. Steam strongly recommends the use of a drip pan in the unlikely event of a plumbing leak.

Locate the drip pan on a solid level surface and place the steam generator inside the drip pan. Insure the steam generator is level (see page 4 for locating the steam generator).

All plumbing shall be performed by a qualified licensed plumber and in accordance with applicable national and local codes. Check local plumbing code for receptor, trap and vent requirements. Drip pans drain by gravity.

The drip pan is equipped with an integral female $\frac{3}{4}$ " NPT fitting.



OPTIONAL EXPRESS STEAM[™]

(only available factory installed)

Suitable for all MS Models. Express Steam[™] is equipped with a low power heating element and thermostat to keep the water in the tank warm enough to bring up steam quicker. All express steam components and wiring are installed at the factory. No additional wiring or plumbing is required by installers.



LIQUID LEVEL CONTROL BOARD Explanation of LED Indicators

GREEN	LED is ON when there is 208/240 Volt incoming power connected, 24 Volt transformer secondary output and on-board 5 Volt DC control power are present.
YELLOW	Water level indicator-LED is OFF when no water is detected (for more that 5 seconds). ON when water level is satisfactory. For units with AutoFlush, if more than five hours have elapsed since last usage and this LED is ON it is indicative of an AutoFlush or water level probe circuit malfunction.
RED	Contactor relay indicator-LED is ON when relay is closed and sending 24 Volts to the contactor coil. (This LED comes ON if the generator is ON.)
FORCE ON TEST BUTTON	Press this button to operate the generator. This button is for trouble shooting only and will operate if a control is connected or not. Pressing the button again will shut the generator OFF. The test buttor will only allow the generator to operate for 10 minutes.
Liquid Leve	I Control Board



MS REGULAR MODELS - MS65E - MS400E (with AutoFlush[™])

shown with cover removed



MS SUPER MODELS - MS SUPER 1E- MS SUPER 6E (with AutoFlush")

shown with cover removed

NOTE: Super 1E 240/1 models are not supplied with internal fusing.

NOTE: FOR ILLUSTRATIVE

PURPOSES ONLY.

Power Block Fuses Liquid Level Control Board Contactor Transformer Ø Liquid Level Probe Water Feed Solenoid Power Supply Knock-Out Water Inlet Ħ Plug and Play Connection (see page 13) Access Cover Safety Valve Steam Outlet Some components may be omitted or altered for clarity. Do not use for AutoFlush Express Steam heater (optional) Valve wiring, repair or other purposes not optional) Heating Element related to component identification. Stainless Steel Tank Nipple (not included) Drain Line

$mr.steam^{*}steamtherapy^{*} \ {\tt Installation, Operation \ \& \ Maintenance \ Manual}$

REPLACEMENT PARTS LIST

Part No.	Description	Product
99178MS	Drain Valve	All Models
99297	Safety Valve 15PSI	All Models
100479	Water Feed Solenoid Valve w/filter	All Models
10477-3	Transformer 24VAC	All Models
103975	Liquid Level Control Board	All Models
103904	Tandem Cable for 2 generators (12 ft.)	All Models
103917	Tandem Cable for up to 5 generators (30 ft.)	All Models
103990-30	Cable for eTempo Control (30 ft.)	All Models
103990-60	Cable for eTempo Control (60 ft.)	All Models
MSTS	Remote Temperature Probe	All Models
100476-2	Contactor 50A 2-pole	MS 90E-400E, Single phase
99012	Contactor 50A 3-pole	All 3-Phase Models
103453	Contactor 50A 4-pole	MS Super-1E – Super-6E
100471-2	Probe Assembly	All Models
99096MS	Heating Element Gasket	All Models
103938	Acrylic Shield	All Models
99314	Power Fuse 60A 250V	MS-Super 1E-6E Single phase
29051BMS	Heating Element 5 KW 208V	MS 90E
29051CMS	Heating Element 5 KW 240V	MS 90E
29061BMS	Heating Element 6 KW 208V	MS 150E
29061CMS	Heating Element 6 KW 240V	MS 150E
29071BMS	Heating Element 7.5 KW 208V	MS 225E
29071CMS	Heating Element 7.5 KW 240V	MS 225E
29091BMS	Heating Element 9 KW 208V	MS 400E
29091CMS	Heating Element 9 KW 240V	MS 400E
29101BMS	Heating Element 10 KW 208V	MS SUPER-1E & MS Super-4E
29101CMS	Heating Element 10 KW 240V	MS SUPER-1E & MS Super-4E
29121BMS	Heating Element 12 KW 208V	MS SUPER-2E & MS Super-5E
29121CMS	Heating Element 12 KW 240V	MS SUPER-2E & MS Super-5E
29151BMS	Heating Element 15 KW 208V	MS SUPER-3E & MS Super-6E
29151CMS	Heating Element 15 KW 240V	MS SUPER-3E & MS Super-6E
103978-30	Cable for STEAM GENIE (30 ft.)	All models
103978-60	Cable for STEAM GENIE (60 ft.)	All models
104058	Steam Genie	All Models
104059	Genie Interface Module	All Models
104060	5 foot Steam Genie Interface Cable	All Models

