

operator manual

MHC-22-GEN Holding Cabinet Models 86002 & 86003

This document includes:

- Safety notices
- Specifications
- Installation instructions
- Operating instructions
- Cleaning instructions
- Warranty statement

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THE OPERATOR OF THIS EQUIPMENT IS SOLELY RESPONSIBLE FOR ENSURING THAT FOOD ITEMS REMAIN AT SAFE HOLDING TEMPERATURE LEVELS. FAILURE TO DO SO COULD RESULT IN UNSAFE FOOD PRODUCT FOR CUSTOMERS.

FOR YOUR SAFETY, DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS OR LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.

DO NOT SPRAY AEROSOLS IN THE VICINITY OF THIS APPLIANCE WHILE IT IS IN OPERATION.

WARNING: IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, INJURY OR DEATH. READ THE INSTALLATION, OPERATING, AND MAINTENANCE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS EQUIPMENT.

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BEFORE INSTALLATION

NOTE: Upon receipt of this product, immediately unpack and inspect for possible concealed shipping damage. If the unit is found to be damaged, save all packing materials and contact your delivery carrier within 15 days. Refer to "Shipping Damage Instructions" enclosed for detailed instructions. Failure to follow these instructions will negate Merco's or your ability to file claims and receive compensation for shipping damage.

This manual contains important safety and installation/operation instructions. Require all operators to read this manual before using the unit. Failure to follow the instructions contained in this manual may cause injury or damage to the unit and will void the warranty.

SITE PREPARATION

Choose a well-ventilated location. Place the holding cabinet on a suitable table or counter capable of supporting the weight of 30 lbs. or 14 kg. The power supply must be in accordance with the specifications on the data plate located on the rear of the appliance. It should be installed on a dedicated service line with no other equipment on the circuit. The unit must be positioned so that the unit's plug is accessible.

UNIT SPECIFICATIONS

Model	Voltage	Amps	Watts	Hz.	Net Wt. Ibs./kg	Plug
86002	120	10.4	1320	60	30/14	NEMA 5-15P
86003 (CE)	230	5.75	1320	50	30/14	CEE 7/7







FRONT VIEW

SIDE VIEW

	Α	В	С	D
MEASUREMENT	13.485"	17.375"	19.5"	10.764"
	(342.5mm)	(441.3mm)	(495.3mm)	(273.4mm)

INSTALLATION INSTRUCTIONS

- 1. Remove legs from unit.
- 2. Place mounting brackets on either side of unit and attach by inserting the screws/washers (provided) into the holes left by the vacated legs. Tighten firmly.
- 3. With brackets securely attached to the unit, place the unit where it is to be mounted and mark the locations for stud placement.
- 4. Mount unit to shelf using hardware (not included) capable of handling the weight of unit.
- 5. With stud locations marked, attach studs with stud gun. Insert nut and washer on each stud then insert unit with mounting brackets followed by additional washers and nuts to complete the installation. *NOTE: Studs should be ¼-20 Stainless Steel. Studs, washers and nuts are not included.*



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CONTROL PANEL ILLUSTRATION



PRE-PROGRAMMED MENU ITEMS

For your convenience, the Merco Holding Cabinet has been pre-programmed with numerous food items that might be useful with your application. A complete listing of pre-programmed menu items and their respective settings can be found in the "Application Guide" section of this manual. If you decide to use any of these pre-programmed menu items, move directly to Part Four of the Quick-Start Programming Instructions listed below. If you wish to create a new menu item, please follow all four parts of the Quick-Start Programming Instructions listed below.

QUICK-START PROGRAMMING INSTRUCTIONS

This unit has the flexibility to provide the operator with numerous options throughout the programming process. The instructions on the following pages will help you to easily navigate through the basic process of setting up the food items and storing them to the desired bins. The information listed below has been formatted to provide you with a brief overview of what programming steps will be performed on the following pages. Please read this information first before beginning the five-step process.

PART ONE - ASSIGNING A FOOD ITEM NAME INTO MEMORY

Part one allows you to create a food product name you wish to save in memory. The display allows for the use of up to four characters in assigning a name. So, if you wish to assign the food item "bacon", you may want to save the name as "BACN".

PART TWO - TEMPERATURE SETTINGS FOR FOOD ITEMS

Food items may have unique temperature settings necessary to hold and maintain quality. As a result, temperature settings need to be assigned to each food item created.

PART THREE - TIME SETTINGS FOR FOOD ITEMS

Food items may also have unique time settings necessary to hold and maintain quality. As a result, two separate time settings need to be assigned to each food item created.

