

# Operating and Maintenance Manual

Model: DX2011208 (208V, 50/60Hz, 3-Phase)



## CONTENTS

INTRODUCTION .....	2
APPLICATION & USE .....	2
SAFETY .....	2
INSTALLATION .....	2
OPERATION INSTRUCTIONS .....	4
MANAGER OPTIONS.....	4
INFORMATIONAL WARNING .....	5
TROUBLESHOOTING.....	5
ERROR CONDITIONS.....	5
MAINTENANCE.....	7
FREIGHT CLAIMS .....	8
DINEX® WARRANTY .....	8

For Service Information, call 1.888.673.4639

Please provide the following information:

Model number

Serial number (from bottom of unit)

## INTRODUCTION

Congratulations! You have purchased the new Dinex® DuraTherm® Induction Charger. Your Dinex® DuraTherm® induction heated base system, when used within a controlled hot food tray line process and covered with Dinex® insulated domes, will keep hot plated food between 60 to 90 minutes depending on menu and initial temperature of food and plate.

Please read this manual for helpful guidelines on how to use your new equipment. Should you have any questions concerning the equipment, please call Dinex® Service at 1-888-673-4639.

## APPLICATION & USE

The equipment is for commercial use only. Not for household use. It provides maximum induction heating compatible with Dinex® bases. Use with Dinex® DuraTherm® and Smart•Therm® bases only and use only for the purpose described.

## SAFETY

The instructions contained in this manual provide important guidelines for the equipment user regarding correct and safe installation. As you read this manual, particular attention should be paid to the precautions given in various parts of this manual with the following indicators.

**! ATTENTION:** Use of this symbol identifies a potentially hazardous situation which, if not avoided, may result in damage to the machine or injury to the operator.

**! CAUTION:** If the product is used without observing the information given under this symbol, minor personal injury, or damage to equipment may result.

**! IMPORTANT:** Key information for use and maintenance of the equipment.

## GENERAL SAFETY PRECAUTIONS:

**! IMPORTANT:** The following instructions reduce the risk of fire, electric shock, injury, and damage to equipment.

- ! Do not** attempt to repair this equipment. Repairs and service work must be performed by qualified service technicians. Service work performed by anyone other than authorized Dinex® service agents will void the warranty.
- ! Do not** allow water near the charger. Allowing water near the charger may cause a fire or electric shock.
- ! Do not** ever put a base in the microwave. A microwave will damage the base.
- ! Do not** stack the bases on the charger, charge ONLY one base at a time.
- ! Do not** use damaged bases.
- ! Do not** leave bases unattended on the charger.
- ! Do not** attempt to heat anything other than a Dinex® base. Use of other than genuine Dinex® bases and/or replacement parts will void the warranty.
- ! Do not** use the equipment as a work surface or cutting board.
- ! Do not** use corrosive cleaners on the equipment. Use only mild detergents.

## INSTALLATION

### SET UP

1. Carefully remove any packing material from the induction charger and check loose packing material for small parts or accessories. Inspect the charger for concealed damage before placing packing material aside. Keep the packaging until you are confident with the equipment's performance.

2. The DuraTherm® Charger must be installed on top of a flat, level countertop or shelving. Be careful to maintain at least two inches of clearance on all sides of the charger for cooling. Do not place over paper or loose material that may inhibit air flow into the bottom air intakes. Consider the Dinex® Induction Stand (Accessory product) DXPICTABLEM (Mobile with casters) DXPICTABLE (Not mobile).
3. The DuraTherm® induction charger is equipped with a locking plug. This plug is part of a system that will protect you from injury in the event of an electrical malfunction inside the unit. Be sure the plug is fully plugged into a matching socket that is properly grounded.

**! ATTENTION:** DO NOT cut or break off the larger angled prong on this plug or change the plug or power in any way. Doing so will create a safety hazard and will also void the warranty.