ETEMPO[®] CONTROLS

Dimensional Information for the Round and Square eTempo° and eTempo/Plus°

BOX CONTENTS:

- eTEMPO[®] or eTEMPO/PLUS[®] Control
- Control Cable (30 ft.)
- Steam head
- Tube of Silicone Sealant
- Owner's Manual

BEFORE INSTALLING

Turn power to the steam generator OFF before connecting the control to the generator. Failure to turn the power off will result in an inoperable control.

CAUTION To avoid unintentional steambath operation, do not locate the control where other controls, accessories, shower heads, valves, body sprays or similar within the shower could cause confusion or interfere with the Mr.Steam control's intended use and function.

CAUTION Do not use any eTEMPO/Plus[®], eTEMPO[®], HOME WIZARD[™] or STEAM GENIE[®] controls without reading and understanding the Mr.Steam steam generator Installation and Operation Manual (PN 101289 Revision number 10.0/08 or higher). Failure to read and understand these instructions may result in an inoperative or hazardous installation.

A peel and stick warning is provided with the Mr.Steam steam generator Installation and Operation Manual. This label is to be applied to the wall of the installed shower or steam enclosure.

Install the eTEMPO or eTEMPO/Plus controls according to installation instructions. Failure to install according to instructions will result in an inoperative control or hazardous overheating or inadequate heating of the steam room.

If an eTEMPO or eTEMPO/Plus control is installed outside the steam room a Remote Temperature Probe (PN MSTS) must be installed inside the steam room per installation instructions supplied with the Remote Temperature Probe. Failure to install according to instructions will result in an inoperative control and overheating of the steam room.

WARNING Do not route eTEMPO/Plus, eTEMPO, HOMEWIZARD or STEAM GENIE control wiring inside conduit together with power lines or close to hot water or steam piping. Doing so may result in an inoperative or hazardous installation. Do not alter or modify any Mr. Steam products including the steam generator, eTEMPO/Plus, eTEMPO, STEAM GENIE or Home Wizard controls. Doing so may result in an inoperative or hazardous installation and will void the warranty.

IMPORTANT NOTES:

- Turn power to the steam generator OFF before connecting the control to the generator. Failure to turn the power off will result in an inoperable control.
- Do not operate eTEMPO/Plus, eTEMPO, HOMEWIZARD or STEAM GENIE controls with other than a Mr.Steam eTEMPO compatible steam generator. Mr.Steam residential steam generators with serial numbers lower than 900000, or any other brand of steam generator are not to be operated with eTEMPO controls. Doing so may result in an inoperative installation.
- This document contains important safety, operation and maintenance information. Leave this document with the homeowner. Do not discard this document.
- Discontinue use of the steam generator or control if the steam generator is damaged oor otherwise not functioning properly. Doing so may result in an inoperative or hazardous installation



eTEMPO[®] CONTROLS

Installation Instructions for Round & Square eTempo[®] and eTempo/Plus[®]

Step 1

Determine the desired installation location of the control. The eTEMPO[°] and eTEMPO/Plus[°] controls are designed to be installed inside or outside the steam room as a matter of personal preference.

If the control is installed inside the steam room the control must be located:

- 4-5 feet above the floor near the bather seating area.
- The control features an integral temperature sensor. Locate the control in a location representative of the desired steambathing temperatures. Do not locate the control above or near the steam head or direct steam emissions.
- on a vertical wall

The control cable length is 30 feet. Insure that the control and/or steam generator are located accordingly. Contact a Mr.Steam technical service representative if a longer cable is required. Contact Mr.Steam for optional 60 ft. cable, PN 103990-60

If the control is installed outside the steam room a Remote Temperature Probe Part Number MSTS must be installed inside the steam room. Insure Mr.Steam steam generator is eTEMPO compatible and has a serial number 900000 or higher.

IMPORTANT: See installation instructions for the MSTS Temperature Probe before rough-in or installation of control (pg. 21-22).

Step 2

Make a one-inch diameter hole in the desired control location (Diagram 1). Do not oversize or undersize the hole.

Step 3

Route the control cable (provided with the control) from the wall cutout to the steam generator. Connect the black round Mini-Din connector to the steam generator connector as shown in Diagram 2.

NOTE: The connector is keyed with the flat facing up.