PART FOUR – ASSIGNING FOOD ITEM TO A STORAGE BIN

At this point all the necessary characteristics have been assigned to the food product created. The last step in the process is to assign that food item (and its temperature and time setting characteristics) to the desired storage bin. Once this has been completed you are ready to go back to part one and create the next food item.

NOTE: When programming the unit, the operator will have a maximum of 14 seconds between programming steps before the unit will "time out." If this happens the operator will be required to begin again with the first step in the "part" (i.e., part one, two, three, four or five as listed above).

FOR YOUR CONVENIENCE, A PERSONALIZED PRODUCT SETTINGS CHART HAS BEEN INCLUDED ON PAGE 20. AS MENU ITEMS ARE STORED AND SAVED INTO MEMORY, WE RECOMMEND YOU NOTE THESE INDIVIDUAL SETTINGS IN THE CHART FOR FUTURE REFERENCE.

FOOD PRODUCT NAMES

The MHC-22-GEN can hold up to 32 separate food items in memory. Each of these food items are programmed by the operator with various temperature, time, and bin location settings. These food items correspond to the four product storage bins of the unit.

PART ONE: CREATING A FOOD PRODUCT NAME

1 Press and hold "program" button until you hear a short, double-beep sound. Release.	
---	--

2 Press and hold "program" button <i>again</i> until you hear a short, double-beep sound. Release.	
--	--

3		Press "Up Arrow" button or "Down Arrow" button to locate the next available name slot (PD1, PD2, PD3, etc). This is where you create the name of the food item and save it to memory. For example, you may want to save "bacn" in place of "PD2".
---	--	---

4		Press and release "Bin 1" button. Display will flash.
---	--	---

5		Press "Up Arrow" button or "Down Arrow" button to change the first character in the name of the food item you wish to save into memory.
---	--	---

6 Press "Bin 4" button to move to the next character in the name of the food item you wish to save. If you need to go back to a previous character, press "Bin 3" button.	
---	--

7		Press "Up Arrow" button or "Down Arrow" button to change the second character in the name of the food item you wish to save. Continue through steps 4 and 5 until finished with the last character of the name of food item. Remember there is a maximum of four available characters to spell item name.
---	--	---

8	Program	Press and hold the "Program" button until you hear a short, double-beep sound to save setting and return to normal operating mode.

UPPER & LOWER TEMPERATURE SETTINGS FOR FOOD PRODUCT

Each product "bin" has upper and lower heating elements that provide the heat necessary to hold your food product. It is critically important that each of these "heat zones" be set to the appropriate temperature for each type of food product you wish to store in the bins. The temperature settings for each of these bins will change with the type of food product being stored.



PART TWO: ASSIGNING UPPER & LOWER TEMP SETTINGS FOR FOOD PRODUCT

1	Program	Press and hold "program" button until you hear a short, double-beep sound. Release.
---	---------	--

2	Program	Press and hold "program" button <i>again</i> until you hear a short, double-beep sound. Release.
---	---------	---

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Program

Т

3		Press "Up Arrow" button or "Down Arrow" to locate desired product (displayed in Bin 1).
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4	Temp	Press "temp" button to make changes the lower temperature of the selected product.
---	------	--

6	Temp	Press "temp" button again to make changes the upper temperature.
---	------	--

7	Press "Up Arrow" button or "Down Arrow" to set the upper temperature.
	Press and hold "program" button until you hear a short, double-beep sound. Release. Lower and upper temperature settings for desired product have now been

	saved.
	Follow these steps each time (while selecting the appropriate product in step 3) to
	assign lower and upper temperature settings to each food product.

FOOD PRODUCT "COOK TIME" AND "DUMP TIME"

The MHC-22-GEN unit has been designed to provide the operator with two different types of alarms; "Cook Time" and "Dump Time". The operator will assign these times to each type of food product being held.

COOK TIME ALARM: This alarm has been designed to provide the operator advance warning that the product being held in the assigned bin is set to expire shortly. When this alarm sounds, the operator should begin preparing additional food to ensure there is no "down time" between preparing and providing food. The "cook time" alarm should be set for the time necessary to completely prepare additional product of this type.

DUMP TIME ALARM: This alarm has been designed to provide the operator with a warning that the food product has reached the end of its "shelf life" and should be discarded. To insure the highest level of quality, food product should never be given to customers after the "dump time" alarm has sounded.

