

### **Operator's Manual**

### Converge<sup>®</sup> Deluxe Control

CMC-H2H CMC-H3H

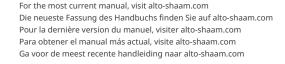


Structured Air Technology™

MN-47239-EN

REV.04 04/24

**EN** 





### **Manufacturer's Information**

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Manufacturer Alto-Shaam, Inc.

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**Original instructions** The content in this manual is written in American English.



## FOREWORD

### **Enjoy your Alto-Shaam Converge Oven!**

Structured Air Technology™ The Alto-Shaam Converge Oven features Structured Air Technology, giving you two or three ovens in one. It combines the flexibility of a multi-cook oven and the versatility of combi cooking in each oven chamber. Two or three independent ovens in one give you the freedom to steam, air fry, bake, grill, and more at the same time without flavor transfer—all in a ventless, self-cleaning design. It provides the ability to control temperature, fan speed, humidity level, and cook time in each individual oven chamber.

### **Extend Your Manufacturer's Warranty**

Register

Register your Alto-Shaam appliance online. Registering your appliance ensures prompt service in the event of a warranty claim.

Your personal information will not be shared with any other company.

alto-shaam.com/warranty

### Alto-Shaam 24/7 Emergency Repair Service

Call 800-558-8744 to reach our 24-hour emergency service call center for

immediate access to local authorized service agencies outside standard business hours. The emergency service access is provided exclusively for Alto-Shaam equipment and is available throughout the United States through Alto-Shaam's

toll free number.

**Availability** Emergency service access is available seven days a week, including holidays.



### FOREWORD

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Manufacturer's Information	 2
Foreword  Enjoy your Alto-Shaam Converge Oven!	 3
Table of Contents	5
Safety The Meaning of Signal Words	 8
Labels Label Locations	1 <b>3</b> 13
Installation  Dimension Drawings	 23 24 26 32 35 40 46 49
Operation  How to Turn On and Turn Off the Oven  How to Preheat the Oven.  How to Cook with Programmed Recipes.  How to Cook in Manual Mode.  How to Lock and Unlock the Screen.  How to Cool Down the Oven.  How to Create a Recipe.  How to Modify, Duplicate, or Delete a Recipe.  How to Create a Category.  How to Backup or Restore Settings with a USB Drive.  How to Save Recipes to a USB Drive.  How to Update Software with a USB Drive.  How to Change the Home Screen.	54 56 58 62 63 64 69 71 73 75 77



### TABLE OF CONTENTS

How to Enable/Disable the Handle Light	. 85
How to Enable/Disable Automatic Preheat	. 86
How to Enable and Use the Replay Function	. 87
How to Lock Recipe Editing, Manual Cooking, or the Settings Scree	en 89
How to View Oven Information	. 91
How to Download HACCP Data	. 92
How to Calibrate the Temperature Probe	. 94
Maintenance	97
Maintenance Schedule	. 97
How to Clean the Oven	. 99
How to Descale the Catalyst	103
How to View the Cleaning Log	106
How to Set the Cleaning Time	107
Troubleshooting	109
Error Codes	109
What to do if the Fan Indicator Light Illuminates	112
What to do if the High Limit Screen Displays	113
Notifications	115
Notifications	115
Conditions for Ovens Installed in New York City	118
Warranty	119
Warranty	119
Declaration of Conformity	121



## SAFETY

### The Meaning of Signal Words

This manual contains signal words where needed. These signal words must be obeyed to reduce the risk of death, personal injury, or equipment damage. The meaning of these signal words is explained below.



### DANGER

Danger indicates a hazardous situation which, if not avoided, will result in serious injury or death.



### **WARNING**

Warning indicates a hazardous situation which, if not avoided, could result in serious injury or death.



### **CAUTION**

Caution indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

Notice indicates a situation which, if not avoided, could result in property damage.

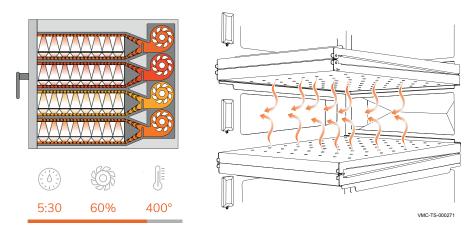


**NOTE:** Note indicates additional information that is important to a concept or procedure.

### **Appliance Description and Intended Use**

### Structured Air Technology<sup>®</sup>

Alto-Shaam Structured Air Technology system allows for multiple, unique cooking chambers within the same oven. Air is delivered by a blower located in the rear of each cooking chamber. Air travels vertically through the jet plates into each chamber. The food product is blown with hot air from above and below. Structured Air plates at the top and bottom of the oven complete the upper and lower cooking chambers. Each cooking chamber is independent from the other and includes its own blower and heat source. The operator can select the optimal cooking temperature, air velocity, humidity level, and cook time for each chamber either manually or through programmed recipes.



### **Nomenclature**

CMC-H2H means Combi Multi-Cook, half-size, two-chamber, and hotel pans. CMC-H3H means Combi Multi-Cook, half-size, three-chamber, and hotel pans.

### **Configurations**

Converge is available in two configurations: two- and three-chamber.

### Intended use

Converge ovens are intended to cook and steam food only. Any other use is prohibited. This appliance is intended to be used for commercial applications, for example in kitchens of restaurants, canteens, hospitals and in commercial enterprises such as bakeries, butcheries, etc., but not for continuous mass production of food.

### **Residual risks**

This oven is manufactured using ISO-certified processes. The oven is designed with maximum safety in mind; however, there are residual risks to operators of this oven. Residual risks include exposure to heat and exposure to hot food products.

### Possible misuse

Misuse of this oven includes loading the oven with anything other than a food product. Misuse also includes heating or cooking any food product that contains alcohol or other flammable substance.



### **Safety Precautions**

### Before you begin

Read and understand all instructions in this manual.

### **Electrical precautions**

Obey these electrical precautions when using the appliance:

- Connect the appliance to a properly grounded outlet. Do not use the appliance if it is not properly grounded. Consult an electrician if there is any doubt that the outlet used is properly grounded.
- Keep the cord away from hot surfaces.
- Do not attempt to service the appliance or its cord and plug.
- Do not operate the appliance if it has a damaged cord or plug.
- Do not immerse the cord or plug in water.
- Do not let the cord hang over the edge of a table or counter.
- Do not use an extension cord.

### **Usage precautions**

Obey these usage precautions when using the appliance:

- Only use this appliance for its intended use of heating or cooking.
- Always keep liquids, or foods that can become liquid when heated, level and at or below eye level where they can be seen.
- Use utensils and protective clothing such as dry oven mitts when loading and unloading the appliance.
- Use caution when using the appliance. Floors adjacent to the appliance may become slippery.
- Do not cover or block any of the openings of this appliance.
- Do not cover racks or any other part of this appliance with metal foil.
- Do not keep anything underneath the oven. Cooling air circulates through the bottom for the electronics.
- Do not use this appliance near water such as a sink, in a wet location, near a swimming pool, or similar locations.
- Do not unplug or disconnect the appliance immediately after cooking. The cooling fans must stay on to protect electrical components.

### Maintenance precautions

Obey these maintenance precautions when maintaining the appliance:

- Obey precautions in the manual, on tags, and on labels attached to or shipped with the appliance.
- Do not store the appliance outdoors.
- Do not clean the appliance with metal scouring pads.
- Do not use corrosive chemicals when cleaning the appliance.
- Do not use a hose, water jet, or steam cleaner to clean the exterior of the appliance.
- Do not use the appliance cavity for storage.
- Do not leave flammable materials, cooking utensils, or food inside the appliance when it is not in use.
- Do not remove the top cover or side panels. There are no user-serviceable components inside.



### **Operator training**

All personnel using the appliance must have proper operator training. Before using the appliance:

- Read and understand the operating instructions contained in all the documentation delivered with the appliance.
- Know the location and proper use of all controls.
- Keep this manual and all supplied instructions, diagrams, schematics, parts lists, notices, and labels with the appliance if the appliance is sold or moved to another location.
- Contact Alto-Shaam for additional training if needed.

### Operator qualifications

Only trained personnel with the following operator qualifications are permitted to use the appliance:

- Have received proper instruction on how to use the appliance.
- Have demonstrated their ability with commercial kitchens and commercial appliances.

The appliance must not be used by:

- Persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision concerning use of the appliance by person responsible for their safety.
- People impaired by drugs or alcohol.
- Children should be supervised to ensure that they do not play with the appliance.
- Children shall neither clean nor maintain the appliance.

### Condition of appliance

Only use the appliance when:

- All controls operate correctly.
- The appliance is installed correctly.
- The appliance is clean.
- The appliance labels are legible.

### Servicing the appliance

- Only trained personnel are permitted to service or repair the appliance. Repairs that are not performed by an authorized service partner or trained technician will void the warranty and relieve Alto-Shaam of all liability. Original manufacturer's replacement parts may be substituted; however, these parts must be of equal quality and specifications as those provided by Alto-Shaam.
- To prevent serious injury, death or property damage, have the appliance inspected and serviced at least every twelve (12) months by an authorized service partner or trained technician.
- Contact Alto-Shaam for the authorized service partner in your area.

### Sound power

The A-weighted sound pressure level is below 70 dB(A).



### Personal Protective Equipment (PPE)

Wear the following Personal Protective Equipment (PPE) while cleaning the appliance:

- Protective gloves
- Protective clothing
- Eye protection
- Face protection



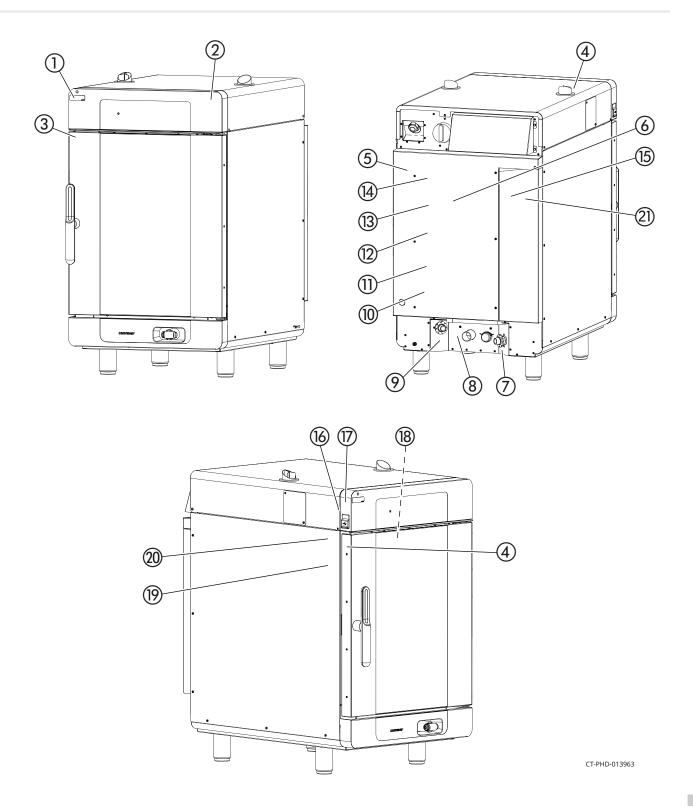
**SAFETY** 

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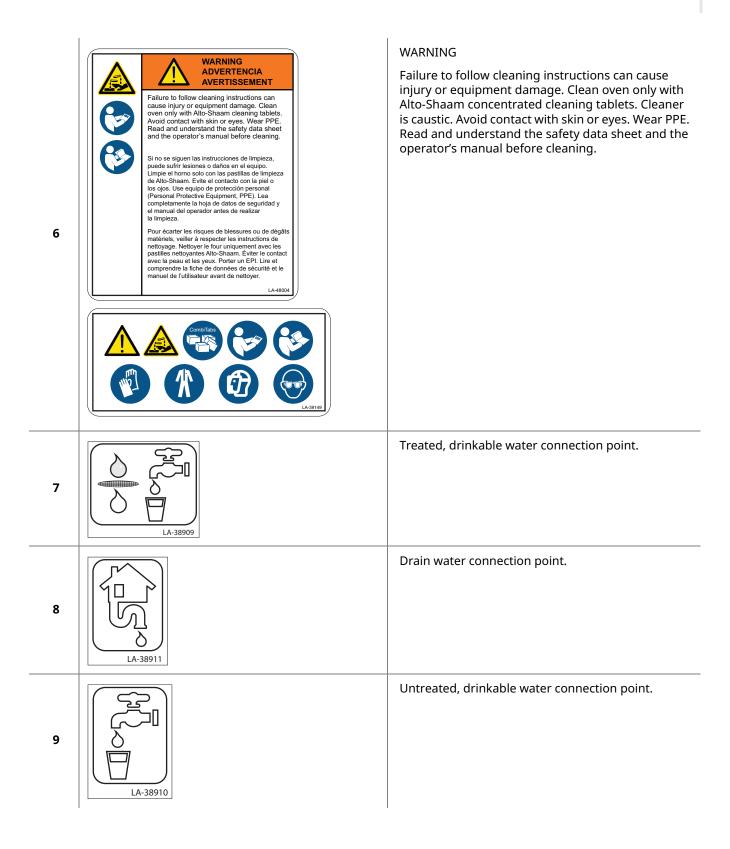
### LABELS

### **Label Locations**

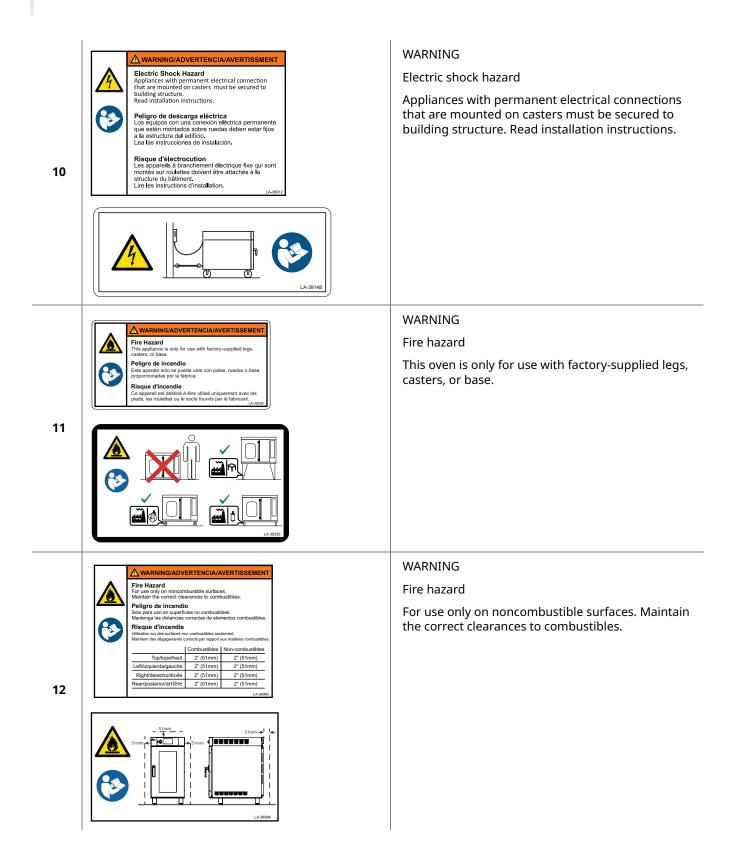




1	Check fans Compruebe los ventiladores Vérifiez les ventilateurs  LA-39033	Check fans
2	MADE IN U.S.A.	Made in U.S.A.
3		WARNING Steam. Open door carefully.
4		WARNING Hot surface
5	ALTO-SHAAM.  Every Alto-Shaam product is precision calibrated prior to release from the factory to ensure accurate temperature control.  CALIBRATION TECHNICIAN	Every Alto-Shaam product is precision calibrated prior to release from the factory to ensure accurate temperature control.







