User Manual

Ventless Countertop Impingement
Conveyor Ovens

351ICOEVB, 351ICOEVD, 351ICOEV50D,
351ICOEV50B, 351ICOEV32D, 351ICOEV32B

REVISED 03/2025

User Manual

Contents

Intertek 5013357

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Conforms to UL STD 197
Conforms to NSF/ANSI 4
Conforms to UL Std. 710b for Ventless Installation
NSF Tested by ETL

User Manual

Congratulations on your purchase of Cooking Performance Group commercial cooking equipment! At Cooking Performance Group, we take pride in the design, innovation, and quality of our products. To ensure optimal performance, we have outlined the following instructions and guidelines in this manual carefully for your review. Cooking Performance Group declines any responsibility in the event users do not follow the instructions or guidelines stated here.

Product Overview

Conveyor ovens are commonly used in commercial restaurants to continuously and consistently cook products such as pizza, chicken wings, sandwiches, and more. This unit's main structure is a chamber with fans, electric heating elements, and several air guide boxes made to direct streams of hot air throughout the cavity while a conveyor belt traverses the oven chamber. You only need to put the food product on one side of the belt. The product is then transported into the chamber to cook. It comes out on the other side of the chamber after being cooked at the designated preset time and temperature.

Key Features

- Easy to clean
- Stainless steel construction
- Programmable touchscreen controller
- Integrated air impingement

Safety Precautions

CAUTION:

Failure to comply with the following operation instructions could lead to potential hazards and/or unsafe practice and could result in injury and damage to product and property.

NOTICE:

Local codes regarding installation vary greatly from one area to another. The National Fire Protection Association, Inc., states in its NFPA96 latest edition that local codes are “Authority Having Jurisdiction” when it comes to requirement for installation of equipment. Therefore, installation should comply with all local codes. This product is intended for commercial use only. Not for residential use.

WARNING:

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other equipment.

Improper installation, adjustment, alteration, service, or maintenance could lead to property damage, injury, or death. Read the installation, operating, and maintenance instructions thoroughly before installing or servicing CPG equipment. This manual must be retained for future reference.

ELECTRICAL WARNING:

Equipment lines must be reliably grounded, and equipotential terminals of equipment are recommended to be connected. It is also highly recommended to install the leakage protector, which shall be confirmed by the professional and technical personnel of the installation company.

Specifications

	351ICOEVB	351ICOEVD
Dimensions	18.4" H x 31.7" W x 32.5" D	18.4" H x 31.7" W x 32.5" D
Voltage	208V	240V
Amps	30	30
Wattage Consumption	6,700W	6,700W
Wattage Output	6,600W	6,600W
Phase	1	1
Operational Clearances	3" side, 1" back, 36" front	3" side, 1" back, 36" front
Max Temperature	570°F	570°F
Plug Type	Hardwired	Hardwired

For items **351ICOEV50B & 351ICOEV32B** reference column **351ICOEVB.**
For items **351ICOEV50D & 351ICOEV32D** reference column **351ICOEVD.**

NOTE: If there are other pieces of cooking equipment on either side of the oven, there should be at least 24" of space between units.

NOTE: Each oven requires its own electrical connection.

NOTE: You cannot convert voltages with these units. If you have the wrong voltage, you will need to purchase a unit with the correct voltage.

NOTE: Unit comes wired with 1-Phase configuration, but can be converted to 3-Phase. When converted to 3-Phase, the amperage drops to 15A.

Installation Instructions

NOTE: Installation must be performed by a licensed service technician.

1. When installing a ventless model, choose a countertop location and ensure there is adequate clearance left on all sides of the unit (see specification table for minimum operational clearances). Note: Proper ventilation is crucial to safe and optimum performance. Although these units do not need to be placed under a hood, it is imperative to maintain adequate clearance and airflow around the oven.
2. Connect impingement plates to the air outlet within the chamber. Ensure the top impingement finger assemblies are facing down and the bottom impingement finger assemblies are facing up. Move the top impingement finger assembly to the left and make sure it is fixed by the hook. **(Fig. 1)**
3. Put the conveyor belt in place by sliding it through the chamber (from right to left). Ensure the belt is locked in place by securing the drive shaft into the groove by pressing the spring by hand. **(Fig. 2)**
4. Before beginning operation, ensure the left and right side crumb trays are pushed in and the extension plates are attached on both ends of the conveyor belt. **(Fig. 3)**