PART THREE: ASSIGNING "COOK TIME" AND "DUMP TIME" SETTINGS FOR PRODUCT

1	Program	Press and hold "program" button until you hear a short, double-beep sound. Release.
---	---------	--

2	Program	Press and hold "program" button <i>again</i> until you hear a short, double-beep sound. Release.
---	---------	---

3		Press "Up Arrow" button or "Down Arrow" to scroll through the available names in memory until you reach the desired product name.
---	--	---

4	Timer	Press "time" button to select "cook time" setting.
---	-------	--

5 Press "Up Arrow" button or "Down Arrow" to set the appropriate "cook tir (Note: Time characters are equal to hours and minutes. For example, 2 to 2 hours and 5 minutes).	ne". :05 is equal
---	----------------------

6	Timer	Press "time" button to select "dump time" setting.
---	-------	--

7		Press "Up Arrow" button or "Down Arrow" to set the appropriate "dump time". (Note: Time characters are equal to hours and minutes. For example, 2:05 is equal to 2 hours and 5 minutes).
---	--	--

8	Program	Press and hold "program" button until you hear a short, double-beep sound. Release. The "cook time" and "dump time" settings have been saved.
		Follow these steps each time (while selecting the appropriate product in step 3) to assign "cook and dump time" settings to each product.

STORAGE BINS FOR FOOD PRODUCT

With the MHC-22-GEN unit, a total of 32 separate food items can be store in memory. Of these 32 food items, any combination of 4 food items may be made active at any one time. For example, all four bins could hold hamburger at the same time or they could be used to hold four separate food items.

The trays used to hold the food product in each bin are made of plastic and are dishwasher safe. These trays are also interchangeable between bins.

PART FOUR: ASSIGNING FOOD PRODUCT TO A STORAGE BIN

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1	Program	Press and hold "program" button until you hear a short, double-beep sound. Release.

2	ân)	Press "Bin 1".
3		Press "Up Arrow" button or "Down Arrow" to scroll through the available names in memory until you reach the desired product name.
		Press and hold "program" button until you hear a short, double-beep sound. Release. The product name is now stored in Bin 1.

Program	Follow these steps each time (while selecting the appropriate bin in step 2) to assign
	product name to each of the 4 available bins.

The process of creating a food item, storing its characteristics, and assigning it to a bin are complete. Follow these steps again to create and assign additional food items.

OPERATING INSTRUCTIONS

The Merco Holding Cabinet has been designed to afford foodservice operators the ability to cook menu components in advance and then gently store that product in the holding bins until an order is received. Once that order has been placed, the crew can assemble the order using hot and fresh menu components from the holding bins. This allows for operators to "serve to order," helping increase speed of service while maintaining high product quality standards.

The Holding Bin Controller is, at all times, operating in one of three modes:

- Normal Mode
- Programming Mode
- Diagnostic Mode

Instructions for each of these operating modes are detailed below.

WARNING: If the supply cord appears to be damaged, do not attempt to operate unit. Contact service agent or qualified technician to repair.

CAUTION: When holding potentially hazardous foods, the minimum shelf temperature must be 220°F for the upper-bin heating element and 200°F for the lower-bin heating element.

NORMAL MODE

This is the normal mode of operation. The product for each bin is displayed, timers are activated for loaded bins, alarms are generated for "cook more" and "expired" product.

ACTION	INSTRUCTIONS		
Turn Unit On	Push "Power On / Power Off" button. Green "Power" button will illuminate in "on" position.		
Load bin with product and start timer	Pull out tray, load product and reinsert bin. Push and hold "bin" button. Bin display will change to show presence of product. Control will sound one short beep. Release hold of "bin" button.		
Empty bin and stop timer	Pull out tray and remove product. Reinsert tray. Press and hold "bin" button. The bin display will indicate empty bin (). Control will sound one short beep.		
Silence Alarm for "Cook" or "Dump"	Locate bin displaying "Attn" and press the "bin" button. The alarm will be silenced. Bin will continue to indicate desired action: "Cook" (It is now time to cook additional product) or "Dump" (It is now time to discard product in bin).		

► Typical Operator Actions

► Normal Display Modes

Each bin display consists of two parts, a primary and secondary message word. These words are displayed one after the other, repeating regularly. The following sections describe the type of displays present under various conditions.

Bin Empty Display – Bin display shows product name followed by "----" to indicate that bin is empty.

<u>Bin Loaded</u> – Bin display shows product name followed by a brief display of the time remaining until the product expires.

<u>Bin Alarm for "Cook More"</u> – Bin display shows "Attn" and a brief "Cook" message. Once the alarm is silenced, the display will show the product name followed by "Cook." This condition persists until the product expires or the bin is emptied.