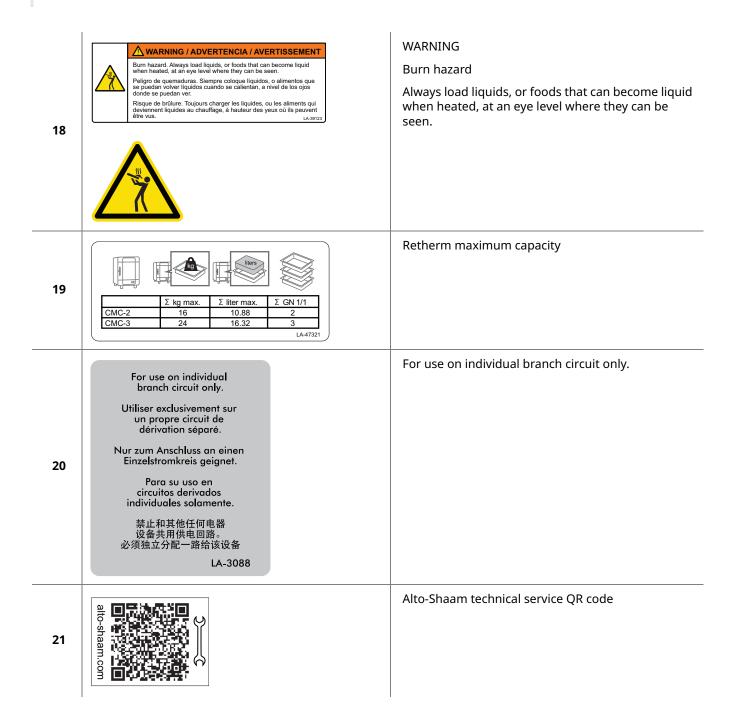
WARNING Electric Shock Hazard
To reduce the risk of electric shock, do not remove or open cover. No user-serviceable parts inside.
Refer servicing to qualified personnel.
Qualified personnel: Disconnect power before servicing. Electric shock hazard To reduce the risk of electric shock, do not remove Qualified personnei: uscurireci pover usurur servicing. Peligro de descarga eléctrica. Para reducir el riesgo de descarga eléctrica, no retire ni atra la cubierta. No hay piezas en el interior a la que se les pueda realizar mantenimiento. Derive el mantenimier a personal calificado. Desconacte la energia antes de realizar mantenimiento. or open cover. No user-serviceable parts inside. Refer servicing to qualified personnel. realizar mantenimiento.

Danger de décharge électrique
Pour réduire le risque de décharge électrique, ne par
ouvrir ni retirer le capot. Ne contient pas de pièces
réparables par l'utilisateur. Confier les réparations à du
personnel qualifié.
Personnel qualifié.
Personnel qualifié : Sectionnez l'alimentation avant
toute intervention.

LA-38 Qualified personnel: Disconnect power before 13 servicing. **Note:** This label is only used on UL-certified appliances Use \_\_\_\_\_AWG for supply connections.
Use only copper wires suitable for temperatures ≥ 90°C. that have 120V to ground wiring. Do not connect to a circuit operating at more than 150 VAC to ground.

For use on individual branch circuits only. Use \_\_\_\_\_ AWG for supply connections. Use AWG \_\_\_\_\_ para las conexiones de suministro.
Use solo cables de cobre aptos para temperaturas mayores que 90 °C.
No conecte a un circuito que (micnoiea a más de 150 °C A a tierra.
Para su uso en circuitos derivados individuales solamente. Use only copper wires suitable for temperature less 14 than or equal to 90°C. Utiliser du calibre AWG pour les raccordements électrique Utiliser exclusivement des conducteurs en cuivre qui conviennent à des températures 2 90°C. Ne pas racorder à un circuit fonctionnant sous plus de 150 VCA par rapport à la terre. Utiliser exclusivement sur des circuits de dérivation propres. Do not connect to a circuit operating at more than 150 VAC to ground. LA-38852 For use on individual branch circuits only. Vector Multi-Cook Oven Patents **VECTOR® Multi-Cook Oven patents** U.S. 10,890,336 U.S. 10,337,745 U.S. 10,088,172 U.S. 10,088,173 U.S. 9,879,865 15 Additional Patents Pending Weitere Patente angemeldet Brevets supplémentaires en instance Patentes adicionales pendientes 其他专利正在申请中 Certificate of Approval number, Fire Department -City of New York. COA #5879 16 I A-46997 Security seal **17** 





_	VMC-H2, VMC-H3, VMC-H4 VMC-H2H, VMC-H3H, VMC-H4H  CMC-H2H CMC-H3H CMC-H3H	Press and release the high limit temperature reset button(s).
-	LA-36443-E	Equipotential terminal
_		Consult instructions for operation and use.

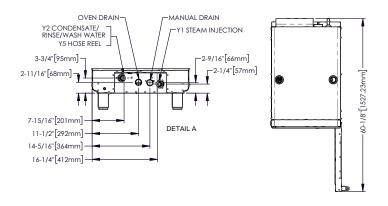
**LABELS** 

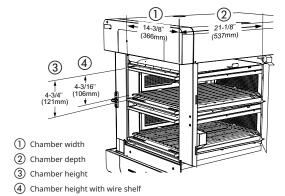
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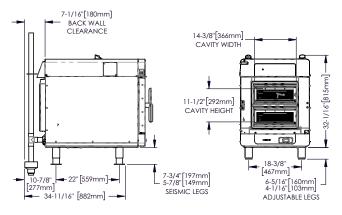


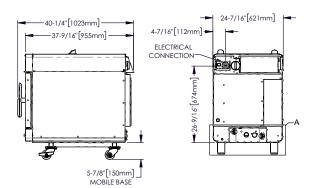
# INSTALLATION

### **Dimension Drawings**

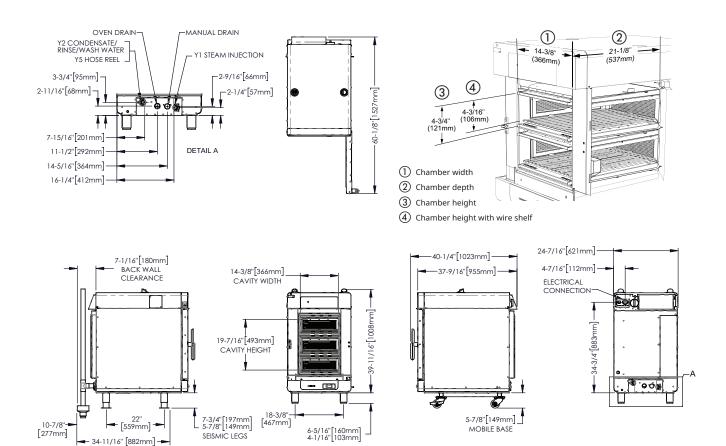








### **INSTALLATION**



### **How to Unpack the Oven**

### Before you begin

### Make sure you have:

- An appropriate lifting device and enough personnel to safely move and position the weight of the oven.
  - $_{\square}$  CMC-H2H: 304 lb (138 kg)
  - □ CMC-H3H: 394 lb (179 kg)
- Cutting tools to remove the packaging.

### Unpack the oven

To unpack the oven, do the following.

Step	Action			
1.	<b>Remove</b> the box. <b>Save</b> all packing materials for inspection by the carrier.			
	NOTE: Examine the appliance for damage. If the appliance has been damaged, do not use the appliance until it has been inspected by an authorized service provider. Contact your carrier or Alto-Shaam customer service.			
2.	<b>Remove</b> the shrink wrap.			
3.	<b>Cut</b> the restraining straps.			
4.	. <b>Remove</b> the probe from the foam block.			
5.	Remove the foam from each chamber.			
6.	Remove the oven from the pallet.			
7.	<b>Remove</b> the protective paper from the outside of the oven.			

### Result

The oven is now unpacked.



### **ChefLinc Installation Checklist**

Place this form with the oven's records.

### **Connectivity Pre-Installation Checklist**

Will you connect the oven to the Internet using Wi-Fi or Ethernet?	Wi-Fi	Ethernet	Unable to answer	
Wi-Fi Connections				
Is the Wi-Fi network that is to be used a WPA2 secured network?	Yes	No	Unable to answer	
Is this network also used to send and receive point of sale information (credit card data, register receipts)? This is NOT recommended for any installation.	Yes	No	Unable to answer	
Have you been provided with the network name (SSID) for the oven to connect to?	Yes	No	Unable to answer	
Have you been provided the password for the Wi-Fi network to be used?	Yes	No	Unable to answer	
At the final location that the oven will be installed, can you connect to the Wi-Fi system with your phone?	Yes	No	Unable to answer	
Using your phones Wi-Fi connection, are you able to connect to alto-shaam.com? You are testing for any additional security on the network to block access to external sites. You will need to turn off your cellular service on your phone to make sure you're using the Wi-Fi network.	Yes	No	Unable to answer	
Ethernet Connections		'	•	
At the final location that the oven will be installed, is there an open Ethernet port conveniently located?	Yes	No	Unable to answer	
Is the Ethernet port live (providing Internet access)?	Yes	No	Unable to answer	
Is the Ethernet harness accessory ordered with the unit?	Yes	No	Unable to answer	
Is there site action required?	Yes	No		

Continued on next page



Action required:

### **Connectivity Installation Checklist** Refer to Network Status screen

What is your connection type?	Wi-Fi	Ethernet
What color is the network status icon?	Red Yellov	v Green
What is the Internet status?	Connected	Not connected
What is the cloud status?	Connected	Not connected
What is the update server status?	Connected	Not connected
What is the SSID (network name)?		
What is the password?		
What is the IP address?		
What is the Front End (FE) software version number?		
What is the Back End (BE) software version number?		
What is the Control Board (CB) software version number?		
Is this the latest software version?		
Validate via: https://www.alto-shaam.com/en/customer-support/software-downloads	Yes	No



### How to Install the Water Supply and Drain

### Before you begin



**NOTE:** Refer to the detailed instructions that come with the installation kit.

NOTICE

Significant damage to the appliance cavity, elements, or heat exchanger could result from improper water quality. Failure to meet the water quality requirements will void the warranty.

NOTICE

Do not install a stacked set of ovens or a floor standing oven directly over a drain. Steam rising from the drain may adversely affect operation and damage electrical components.

### **Exception:**

An oven on a stand that includes a solid bottom or solid shelf may be installed directly over a drain because the shelf or solid bottom will prevent steam from entering the oven.

### Make sure:

- The supply lines are flexible to allow the oven to be moved when service or cleaning is needed.
- For units under IEC/EN jurisdiction: This appliance is intended to be permanently connected to the water mains. Comply with local codes when installing this appliance.
- The incoming water supply is shut off when the oven is not being used.

### Requirements

### Water requirements:

- Two (2) water inlets, drinking quality.
- One treated water inlet: 3/4" NPT male connection. Line pressure 30 psi (200 kPa) minimum dynamic and 145 psi (1000 kPa) maximum static at a minimum flow rate of 0.16 gpm (0.6 L/min).
- One untreated water inlet: 3/4" NPT male connection. Line pressure 30 psi (200 kPa) minimum dynamic and 145 psi (1000 kPa) maximum static at a minimum flow rate of 4.0 gpm (15 L/min).
- Water temperature range: 50°-140°F (10°-60°C)
- One (1) 3/4" ID water supply shut-off valve and back-flow preventer per oven where required by local code.
- Water drain: 1-1/2" No HUB connection with air gap at floor. Materials must withstand temperatures up to 200°F (93°C).
- Drain may not be directly below oven.



It is the responsibility of the operator to make sure the incoming water supply is tested and meets the compliance requirements with the published water quality standards listed below. Non-compliance could damage the oven and void the warranty. Alto-Shaam recommends using OptiPure products to treat the water.

Contaminant	Treated Water	Untreated Water
Free Chlorine	less than 0.1 ppm (mg/L)	less than 0.1 ppm (mg/L)
Hardness	30-70 ppm	30–70 ppm
Chloride	less than 30 ppm (mg/L)	less than 30 ppm (mg/L)
рН	7.0-8.5	7.0-8.5
Silica	less than 12 ppm (mg/L)	less than 12 ppm (mg/L)
Total Dissolved Solids (TDS)	50-125 ppm	50–360 ppm

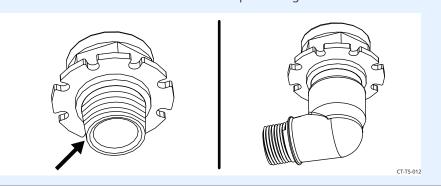
### Installing the water supply

To install the water supply, do the following.

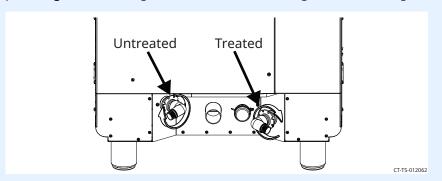
-:	
Step	Action
1.	<b>Flush</b> the water line at the installation site.
2.	<b>Install</b> adequate backflow protection to comply with applicable federal, state, and local codes.
3.	<b>Remove</b> the two adapter fittings on the water inlets.
	Untreated Treated



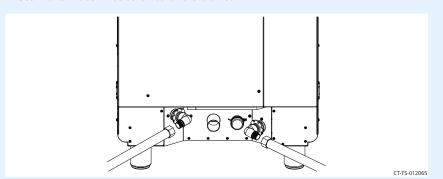
Apply thread sealant to the threads of the adapter fittings.
 Install the elbow from the kit onto the adapter fitting.



5. **Install** the adapter fittings and elbows onto the water inlets with slip joint pliers. **Tighten** the fittings until the elbows have a slight downward angle.



6. **Install** the water hoses onto the elbows.