Fig. 1

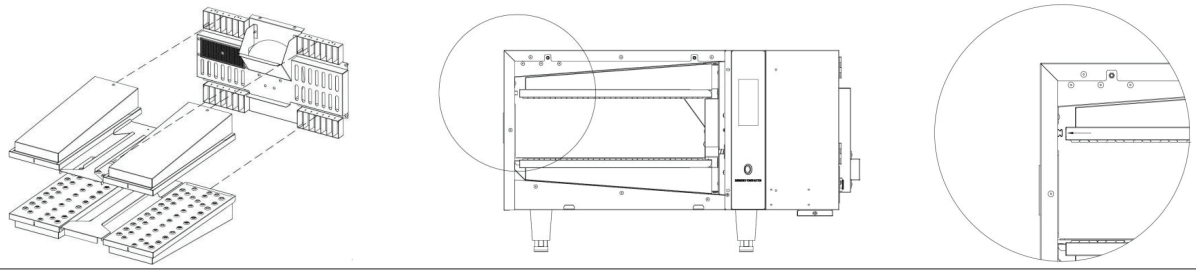


Fig. 2

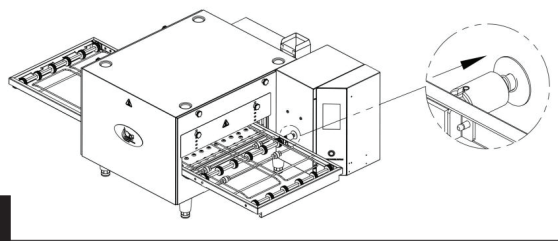
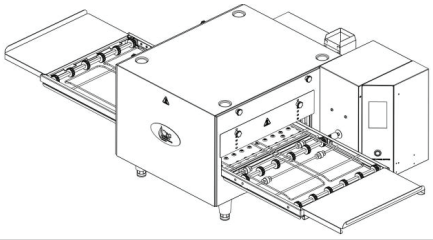


Fig. 3



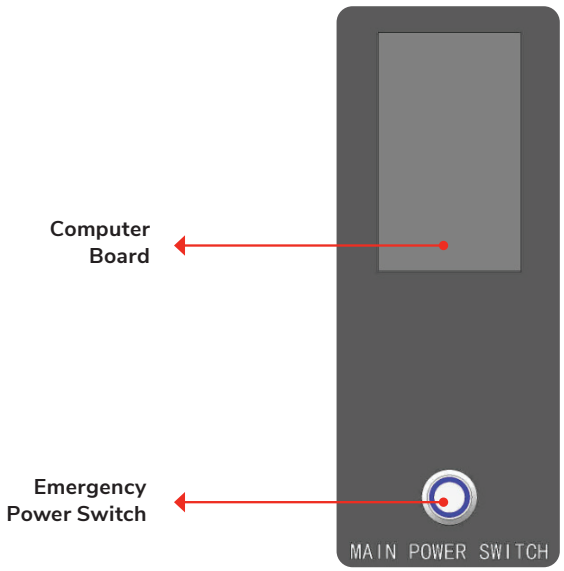
Electrical Connection

1. Ensure voltage shown on unit nameplate matches the voltage being supplied through the electrical connection.
2. The manufacturer requires the installation to be performed according to national and local codes and must be performed by a licensed technician.
3. The unit must be electrically grounded in accordance with all local and national codes (in the USA, the National Electrical code ANSI/NFPA no. 70 is applicable).

