



# **Prodigi**<sup>™</sup> Pro Control

6-10E	6-10G
10-10E	10-10G
7-20E	7-20G
10-20E	10-20G
20-10E	20-10G
20-20E	20-20G



#### **MN-48155-EN**

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# **Manufacturer's Information**

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	This manual or any portion thereof may not be reproduced or used in any manner whatsoever without the express written permission of Alto-Shaam, Inc.					
Trademarks	All trademarks referenced in this documentation are the property of their respective owners.					
Manufacturer	Alto-Shaam, Inc.					
	P.O. Box 450					
	W164 N9221 Water Street					
	Menomonee Falls, WI 53052					
Original instructions	The content in this manual is written in American English.					



# Alto-Shaam 24/7 Emergency Repair Service

Call	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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# **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 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.



# **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.							
	<ul> <li>Always keep liquids, or foods that can become liquid when heated, level and at or below eye level where they can be seen.</li> </ul>							
	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 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	Obey these maintenance precautions when maintaining the appliance:							
precautions	Obey precautions in the manual, on tags, and on labels attached to or shipped with the appliance.							
	Only clean the appliance when oven is OFF.							
	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 or water jet to clean 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.							



SAFETY

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.
	<ul> <li>Have demonstrated their ability with commercial kitchens and commercial appliances.</li> </ul>
	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	Only use the appliance when:
appliance	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).



#### SAFETY

Personal Protective Equipment (PPE)	Wear the following Personal Protective Equipment (PPE) while cleaning the appliance:
	Protective gloves
	Protective clothing
	Eye protection
	Face protection

Service Technician Training Only trained personnel are permitted to service or repair the appliance. Service technicians must be knowledgeable in current codes and standards as stated by the appropriate agencies, such as:

- The National Fire Protection Association (NFPA)
- National Electrical Code (NEC)
- The Service Technician's employer



# How to Turn On and Turn Off the Oven

#### Before you begin The oven must be connected to electric power. Make sure the gas supply is connected. Make sure the water supply is connected. Turning on the oven To turn on the oven, do the following. Action Step 1. **Touch** the ON/OFF button **()**. LED $\langle 1 \rangle$ CT-TS-014421 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 (1) until the "Shut Down Options" screen displays. Touch "Shut down" (2). (1 LED (2)(1)2 (1)Restart Shut down CT-TS-014425 The oven is now off.





THIS DIAGRAM IS SUBJECT TO CHANGE WITHOUT NOTICE

# **PRODIGI PRO - AMPIRE** CAPACITIVE TOUCH NOT TO SCALE



THIS DIAGRAM IS SUBJECT TO CHANGE WITHOUT NOTICE

# WITHOUT DAUGHTER BOARD **PRODIGI PRO - AMPIRE** CAPACITIVE TOUCH NOT TO SCALE

#### **Interface Board**



VMC-TS-008222.ai

Ref.	Description	Product	Screen Orientation	SW 6	SW 5	SW 4	SW 3	SW 2	SW 1
BATT	Clock battery	Vector H	Landscape	OFF	OFF	OFF	OFF	OFF	OFF
120		Cook & Hold	Landscape	OFF	OFF	ON	OFF	OFF	OFF
120	Capacitive touch cable	Vector F	Dortroit				OFF	OFF	
J1	USB connections	Vector E Cas	Portrait	OFF				OFF	
13	Display back light	-	-	-	-	-	-	-	-
		Converge DX	Landscape	ON	OFF	OFF	OFF	OFF	OFF
J4	LCD interface	Converge SX	Landscape	ON	OFF	OFF	OFF	ON	OFF
J10	Speaker	Prodigi Pro	Dortroit						
J12	12 VDC power	Dradiai Dra	POLITAIL	UFF	UFF	OFF	UN	UFF	
J13	Ethernet	Gas	Portrait	ON	OFF	ON	ON	OFF	ON
J16	8 GB micro SD card	Prodigi Classic Elect	Portrait	OFF	OFF	OFF	ON	ON	ON
J21	ON/OFF board	Prodigi Classic Gas	Portrait	ON	OFF	ON	ON	ON	ON
J38	Speaker		1 1			I			
J54	RS 485/232 LVIO								
S1	DIP switches (see table)								
SW1	DIP switch (off)								
SW2	DIP switch (off)							AS-PHD-	-014227