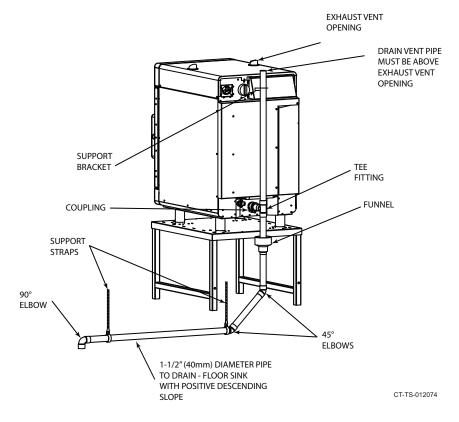


### Installing the water drain

Install a 1-1/2" (40mm) diameter connection, drain line and clamp into place. The drain line must always slope downward away from the oven. An end-of-drain air gap may be required by local code. Vertical air vent required.

NOTICE

In the U.S.A., this equipment must be installed to comply with the Basic Plumbing Code of the Building Officials and Code Administrators International, Inc. (BOCA), and the Food Service Sanitation Manual of the Food & Drug Administration (FDA).

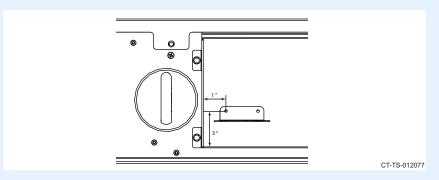




To install the water drain, do the following.

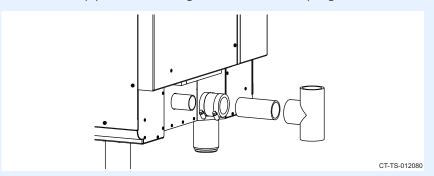
7. **Drill** a hole for the mounting bracket using the dimensions in the image.

**Install** a screw into the drilled hole. Drill a hole for the second mounting screw. Install the screw.

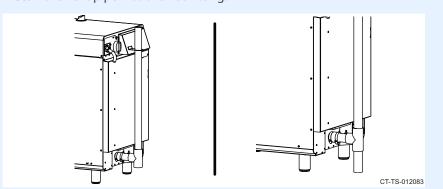


8. **Install** the no hub coupling onto the over drain.

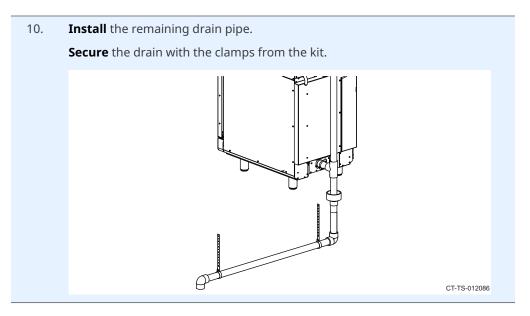
**Cut** a short piece of drain pipe. **Install** the pipe into the Tee fitting from the kit. **Install** the pipe and Tee fitting into the no hub coupling.



9. **Install** the vent pipe into the Tee fitting.







Result

The water supply and drain are now installed.

### How to Install the Oven (60 Hz Cord and Plug Models)

### Before you begin

### Make sure you have:

- An appropriate lifting device, and enough personnel, to safely move and position the weight of the oven.
  - CMC-H2H: 304 lb (138 kg)CMC-H3H: 394 lb (179 kg)

### Requirements

- The oven must be installed on a level surface.
- The oven must not be installed in any area where it may be affected by steam, grease, dripping water, high temperature, or any other severely adverse conditions.
- The oven is not intended for built-in installation.

### **Voltages**

	v	Ph	Hz	A	Breaker*	kW	Plug Configuration**
CMC-H2H	208	1	60	32	50	6.7	NEMA 6-50P
	240	1	60	37	50	8.9	NEMA 6-50P
	208	3	60	19	30	6.7	NEMA 15-30
	240	3	60	22	30	8.9	NEMA 15-30
СМС-НЗН	208 240	3	60 60	28 32	50 50	10.1 13.4	

<sup>\*</sup>Electrical connections must meet all applicable federal, state, and local codes.



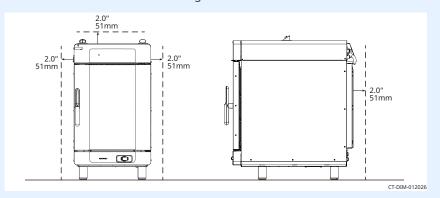
<sup>\*\*</sup>For use on individual circuit branch only.

### Position the oven

To position the oven, do the following.

### Step Action

- 1. **Make sure** that:
  - The location where the oven is being installed is rated to support the weight of the oven;
  - The oven is within five feet (1.5m) of the appropriate electrical outlet;
  - You follow the oven clearance guidelines.



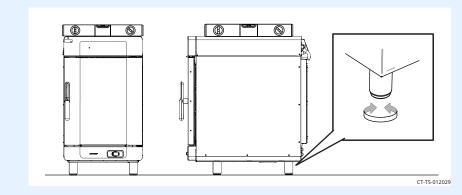
2. **Move** the oven to the installation location and onto the final resting surface.

The oven is now correctly positioned.

### Level the oven

To level the oven, do the following.

3. **Check** the level of the oven using a spirit (bubble) level. Check front to back and side to side.



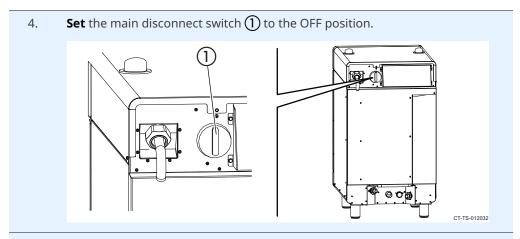
**Adjust** the legs, if necessary, to achieve levelness.

The oven is now correctly positioned.



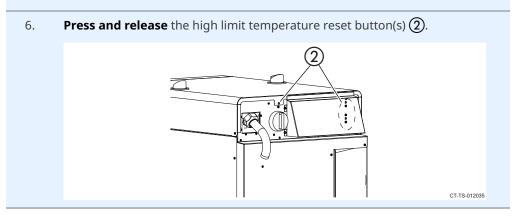
### **Connect power**

To connect electric power to the oven, do the following.



5. **Connect** the plug to the electrical outlet.

### Press reset button(s)



Result

The oven is now installed and ready to be used.

### How to Install the Oven (50 Hz Models Without Cord or Plug)

### Before you begin

### Make sure you have:

- An appropriate lifting device, and enough personnel, to safely move and position the weight of the oven.
  - CMC-H2H: 304 lb (138 kg)CMC-H3H: 394 lb (179 kg)

### Requirements

- The oven must be installed on a level surface.
- The oven must not be installed in any area where it may be affected by steam, grease, dripping water, high temperature, or any other severely adverse conditions.
- The oven is not intended for built-in installation.
- For 3-phase applications, an RCD Type B protection device must be installed. The device must accommodate a leakage current that may exceed 10 mA.
- If a power cord is used for the connection of the product, an oil resistant cord like H05RN or H07RN or equivalent must be used.

### **Voltages**

	v	Ph	Hz	A	Breaker*	kW
CMC-H2H	380 415	3	50 50	11 12	30 30	7.5 8.9
СМС-НЗН	380 415	3 3	50 50	17 19	50 50	11.3 13.4

<sup>\*</sup>Electrical connections must meet all applicable federal, state, and local codes.



### Wire sizes

60335-1 IEC:2010

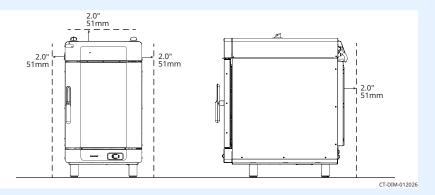
Rated current of appliance A	Nominal cross-sectional area mm <sup>2</sup>
>0.2 - ≤3	0.5
>3 - ≤0	0.75
>6 - ≤10	1.0
>10 - ≤16	1.5
>16 - ≤25	2.5
>25 - ≤32	4
>32 - ≤40	6
>40 - ≤63	10
	I

### Position the oven

To position the oven, do the following.

### Step Action

- 1. **Make sure** that:
  - The location where the oven is being installed is rated to support the weight of the oven;
  - The oven is within five feet (1.5m) of the appropriate electrical outlet;
  - You follow the oven clearance guidelines.



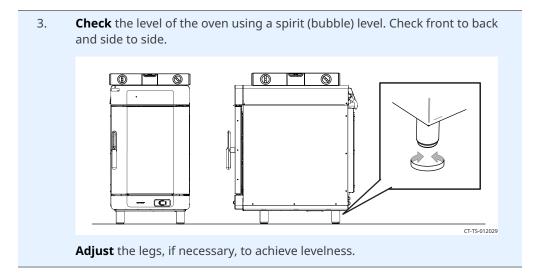
2. **Move** the oven to the installation location and onto the final resting surface.

The oven is now correctly positioned.



#### Level the oven

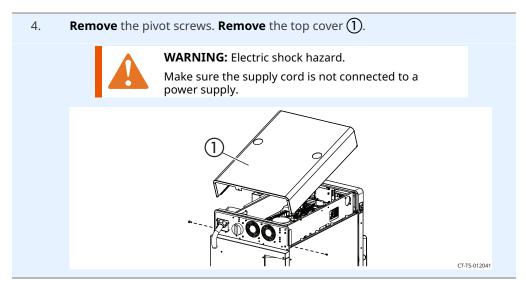
To level the oven, do the following.



The oven is now correctly positioned.

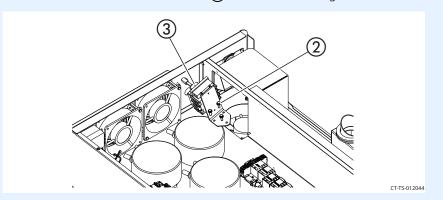
#### **Connect the wiring**

To connect the wiring, do the following.

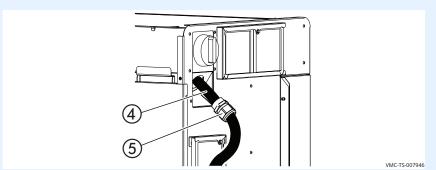




Remove the bottom 3 screws ② from the mounting bracket.
 Remove the main disconnect switch ③ from the mounting bracket.



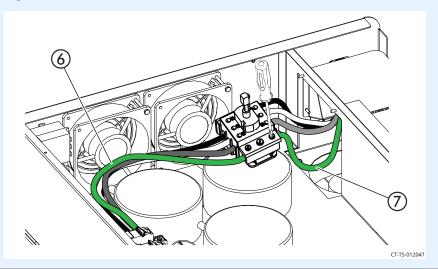
6. **Install** the cord **4** through the cord grip **5** and install in the oven. **Install** the lock nut onto the cord grip.



7. **Connect** the supply cord to the appropriate terminals (L1, L2, L3, etc.) in accordance with local codes and regulations.

**Install** the ground wire **6**.

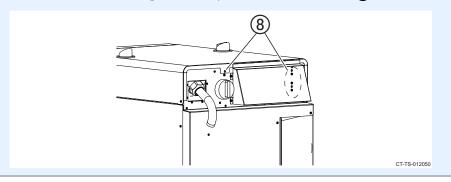
**Leave** an extra loop  $\bigcirc$  so that current-carrying conductors become taut before the ground wire if the cord is accidentally pulled. Follow applicable regulations.



- 8. **Re-install** the main disconnect switch.
- 9. **Re-install** the mounting bracket.
- 10. **Re-install** the top cover.

#### Press reset button(s)

11. **Press and release** the high limit temperature reset button(s) **(8)**.



Result

The oven is now installed and ready to be used.



# How to Install the Oven on a Stand

#### Before you begin

#### Make sure you have:

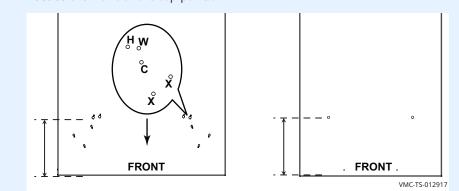
- The appropriate stand for your oven
- Regulation UL 197, 91.8
- A pop rivet gun and rivets
- An appropriate lifting device, and enough personnel, to safely move and position the weight of the oven.
  - CMC-H2H: 304 lb (138 kg)
  - CMC-H3H: 394 lb (179 kg)

#### **Procedure**

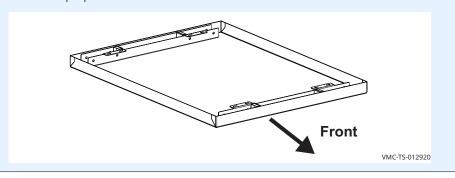
To install the ovens on a stand, do the following.

#### Step Action

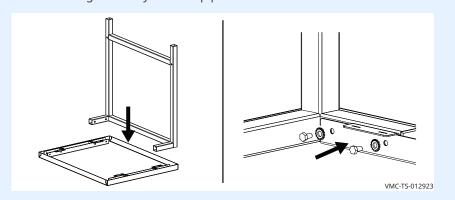
1. **Locate** the front of the top panel.



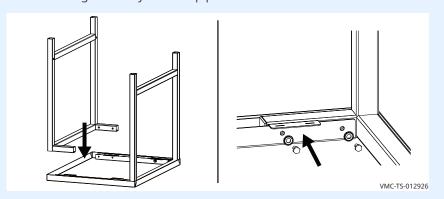
2. **Put** the top upside down on a flat surface.



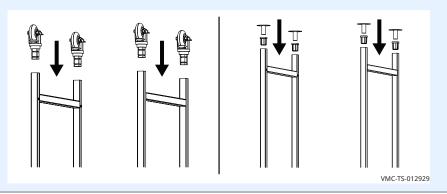
Install the leg assembly into the top panel.
 Attach the leg assembly to the top panel with bolts and lock washers.



Install the second leg assembly into the top panel.
 Attach the leg assembly to the top panel with bolts and lock washers.



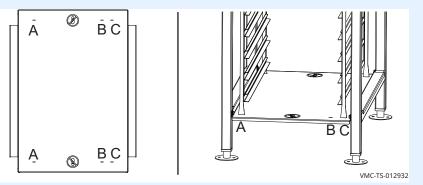
5. **Install** the casters or the feet assemblies into the legs.





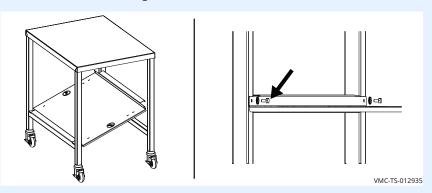
# Installing the shelf (optional)

6. **Determine** which way the slots are to be oriented.



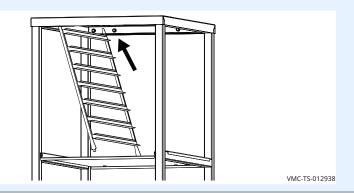
7. **Install** the shelf onto the leg assemblies.

**Attach** the shelf to the leg assemblies with bolts and lock washers.



Installing the racks (optional)

8. **Install** the rack into the slots on the underside of the top.