Operating Instructions

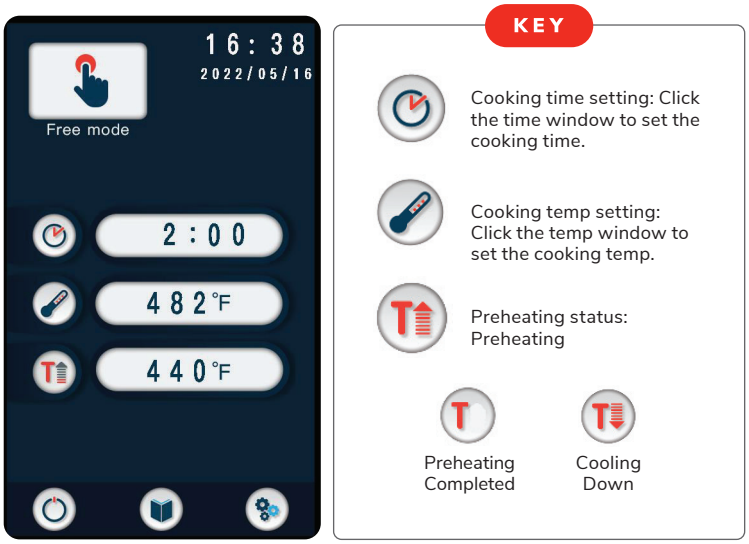
Controller Location and Function

WARNING: When the oven is operating normally, do not turn off the unit using the emergency power switch without progressing through the standard cool down process. Doing this could potentially overheat components, causing internal damage to the unit.



Power On

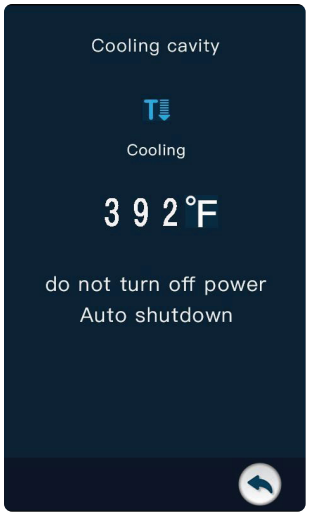
1. When powering on the unit, press the "Emergency Power Switch," causing the touchscreen to light up and enter the boot interface shown below.
2. Next, press the "Power On" button, which will lead you into the "Free Mode" interface shown below.



NOTE: When the temperature on the right side of the temperature icon is not displayed, press "Preheating Status" and the live temperature reading will be displayed on the right side for 5 seconds.

Shut Down

To shut down the oven, long press “Shut Down” for 3 seconds to shut down the unit. If the temperature is higher than 195°F, it will automatically enter cool down mode and shut down once the cool down has been completed.

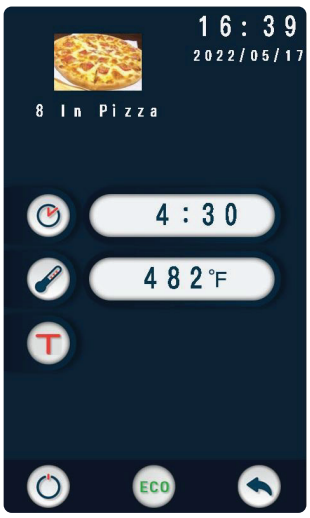


WARNING:
During the automatic cool down process, do not turn off using the emergency power switch. Doing so could cause high temperature damage to the unit!

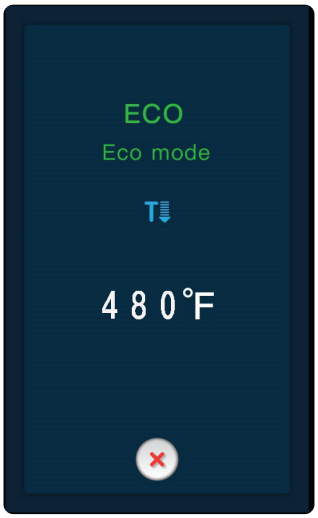
Menu Mode

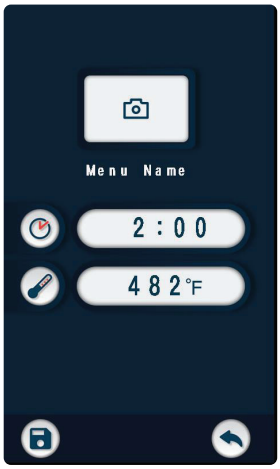
Click “Menu Mode” icon to enter menu list as shown below.

Press the “ECO Mode” button to enter ECO mode as shown below. This maintains the cavity temperature at 250°F, stops the conveyor belt from moving, and darkens the touchscreen to save power during downtime.