4. CONFIRM THAT INCOMING VOLTAGE MATCHES THE CHARGER. The charger must be plugged into a grounded 208V 3-phase, 20A dedicated NEMA L15-20R receptacle. A dedicated electrical outlet is required for EACH DuraTherm® charger. Make sure that your DuraTherm® Charger is plugged into an energized circuit.

**! CAUTION:** A product identification label on the bottom of the unit specifies the operating voltage, current, frequency, phase, and maximum wattage of the charger. Plugging or wiring the charger into less voltage than the charger is rated may significantly decrease the performance of the unit or damage internal electrical components.

**! IMPORTANT:** Each charger should be connected to its own dedicated circuit. They should not be connected to circuits sharing compressors or other heavy current draw devices (i.e., plate heaters, steam tables, etc.)

5. **Do not** use any DuraTherm® charger that has a damaged cord or plug. Consult the warranty and follow the instructions for service.
6. **Do not** move the DuraTherm® Charger when it is electrically connected.
7. **Do not** place foreign objects on the charger, or between the Dinex® base and the charger surface. Foreign objects may heat within the induction field and cause damage to the charger surface and/or base.
8. A grease filter is mounted to the bottom of the unit. Assure the filter is seated and free of excessive debris or grease. For replacement filters order DXPLE9560.
9. **Do not** let the power cord touch hot surfaces.
10. The center of the charger may get hot to the touch after hours of continuous use. Use caution when loading and unloading bases.
11. The charger requires ample air flow to cool the internal electronic components. Air is pulled in from the bottom of the unit from the front and sides, and exhausted towards the rear of the unit. Assure that nothing obstructs the airflow about all four sides of the unit. Allow at least two inches from a wall or partition.

**! ATTENTION:** Do not attempt to open the charger or perform service of any kind. This product can only be serviced by a Dinex® Authorized Service Agent or designated Dinex® personnel. Contact Dinex® at 1-888-673-4639 for service information.

**! IMPORTANT:** Any installation not matching the requirements discussed in this manual will automatically void the product's warranty.

**! IMPORTANT:** Every installation site has different electrical wiring requirements. Because many different local codes exist, it is the owner and installer's responsibility to comply with all federal, state, and local codes. Dinex® is not responsible for any consequential damages, either expressed or implied, because of failure to comply with installation requirements.

## OPERATION INSTRUCTIONS

Make sure your DuraTherm® Induction Charger is plugged into an energized circuit per the requirements described in the previous section.

### USER INTERFACE:

**POWER** button will turn the unit on and off.

**LCD Info Center** provides feedback on the status of bases charging and equipment operation.

**SELECT** button will be used to reset error conditions, clear informational messages, and select or set options.

**UP/DOWN** arrow buttons are used to move among Manager Options in the OPTIONS menu. (These are just right of the SELECT button and not embossed.)

1. The DuraTherm® Charger is turned on by pressing the POWER button on the left front of the switch panel. The LCD Info Center will display “Waiting for base...” indicating the DuraTherm® Charger is turned on and ready for use.
2. Place a Dinex® DuraTherm® or Smart•Therm® base on the charger within the positioning rails. Confirm the base is seated flat on the top. The charger will beep once as it recognizes the base.
3. The LCD Info Center will display “Heating Base” once it has begun charging. A status bar at the bottom of the screen will continue to fill in to show the progression of charge. If the base is removed prior to the status bar being completely filled the base will not be fully charged and may result in a lower delivery temperature.

**! IMPORTANT:** You will hear three loud “BEEPS” if you remove the base before it is fully charged.

**! IMPORTANT:** To prevent overheating a base, the charger will not reheat a base until sufficient cooling time has elapsed – even if the base was removed before the initial charge was completed. “Reheat Later” will appear in the LCD screen if insufficient time has elapsed between charges. Bases require 90 minutes reset time between uses.