IMPORTANT: Be careful not to strain, staple, pinch or otherwise damage the control cable. Route cable as required to permit replacement. Do not route cable inside conduit together with power lines or in proximity to hot water or steam piping.

Step 4

Firmly connect the control connector to the control. Turn on power to the steam generator and test the control to verify correct connections. Test per the instructions on pages 25-26. Proceed with installation and verification of proper control function.

Step 5

Remove & discard peel-off paper to expose adhesive liner as shown in Diagram 3.

Step 6

Run a bead of silicone (provided) as shown to the **C** shaped groove as shown in Diagram 4.

IMPORTANT: Do not apply excessive amounts of silicone. DO NOT APPLY SILICONE TO ANY OTHER PARTS OF THE CONTROL INCLUDING THE ADHESIVE GASKET.

Step 7

Insure the mounting surface is clean and dry as required for good adhesion. Apply silicone into the hole in the wall as required to create a moisture seal. Hold the control with the LED display in the 12 o'clock position and press the control against the wall until the adhesive sticks and holds firmly as shown in Diagram 6.

IMPORTANT: Two registration marks are provided on round controls to facilitate level installation. The marks are located at the 3 o'clock and 6 o'clock positions on the back side of the control. Use a level as required.

Installing the Remote Temperature Probe for eTempo[®] & eTempo/Plus[®] Controls (PN: MSTS)

The Remote Temperature Probe is required when the eTEMPO or eTEMPO/PLUS Controls are installed outside the steam room.

CAUTION The Remote Temperature Probe (P/N MSTS) is for use with eTEMPO and eTEMPO/PLUS Controls only. Do not use any other controls. Do not use any other temperature probe with the eTempo and eTEMPO/PLUS controls. Noncompatible products may result in an inoperative control and a hazardous condition.

CAUTION Install the eTEMPO or eTEMPO/PLUS controls according to the installation instructions on pages 17-19. Failure to do so may result in an inoperative control and a hazardous condition.

- 1. Determine the location of the Remote Temperature Probe:
 - The Remote Temperature Probe must be installed:
 - a. On a vertical surface
 - b. 4-5 feet above the floor
 - c. Locate the MSTS Temperature Sensor in a location representative of the desired steambathing temperatures.
 Do not locate the MSTS above or near the steam head or direct steam emissions.

The probe has an integral 30' cable. Insure that the probe and/or steam generator are located accordingly.

- 2. Drill a 5/16 inch diameter hole in the wall as shown in Diagram 1. Do not oversize or undersize the hole. Clean area thoroughly.
- **3.** Remove the knock-out from the steam generator jacket as shown in Diagram 2.
- **4.** Insert the Remote Temperature Probe cable through the knock-out and connect to the connector on the steam generator printed circuit board marked EXT TEMP as shown in Diagram 2.
- **5**. Route the end of the temperature probe cable with the temperature probe through the wall into the steam room as shown in Diagram 3.

IMPORTANT NOTE: Do not strain, staple, pinch or otherwise damage the probe cable.

- 6. With a minimal length of the cable exposed apply silicone (provided) to the hole in the wall as required to create a moisture seal as shown in Diagram 3.
- 7. Push the temperature cable and bulb into hole as required to leave minimum 1/4", maximum 1/2" of the bulb exposed as shown.

WARNING Insure a minimum of 1/4" of the temperature bulb is exposed to the air. Failure to do so may result in an inoperative control and a hazardous condition.

WARNING The exposed area of the temperature bulb must be free of silicone or any materials or obstructions that prevent direct exposure to the steam room air. Failure to do so may interfere with the ability to sense temperature and may result in excessive steam room temperatures.







NOTE: FOR ILLUSTRATIVE PURPOSES ONLY. DRAWINGS NOT TO SCALE

mr.steam[®] steam therapy



STEAM GENIE® INTERFACE MODULE INSTALLATION

- Connect the GENIE INTERFACE MODULE to the generator by plugging in the provided 5 foot cable to the GENIE INTERFACE MODULE and the STEAM GENIE® connector on the side of the generator as shown.
- Mount the GENIE INTERFACE MODULE in a dry location. For maximum range, the Genie Interface Module should be mounted as high as practical and away from metal that could effect the radio signal. Screwing it into a nearby wood stud is ideal. The antenna should be pointing upwards.
- With the generator powered, the red light (steam off) or green light (steam on) should come on when plugged in. Press the TOGGLE STEAM button to confirm proper connection.
- Press the ON/OFF button and confirm that the STEAM GENIE[®] lights match the state of the steam generator. Red for STEAM OFF (eTempo control is off) and green for STEAM ON (eTempo control is on).
- The yellow RF activity light on the GENIE INTERFACE MODULE should flash each time the button on the STEAM GENIE[®] is pressed.
- Test the range of the STEAM GENIE[®]. It may be necessary to change the location of the Genie Interface Module to improve the range. Contact Mr.Steam technical service for an optional 60 foot cable, part number 103978-60.