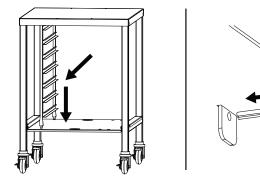
10.

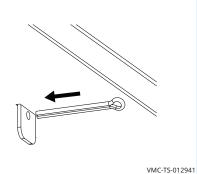
9. **Rotate** the rack and lower it into the slots on the shelf.

**Attach** the rack to the shelf with cotter pins.



**NOTE:** Expand the cotter pin after inserting it through the hole.

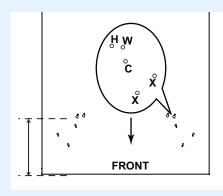


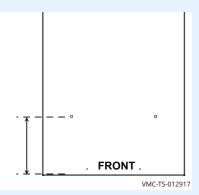


**Repeat** the process for the other rack.

# Installing the support channels

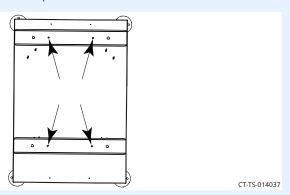
11. **Locate** the holes in the top of the stand with the letter "C" etched next to them.



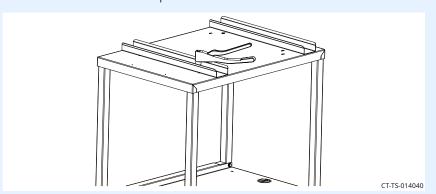




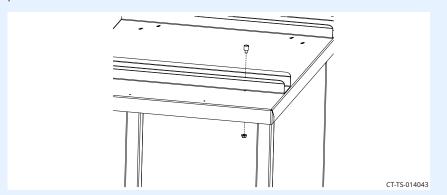
12. **Place** the support channels onto the top of the stand. Line up the holes in the channels with the holes in the top of the stand.



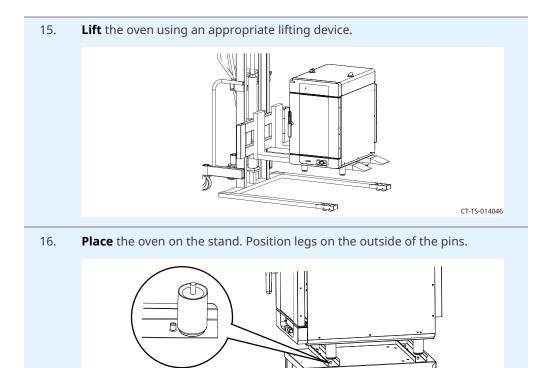
13. **Rivet** the channels to the top of the stand.



14. **Install** the pins through the channels and the top of the stand. **Secure** the pins with nuts.



# Installing the oven on a stand



Result

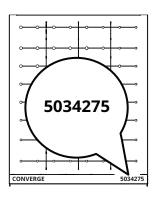
The oven is now installed to the stand.

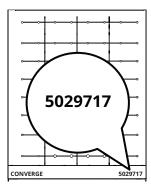
CT-TS-014049

# **How to Install the Jet Plates**

#### **Background**

Each jet plate assembly consists of one inner panel and one outer panel. There are two unique jet plate assemblies used on the Converge oven. The difference is in the outer panel used. One type (5034275) is used on the lower section of each chamber. The other type (5029717) is used on the upper section of each chamber. The inner panels used are the same for both types of assemblies.





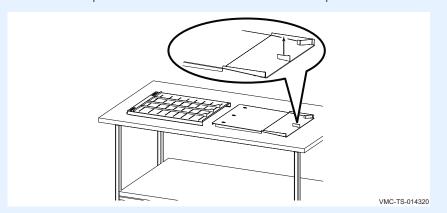
CT-TS-016595

#### **Procedure**

To install the jet plates, do the following.

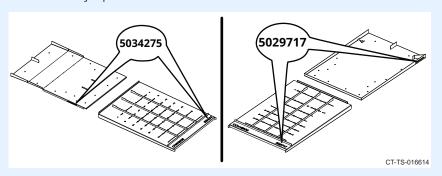
# 1. Each outer panel has the part number etched into the right corner. Locate the part number on all outer panels. Place an outer panel on a table with the part number facing up. 5034275 5029717 CT-TS-016699

2. **Place** an inner panel on the table with the air deflector up.



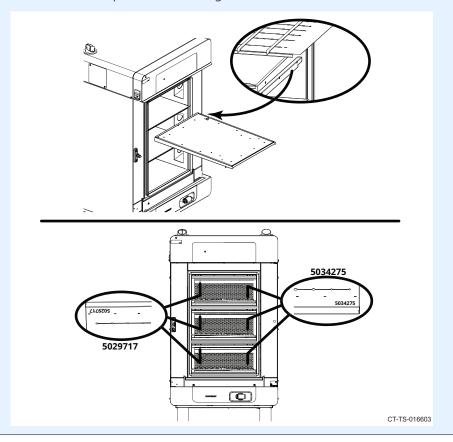
3. **Insert** the inner panel into the outer panel. **Push** the inner panel into the outer panel until it is fully inserted.

**Assemble** all jet plates in a similar fashion.





4. **Install** jet plates 5034275 in the lower section of each chamber with the part number facing up. **Install** jet plates 5029717 in the upper section of each chamber with the part number facing down.



Result

The jet plates are now installed.

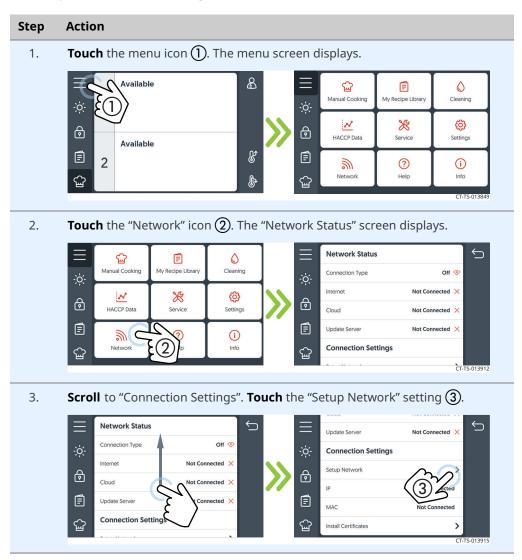
# How to View and Set up WiFi Connection

#### Before you begin

- The facility must have WiFi.
- Do not connect to a guest network.

#### **Procedure**

To set up WiFi, do the following.





4. **Touch** the "WiFi" icon 4.



The available networks will show on the screen. The color of the network icon indicates the strength of the signal for each network.

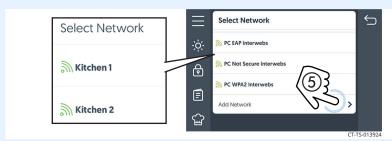
Green = strong

Yellow = medium

Red = weak



5. If the network is not displayed, **touch** the "Add Network" setting **⑤**.



**Enter** the SSID using the keypad. Then, **touch** the check mark.

**Select** the security type.

**Enter** the password using the keypad. Then, **touch** the check mark.

**Touch** the check mark when finished.

Result

The procedure is now complete.



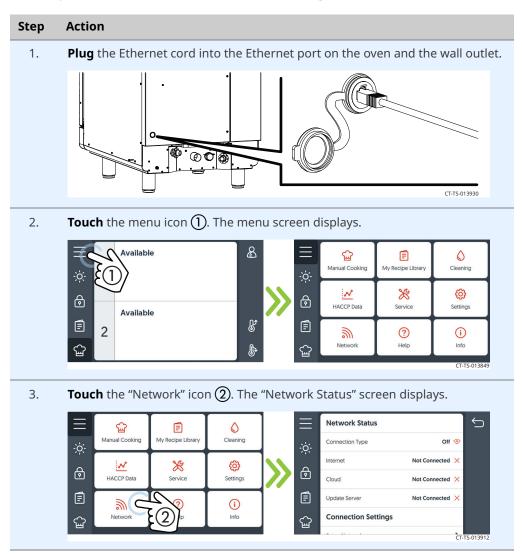
# How to Set up an Ethernet Connection

#### Before you begin

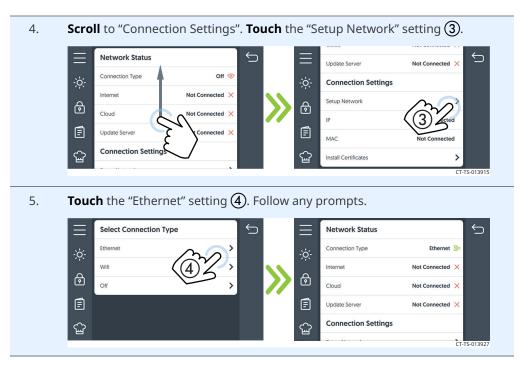
- The facility must have an Ethernet port.
- You will need an Ethernet cable.

#### **Procedure**

To set up an Ethernet connection, do the following.







Result

The Ethernet connection is now set up.

# OPERATION

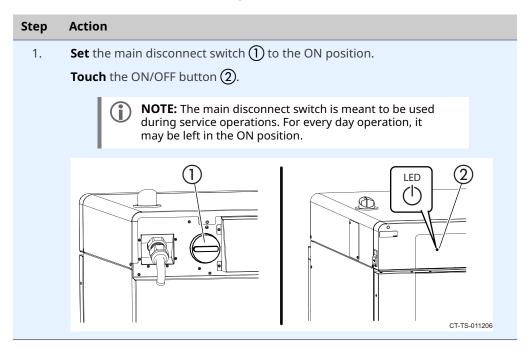
## How to Turn On and Turn Off the Oven

#### Before you begin

The oven must be connected to electric power.

#### Turning on the oven

To turn on the oven, do the following.

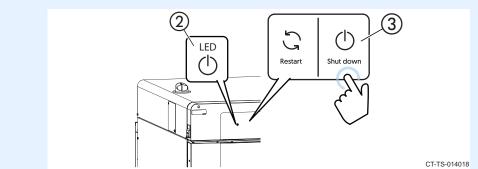


The oven is now on.

#### Turning off the oven

To turn off the oven, do the following.

2. **Touch** and hold the ON/OFF button ② until the "Shut Down Options" screen displays. **Touch** "Shut down" ③. The oven activates the blowers for the cooldown process. The cool-down process is complete when the oven deactivates the blowers and the display screen turns off.



The oven is now off.



# How to Preheat the Oven

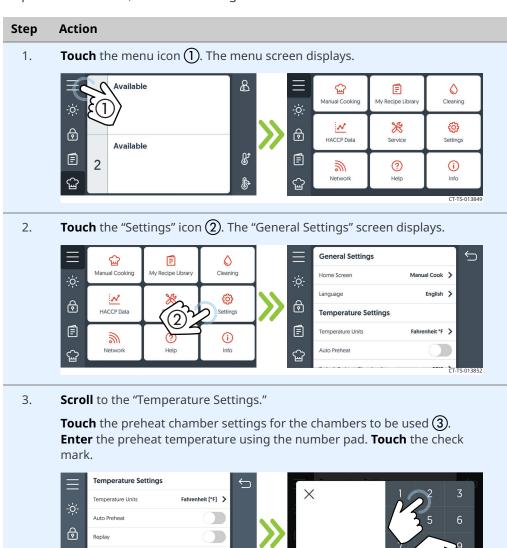
#### Before you begin

#### Make sure:

- The oven is turned on.
- The oven door is closed.

#### **Procedure**

To preheat the oven, do the following.





**Touch** the manual cook icon (4) to return to the manual cook screen. 4. Temperature Settings Available Temperature Units Fahrenheit [°F] ⇧ Ð Available efault Preheat Chamber 1 300°F > 2 275°F > **Touch** the preheat icon (5). The preheat confirmation screen displays. 5. **Touch** "Preheat" **(6)**. All chambers start to preheat to their preset temperatures. 8 Available 1 Preheat chambers not in use? ➌ Available 2

#### **Screen loading bars**

Loading bars indicate each chamber's progress towards reaching its set temperature.

Touch the cancel icon ⑦ to cancel the preheating process before the individual chamber reaches its preset preheat temperature. Each chamber must be canceled individually.





#### Result

The oven is preheating. When the preheat process is complete, the screen displays "Ready" for each chamber.



# **How to Cook with Programmed Recipes**

#### Before you begin

#### Make sure:

Step

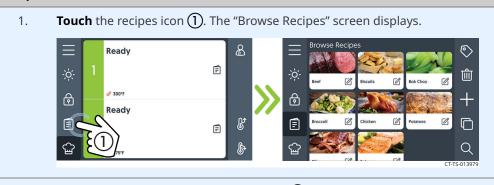
■ The oven is preheated.

Action

Your food is prepared and ready to cook.

#### **Procedure**

To cook using a programmed recipe, do the following.



2. **Navigate** to the recipe. **Touch** the recipe ②.

**Select** the available chamber(s) (3).



3. **Open** the door and load the food into the chamber. **Close** the door.

**Touch** the start icon (4).





# During the cooking process

The cooking status screen displays the details on the current cook setting.



#### During the cooking process:

Action	Result
Touch the hand icon when action is required	to continue the cooking process.
Touch the chamber	to show the recipe details.
Touch "X"	to cancel the cooking process.

#### Result

At the end of the cooking process, the oven sounds an alert and both the chamber light and door handle light flash. Remove the cooked food.



# **How to Cook in Manual Mode**

#### Before you begin

#### Make sure:

- The oven is preheated.
- Your food is prepared and ready to cook.

#### **Background**

This procedure consists of:

**Action** 

Step

- setting the food loading action;
- and setting the cooking stage parameters (temperature, time, humidity, and fan speed).

#### **Procedure**

To cook in manual mode, do the following.

#### **Touch** the manual cook icon (1). The available chambers are displayed. 1. 8 Ready 0 Manual Cooking Cleaning Ē N X 6 ₫ 300°F ð HACCP Data Service Settings Ready Ē ? (i) Info 땁

2. **Touch** any available chamber **②**.

**Touch** a cooking mode or an action step icon **3** to choose the step type.



**(i)** 

**NOTE:** Touching "Action" adds an action step to the recipe. An action adds manual tasks to be completed during the recipe such as loading the food or adding an ingredient.



3. The "Professional Cook" screen displays. The upcoming steps set the parameters for this screen.



**Cooking by time** 

4. If cooking by time, **touch** the cook by time icon **4**. Then, **touch** the cooking time **5**. **Enter** the cooking time using the key pad. **Touch** the check mark.



**Cooking by probe** 

5. If cooking by probe, **touch** the cook by probe icon **(**6**)**. Then, **touch** the probe temperature **(**7**)**. **Enter** the probe temperature set-point using the key pad. **Touch** the check mark.





6. **Touch** the cooking temperature icon **(8)**. **Enter** the cooking temperature using the key pad.

**Touch** the humidity percentage icon **9**. **Enter** the humidity percentage using the key pad.

**Touch** the fan speed icon **①**. **Enter** the fan speed using the key pad. The fan speed can be set in increments of five percent.