#### **Control Board**



CT-PHD-014167\_ Prodigi

**DIP SWITCH TABLE S1** 

	1		2		3			4		5		6	7		8	
ON	BOILE	R	GAS		CLAS	ASSIC ROLL-IN		OPTION		V-HOOD	MULTI- POINT PROBE		SPA	RE		
OFF	BOILE LESS	R-	ELECTR	с	PR	0	T T	able Op	N O	IO IPTION	1	NO V-HOOD	SINC POII PRO	GLE- NT BE	SPA	RE
			DIP	sw	/ІТСН	ТАВ	LE	S2				DIP	SWIT	СНТ	ABLE	<b>S</b> 3
	1		2		3	4	ġ.	5		6			1		2	
ON	N/A	PI	Rodigi	ſ	N/A	N/.	A	N/A		N/A		ON	N/A	Ν	I/A	
OFF	N/A		СМС	I	N/A	N/	A	N/A		N/A		OFF	N/A	Ν	I/A	



#### **Control Board**

Ref.	Pin(s)	Description	Ref.	Pin(s)	Description
D1	-	Green / Red LED 5V	X11	1-2	B10, Product Temp Probe
D15-D28	-	Yellow LEDs - Function Outputs	-	3-8	Not Used
D36-D42	-	Yellow LEDs - Function Outputs	X12	1-2	N6, Cavity Temp Probe
D52	-	Amber LED 12V at 5V Converter	-	3-8	Not Used
D66	-	White Led - Heart Beat Blinking	X13	1-4	RGB Door Handle Lights
D67-D68	-	Blue LEDs - Rx - Tx Blinking	X14	1-2	Pressure Switch - Water Supply
D69-D70	-	Not Used	-	3-12	Not Used
D74	-	Green LED 3.3V	X15	1-2	Door Switch
J1- J8	-	Probe Jumpers 100 $\Omega$ , or 1000 $\Omega$	-	3-4	Not used
S1	-	DIP Switches - See Table on El Schematic	-	5-6	Steam Relief Valve Switch 1 (SW-1)
S2	-	DIP Switches - See Table on El Schematic	-	7-8	Steam Relief Valve Switch 2 (SW-2)
S3	-	DIP Switches - See Table on El Schematic	-	9-10	Not Used
X1	1-14	Not Used	X16	1	PWM to RB - Upper Burner
X2	1-2	RLY 50 VFD(s) - Power Enable	-	2	Not Used
-	3-4	RLY 51 VFD - 20.20 - Lower - 440-480 Volt	-	3	Not Used
-	5-14	Not Used	-	4	Hall Effect from RB - Upper Burner
X3	1	Not Used	X17	1	PWM to RB - Lower Burner
-	2	Cavity LED	-	2	Not Used
-	3	Not Used	-	3	Not Used
-	4	Cavity LED - 20.10, 20.20	-	4	Hall Effect from RB - Lower Burner
-	5-8	Not Used	X18	-	Not Used
-	9-12	Steam Relief Valves (RV) Browning Valves	X19	-	Not Used
-	13-14	Not Used	X20	-	Not Used
X4	-	12 VDC Supply - Jumpers to IB	X21	-	Not Used
X5	1-2	N7, High Limit - Test	X22	-	Interface to Option Board X4
-	3-8	Not Used	X23	-	Comm Cable to Relay Board X11
X6	-	CB - IB Communication	X24	-	Not Used
X7	1-2	Fan Motor - High Limit - Upper - Classic	X25	-	Not Used
-	3-4	Fan Motor - High Limit - Lower - Classic	X26	-	Not Used
-	5-10	Not Used	X27	-	VFD(s) Communication - S600
X8	-	Not Used	X28	-	Not Used
X9	-	Not Used	X29	-	Not Used
X10	1-2	B3 - Water Temp Probe - Condensate	-	-	-
-	3-4	Not Used	-	-	-
-	5-6	B5 - Probe- Steam Bypass	-	-	-
-	7-8	Not Used	-	-	-