NOTE: All drawings for illustrative purposes only. The eTempo control cable is not shown for clarity. An eTempo or eTempo/Plus must be used in conjunction with the STEAM GENIE/HomeWizard.



INTERFACE MODULE INSTALLATION

- Installation of the HomeWizard[™] Genie should be performed by a certified Home Automation Integrator in accordance with applicable National and local electrical codes.
- · Connect the HomeWizard INTERFACE MODULE to the generator by plugging in the provided 5 foot cable to the HomeWizard INTERFACE MODULE and the HomeWizard connector on the side of the generator as shown.
- Mount the HOMEWIZARD INTERFACE MODULE in a dry, indoor location. For maximum range, the HomeWizard Interface Module should be mounted as high as practical and away from metal that could effect the radio signal. Securing it to a nearby wood stud is ideal. The antenna should be pointing upwards.
- 2 wire pairs (not supplied) must be provided to connect the Home Automation system and the HomeWizard.
- Using the supplied connector, connect the signal wires and feedback wires from the Home Automation system to the HomeWizard.

'I' **CAUTION** The signal from the Home Automation system must be a momentary contact closure to turn the Steam Generator ON or OFF. A sustained contact closure or voltage will damage the HomeWizard.

• The feedback from the HomeWizard is a sustained contact closure when the steam generator is ON and an open circuit when the steam generator is OFF.



CAUTION The maximum voltage for the feedback circuit is 2A AT 12 VDC

- With the generator powered, the red light (steam off) or green light (steam on) should come on when plugged in. Press the TOGGLE STEAM button to confirm proper connection.
- Press the ON/OFF button and confirm that the HomeWizard lights match the state of the steam generator. Red for STEAM OFF (eTempo control is off) and green for STEAM ON (eTempo control is on).
- The yellow RF activity light on the HomeWizard Interface Module should flash each time the button on the HomeWizard FOB is pressed.
- Test the range of the HomeWizard FOB. It may be necessary to change the location of the HomeWizard Interface Module to improve the range. Contact Mr.Steam technical service for an optional 60 foot cable, PN 103978-60.

PAIRING

- The GENIE/HOMEWIZARD FOB and GENIE/HOMEWIZARD Interface Module come paired from the factory with address 1. The Genie/HomeWizard FOB and GENIE/HOMEWIZARD Interface Module can be set to one of eight different addresses.
- Pairing is required if you have more than one steam generator in your home or if you experience interference from a neighbor's steam generator.
- You can determine the pairing of an Steam Genie/Home-Wizard FOB and GENIE/HOMEWIZARD Interface Module by pressing and holding the ON/OFF button for 2 seconds. If you are within range of the Genie Interface Module, the green light will flash from 1 to 8 times depending on the address. To change the address of the GENIE/HOMEWIZARD Interface Module, you must enter pairing mode.
- To enter pairing mode, press and hold the TOGGLE-STEAM button on the GENIE/HOMEWIZARD Interface Module for 2 seconds until the blue indicator light comes on. The green indicator light will start flashing the current address every 4 seconds. Count from 1 to 8 flashes. To change the GENIE/HOMEWIZARD Interface Module address press the ADJUST-ADDRESS button. Observe that the flash increments from 1 to 8 and then back to 1 each time you press it.
- To change the address of the STEAM GENIE, to match the address of the GENIE/HOMEWIZARD Interface Module, press and hold the ON/OFF button while the GENIE/HOME-WIZARD Interface Module is in pairing mode. You will see the new flash count on the STEAM GENIE.
- To exit pairing mode, press the TOGGLE-STEAM button on the GENIE/HOMEWIZARD Interface Module and observe that the blue light turns off. Pairing mode will automatically exit after 60 seconds.

NOTE: The STEAM GENIE/HOMEWIZARD FOB and GENIE/ HOMEWIZARD INTERFACE MODULE address are maintained even when power is removed.

INSTALLING THE HOLDER

A holder is provided with the Steam Genie/ Home-Wizard Control as an optional convenience.

Secure the holder to a wall so the Steam Genie/ HomeWizard Control is oriented as shown. Determine if the two screws provided are suitable for the installation conditions. Use alternate hardware or use with plastic anchors as required by installation conditions. Seal screw holes in the wall against moisture as required.



TROUBLESHOOTING

NOTE: The STEAM GENIE[®]/HomeWizard[™] FOB will not operate the generator without an eTempo[®] or eTempo/Plus[®] control

I cannot control my steam generator with my remote:

Is the light twinkling on the Steam Genie[®]/HomeWizard[™] FOB when the button is pressed?