<u>Bin Alarm for "Holding Time Expiration"</u> – Bin display shows "Attn" followed by "Dump." Once the alarm is silenced, the display indicates the product name followed by "Dump." This condition persists until the bin is emptied.

PROGRAMMING MODE

See "Quick Start Programming Instructions" beginning on page 7 for detailed information.

DIAGNOSTIC MODE

To reset the holding bin controller to the factory configuration, hold down the top two "bin" buttons while powering on the controller. Release as soon as displays come on. See page 20 for factory default settings.

CLEANING AND MAINTENANCE

DANGER:	Disconnect power supply before servicing or cleaning this unit. Safeguard power so it cannot be accidentally restored. Failure to do so could result in serious injury.
CAUTION:	Unit must be cool to touch and disconnected from power source prior to cleaning. Do not use power-cleaning equipment, steel wool, or wire brushes on stainless steel or painted surfaces.
	This appliances plug is the disconnect device and, as such, the unit must be installed so that the plug is accessible.

Merco Holding Cabinets are designed for easy cleaning and minimum maintenance. The stainless steel outer case requires nothing more than a daily wiping with a damp cloth. If, however, an excessive amount of food particles / grease are allowed to collect, a non-abrasive cleaner (hot sudsy water) may be used. The Product Holding Bin and Bin Lid may be cleaned via dishwasher or with warm soapy water. Care must be taken to prevent water or cleaning compounds from getting on internal parts, especially the switches on the control panel.

BIN LID REMOVAL INSTRUCTIONS

Note: The illustration below features a Merco MHC-1 (1-Bin Unit). These instructions also apply to the MHC-22 (2x2 Bin Unit).



HOW TO OBTAIN SERVICE

Please contact Merco Technical Service at (800) 678-9511 with questions or concerns relating to this equipment.

APPLICATION GUIDE

The guide shown below contains food items that have been pre-programmed at the factory for your convenience. Please note that this is meant to be a guide and that minor adjustments may be necessary to meet your specific quality requirements.. We recommend that you test these items and adjust settings as needed.

Product Code	Product Description	Entry Temp (°F)	Upper Temp (°F)	Lower Temp (°F)	Recommended Hold Time (mins)	Recommended Cook Time (mins)
Eggs	Eggs	160	160	180	60	10
Bacn	Bacon	175	200	200	20	5
Hsh1	Hash Browns	180	200	200	15	5
Hsh2	Hash Browns (cover removed)	180	200	200	20	5
Bsct	Biscuits	170	200	200	60	10
Saus	Sausage Patties	180	200	200	240	15
Ham	Ham Steak	160	200	200	120	10
Dogs	Hot Dogs	180	200	200	240	15
Ch Br	Chicken Breasts	170	200	200	240	15
Burg	Hamburger Patties	175	200	200	240	15
Fish	Breaded Fish Fillets	180	190	190	45	10
Ck Pt	Breaded Chicken Patties	180	200	200	45	10
Mt Lf	Meat Loaf	180	220	220	120	10
Mt BI	Meatballs	180	220	220	120	10
Past	Pasta	180	200	200	240	15
Veg	Vegetables	150	200	200	120	10
Frut	Fruit Compote	175	200	200	240	15
Chil	Chili	175	200	200	240	15
Spin	Spinach Dip	180	200	200	240	15
Mozz	Mozzatella Sticks	165	200	200	15	5
Popp	Poppers	175	200	200	15	5
PD22	n/a	n/a	200	200	240	15
PD23	n/a	n/a	200	200	240	15
PD24	n/a	n/a	200	200	240	15
PD25	n/a	n/a	200	200	240	15
PD26	n/a	n/a	200	200	240	15
PD27	n/a	n/a	200	200	240	15
PD28	n/a	n/a	200	200	240	15
PD29	n/a	n/a	200	200	240	15
PD30	n/a	n/a	200	200	240	15
PD31	n/a	n/a	200	200	240	15
PD32	n/a	n/a	200	200	240	15

PERSONALIZED PRODUCT SETTINGS

The following chart has been provided as a reference tool for future use if you decide to create new menu items separate from what have been pre-programmed. We recommend writing the food item characteristics in the chart below to use as a quick reference tool. You may want to revert back to this chart in the future to reference the different saved settings (product name, upper temp, lower temp, cook time, dump time).