Choose a recipe to enter the cooking interface as shown above.



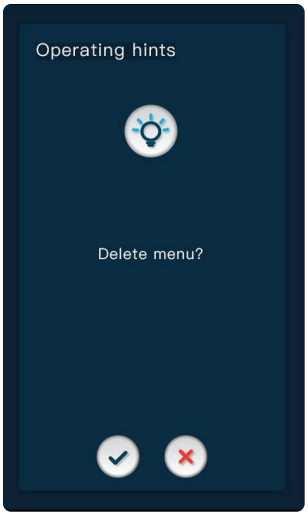


New Menu Setting

1. On the menu list interface, click the "New Recipe" button to enter the new recipe interface shown to the left.
2. Select the picture, set the recipe name, and set the cooking time and temperature.
3. Once complete, click the save button to save the menu.

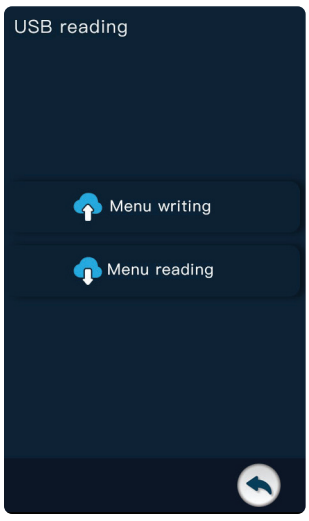
Delete Menu

To delete an existing recipe, long press the recipe on the menu list interface. This will prompt the delete window to pop up as shown below.



USB Read/ Write Menu

On the menu list interface, click "USB Read & Write Menu" to enter the USB read and write menu interface as shown below.

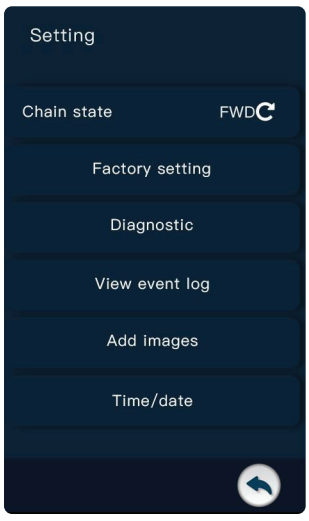


Menu Writing: Input USB to the computer board to upload a recipe.

Menu Reading: Input USB to the computer board to download existing recipe.

Settings

Click the "Settings" button to enter the settings interface screen as shown below.



Chain State: Conveyor belt direction can be changed to forward (right to left) or reverse (left to right).

Factory Setting & Diagnostic: Need password to gain access (contact the manufacturer to obtain password).

View Event Log: View past event information.

Add Images: Upload custom images.

Time/Date: Set the time and date on your unit.

Cleaning & Maintenance

WARNING: Use only non-abrasive cleaners. Abrasive cleaners could scratch the finish of your unit, marring its appearance and making it susceptible to dirt accumulation. Do not use steel wool, other abrasive cleaners, or cleaners/sanitizers containing chlorine, iodine, ammonia, or bromine chemicals, as these will deteriorate the stainless steel and glass material and shorten the life of the unit.

Daily Cleaning

Step	Operation
1	Check that the oven is cooled and the power is completely turned off according to the warnings previously mentioned.
2	Clean the outside of the oven with a soft cloth and medium detergent.
3	Use a hard nylon brush to clean the cooling fan and the cooling air outlet.
4	Check that all cooling fans are operating properly (there is air flowing in and out of the electrical box).
5	Use a hard nylon brush to clean the conveyor belt.
6	Remove crumb pan, clean, and replace.

CAUTION: If the cooling fan does not work properly, replace it immediately. If the oven runs without sufficient cooling, the parts inside the oven will be damaged.