#### **Relay Board**



Ref.	Pin(s)	Description	Ref.	Pin(s)	Description
D1 - D10	- 23	Yellow LEDs - Function Outputs	хз	1-3	Fan Motor - Upper - Classic
D11		Green LED Lower Gas Function Check	X4	1-3	Fan Motor - Lower - Classic
D12		Green LED Upper Gas Function Check	X5	1	NO Contact RL6 - Y4 Cleaning Pump
D13		Amber LED 12V	1.40	2	NO Contact RL5 - Y3 Water
D14		Green LED - 5VDC	- a	3	NO Contact RL4 - Y2 Water
D25	-	Red LED - Lower Gas Alarm	1. <del>.</del>	4	NO Contact RL3 - Y1 Steam Valve
D26	- 23	Red LED - Upper Gas Alarm	122	5	Common RL 3 - RL 6
RL-1	- 22	Fan Motor - High Speed - Classic	X6	1-2	RL7 - Smoker
RL-2	1	Fan Motor - Low Speed - Classic	X7	1-2	Flame Sensor - Upper (Gas)
RL-3		Y1 Water Solenoid		3.4	Flame Sensor - Lower (Gas)
RL-4	2	Y2 Water solenoid	X8	1-2	Upper Alarm (Gas)
RL-5		Y3 Water solenoid	1.00	3.4	Lower Alarm (Gas)
RL-6		Y4 Cleaning Pump	X9	1-2	Heat Demand - Upper (Gas)
RL-7	-	Smoker		3-4	Heat Demand - Lower (Gas)
RL-8	-	Reset - Lower (Gas)	8.00	5-6	Reset - Upper (Gas)
	-	K45 Contactor (Electric)		7-8	Reset - Lower (Gas)
RL-9	- 22 ()	Reset - Upper (Gas)	X10	1-2	K41 Contactor (Electric)
-	-2	K44 Contactor (Electric)	-	3-4	K44 Contactor (Electric)
RL-10	-	Heat Demand Upper and Lower (Gas)	040	5-6	K45 Contactor (Electric)
		K41 Contactor (Electric)	X11	æ	Comm Cable to Control Board X23
X1	1	Combustion Blower - Upper - GND	X12	1	Combustion Blower Lower - HES to CB
	2	Hall Effect (HES) - In	to <del>s</del> a -	2	CB PWM Signal
	3	Pulse Width Modulation (PWM) - Out	X13	1	Combustion Blower Upper - HES to CB
-	4	12 VDC		2	CB PWM Signal
X2	1	Combustion Blower - Lower - GND	323	12 J	
-	2	Hall Effect (HES) - In	328	2	<u>4</u>
1 i i i i i i i i i i i i i i i i i i i	3	Pulse Width Modulation (PWM) - Out	0 <b>2</b> 8	14 T	2 C
-	4	12 VDC	1.0 <del>4</del> .20	19 T	1



#### **Option Board**



Ref.	Description	Ref.	Pin(s)	Description
RLY 1	Relay - Hood Low	X 1	1-2	Hood Low
RLY 2	Relay - Hood High	-	3-4	Hood High
RLY 3	Relay - Grease Pump - PRO ONLY	-	5-6	Grease Pump - PRO ONLY
RLY 4	Relay - Liquid Soap - PRO ONLY		7-8	Hood Function Test
RLY 5	Relay - Not Used	X 2	-	Not Used
RLY 6	Relay - Not Used	X 3	1-2	Soap Pump - PRO ONLY
D 1- 6	LED - Function Outputs	( <b>.</b>	3-6	Not Used
D-7	12 VDC	X 4	-	Interface Pins to CB
D-8	5 VDC	( <b></b> .)	-	3 <b>4</b> 3