Product Name		Upper Temp	Lower Temp	Cook Time	Dump Time
PD01					
PD02					
PD03					
PD04					
PD05					
PD06					
PD07					
PD08					
PD09					
PD10					
PD11					
PD12					
PD13					
PD14					
PD15					
PD16					
PD17					
PD18					
PD19					
PD20					
PD21					
PD22					
PD23					
PD24					
PD25					
PD26					
PD27					
PD28					
PD29					
PD30					
PD31					
PD32					

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LIMITED WARRANTY FOR COMMERCIAL PRODUCTS

LIMITED WARRANTY

Merco/Savory LLC, ("Merco") warrants this product to be free from defects in material and workmanship for a period of:

- One (1) year from date of product installation or eighteen (18) months from the date of shipment from our facility, whichever comes first.
- Calrod and Pyrex Heating Elements only two (2) year warranty against burnout (excluding breakage) from date of shipment from our facility.
- Quartz Heating Elements only ninety (90) days warranty against burnout (excluding breakage) from date of shipment from our facility.
- Hot Food Server products only one (1) year labor, two (2) years parts from the date of shipment from our facility.

During the warranty period, Merco shall, at Merco's option, repair, or replace parts determined by Merco to be defective in material or workmanship, and with respect to services, shall re-perform any defective portion of said services. The foregoing shall be the sole obligation of Merco under this Limited Warranty with respect to the equipment, products, and services. With respect to equipment, materials, parts and accessories manufactured by others, Merco's sole obligation shall be to use reasonable efforts to obtain the full benefit of the manufacturer's warranties. Merco shall have no liability, whether in contract, tort, negligence, or otherwise, with respect to non-Merco manufactured products.

WHO IS COVERED

This Limited Warranty is available only to the original purchaser of the product and is not transferable.

EXCLUSIONS FROM COVERAGE

- Repair or replacement of parts required because of misuse, improper care or storage, negligence, alteration, accident, use of incompatible supplies or lack of specified maintenance shall be excluded
- Normal maintenance items, including but not limited to, light bulbs, fuses, gaskets, O-rings, interior and exterior finishes, lubrication, deliming, broken glass, etc.
- Failures caused by improper or erratic voltages
- Improper or unauthorized repair
- Changes in adjustment and calibration after ninety (90) days from equipment installation date
- This Limited Warranty will not apply to any parts subject to damage beyond the control of Merco, or to equipment which has been subject to
 alteration, misuse or improper installation, accidents, damage in shipment, fire, floods, power changes, other hazards or acts of God that are
 beyond the control of Merco.
- This Limited Warranty does not apply, and shall not cover any products or equipment manufactured or sold by Merco when such products
 or commercial equipment is installed or used in a residential or non-commercial application. Installations not within the applicable building or
 fire codes render this Limited Warranty and any responsibility or obligations associated therein null and void. This includes any damage,
 costs, or legal actions resulting from the installation of any Merco commercial cooking equipment in a non-commercial application or
 installation, where the equipment is being used for applications other than those approved for by Merco.

LIMITATIONS OF LIABILITY

The preceding paragraphs set forth the exclusive remedy for all claims based on failure of, or defect in, products or services sold hereunder, whether the failure or defect arises before or during the warranty period, and whether a claim, however instituted, is based on contract, indemnity, warranty, tort (including negligence), strict liability, implied by statute, common-law or otherwise, and Merco its servants and agents shall not be liable for any claims for personal injuries, incidental or consequential damages or loss, howsoever caused. Upon the expiration of the warranty period, all such liability shall terminate. THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN, ORAL, IMPLIED OR STATUTORY. NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE SHALL APPLY. MERCO DOES NOT WARRANT ANY PRODUCTS OR SERVICES OF OTHERS.

REMEDIES

The liability of Merco for breach of any warranty obligation hereunder is limited to: (i) the repair or replacement of the equipment on which the liability is based, or with respect to services, re-performance of the services; or (ii) at Merco's option, the refund of the amount paid for said equipment or services.

Any breach by Merco with respect to any item or unit of equipment or services shall be deemed a breach with respect to that item or unit or service only

WARRANTY CLAIM PROCEDURE

Customer shall be responsible to:

- Immediately advise the Dealer or Merco's Authorized Service Agent of the equipment serial number and the nature of the problem.
- Verify the problem is a factory responsibility. Improper installation or misuse of equipment, are not covered under this Limited Warranty.
- Cooperate with the Service Agency so that warranty service may be completed during normal working hours.
- Travel Time not to exceed two hours and mileage not to exceed one hundred (100) miles.
- Portable equipment weighting less than ninety (90) pounds must be delivered to the Service Agent at Customer's expense.

GOVERNING LAW

This Limited Warranty shall be governed by the laws of the state of Delaware, USA, excluding their conflicts of law principles. The United Nations Convention on Contracts for the International Sale of Goods is hereby excluded in its entirety from application to this Limited Warranty

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