Monthly Cleaning

Step	Operation
1	Caution: Make sure oven is totally powered off and unplugged. Do not clean the oven until it's cooled down.
2	Remove the following components from the oven: crumb trays, extension plates, left and right baffles, and conveyor assembly.
3	When taking out each impingement finger assembly and shutter, take note of the installation position on each assembly to confirm that they are reinstalled in the proper position.
4	Write a number on the three components of each impingement finger assembly that you disassembled to help you reassemble them correctly.
5	Clean the components of the air guide box and clean the inside of the oven with a wet cloth.
6	Assemble the impingement finger assembly, and then install the impingement finger assembly back into the oven according to the position number written on it.
7	Reinstall the left and right baffles.
8	Reinstall conveyor chain assembly.
9	Check the tightness of the conveyor belt, which should be able to pull up 2"-3" (50-70 mm). If necessary, adjust the belt tightness by turning the belt tightness adjusting screws at one end (right side) of the belt retaining shaft.
10	Reinstall the crumb trays.

RECOMMENDED CLEANING AGENTS

NOBLE CHEMICAL INC.

#999SUNBRIGHT

Sunbright

Lemon Dish Soap

NOBLE CHEMICAL INC.

#999KNOCKOUT

Knockout

Heavy-Duty Oven & Grill Degreaser & Carbon Remover

NOBLE CHEMICAL INC.