If not, replace the batteries in the Steam Genie[®]/HomeWizard[™] FOB.

If the light still does not twinkle, contact technical service.

Are you within range of the GENIE/HOMEWIZARD Interface Module?

Go closer to the steam generator and see if that works. If the range has diminished then the Steam Genie/ HomeWizard FOB battery may be getting weak.

For new installations it my be necessary to change the location of the GENIE/HOMEWIZARD Interface Module to improve the range. Contact Mr.Steam technical service for an optional 60 foot cable, part number 103978-60.

Go to the GENIE/HOMEWIZARD Interface Module.

Are any of the GENIE/HOMEWIZARD Interface Module indicator lights on?

If not check the connection to the steam generator. Unplug and re-plug the GENIE/HOMEWIZARD Interface Module from the steam generator. Verify the steam generator is receiving the correct voltage.

Press the TOGGLE STEAM button on the GENIE/HOMEWIZARD Interface Module and verify that it can control the steam generator. If no lights are on or you cannot manually control the steam generator, contact technical service.

Press the ON/OFF button on the Steam Genie/HomeWizard FOB. While the Steam Genie/HomeWizard FOB is twinkling, do you see the yellow RF activity light flashing on the GENIE/HOMEWIZARD Interface Module?

If yes, then the address of the Steam Genie/HomeWizard FOB and the GENIE/HOMEWIZARD Interface Module may not match. Enter pairing mode by pressing the TOGGLE STEAM button on the GENIE/HOMEWIZARD Interface Moduleuntil the blue light comes on. While the blue light on the GENIE/HOMEWIZARD Interface Module is on, press and hold the ON/OFF button for 2 second until the LED flashes. Exit pairing mode and test the Steam Genie/HomeWizard FOB.

I cannot control my steam generator with my Home Automation system

Disconnect the wires on the HomeWizard Genie connector from the Home Automation system

Momentarily short the two terminals on the HomeWizard connectorlabeled "SWITCH INPUT FROM HOME AUTOMATION SYSTEM". The steam generator should turn on.

If the steam generator is not on contact technical service, if the steam generator is on, the Home Automation system is not configured correctly, contact your Home Automation integrator.

FCC ID: KSK-104058 FCC ID: KSK-104059

Mr.Steam[®]: Steam Genie[®]

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

- Operation is subject to the following two conditions:
- This device may not cause harmful interface, and
 This device must accept any interface received,
- including interface that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

GENIE/HOMEWIZARD[™] INTERFACE MODULE:

- The eTEMPO[®]/GENIE/HOMEWIZARD[™] Interface Module is connected to and mounted near your steam generator and normally does not require any attention.
- The 4 lights on the eTEMPO/GENIE/HOMEWIZARD Interface Module indicate the status of the steam generator that it is connected to. At least one light will be on to show you that the eTEMPO/GENIE/ HOMEWIZARD Interface Module is operating.
- If the red light is on, the steam cycle is off. If the green light is on, the steam cycle is on.
- If the red light is blinking there is an error condition in the steam generator. An error code will be displayed on your eTempo or eTempo/Plus control. Contact the Mr.Steam Technical Service Department at 800-76-STEAM (east coast) or 800-72-STEAM (west coast) for assistance or additional information.
- The yellow light flashes to indicate when the ON/OFF button on the Genie/HomeWizard FOB is pressed.
- The blue light is on to indicate that you are in pairing mode.
- While in pairing mode, the green light will continuously flash the GENIE/HOMEWIZARD Interface Module address (1-8).
- You can turn the generator on and off by pressing either button on the GENIE/HOMEWIZARD Interface Module (while not in pairing mode).



Steam Genie[®] /HomeWizard[™] Systems

Generator (on the side of the Interface Module)

GENIE INTERFACE MODULE

button

button



HOME WIZARD[™] INTERFACE MODULE

GENIE/HOMEWIZARD[™] FOB

OPERATION

WITH A HOME AUTOMATION SYSTEM:

- The Steam Generator will turn on when a signal is received from the Home Automation system.
- The steam generator will run for a maximum of 10 minutes when turned on using the Home Automation system. To continue for longer than 10 minutes, simply turn the generator off then back on using the eTempo Control or the HomeWizard FOB.

WITH STEAM GENIE[®]/HOMEWIZARD[™] FOB:

- When the eTempo Genie/HomeWizard FOB light is off, press the button once and the Tempo Genie/HomeWizard FOB light indicates if the steam is on or off. When you press the button, the light will momentarily twinkle between red and green. A red light indicates that the steam is off and a green light indicates that the steam is on. If you are out of range, the lights will twinkle for about 5 seconds and then shut off.
- To turn the steam on or off, press the ON/OFF button again while the light is illuminated. After a short delay the light will change from red to green (steam on) or green to red (steam off).
- The light will stay illuminated for 10 seconds and then shut off.
- A blinking red light indicates that an error condition exists in the steam generator. An error code will be displayed on your eTempo or eTempo/Plus control. Contact the Mr.Steam Technical Service Department at 800-76-STEAM (East coast) or 800-72-STEAM (West coast) for assistance or additional information.