4. If the phrase “Waiting for base...” still appears after placing a base on the charger, remove the base and reposition – assuring the base is seated flat to the top, and within the positioning rails.
5. The status bar tracks the progress of the base charge. After the status bar is completely filled the charger will display “Base Ready” and will beep indicating that base is at full charge. A DuraTherm® base will usually charge completely in 15 seconds. On a DuraTherm® Charger, a Smart•Therm® base will charge in 10 seconds. Only a DuraTherm® base will provide maximum performance. Note: Low incoming voltage may increase charge time.

**! IMPORTANT:** Fluctuations in voltage may affect heating time.

6. If the charger sees no activity for an extended period, it will beep 2 times and go into “Sleep” mode to conserve power. This will be indicated by the display reading “Power Save. Press any button to return to previous mode”. Press any button to exit “Sleep” mode.
7. Power off the DuraTherm® Charger by depressing the POWER button.

## MANAGER OPTIONS

Your DuraTherm® charger can be set to display in English, Spanish, or French languages. You may also choose to disable information alerts (see item 4 below). These options may be changed through the OPTIONS menu.

1. The unit must be powered down with DINEX® in the display. Press and hold the SELECT button for 5 seconds.
2. Release the SELECT button, and within two seconds, press the POWER button once. The OPTIONS menu should now be displayed.
3. Use the UP/DOWN arrow buttons to move the caret symbol (>) to the desired option, and press SELECT.
4. The “Set Language”, “Ignore Warnings”, and “Set LCD Contrast” options will bring up sub-menus where you may select the desired mode. “Set Languages” allows you to choose between displaying English, Spanish, or French. “Ignore Warnings” allows you to suppress the display of certain informational warning messages. (For example, you may suppress the display of “Low Voltage” warnings during times of heavy electrical demand where voltage on power lines may sag).
5. Choose “Exit” to back out of the displayed menu.
6. At any time, you may also press the POWER button to cycle the unit back into normal operation.

## INFORMATIONAL WARNING

Informational warning messages may appear during operation. Make note of and correct the condition as soon as is practical. Press the SELECT button to continue normal operation.

1. “WARNING! Low voltage conditions exist. Performance may suffer. Press SELECT to continue”. This indicates that the unit senses the line voltage has dropped and charge times may be adversely affected. The unit will pause operation until SELECT is pressed. No harm will result if you continue to operate the unit. If these warnings become excessive (for example, during periods of high electrical demand), they may be suppressed from the OPTIONS menu.

2. “WARNING! Reduced airflow detected. Check grease filter. Press SELECT to continue.

## TROUBLESHOOTING

**! IMPORTANT:** For the warranty to remain valid, any repairs or part replacements must be completed by a Dinex® qualified service technician authorized by Dinex®.

Should you require service please call the Dinex® Hotline at 1-888-673-4639.

The following section explains how to determine if you are experiencing a problem and what can be done to correct the problem. This information can be very helpful if you are calling our Customer Service department to report any operational difficulties.

1. Errors are displayed in easy-to-understand text on the LCD Screen.
2. If an error occurs, press SELECT to clear the error and try again. Or remove the base from the charger and turn the charger OFF and back ON again.
3. If an error persists, remove the base from the charger, turn the power off and unplug the charger, wait 5 seconds, and then plug the charger back in and turn the charger on by pressing the “POWER” button.
4. When the display reads “Waiting for Base”, put the base back on the charger to continue charging. Make sure that the base is properly positioned on the charger.
5. If the base still doesn’t heat, set it aside and take it out of service. If other bases exhibit similar conditions note the error code and call Dinex® Service.

## ERROR CONDITIONS

Errors are indicated by an error code and a message on the LCD Info Center. If there is more than one error

condition, the display will alternate between the error messages. It will continuously repeat this cycle until the errors are reset. Error messages may be reset by pressing SELECT.

If the error persists after pressing SELECT, turn the charger off, unplug the power cord, wait 5 seconds and plug it in again. If the error reappears after this, turn the charger off and call Dinex® Service Department at 1-888-673-4639.