- 7. **Touch** the plus (+) icon to add an additional step or action, if needed.
- 8. **Load** the food into the appropriate chamber.
- 9. **Touch** the start icon  $\widehat{\text{11}}$ . The cooking process timer starts to count down.



# During the cooking process

Action	Result
Touch the hand icon  when action is required	to continue the cooking process.
Touch the chamber	to show the recipe details.
Touch "X"	to cancel the cooking process.



- 10. At the end of the cooking process, the oven sounds an alert, and the chamber light and door handle light flash.
- 11. **Open** the door and remove the hot food.



**NOTE:** Be sure to remove the cooked food after the cooking process is complete. The oven will revert back to the preheat temperature. If left inside the oven, the food will continue to cook.

**Result** The food is now cooked.



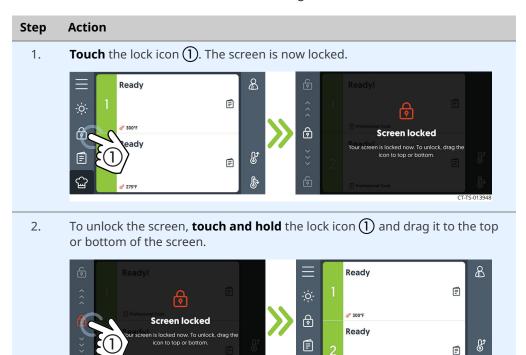
# How to Lock and Unlock the Screen

**Before you begin** The oven is turned on.

**Background** The screen can be locked to prevent changes being made during the cooking

process.

**Procedure** To lock and unlock the screen, do the following.



Result

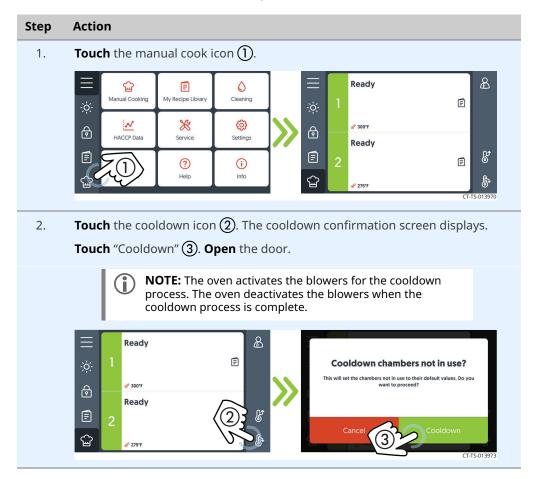
The screen is now locked or unlocked.



## How to Cool Down the Oven

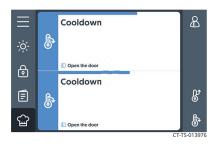
#### **Procedure**

To cool down the oven, do the following.



# Cooling down progress bars

Progress bars indicate each chamber's progress towards reaching its cool down temperature.



Result

The oven is now cooled down.



# **How to Create a Recipe**

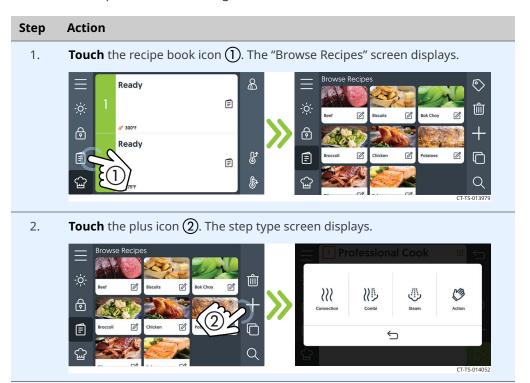
#### **Background**

Creating a recipe consists of:

- Setting the cooking stage(s) parameters (temperature, time, humidity percentage, and fan speed);
- setting an action step if desired such as adding an ingredient;
- naming the recipe;
- adding a description to the recipe;
- adding a photo to the recipe;
- and adding the recipe to a category.

#### **Procedure**

To create a recipe, do the following.





3. **Touch** a cooking mode or an action step icon **3** to choose the step type.



- NOTE: Touching "Action" adds an action step to the recipe. An action adds manual tasks to be completed during the recipe such as loading the food or adding an ingredient.
- 4. **Touch** "Recipe Name" (4). The "Recipe name" screen displays.



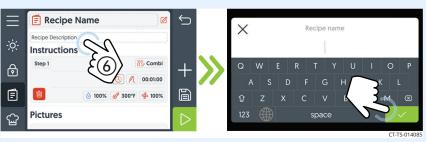
5. **Enter** the recipe name. **Touch** the check mark icon **(5)** to return to the create recipe screen.





6. **Touch** "Recipe Description" **(6)**. The recipe description screen displays.

**Enter** the recipe description. **Touch** the check mark icon to return to the create recipe screen.



7. **Touch** the cook by time icon or cook by probe icon  $\bigcirc$ .

**Touch** the cooking time or probe set-point temperature **(8)**. **Enter** the cooking time or probe temperature using the key pad. **Touch** the check mark.

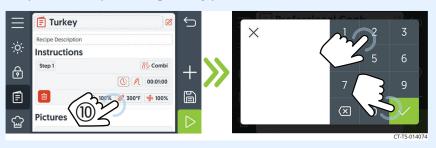


8. **Touch** the humidity icon **(9)**. **Enter** the humidity percentage using the key pad. **Touch** the check mark.





9. **Touch** the chamber temperature set-point icon ①. **Enter** the chamber temperature set-point using the key pad. **Touch** the check mark.



10. **Touch** the fan speed icon (1) to set the fan speed. **Enter** the fan speed using the key pad. **Touch** the check mark.



11. **Touch** the plus icon (2) to add an additional stage or action.

**Touch** the delete icon (3) to delete a stage or action.



- 12. **Scroll** to "Pictures" to add a photo to the recipe.
- 13. **Scroll** to "Categories" to add the recipe to a category.



#### **OPERATION**

Continued from previous page

Result

A new recipe has been created.

# How to Modify, Duplicate, or Delete a Recipe

#### **Procedure**

To modify, duplicate, or delete a recipe, do the following.

#### Step Action

1. **Touch** the recipes icon (1). The "Browse Recipes" screen displays.



#### Modifying

2. To modify a recipe, **touch** the recipe edit icon **(2)** of the desired recipe.



The first stage of the recipe displays. There will be a screen for each stage. Scroll to the stage you want to modify.

- **Touch** the cook by time or cook by probe icon then modify the value using the key pad.
- **Touch** the humidity icon to modify the humidity percentage.
- **Touch** the chamber set-point icon to modify the chamber temperature.
- **Touch** the fan speed icon to modify the fan speed.

**Touch** the save icon (3) when finished.

**Touch** the trash icon to delete the stage, if desired.



#### **Duplicating**

3. To duplicate a recipe, **touch** the duplicate recipe icon **4** of the desired recipe.

**Touch** the recipe to copy it. The recipe copy will display at the bottom of the recipe list. Edit the copied recipe as desired.



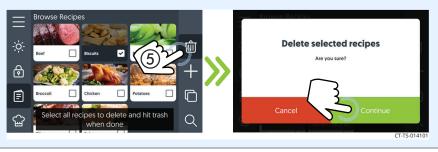
#### **Deleting**

4. To delete a recipe, **touch** the delete icon (5).



**Select** the recipe(s) that you want to delete. **Touch** the delete icon again.

**Touch** "Continue" to confirm that you want to delete the recipe(s).



Result

The procedure is now complete.



# **How to Create a Category**

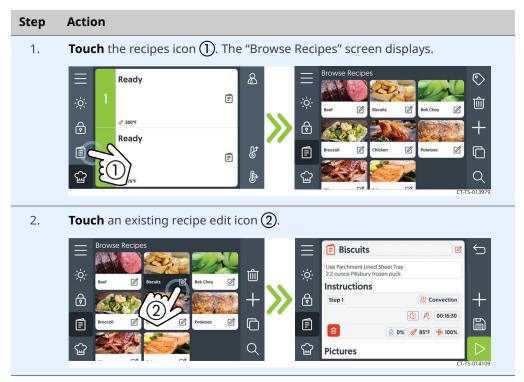
#### **Background**

A category allows the user to label and group recipes together. When viewing a recipe, the user can add a recipe to a category by touching the check mark next to the desired category. The categories can be viewed at the bottom of an existing recipe screen.

Each category must contain at least one recipe. A recipe can be assigned to multiple categories

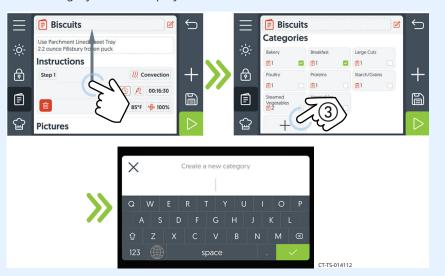
#### **Procedure**

To create a category, do the following.





3. **Scroll** to "Categories". **Touch** the plus icon (3) to add a category. The "Create a new category" screen displays.



4. **Enter** the category name. **Touch** the check mark **4**.



5. **Touch** the check box **(5)** on a category to select the category. This saves the current recipe to the category.



**Deleting a Category** 

A category is deleted automatically when all recipes have been deleted from the category.

Result

The category has now been created.



# How to Backup or Restore Settings with a USB Drive

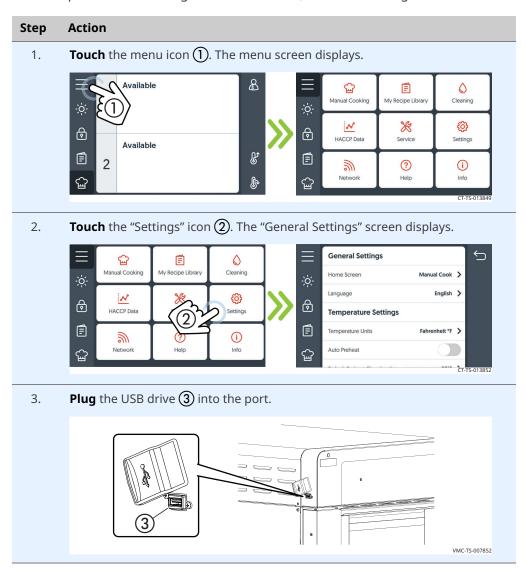
### Before you begin

### Make sure:

- The oven is on, but not in a cooking mode.
- You will need a USB drive.

### **Procedure**

To backup or restore settings with a USB drive, do the following.





4. Scroll to "System Backup & Update."

Touch "Backup settings to USB" or "Restore settings from USB" 4.

System Backup & Update

Backup Settings to USB

Restore Settings from USB

Download Recipes to USB

Upload Recipes from USB

Update System Software

CT-TS-013855

### **Loading the recipes**

The oven downloads or restores the settings. When the process is complete, **touch** the check mark to return to the general settings screen. **Remove** the USB drive.



### Result

The settings have now been saved to the USB drive or restored from the USB drive.

# **How to Load Recipes from a USB Drive**

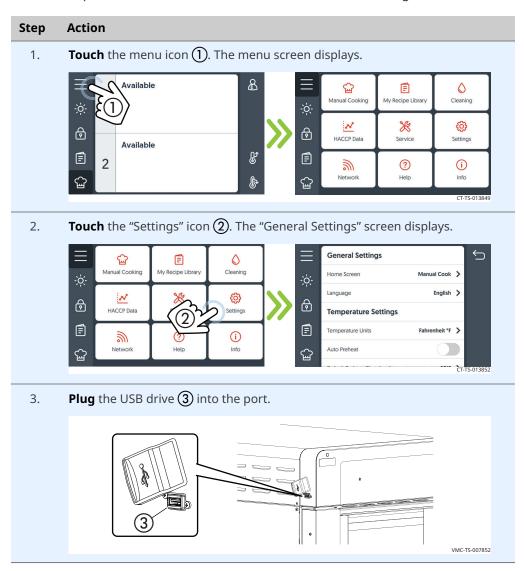
### Before you begin

### Make sure:

- The oven is on, but not in a cooking mode.
- You will need a USB drive loaded with recipes.

### **Procedure**

To load recipes from the USB drive to the oven, do the following.





4. Scroll to "System Backup & Update."

Touch the "Upload recipes from USB" 4 setting.

System Backup & Update

Backup Settings to USB

Restore Settings from USB

Download Recipes to USB

Update System Software

CT-TS-013861

### Loading the recipes

The oven loads the recipe file. When the process is complete, the "Recipes uploaded" screen displays. **Touch** the check mark to return to the general settings screen. **Remove** the USB drive.



Result

The recipes are now loaded.

# **How to Save Recipes to a USB Drive**

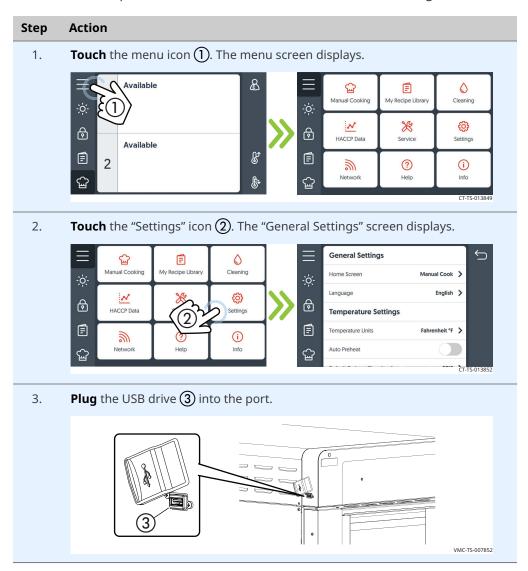
### Before you begin

### Make sure:

- The oven is on, but not in a cooking mode.
- You will need a USB drive.

### **Procedure**

To download recipes from the oven to a USB drive, do the following.





4. Scroll to "System Backup & Update."

Touch the "Download recipes to USB" (4) setting.

System Backup & Update

Backup Settings to USB

Restore Settings from USB

Download Recipes to USB

Upload Recipes from USB

Update System Software

CT-TS-013867

### Loading the recipes

The oven downloads the recipes onto the USB drive. When the process is complete, the "Download successful" screen displays. **Touch** the check mark to return to the general settings screen. **Remove** the USB drive.



Result

The recipes are now saved to the USB drive.

# How to Update Software with a USB Drive

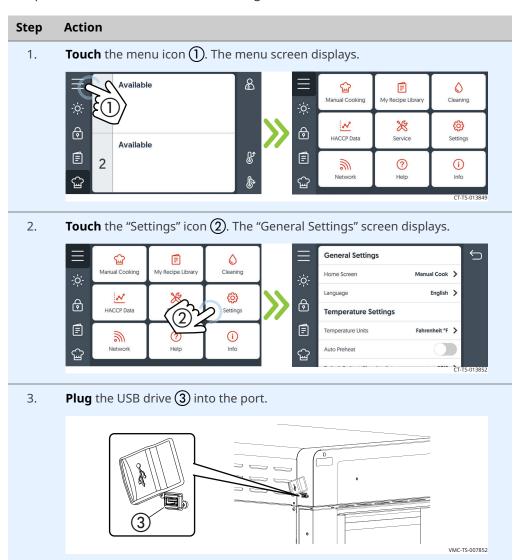
### Before you begin

### Make sure:

- The oven is on, but not in a cooking mode.
- You will need a USB drive with the updated software. To download the most up to date oven software and register for email notifications when new software versions are released, please visit <a href="https://www.alto-shaam.com/en/customer-support/software-downloads.">https://www.alto-shaam.com/en/customer-support/software-downloads.</a>
- Do not remove the USB drive during the update process.