CAUTION The Steam Genie[®]/HomeWizard[™] FOB may be used in the steam room. Do not submerge the HomeWizard FOB in water. Doing so may result in an inoperative or hazardous installation.

BATTERY REPLACEMENT:

Your Mr. Steam Steam Genie[®]/HomeWizard[™] requires one CR2032 disk battery available at most local drug stores

CAUTION This product contains a button cell battery that may be ingested by children. Do not leave button cell batteries within reach of children.

TO REPLACE THE BATTERY:

- 1. Unscrew the 2 philips head screws on the FOB case
- 2. Pry open the hinged case.
- 3. Carefully lift out the circuit board.
- 4. Slide out the old battery.
- 5. Slide in a new battery making sure that the + side is facing outwards (away from the circuit board).
- 6. Replace the circuit board in the case. Be sure the button is facing the right way or else the case will not close.
- 7. Snap the case closed.
- 8. Test the remote.
- 9. Replace the 2 screws.

NOTE: The Steam Genie/HomeWizard FOB will remember its address when the battery is removed.



CAUTION Flush a minimum of two-three hours after the control has been turned off to insure that the water has cooled.

WARNING Draining immediately after a steam cycle may expose PVC and other piping to high temperature water. Check local codes. The unit will refill automatically when the control is activated again. In areas of hard water, a Mr.Steam AutoFlush system is recommended for generator longevity.

USING MR.STEAM[®] ESSENTIAL OILS

STEAM GENERATOR MAINTENANCE

Mr.Steam steambath generators require little maintenance. Other than periodic draining, maintenance procedures are

accumulated materials, salts and other particles which are

natural by-products of boiling water.

minimal. Every 2 months, or more often in "hard" water areas, the manual drain valve should be opened fully flushing out

Enjoy AromaSteam™ essential oils by placing a drop or two into an unheated AromaSteam steamhead as shown in the illustration. Only use Mr.Steam® AromaSteam essential oils in the Mr.Steam® AromaSteam steamhead.

- Use essential oils with caution. Essential oils are for external use only. Keep out of reach of children. Essential oils are highly concentrated and are potent substances and should not be applied directly to the skin as they can be irritants. Use essential oils with caution.
- Place the drops into the Mr.Steam AromaSteam steamhead recess prior to turning on the steambath. Do not place drops in a hot steam head as SERIOUS INJURY CAN RESULT IF YOU DO NOT FOLLOW THIS WARNING.
- Start with one drop to gauge strength and suitability. Limit to a maximum of a few drops for a steambathing session.
- The bather should exit the steambath IMMEDIATELY if dizziness occurs. If skin irritation occurs stop using the oils immediately. Remove any excess oil by washing in mild soap and water. If ingested, rinse mouth with water. Administer water or milk to dilute. Contact a physician immediately.

Tightly close bottles when storing oils. Keep bottles away from sources of ignition.



CAUTION Aromatic oils should be added to steamhead <u>before</u> turning on the steambath unit. DO NOT add oil during steambathing or when the steam head is heated.

eTEMPO[®] CONTROLS

CARE TIPS FOR ALL CONTROLS AND STEAMHEADS

- 1. Use only mild soap and water on a soft cloth to clean the control.
- 2. Do not use abrasive cleansers
- 3. If the decorative cover is damaged on the eTEMPO[®] or eTEMPO/PLUS[®] call Mr.Steam[®] technical service for replacement parts.

NOTE: Replacement of the decorative covers requires removal and reinstallation of the control from the mounting surfaces.

SAFETY AND OPERATING INFORMATION

WARNING Set the steambathing temperature according to personal preference, however it is highly recommended to begin steambathing at a low temperature setting to gauge comfort and safety levels. Set the duration at 10 minutes max. to gauge comfort and safety levels. This will allow the steam generator to heat up and begin producing steam.

Do not install or use any eTEMPO/PLUS[°], eTEMPO[°], HOMEWIZARD[™] or STEAM GENIE[°] controls without reading and understanding the Mr.Steam steam generator Installation and Operation Manual (PN 101289 Revision number 10.0/08 or higher). Failure to read and understand these instructions may result in an inoperative or hazardous installation.

A peel-off warning label has been provided in the Information envelope This label is to be applied to the wall of the installed shower or steam enclosure.