**Message:** Error! (1 or 2) "RFID Communications problem. Possible bad base."

**Condition:** RFID read/write problem.

**Check:** Possible bad electronics chip on the base, or RF antenna/reader problems. If isolated to one or more bases, set them aside and call service about those bases. If the error occurs with many bases, call service about the charger.

**Message:** Error! (3) "Incompatible base."

**Condition:** Base draws too much current.

**Check:** Object being heated is not a Dinex® base or internal charger problem.

**Message:** Error! (4) "Unit overheat! Check fan operation. Allow to cool."

**Condition:** Internal unit temperature too hot.

**Check:** Verify grease filters are not dirty or blocked; airflow is not restricted to the bottom of the unit. Listen for fan operation, fan could be stalled. Ambient operating temperature could be too hot. If the error persists, call Dinex® service.

**Message:** Error! (6) "Incoming voltage too high."

**Condition:** Line voltage measures greater than 110% of unit rated voltage.

**Check:** Line voltage spikes, possible voltage sensing electronics fault. Have maintenance verify line voltage.

**Message:** Critical Error! (7) "Unit requires service."

**Condition:** Inverter drawing power when commanded off.

**Check:** Possible internal electronics fault. Unplug, wait 5 seconds, and replug unit. If the error persists, call Dinex® service.

**Message:** Error! (8) "Check incoming voltage!"

**Condition:** Poor power quality.

**Check:** Major line voltage sags (severe brown out) or internal electronics fault. Have maintenance verify line voltage. Unplug, wait 5 seconds, and replug unit. If the error persists, call Dinex® service.

**Message:** Critical Error! (9) "Time corrupted."

**Condition:** Internal system clock time incorrect.

**Check:** System clock backup battery dead, system clock electronics fault, or electronic noise spike. Cycle POWER button. Unplug, wait 5 seconds, and replug the unit. If the error persists, call Dinex® service.

**Message:** Critical Error! (15) "RFID failure."

**Condition:** RFID reader-to-host communications failure

**Check:** RFID reader fault, internal power supply electronics fault, CPU electronics fault, bad internal interconnect. Call Dinex® service.

**Message:** Critical Error! (16) "Electronics platform fault."

**Condition:** CPU memory corrupt.

**Check:** Internal CPU fault or electrical noise spike. Cycle power. If the error persists, call Dinex® service.

**Message:** "Reheat later." (Clears when base is removed).

**Condition:** Insufficient base cooling time or Base time stamp has corrupted information – but the unit automatically repaired it.

**Check:** Set base aside for reuse after 90 minutes.

## MAINTENANCE

### DURATHERM® CHARGER CLEANING GUIDE

**! ATTENTION:** Do not submerge the charger in water. Do not splash or pour water onto the charger's control panel or into intake/outlet vents. Possible shock hazard may result, and the charger may be damaged. Never spray, wash, or use excessive water on the charger. Before cleaning it is absolutely necessary to unplug the power plug.

1. Unplug the charger before cleaning.
2. Wipe the entire charger off with a damp cloth and mild detergent. Dry the charger before connecting it to its electrical source.
3. Do not use steel wool or abrasive cleaners or chlorinated cleaners on the charger.
4. The heating surface is a high strength material. Please use appropriate care in handling and cleaning
5. Inspect the unit during cleaning. If the top is broken or cracked, do not use the charger, call Dinex® service.

### GREASE AND AIR FILTERS

1. WEEKLY inspect and clean the bottom-mounted grease filter for build-up of debris.
2. To clean, slide the filter out of its holder and run under a faucet or in dishwasher to clear of debris and grease.

**! ATTENTION:** FILTERS MUST BE DRY BEFORE SLIDING BACK INTO THEIR HOLDERS. Do not

operate your DuraTherm® without properly fitted, dry filters.