#147BLASTQT

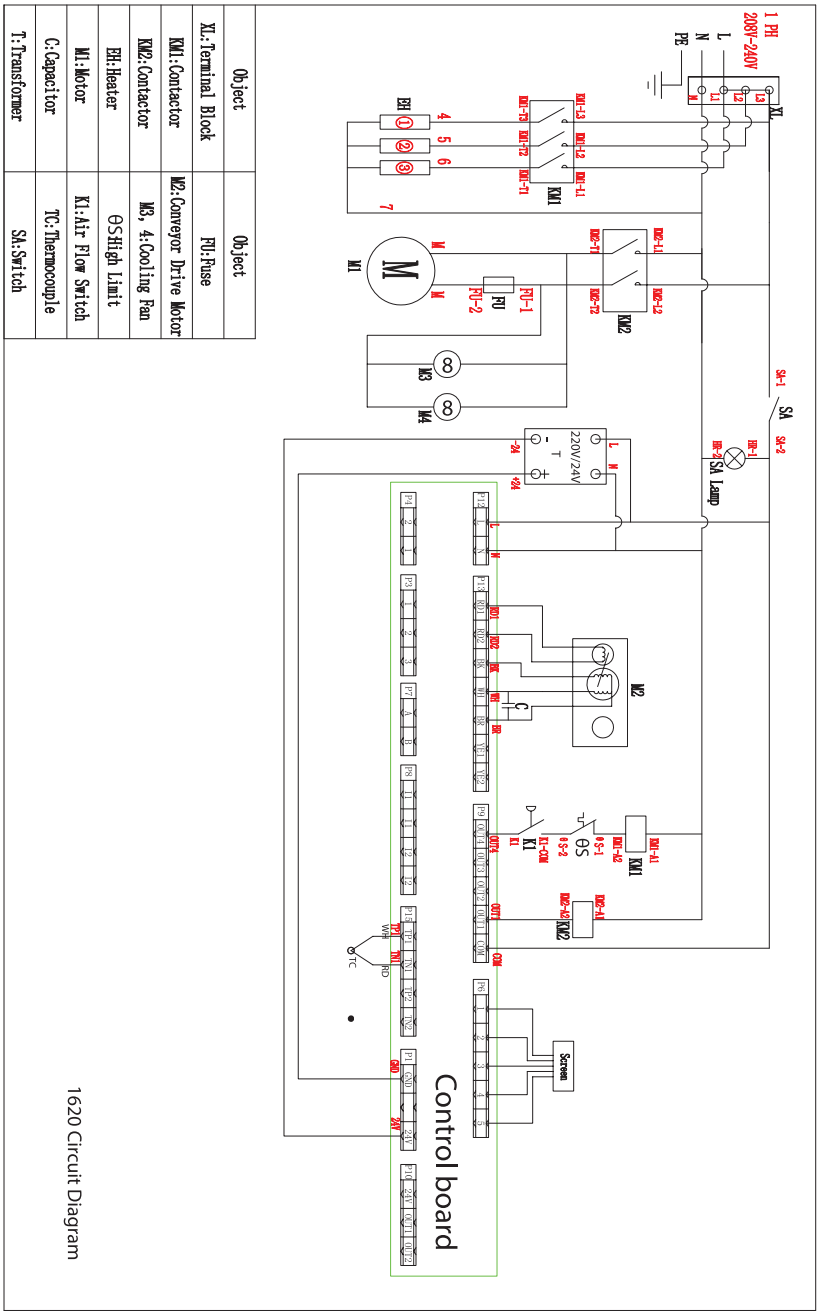
Blast

Liquid Oven & Grill Cleaner

Electrical Diagrams

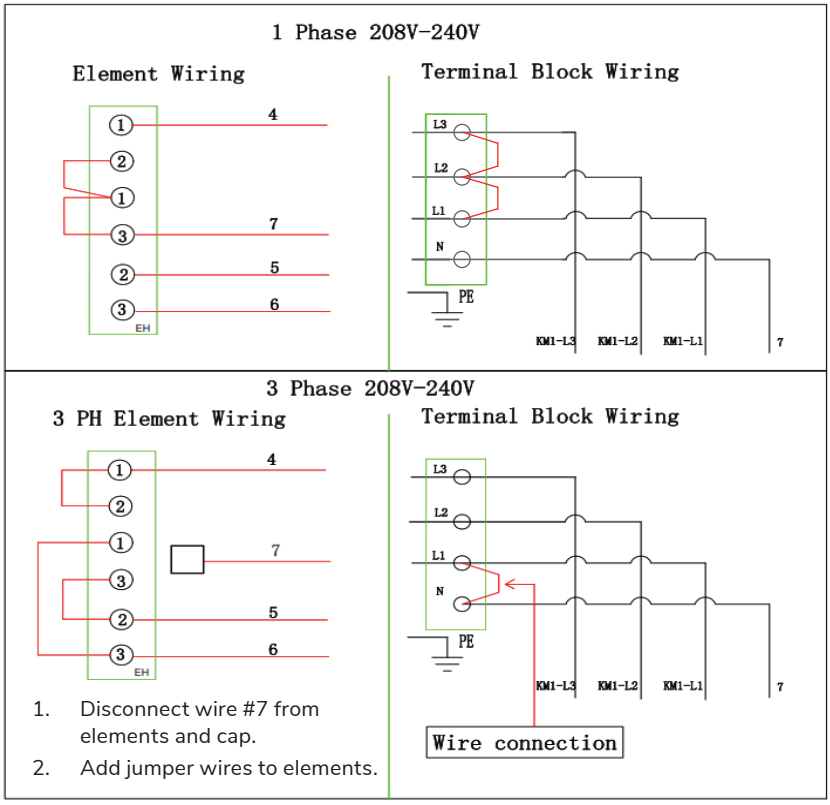
1 Phase:

WARNING: Warranty may be void if this unit is not installed by a licensed and insured food service technician or electrician.



Electrical Diagrams

1-Phase to 3-Phase Field Conversion Diagram:



1. Disconnect wire #7 from elements and cap.
2. Add jumper wires to elements.

Terminal Block Wiring Change

Step 1: Locate the incoming power terminal block inside the control box.
Step 2: Remove only the jumper wire that connects L1 and L2 on the terminal block.
Step 3: Remove only the jumper wire that connects L2 and L3 on the terminal block. (Save this jumper wire to be used in next step.)
Step 4: Use the jumper wire removed from Step 3 and install connecting L1 and N terminals.
Step 5: Connect one incoming leg of power to L1.
Step 6: Connect the other incoming leg of power to L2.
Step 7: Connect the third incoming leg of power to L3.
Step 8: Verify that all screws are tight and wires are secure on the terminal block area after wiring has been changed.

Control box wiring is now complete.

Heating Element Wiring Change

Remove the back panel of the oven and gain access to the wire connections on the element.

Step 1: Remove wire #7 and use a high-temperature porcelain nut to cap off wire. Be sure to use high-temperature fiberglass tape to secure cap.
Step 2: Remove jumper wires from connections 3 and 1 on heating element. Remove jumpers from connections 1 and 2 on heating element.
Step 3: Use jumpers provided to connect terminals 3 and 1 on element, 2 and 3 on element, and 1 and 2 on element as shown.

Element wiring is now complete.
Verify change by running the oven and using an amperage clamp on each incoming leg of power to see if all three legs draw amperage during heating cycle.