Install the eTEMPO or eTEMPO/Plus controls according to installation instructions. Failure to install according to instructions will result in an inoperative control or hazardous overheating or inadequate heating of the steam room.

If a eTEMPO or eTEMPO/Plus control is installed outside the steam room a Remote Temperature Probe (PN MSTS) must be installed inside the steam room per installation instructions supplied with the Remote Temperature Probe. Failure to install according to instructions will result in an inoperative control and overheating of the steam room.

CAUTION Do not route eTEMPO/Plus, eTEMPO, HOMEWIZARD or STEAM GENIE control wiring inside conduit together with power lines or in proximity to hot water or steam piping. Doing so may result in an inoperative or hazardous installation.

Do not alter or modify any Mr. Steam products including the steam generator, eTEMPO/Plus, eTEMPO, STEAM GENIE or Home Wizard controls. Doing so may result in an inoperative or hazardous installation and will void the warranty.

IMPORTANT:

Do not operate any eTEMPO/PLUS[®], eTEMPO[®], HOMEWIZARD or STEAM GENIE[®] controls with other than a MrSteam[®] eTEMPO[®] compatible steam generator. MrSteam residential steam generators with serial numbers lower than 900000, or any other brand of steam generator are not to be operated with eTEMPO[®] controls. Doing so may result in an inoperative installation.

This document contains important safety, operation and maintenance information. Leave this document with the homeowner. Do not discard this document.

Malfunction due to power spikes, lightning, fire, freezing or flooding is not covered under the warranty.

Discontinue use of the steam generator or control if the steam generator is damaged or otherwise not functioning properly. Doing so may result in an inoperative or hazardous installation.

homeowner

eTEMPO[®] OPERATING INSTRUCTIONS

The eTEMPO[®] Control features programmable digital temperature control, a fixed (60) minute duration, ON/OFF and PAUSE. The control can be set at a temperature range from 105°F up to 120°F

ON/OFF - Diagram 1

Press the ON/OFF key to start or stop the flow of steam. Steam will begin to flow a few minutes after the control is turned ON. The duration required for the steam room to reach steambathing temperatures depends on the steam room construction and steam generator specifications. Steam may continue to flow for a short time after the control is turned OFF.

PAUSE feature - Diagram 2

If a pause in steam flow is desired press the PAUSE key. The display will flash while the control is in the PAUSE mode. The timer will continue to countdown while in the PAUSE mode.

Timer Feature

When the control is turned ON a 60 minute time duration is initiated. The control will turn off after 60 minutes unless the control is turned off manually.

Memory Feature

If the control is turned off manually before 60 minutes then the default temperature of 110°F will be used the next time the control is turned on. If the control times out at 60 minutes (not manually turned off) then the previous user temperature setting will be used when the steambath is used again.

Setting the Temperature - Diagram 3

The control is pre-set and will display the temperature setting of 110° F (default setting). Use the **UP** and **DOWN** keys to change the temperature setting from 100° F to 120° F in one degree increments.

Changing the Temperature Units (°F/°C)

When the generator is Off, Press and hold **ON/OFF** key for 10 seconds. The temperature units will be displayed as Fahrenheit (TuF) or Celsius (TuC). Use the **UP/DOWN** keys to choose between (TuF) and (TuC). Press **ON/OFF** key to accept the new value and exit.



eTEMPO/PLUS[®] OPERATING INSTRUCTIONS

The eTEMPO/Plus[®] Control features programmable digital temperature control, programmable time duration, clock, AromaSteam[™], ChromaSteam[™], ON/OFF and two personal settings.

WARNING Set the steambathing temperature according to personal preference, however it is highly recommended to begin steambathing at a low temperature setting to gauge comfort and safety levels. Set the duration at 10 minutes max. to gauge comfort and safety levels. This will allow the steam generator to heat up and begin producing steam.

POWERING UP THE UNIT- Diagram 1

When the generator is first powered up or after a power interruption, the clock display flashes and the clock is ready to be set up.

NOTE: Pressing the **ON/OFF** will start the generator even if the clock has not been set.

ON/OFF - Diagram 2

Press the **ON/OFF** key to start or stop the flow of steam. The Set Point is displayed. Steam will begin to flow a few a few minutes after the control is turned **ON**. The duration required for the steam room to reach steambathing temperatures depends on the steam room construction and steam generator specifications. Steam may continue to flow for a short time after the control is turned OFF.

Setting the Clock - Diagram 3

When the display is not flashing: Press and hold the **TIME** key until the display starts flashing.

Use the **UP/DOWN** keys to select the desired, at this time the AM/PM logo will be displayed. Press the **TIME** key to save changes.

NOTE: The clock can only be set when the generator is off.