### **Procedure**

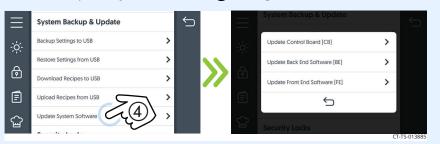
To update the software, do the following.





4. **Scroll** to "System Backup & Update."

**Touch** the "Update system software" (4) setting.



**NOTICE** Do not remove the USB drive during the update process.

**Touch "**Update Back End Software" to update the supporting software between the control board (CB) and interface board (IB). The oven loads the selected software.

**Touch** "Update Front End Software" to update the user interface software. The oven loads the selected software.

**Touch** "Update Control Board (CB)" to update the control board. The oven loads the selected software. The oven verifies the file and then updates the CB

5. **Touch** the check mark when the update is complete to restart the oven.



6. **Remove** the USB drive.

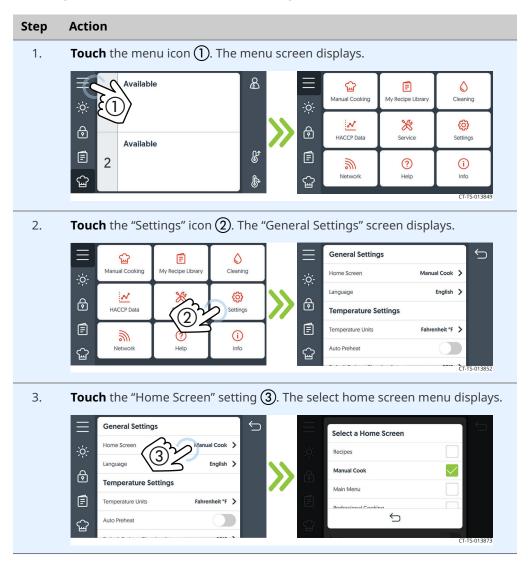
Result

The software has now been updated.

# **How to Change the Home Screen**

**Procedure** 

To change the home screen, do the following.





4. Select your desired home screen from the list.

Touch the check mark 4 to save the home screen setting.

Select a Home Screen
Recipes
Manual Cook
Main Menu
Desired Auto Preheat

Temperature Units
Auto Preheat

Select a Home Screen
Recipes
Language
English
Temperature Settings
Temperature Units
Auto Preheat

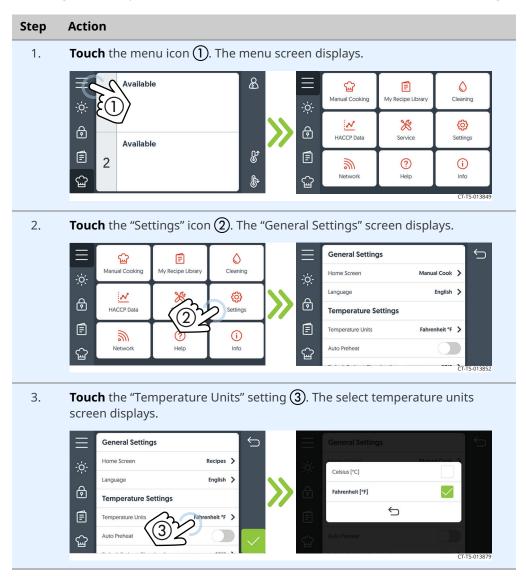
Result

The home screen has now been changed.

# **How to Change the Temperature Scale**

**Procedure** 

To change the temperature scale from °F to °C and vice versa, do the following.





### **OPERATION**

Continued from previous page

4. Select your desired temperature scale.

Touch the check mark 4 to save the temperature scale setting.

General Settings

Celsius [\*C]
Fahrenheit [\*F]

Auto Preheat

Auto Preheat

Auto Preheat

Result

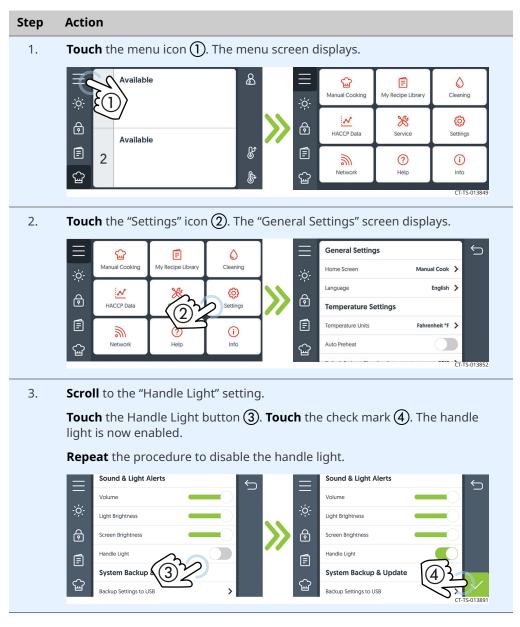
The temperature scale has now been changed.



# How to Enable/Disable the Handle Light

**Procedure** 

To enable the handle light, do the following.



Result

The handle light is now enabled/disabled.



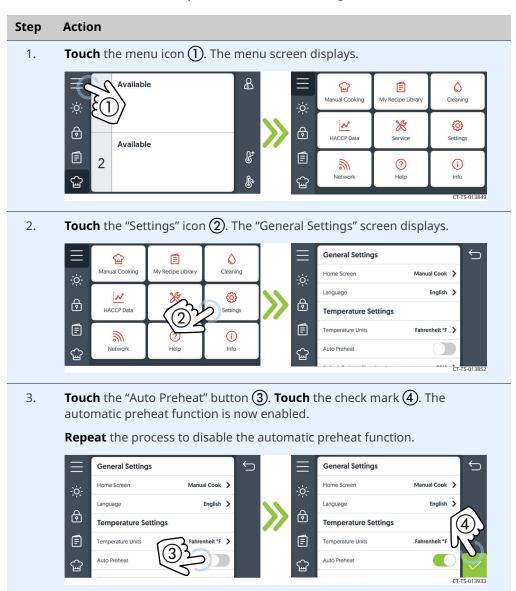
# How to Enable/Disable Automatic Preheat

### **Background**

Enabling the automatic preheat function preheats the oven upon start up to the set preheat temperature. Make sure to set your preheat temperatures. See topic *How to Preheat the Oven*.

### **Procedure**

To enable/disable automatic preheat, do the following.



Result

The automatic preheat function is now enabled/disabled.



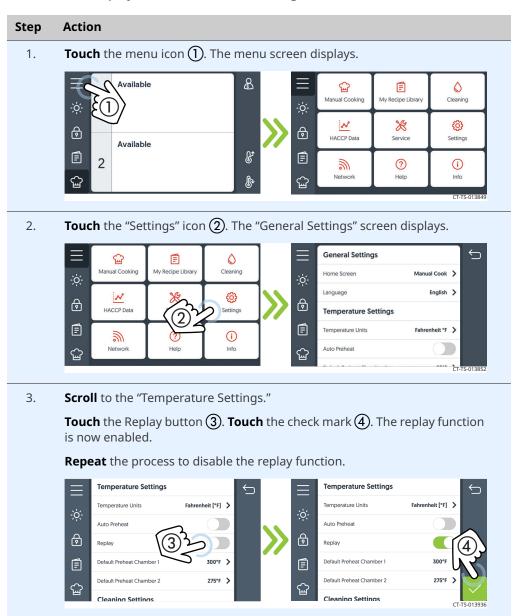
# How to Enable and Use the Replay Function

### **Background**

When a cooking process is complete, the replay function repeats the same cooking process when you touch the replay icon. The replay function can be used for a programmed recipe or manual cook.

### **Procedure**

To enable the replay function, do the following.





### **OPERATION**

Continued from previous page

# Using the replay function (if enabled)

4. If the replay function is enabled, when the cooking process is complete, **touch** the replay icon **(5)** to repeat the previous cooking process.



Result

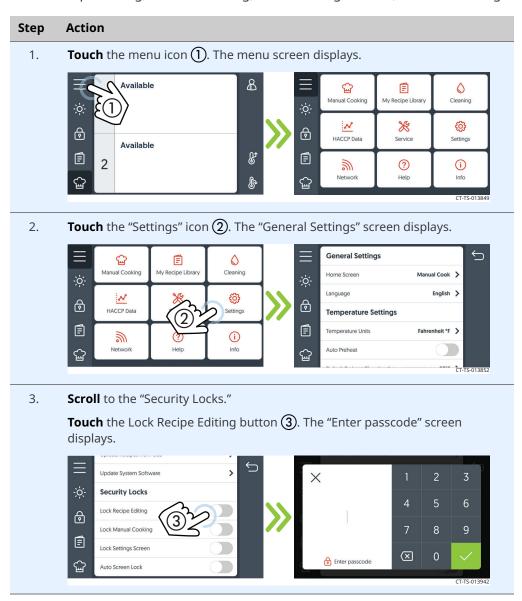
The procedure is now complete.



# How to Lock Recipe Editing, Manual Cooking, or the Settings Screen

**Procedure** 

To lock recipe editing, manual cooking, or the settings screen, do the following.





Result

The lock recipe editing, manual cooking, or the settings screen are now locked.

# **How to View Oven Information**

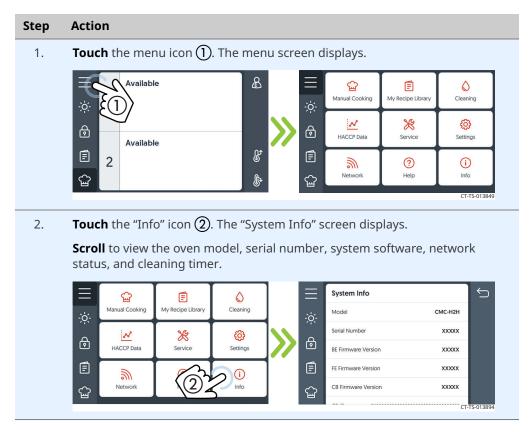
### **Background**

This procedure is to be done through the touchscreen on the Deluxe control, not through the ChefLinc $^{\text{TM}}$  oven management system.

The oven information screen shows the system info, serial number, network status, and connection settings.

### **Procedure**

To view oven information, do the following.



Result

The oven's information has been viewed.



# **How to Download HACCP Data**

### Before you begin

### Make sure:

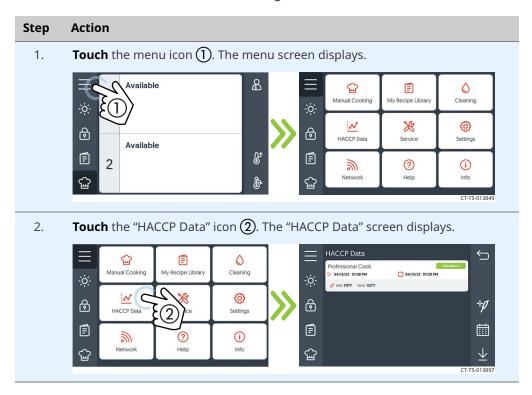
- The oven is on, but not in a cooking mode.
- You will need a USB drive.

### **Background**

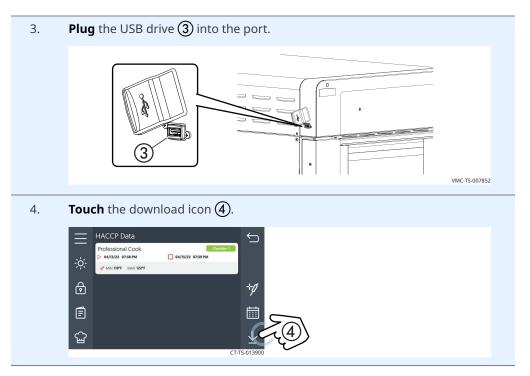
HACCP data provides automated record keeping, set-point validation, recipes used, dates and times. The data is stored until the information is downloaded. Once downloaded, the information is removed from the oven's memory. Best practice would be to download the information every 30 days to a USB drive. The file format is plain text file (.csv). The file can be viewed in Microsoft® Excel.

### **Procedure**

To download HACCP data, do the following.







Loading the data

The oven downloads the data onto the USB drive. When the process is complete, the "Download Successful" screen displays. **Touch** the check mark to return to the menu screen. **Remove** the USB drive.



Result

The HACCP data has now been downloaded.

# **How to Calibrate the Temperature Probe**

### Before you begin

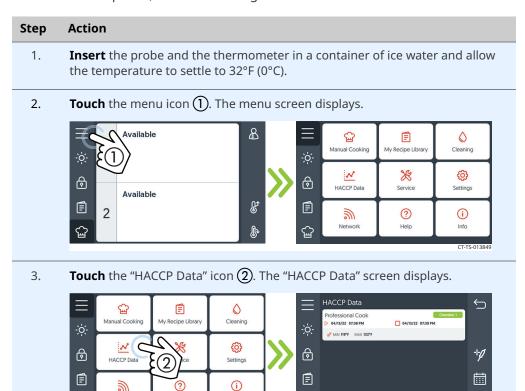
### Make sure:

- The oven is on, but not in cooking mode.
- You have a thermometer.

You have a container filled with ice and water.

### **Procedure**

To calibrate the probe, do the following.



Info

땁



4. **Touch** the calibrate probes icon (3).



5. **Compare** the probe temperature reading against 32°F (0°C).

**Touch** the "+" or "-" symbols 4 until the temperature displayed is 32°F (0°C).



- 6. **Remove** the probe from the ice water.
- 7. If the oven has multiple probes, repeat this procedure until all probes are calibrated.

Result

The probe is now calibrated.

### **OPERATION**

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# MAINTENANCE

# **Maintenance Schedule**

### Requirements

- See topic How to Clean the Oven.
- Make sure the oven is cooled down and off—inside of chamber 140°F (60°C) or less.

### **Daily**

For daily maintenance, do the following.

- **Remove** any spills with disposable paper wipes or a damp cloth.
- Wipe the outside of the oven with a damp cloth.
- Wipe the oven gaskets with soap and water.
- **Inspect** the oven gaskets for damage.
- **Wipe** the front door glass.
- **Check** the screen for cracking or peeling. Contact Technical Service if needed.

### Weekly

For weekly maintenance, do the following.

- **Clean** the entire oven. **Make sure** to use a non-abrasive nylon scrub pad.
- Do not spray the cleaner directly into the fan openings located in the rear of the oven.