3. Replacement filters may be obtained by calling Dinex® service. SKU: DXPLE9560.

### INDUCTION BASE CONDITION & CARE

**! ATTENTION:** Never attempt to heat anything other than a Dinex® 8x1-Series Smart base.

#### DURATHERM® BASES

- DX1411003- Onyx
- DX1411061 – Cranberry
- DX1411050 - Blue
- DX1411084 – Sage
- DX1411031 – Latte
- DX1411044 – Graphite Grey

AFTER WASHING THE BASES, STORE IN DINEX® DRYING RACK.

- DXIBDRS90 - HOLDS 90 INDUCTION BASES
- DXIBDRS180 - HOLDS 180 INDUCTION BASES
- DXIBDRS270 - HOLDS 270 INDUCTION BASES

## FREIGHT CLAIMS

Your DuraTherm® Induction Charger was carefully inspected and packed before leaving our factory. The transportation company assumes full responsibility for the safe delivery of this equipment. Dinex® cannot assume responsibility for damage or loss incurred in transit. Visible damage or loss should be noted on the freight bill and signed by the person making the delivery.

A freight claim should be filed immediately with the transportation company. If damage is unnoticed or concealed until the equipment is unpacked, notify the transportation company immediately and tell them you want to file a concealed damage claim. This must be done within seven (7) days after delivery was made. Be sure to retain all packing materials and cartons.

## DINEX® WARRANTY

### STANDARD WARRANTY

Except as indicated otherwise below, Dinex® warrants that the Warranted Products will be free from defects in title, material and workmanship under normal use and service and will perform substantially in accordance with Dinex®'s written technical specifications for the Warranted Products (as such specifications exist on the date the Warranted Products are shipped) (the "Product Specifications"). This warranty covers both parts and labor and is available only to end-users (the "Customers") that purchase the Warranted Products from Dinex® or its authorized distributors. For the purpose of these warranties, a defect is determined by Dinex® after its good faith investigation.

subject to the terms and conditions set forth in Dinex®'s standard terms and conditions.

### SUPPLIES AND ACCESSORIES

Dinex®'s warranty for its supplies and accessories that are shipped with Warranted Products is covered

### SERVICES

Dinex® warrants that any service it provides to Customer will be performed by trained individuals in a workmanlike manner.

### DURATION

Dinex® provides a two-year warranty for the Warranted Products. The warranty period begins on the date the Warranted Products are shipped to Customer. The warranty period for any Warranted Product or part furnished to correct a warranty failure will be the unexpired term of the warranty applicable to the repaired or replaced Warranted Product.

### REMEDIES

If Customer promptly notifies Dinex® of Customer's warranty claim and makes the Warranted Product available for service, Dinex® will, at its option, either repair or replace (with new or exchange replacement parts) the non-conforming Warranted Product or parts of the Warranted Product. With respect to Dinex®'s licensed software, Dinex® will, at its option, either correct the non-conformity or replace the applicable licensed software. Warranty service will be performed without charge from 8:00 a.m. to 5:00 p.m. E S T, Monday - Friday, excluding Dinex® holidays, and outside those hours at Dinex®'s then prevailing service rates and subject to the availability of personnel.

With respect to Dinex®'s warranty for the services it provides to the Customer, the Customer's exclusive remedy shall be the re-performance of the services by Dinex®. The foregoing remedies are Customer's exclusive remedies and Dinex®'s sole liability for warranty claims under this warranty statement. This exclusive remedy shall not have failed of its essential purpose (as that term is used in the Uniform Commercial Code) as long as Dinex® remains willing to repair or replace defective Warranted Products

within a commercially reasonable time after being notified of Customer's warranty claim.

## LIMITATIONS

THESE WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN, ORAL, EXPRESSED, IMPLIED OR STATUTORY. EXCEPT AS PROVIDED HEREIN, NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, SYSTEM INTEGRATION AND DATA ACCURACY, WILL APPLY. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THOSE DESCRIBED IN THIS DOCUMENT AND NO PRIOR STATEMENTS BY ANY OF DINEX®'S REPRESENTATIVES SHALL MODIFY OR EXPAND THESE WARRANTIES. DINEX® AND DINEX®'S AFFILIATES AND REPRESENTATIVES SHALL HAVE NO LIABILITY TO CUSTOMER FOR (1) ANY SPECIAL, PUNITIVE, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE WARRANTED PRODUCTS, REGARDLESS OF WHETHER SUCH LIABILITY SHALL BE CLAIMED IN CONTRACT, TORT, EQUITY OR OTHERWISE, (2) ANY ASSISTANCE NOT REQUIRED UNDER DINEX®'S QUOTATION OR (3) ANYTHING OCCURRING AFTER THE WARRANTY PERIOD ENDS.