Setting the Time Duration/Viewing the Clock

Press **TIME** key to set or display the remaining relaxation time or the clock.(Diagram 4). The control is pre-set and will display a TIME setting of 20 minutes (default setting).

With the TIME or CLOCK displayed, press the **UP** or **DOWN** keys (Diagram 5) to set the desired duration time (2-60 minutes) in two minute increments.

Set the steambathing duration according to personal preference, however it is highly recommended to begin steambathing at a shorter duration to gauge comfort and safety levels.

The control will turn off when the relaxation period times out. Then, the clock time will be displayed.



DIAGRAM 1



DIAGRAM 2



DIAGRAM 3



DIAGRAM 4



DIAGRAM 5

mr.steam[®]steamtherapy[®]

eTempo[®] Controls

homeowner

eTEMPO/PLUS[®] OPERATING INSTRUCTIONS (cont.)

Setting the Temperature

Press **TEMP** key to set the desired temperature or display the temperature setting. Diagram 6 The control is preset and will display a temperature setting of 110°F (default setting). With the temperature displayed, press the **UP** or **DOWN** keys (Diagram 7) to set the desired temperature (100°F to 120°F) in one degree increments. Set the steambathing temperature according to personal preference, however it is highly recommended to begin steambathing at a low temperature setting to gauge comfort and safety levels.

Changing the Temperature units (°F/°C)

When the generator is Off, Press and hold **ON/OFF** key for 10 seconds. The temperature units will be displayed as Fahrenheit(TuF) or Celsius (TuC). Use the **UP/DOWN** keys to choose between (TuF) and (TuC). Press **ON/OFF** key to accept the new value and exit.

Memory Feature

If the control is turned off manually before it times out then the default settings of 20 minutes and 110° F will be used the next time the control is turned on. If the control times out (not manually turned off) then the previous user time and temperature settings will be used when the steambath is used again.

PROG 1 and PROG 2 - Diagram 8

The **P1/P2** key program and store preferred settings. To program preferred settings: Press **ON/OFF** key to turn generator on. Press **P1/P2** key once to program **PROG1**.

Press it twice to program **PROG2**. The selected parameter will be displayed. Enter the preferred time and temperature settings. The eTEMPO/PLUS will store the following settings: set point, time duration & aroma state.

To select **PROG1** or **PROG2** : Press **ON/OFF** key then press **P1/P2** key once to select **PROG1**, press it twice to select **PROG2**. The steambath will begin to operate at the stored settings.

AromaSteam[™] - Diagram 9

To enjoy the benefits of the AromaSteam[™] system, the AromaSteam system and the steam generator must be at on at the same time. Press the **ON/OFF** key to turn the steam generator on. Then, press the **AROMA** key to generated the aroma oils will mix with the steam flow The Aroma indicator will be displayed. The AromaSteam turns off automatically when the steam generator stops heating. Press the **AROMA** key to turn it off during a steam session. The logo will turn off.

ChromaSteam[™] - Diagram 10

The ChromaSteam system will activate colored lights in the steam shower. Press the **CHROMA** key to turn lights on. Press twice to select the current light color. Press again to turn the lights off. Note that the lights can be turned on even if the steam generator is off and the ChromaSteam system hasn't timed out.



DIAGRAM 6



DIAGRAM 7



DIAGRAM 8



DIAGRAM 9



DIAGRAM 10

Products, information and specifications are subject to change without notice. Please call Sales & Support at 1.800.76.STEAM (East Coast) or 1.800.72.STEAM (West Coast) for more information.

mr steam[°]

Sussman-Automatic Corporation[®] info@mrsteam.com www.mrsteam.com 43-20 34th Street Long Island City, NY 11101 TEL: 718 937 4500 FAX: 718 472 3256

9410 S. La Cienega Blvd. Inglewood CA 90301 TEL: 310 216 6565 FAX: 310 216 2944 2011 © Sussman-Automatic Corporation

MR. STEAM and des., A LIFETIME OF PLEASURE, AROMAFLO, AUTOFLUSH, CLEAN STEAM...EVERY TIME, CLUB THERAPY, DIGITAL 1, eTEMPO, eTEMPO/PLUS, FROM BATHROOM TO SPA, MAKING WELLNESS a WAY OF LIFE, MUSIC THERAPY, STEAM ON DEMAND, STEAM@HOME, STEAM GENIE, STEAMTHERAPY, and SUSSMAN are registered trademarks of Sussman-Automatic Corporation. AROMASTEAM, BUTLER PACKAGE, CHROMASTEAM, EXPRESS STEAM, HOME WIZARD, STEAM STOP, THE INTELLIGENT STEAMBATH and VALET PACKAGE, Sussman-Automatic Corporation. PUR 101289 15.1/12 PUR 101289 15.1/12