### Monthly

For monthly maintenance, do the following.

- **Inspect** and clean the air filters.
- **Clean** out the drip tray line.
- **Check** the supplied water filtration and change as needed.
- **Check** for software updates.
- Check lighting.
- **De-scale** as needed.

### Yearly

For yearly maintenance, do the following.



**NOTE:** Must be performed by a qualified professional.

- **Inspect** and test the humidity control.
- **Inspect** and test the catalytic converter element.
- **Inspect** the catalytic converter.
- **Inspect** the air intake. **Check** the length of the tubing for debris clean out or replace as needed.



### **MAINTENANCE**

### Continued from previous page

- **Inspect** all drain hoses and clamps.
- **Inspect** all steam water injection lines and clamps for leaks or potential issues.
- **Inspect** wiring to heating elements. Re-tighten or secure as needed. Record the amp draw.
- **Inspect** wiring to the steam element. Re-tighten or secure as needed. Record the amp draw.
- **Inspect** the cleaning system pump and hoses for leaks and proper operation.
- For ovens shipped to New Zealand or Australia, **inspect** the back flow preventer check valve per AS/NZ3500.1 and AS/NZ3500.2
- **Check** operation of all electrical cooling fans.
- **Check** all electrical connections are properly connected and secure to the boards.
- **Check** door hinges and handles. Tighten, secure, or adjust as needed.
- Check door gaskets for damage and seal.
- **Test** steam injection solenoid.
- **Test** condensate solenoid.
- **Run** each chamber in convection mode and test operation.
- **Run** each chamber in steam mode and test operation.



## How to Clean the Oven

### **Precautions**



### WARNING: Burn hazard.

Wear protective gloves, protective clothing, eye protection, and face protection when handling oven cleaner. Do not open the oven door during the cleaning cycle.

### NOTICE

Using improper cleaning procedures will damage the catalyst and void the warranty.

Use only Alto-Shaam cleaner CE-48578 and oven decarbonizer + degreaser spray CE-48623 when running a cleaning cycle identified with a blue icon. The use of any other cleaning chemical may damage the catalyst and void the warranty.

Do not use steel pads, wire brushes, or scrapers when cleaning.

### **Background**

The oven has six different cleaning modes — five for cleaning the oven, identified with blue icons, and one for cleaning the catalyst, identified with the green icon.

- The rinse cycle is a mid-day rinse to reduce the grease and requires no packets.
- The spray clean cycle is for daily use when cooking heavy proteins and requires no packets.
- The light clean cycle is for light debris and requires one packet.
- The medium clean is for heavy debris (10 full loads of chicken) in one chamber and requires three packets.
- The heavy clean is for heavy debris (10 full loads of chicken) in all chambers and requires six packets.
- The descale catalyst cleaning keeps the oven properly maintained. A reminder screen displays after 18 hours of cumulative cleaning (example: after four heavy cleaning cycles). See topic: "How to Descale the Catalyst" to descale the catalyst.



### Cleaning the oven

To clean the oven, do the following.

### Step Action

1. **Touch** the menu icon ①. The menu screen displays.



2. **Touch** the "Cleaning" icon ②. The "Cleaning" screen displays.



### Spray cleaning

3. **Select** either "Spray Clean" or "Heavy Clean" ③.

For "Rinse", "Light Clean" or "Medium Clean" go to step 4.

**Shake** the oven decarbonizer + degreaser bottle gently four times before using. **Apply** 10-12 pumps per chamber, then touch "Continue".

**Distribute** the contents of the packets onto the jet plates equally between the chambers.

**Touch** the start icon **4**.





**NOTE:** Both programs start with a built-in 30-minute rest for the oven decarbonizer + degreaser to loosen carbon/ grease build up. The cleaning cycle then runs.

**Proceed** to step 5.



### **Non-spray cleaning**

4. **Select** "Rinse", "Light Clean" (5) or "Medium Clean".

**Distribute** the contents of the packets onto the jet plates equally between the chambers.

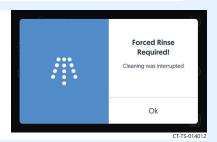
**Touch** the start icon (6).



The oven heats to the required temperature for the cleaning cycle, then the cleaning cycle starts.

**NOTE:** Touching the cancel icon "X" cancels the cleaning cycle. The oven will start a forced rinse. The forced rinse must complete before operating the oven.





5. **Touch** "Ok" (7) when the cleaning cycle is complete.

**Repeat** the cleaning process as needed.



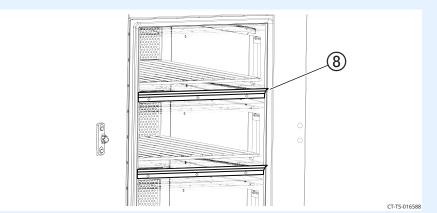
WARNING: Burn hazard.

Open the door carefully when the cleaning cycle is complete. Escaping hot vapors or steam can cause injury.





- 6. **Clean** the door glass with Windex® or equivalent glass cleaner.
- 7. **Clean** the door gasket with soap and water.
- **Clean** out any debris from behind the divider gaskets (8). 8.



9. **Spray** the exterior of the oven with stainless steel polish. **Wipe** the exterior of the oven with a non-abrasive scrub pad. Follow safety instructions on the bottle of the stainless steel polish.

**NOTICE** Use only non-caustic cleaners.

Do not spray directly into the fan openings on the rear of the oven.

Do not use cleaners that contain sodium hydroxide (lye) or phosphorus.

10. **Leave** the door slightly ajar if the cleaning has been done at the end of the day.

Result

The oven is now clean.

# **How to Descale the Catalyst**

### **Precautions**



### WARNING: Burn hazard.

Wear protective gloves, protective clothing, eye protection, and face protection when handling oven cleaner. Do not open the oven door during the cleaning cycle.

### NOTICE

Using improper cleaning procedures will damage the catalyst and void the warranty.

For a descale catalyst cleaning cycle, use only catalyst descaler CE-47859. The use of any other cleaning chemical may damage the catalyst and void the warranty.

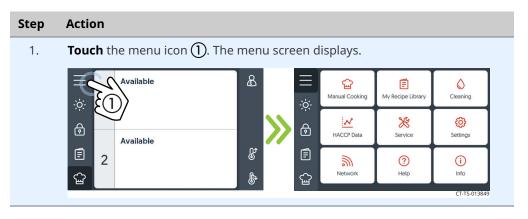
Do not use steel pads, wire brushes, or scrapers when cleaning.

### **Background**

- The descale catalyst cleaning keeps the oven properly maintained.
- The descale catalyst cleaning cycle is identified with a green icon.
- The descale catalyst cleaning cycle requires three descaler packets.
- The descale catalyst cleaning does not need to be run after an oven cleaning mode.
- A descale catalyst cleaning reminder screen displays after 18 hours of cumulative cleaning (example: after four heavy cleaning cycles).

### **Descale the catalyst**

To descale the catalyst, do the following.





2. **Touch** the "Cleaning" icon (2). The "Cleaning" screen displays.



3. **Touch** the "Descale (Catalyst)" icon ③.

**Distribute** the contents of the descaler packets onto the jet plates equally between the chambers.

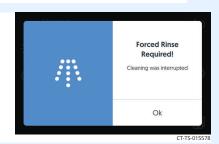
**Touch** "Start" **4** to start the descale catalyst cleaning cycle.



The oven heats to the required temperature for the descale catalyst cleaning cycle, then the cycle starts.

NOTE: Touching the cancel icon "X" cancels the descale catalyst cleaning cycle and the oven starts a forced rinse. The forced rinse must complete before operating the oven.







Result

The catalyst is now descaled.

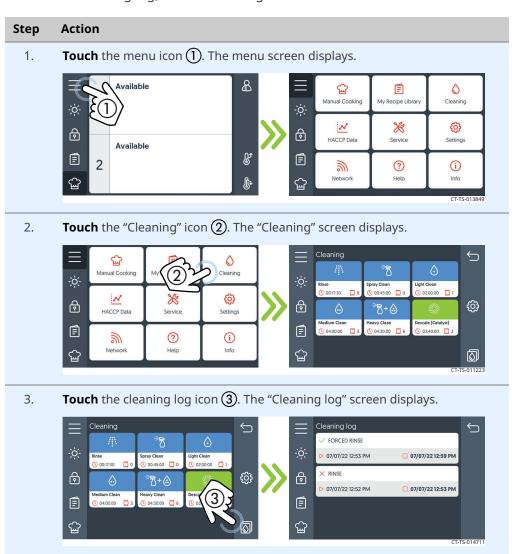
# **How to View the Cleaning Log**

Background

The cleaning log allows the user to view details about the previously completed cleaning cycles on the unit.

**Procedure** 

To view the cleaning log, do the following.



Result

The cleaning log has been viewed.

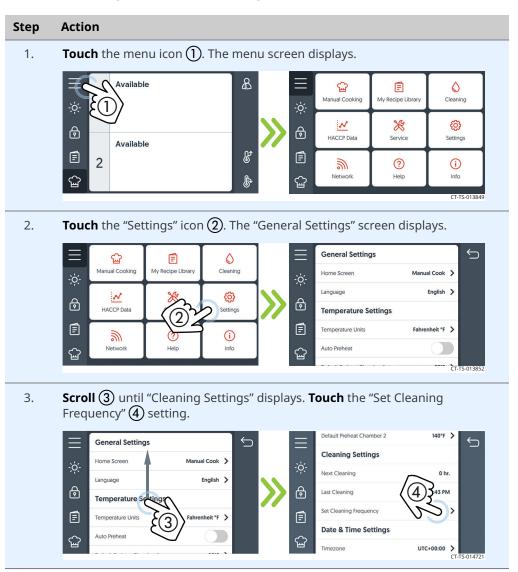
# **How to Set the Cleaning Time**

Background

The user can set a cleaning frequency to schedule when the unit will go through a cleaning cycle. The cleaning frequency can be set by hours or day and time.

**Procedure** 

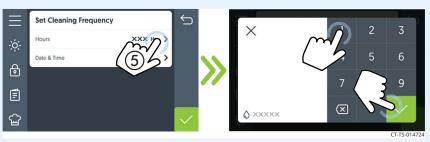
To set the cleaning time, do the following.





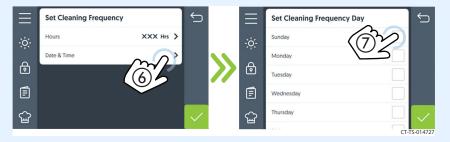
Setting the cleaning frequency hours

4. **Touch** the "Hours" setting **(5)** to set the cleaning frequency hours. **Enter** the desired hours using the key pad. **Touch** the check mark.



Setting the cleaning frequency day and time

5. **Touch** the "Date & Time" setting **(6)** to set the day and time for cleaning. **Touch** the check box **(7)** next to a day to set it. **Touch** the check mark.

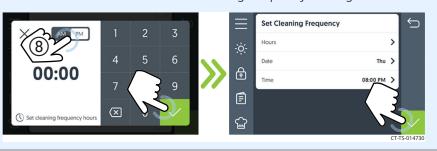


6. The "Set cleaning frequency hours" screen will display.

**Touch** the "AM"/"PM" button **(8)** to choose whether the cleaning time is set for AM or PM.

**Enter** the time of day for the cleaning. **Touch** the check mark.

**Touch** the check mark on the "Set Cleaning Frequency" setting screen.



Result

The cleaning frequency has been set.

# **Error Codes**

Code	Description	Parameters that trigger the error	Possible Cause(s)	
E-3	Motor error	No chamber motor rotation detected for greater than 30 seconds.	<ol> <li>Power down the control using the ON/OFF button.</li> <li>Cycle power to the oven either by unplugging the oven or setting the main disconnect switch OFF and ON.</li> <li>Continue operation of the oven. If the error reoccurs, contact Technical Service.</li> </ol>	
E-10	Sensor short	Control board detects that the chamber sensor is shorted.	<ol> <li>Power down the control using the ON/OFF button.</li> <li>Cycle power to the oven either by unplugging the oven or setting the main disconnect switch OFF and ON.</li> <li>Continue operation of the oven. If the error reoccurs, contact Technical Service.</li> </ol>	
E-10	Sensor short	Control board detects that the probe in the chamber is shorted.	<ol> <li>Investigate the food probe for damage.</li> <li>Replace if damaged.</li> <li>Power down the control using the ON/OFF button.</li> <li>Cycle power to the oven either by unplugging the oven or setting the main disconnect switch OFF and ON.</li> <li>Continue operation of the oven. If the error reoccurs, contact Technical Service.</li> </ol>	
E-11	Sensor open	Cavity air sensor reading > 650°F (343°C).	<ol> <li>Power down the control using the ON/OFF button.</li> <li>Cycle power to the oven either by unplugging the oven or setting the main disconnect switch OFF and ON.</li> <li>Continue operation of the oven. If the error reoccurs, contact Technical Service.</li> </ol>	
E-30	Unit under temperature	Cavity temperature remains 25°F (14°C) below target for more than 90 minutes.	<ol> <li>Was the oven preheated before loading the food?</li> <li>Was the oven loaded with frozen food?</li> <li>Press the high limit reset buttons.</li> <li>Power down the control using the ON/OFF button. Turn the oven back ON and start a cook.</li> </ol>	
E-31	Electronics over temperature	Control board temperature exceeds 158°F (70°C).	<ol> <li>Make sure the cooling fan(s) are operating.</li> <li>Make sure the exhaust vents are clean and free of debris.</li> <li>Make sure the oven clearances are met.</li> <li>Ambient temperature greater than 105°F (41°C).</li> <li>Check the door gasket for damage and proper seal.</li> </ol>	



# TROUBLESHOOTING

Code	Description	Parameters that trigger the error	Possible Cause(s)	
E-31	Electronics over temperature	Interface board temperature exceeds 184°F (84°C).	<ol> <li>Power down the control using the ON/OFF button.</li> <li>Cycle power to the oven either by unplugging the oven or setting the main disconnect switch OFF and ON.</li> <li>Continue operation of the oven. If the error reoccurs, contact Technical Service.</li> </ol>	
E-31	Electronics over temperature	Chamber temperature sensor > 600°F (316°C) for Combi or Convection or chamber temperature sensor > 395°F (202°C) for Steam or Cleaning.	<ol> <li>If the oven has experienced an over temperature condition, allow the oven to cool down for a minimum of 30 minutes.</li> <li>Press the high limit reset buttons.</li> <li>Continue operation of the oven. If the error reoccurs, contact Technical Service.</li> </ol>	
E-31	Electronics over temperature	B3 sensor is higher than 212°F (100°C) for more than 180 seconds.	<ol> <li>Make sure the water supply line(s) is connected to the oven and that the shut off valve for the water connections is in the open position.</li> <li>If connected to water filter(s), make sure the filters are not in need of replacement.</li> <li>Power down the control using the ON/OFF button.</li> <li>Cycle power to the oven either by unplugging the oven or setting the main disconnect switch OFF and ON.</li> <li>Continue operation of the oven. If the error reoccurs, contact Technical Service.</li> </ol>	
E-50	Control board temperature error	Temperature measurement failure on the control board.	<ol> <li>Make sure the cooling fan(s) are operating.</li> <li>Make sure the exhaust vents are clean and free of debris.</li> <li>Make sure the oven clearances are met.</li> <li>Ambient temperature greater than 105°F (41°C).</li> <li>Check the door gasket for damage and proper seal.</li> </ol>	
E-55	Vent not open	60 seconds after the chamber venting motor is activated, the chamber vent valve did not open.	<ol> <li>Power down the control using the ON/OFF button.</li> <li>Cycle power to the oven either by unplugging the oven or setting the main disconnect switch OFF and ON.</li> <li>Continue operation of the oven. If the error reoccurs, contact Technical Service.</li> </ol>	
E-78	Voltage monitor output is too low	Incoming line voltage is too low (<190V) or voltage monitor output is shorted.	Make sure the oven plug is fully seated in electrical outlet.     Reset the main circuit breaker for the oven. If error reoccurs, contact Technical Service.	
E-79	Over voltage	Incoming line voltage is too high (>250V) or voltage monitor output is open.	Make sure the oven plug is fully seated in electrical outlet.     Reset the main circuit breaker for the oven. If error reoccurs, contact Technical Service.	