DINEX®'S STANDARD WARRANTIES ONLY APPLY TO END-USER-PURCHASERS LOCATED IN THE UNITED STATES AND CANADA. ANY SALE TO END-USER- PURCHASERS OUTSIDE THE UNITED STATES AND CANADA WILL BE SUBJECT TO COMMERCIAL TERMS SPECIFICALLY AGREED BY DINEX® AND THE END-USER PURCHASER. DINEX® MAKES NO WARRANTY, EXPRESS OR IMPLIED, TO END USER PURCHASERS OUTSIDE THE UNITED

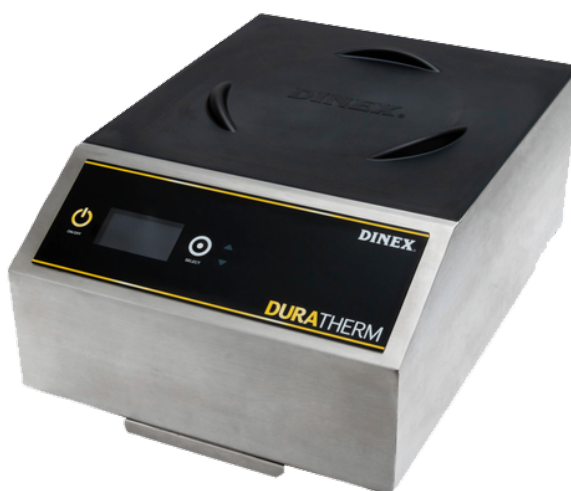
STATES OR CANADA UNLESS OTHERWISE EXPRESSLY AGREED IN WRITING.

These warranties do not apply to, and Dinex® shall not have any obligation to Customer hereunder with respect to, any warranty claim resulting from or arising out of: (i) normal wear and tear; (ii) damage caused by shipping or accident; (iii) damage caused by improper installation, repair or alteration not performed by Dinex®; (iv) the use of the Warranted Product in combination with any software, tools, hardware, equipment, supplies, accessories or any other materials or services, not furnished by Dinex® or recommended in writing by Dinex®; (v) the use of the Warranted Product in a manner or environment, or for any purpose, for which Dinex® did not design or license it, or inconsistent with Dinex®'s recommendations or instructions on use including, but not limited to, power supply requirements identified in Product Specifications; (vi) any alteration, modification or enhancement of the Warranted Product by Customer or any third party not authorized or approved in writing by Dinex®; (vii) Warranted Product manufactured to meet customer specifications or designs; or (viii) any accessories or supplies or other equipment or products that may be delivered with the Warranted Product.

In addition, these warranties do not cover: (i) Any defect or deficiency (including failure to conform to Product Specifications) that results, in whole or in part, from any improper storage or handling, failure to maintain the Warranted Products in the manner described in any applicable instructions or specifications, inadequate backup or virus protection or any cause external to the Warranted Products or beyond Dinex®'s reasonable control, including, but not limited to, power failure and failure to keep Customer's site clean and free of dust, sand and other particles or debris; (ii) the payment or reimbursement of any facility costs arising from repair or replacement of the Warranted Products; (iii) any adjustment, such as alignment, calibration, or other

normal preventative maintenance required of Customer; and (iv) expendable supply items.

# Operating and Maintenance Manual



**[CFS BRANDS]**

DESIGNING **VALUE.**  
DELIVERING **SUCCESS.**

**DINEX®**