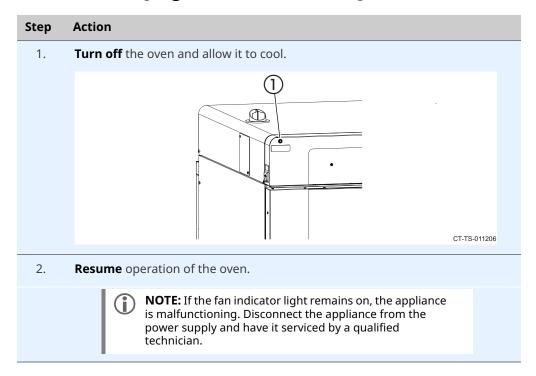
Code	Description	Parameters that trigger the error	Possible Cause(s)	
E-94	Interface Board - Control Board communication error	No signal transfer for more than 5 seconds between the interface board and the control board.	<ol> <li>Make sure the oven plug is fully seated in electrical outlet.</li> <li>Reset the main circuit breaker for the oven.</li> <li>If error reoccurs, contact Technical Service.</li> </ol>	
E-108	Cooling fan over temperature	Chassis bi-metal temperature sensor over temperature 130°F (54°C).	<ol> <li>Make sure the cooling fan(s) are operating.</li> <li>Make sure the exhaust vents are clean and free of debris.</li> <li>Make sure the oven clearances are met.</li> <li>Ambient temperature greater than 105°F (41°C).</li> <li>Check the door gasket for damage and proper seal.</li> </ol>	
E-109	High limit error <b>Note:</b> Contact an authorized Alto-Shaam service partner.	Open circuit detected across high limit switch.	1. If the oven has experienced an over temperature condition, allow the oven to cool down for a minimum of 30 minutes.  2. Press the high limit reset buttons.  3. Continue operation of the oven. If the error reoccurs, contact Technical Service.	
E-606	Oven cleaning system failure	Convection fan error, high limit error, cavity temperature sensor open or short, or communication for at least 15 seconds during cleaning.	<ol> <li>Contact Technical Service.</li> <li>Manually clean the oven.</li> <li>Manually rinse the oven.</li> <li>Make sure to remove cleaners before operating the oven.</li> </ol>	



# What to do if the Fan Indicator Light Illuminates

### **Procedure**

If the fan indicator light (1) illuminates, do the following.



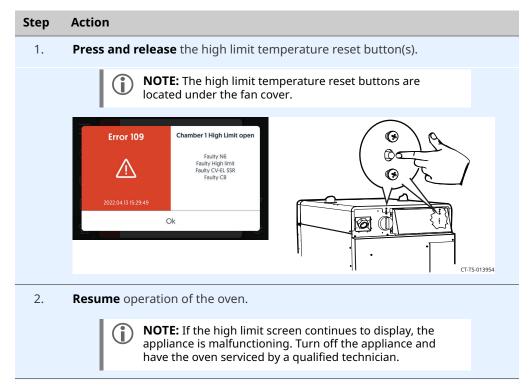
Result

The procedure is now complete.

# What to do if the High Limit Screen Displays

### **Procedure**

If the high limit screen displays, do the following.



Result

The procedure is now complete.



# TROUBLESHOOTING

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# NOTIFICATIONS

# **Notifications**

FCC ID: N6C-SDPAC IC ID: 4908A-SDPAC

### **NOTICE**

### Federal Communication Interference Statement (United States only)

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be colocated or operating in conjunction with any other antenna or transmitter.



# Canadian Department of Communications Industry Canada Notice (Canada only)

This Class B digital apparatus complies with Canadian ICES-003.

### FCC Rules, Part 15 / Industry Canada

This device complies with Part 15 of FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference, including interference that may cause undesired operation of this device.

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65 and RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 20 cm or more away from a person's body.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This radio transmitter (identify the device by certification number, or model number if Category II) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

For product available in the USA/Canada market, only channels 1–11 can be operated. Selection of other channels is not possible. If this device is to be operated in the 5.15~5.25GHz frequency range, it is restricted to indoor environments only.

Antenna: Proprietary

Antenna gain information: Embedded Antenna: 3.25dBi (2.4 GHz), 5.0dBi (5 GHz)

Frequency Tolerance: +/-20ppm

### **WARNING**

The FCC / The Industry Canada regulations provide that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



**General Specifications** 

**Chipset:** QCA9377-3, (Qualcomm Atheros)

**Host Interface:** Wifi: SDIO v3.0; BT: High Speed UART

**Operating Voltage:** 3.30 VDC +/- 5%

Operating Temperature:

-20 to +70 degrees C

**Dimensions:** 18.0 x 13.0 x 2.2 mm (L x W x D)

**Connector Type:** 52-pin proprietary

**Radio Specifications:** 802.11b/g/n: 2.412–2.484 GHz;

802.11a/n: 5.18-5.825 GHz

BT: 2.402-2.480 GHz

Link Rates (1 stream): IEEE 802.11b: 1–11 Mbps

IEEE 802.11g: 6–54 Mbps IEEE 802.11a: 6–54 Mbps

IEEE 802.11n HT20: 6.5-65.0 Mbps

IEEE 802.11n HT40: 13.5–135.0 Mbps IEEE 802.11ac VHT20: 6.5–78.0 Mbps I

EEE 802.11ac VHT40: 13.5–180.0 Mbps

IEEE 802.11ac VHT80: 29.3-390.0 Mbps

Modulation Modes: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK), DSSS (CCK, DQPSK, DBPSK),

GFSK (1Mbps), π/4 DQPSK (2Mbps), 8DQPSK (3Mbps)

Hardware Encryption:

WEP, WPA/WPA2 (TKIP/AES-CCMP), WAPI

**Quality of Service** 

(QoS):

WMM, WMM-PS, 802.11e

Japanese Security

Standard

This oven cannot be connected directly to the telecommunications circuits (or public wireless LANs) of any telecommunication carriers (example: mobile communications carriers, fixed communications carriers, or Internet providers). In the case of connecting the oven to the Internet, make sure to connect it via a

router.

# Conditions for Ovens Installed in New York City

- Operating instructions in the manual must be read and understood by all persons using the appliance. The person responsible for training of the operators is responsible for the safekeeping of the manual.
- Prior to installation, plans specifying the exact product name/model number and dimensions/specifications shall be filed with and approved by New York City Department of Buildings (DOB). A copy of DOB docketed (Stamped, numbered and dated) plans shall be transmitted to the Fire Department for review and approval, as applicable.
- Installation, maintenance, and cleaning procedures shall comply with all applicable New York City Fire Code, New York City Electric Code, New York City Construction Codes (including the Building Code and the Mechanical Code), and rules.
- The cooking equipment shall be used for light duty cooking ad food warming only, and shall be provided with catalyst to limit the emission of grease-laden air.
- The cooking equipment shall be installed in an area approved by the New York City Department of Buildings.
- Underwriters Laboratories, Inc.'s listing requirements and manufacturer's installation, operation and maintenance requirements shall be complied with.
- The cooking equipment (including filters and catalyst) shall be inspected, cleaned and replaced if necessary, by a qualified person holding a Fire Department Certificate of Fitness. They catalyst shall be maintained in proper working order. A record of such inspection and cleaning shall be kept on the premises for inspection.
- All installations are subject to inspection by representatives of the Bureau of Fire Prevention which may result in additional requirements being imposed.
- The Fire Department's condition of approval shall be provided to all New York City buyers, users and installers.
- Certificate of Approval number shall be plainly and permanently stamped or otherwise fixed upon each product by the manufacturer or the local representative of the manufacturer.
- The equipment's technology does not violate any patent, trade name, trade secret or other intellectual right.
- The Certificate of Approval does not constitute an endorsement or recommendation of the product by the Fire Department, but is a certification that the product is acceptable as of the date of issuance.
- The Fire Department may withdraw this approval at any time in the event there is a reasonable doubt that the product does not operate or perform as required by code, the conditions of the resolution or as represented in the application.
- Any end user who fails to comply with the conditions as outlined in this approval will be subject to enforcement action.



# WARRANTY

# Warranty

### Introduction

Alto-Shaam, Inc. warrants to the original purchaser only, that any original part found to be defective in material or workmanship will be replaced with a new or rebuilt part at Alto-Shaam's option, subject to provisions hereinafter stated.

### **Warranty Period**

The original parts warranty period is as follows:

- For all other original parts, one (1) year from the date of installation of appliance or fifteen (15) months from the shipping date, whichever occurs first.
- The labor warranty period is one (1) year from the date of installation or fifteen (15) months from the shipping date, whichever occurs first.
- Alto-Shaam will bear normal labor charges performed during standard business hours, excluding overtime, holiday rates or any additional fees.
- For the refrigeration compressor, if installed, the warranty period is five (5) years from the date of original installation of the appliance.
- For heating elements on Halo Heat® Cook and Hold ovens, the warranty period is for as long as the original owner owns the oven. This warranty period applies to units sold after 2/1/2009 and excludes holding-only ovens.
- To be valid, a warranty claim must be asserted during the applicable warranty period. This warranty is not transferable.

### **Exclusions**

This warranty does not apply to:

- Calibration.
- Replacement of light bulbs, rubber gaskets, grease filters, air filters, racks, jet plates, and/or the replacement of glass due to damage of any kind.
- Equipment damage caused by accident, shipping, improper installation or alteration.
- Equipment used under conditions of abuse, misuse, carelessness or abnormal conditions, including but not limited to, equipment subjected to harsh or inappropriate chemicals, including but not limited to, compounds containing chloride or quaternary salts, poor water quality, or equipment with missing or altered serial numbers.
- Equipment damage caused by use of any cleaning agents other than those recommended by Alto-Shaam, including but not limited to damage due to chlorine or other harmful chemicals.
- Any losses or damage resulting from malfunction, including loss of food product, revenue, or consequential or incidental damages of any kind.
- Equipment modified in any manner from original model, substitution of parts other than factory authorized parts, unauthorized removal of any parts including legs, or unauthorized addition of any parts.

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- Equipment damage incurred as a direct result of poor water quality\*, inadequate maintenance of steam generators and/or surfaces affected by water. Water quality and required maintenance of steam generating equipment is the responsibility of the owner/operator.
- Equipment damage incurred as a result of not following the required maintenance schedule published in the manuals for the equipment.

### Conclusion

This warranty is exclusive and is in lieu of all other warranties, express or implied, including the implied warranties of merchantability and fitness for a particular purpose. No person except an officer of Alto-Shaam, Inc. is authorized to modify this warranty or to incur on behalf of Alto-Shaam any other obligation or liability in connection with Alto-Shaam equipment.

\*Refer to the product spec sheet for water quality standards.

# **DECLARATION OF CONFORMITY**

### Manufacturer:

Alto-Shaam, Inc. W164 N9221 Water Street Menomonee Falls, WI 53202-0450 U.S.A.



**EQUIPMENT TYPE:** Household and Similar Electric Appliances

**EQUIPMENT DESCRIPTION:** Commercial Electric Convection Ovens

MODEL NUMBER: VMC-H2, VMC-H3, VMC-H4, VMC-H2H,

VMC-H2HW VMC-H3H, VMC-H3HW,

VMC-H4H, VMC-F3E, VMC-F4E with or without a

V after the dash.

CMC-H2H, CMC-H3H with or without option VH

APPLIED DIRECTIVES: Low Voltage Directive 2014/35/EU

MD (Machinery Directive) 2006/42/EC

EMC – 2014/30/EC RED – 2014/53/EU

**APPLIED STANDARDS:** EN 60335-1:2012+AC:2014 + A11:2014

EN 60335-2-42:2003 + A1:2008 + A11:2012

AS/NZS 60335.1:2011 + A1:2012 +

A2:2014 + A3:2015. AS/NZS 60335.1:2020 EN 55014-1: CISPR 14, EN 55014-2: CISPR 14

EN 62479, EN 300 328, EN 301 489, EN 300 893



We me unwersigned, hereby declare that the equipment specified above conforms to the above Directives and Standards

Manufacturer Name: ALTO-SHAAM INC. NAME: Christa Pieper

TENTET IE - C - 41C - 41 - NA

TITLE: Certification Manager

SIGNATURE

DATE: March 4th 2022





## **DECLARATION OF CONFORMITY**

Manufacturer:

Alto-Shaam, Inc. W164 N9221 Water Street Menomonee Falls, WI 53202-0450



**EQUIPMENT TYPE:** 

Household and Similar Electric Appliances

**EQUIPMENT DESCRIPTION:** 

Commercial Convection Ovens

MODEL NUMBER:

VMC-H2, VMC-H2H, VMC-H2HW, VMC-H3, VMC-H3H, VMC-H3HW, VMC-H4, VMC-H4H, VMC-F3E, VMC-F4E CMC-H2H, CMC-H3H with or without option VH

APPLIED UK REGULATIONS:

- > Supply of Machinery (Safety) Regulations 2008
- ➤ Electromagnetic Compatibility Regulations 2016
- > The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012
- > Radio Equipment Regulations 2017

APPLIED STANDARDS:

EN 60335-1:2012+AC:2014 + A11:2014 EN 60335-2-42:2003 + A1:2008 + A11:2012 EN 55014-1:2018, EN 55014-2:2016

We the undersigned, hereby declare that the equipment specified above conforms to the above Directives and Standards

Manufacturer Name: ALTO-SHAAM INC. NAME: Christa Pieper

TITLE: Certification Manager

SIGNATURE DATE: March 4th 2022







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