ALTO-SHAAM

# **Maintenance Schedule**

Requirements	<ul> <li>See topic <i>How to Clean the Oven</i>.</li> <li>Make sure the oven is cooled down and off—inside of chamber 140°F (60°C) or less.</li> </ul>	
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.	
	<ul> <li>Wipe the oven gaskets with soap and water.</li> </ul>	
	Inspect the oven gaskets for damage.	
	<ul> <li>Wipe the front door glass.</li> </ul>	
	<b>Check</b> the product probe.	
	<b>Check</b> 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.	
	Inspect the oven cavity lamp.	
	Inspect the oven cavity for signs of grease/carbon buildup.	
	Check behind the fan panel inside the oven cavity for signs of grease/carbon buildup.	
	Check behind the fan panel inside the oven cavity for signs of scale buildup.	
	<ul> <li>Inspect the heat exchanger for any signs of major deformation. If yes, immediately remove from service and take corrective action.</li> </ul>	
	<ul> <li>Inspect the heat exchanger for any loose/disconnected pipes or flanges. If yes, immediately remove from service and take corrective action.</li> </ul>	
	Inspect the convection elements for signs of cracking, deformation, or damage.	
	Clean the ventless hood grease filters.	
Monthly	For monthly maintenance, do the following.	
	Clean out the drip tray line.	
	Check the supplied water filtration and change as needed.	
	Check for software updates.	
	Check lighting.	
	Inspect and test the proper draining of the oven cavity.	
	Inspect the drain lines for leaks or clogs.	

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- **Inspect** the oven cavity for any signs of scale buildup.
- Inspect the ventless hood paper filter (replace as needed).
- Test the ventless hood drain for proper drainage and signs of leaking.
- De-scale as needed.

Yearly

For yearly maintenance, do the following.

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

- Replace the steam bypass hose.
- **Inspect** and test the humidity control.
- 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** the cleaning system pump and hoses for leaks and proper operation.
- **Inspect** and test the proper draining of the oven cavity.
- Inspect the upper browning valve hose.
- **Inspect** the low pressure relief valve and hose.
- **Inspect** the convection element seal from the electrical compartment.
- Inspect the gas heat exchanger seal from the electrical compartment.
- **Inspect** the N6 oven temperature probe seal.
- Inspect the hand shower handle and hose.
- **Check** operation of all electrical cooling fans.
- Test steam injection solenoid.
- **Test** condensate solenoid.
- 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.
- **Run** the oven in convection mode and test operation.
- **Run** the oven in steam mode and test operation.
- De-scale as needed.
- For ovens shipped to New Zealand or Australia, inspect the back flow preventer check valve per AS/NZ3500.1 and AS/NZ3500.2

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- **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.



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### **Error Codes**

Code	Component	Description	Troubleshooting steps
E-5	2 - Convection fan	Convection fan (upper) under speed	<ol> <li>Motor or fan wheel locked.</li> <li>Check all connectors on the motor control. Inspect pins and confirm wires are secure in the connector.</li> <li>If LED on motor control flashes, see error codes for motor control.</li> <li>Hall Effect sensor does not detect motor rotation.</li> </ol>
E-5	2 - Convection fan	Lower convection fan under speed	<ol> <li>Motor or fan wheel locked.</li> <li>Check all connectors on the motor control. Inspect pins and confirm wires are secure in the connector.</li> <li>If LED on motor control flashes, see error codes for motor control.</li> <li>Hall Effect sensor does not detect motor rotation.</li> </ol>
E-10	44 - Cavity sensor	Cavity sensor short	Sensor (N6) mis-wired or has malfunctioned.
E-10	47 - Food probe	Food probe short	Probe (B10, B11) mis-wired or has malfunctioned.
E-10	52 - Steam injector	Steam injector sensor short	Sensor (B5) mis-wired or has malfunctioned.
E-10	55 - Tank	Tank sensor short	Sensor (B3) mis-wired or has malfunctioned.
E-11	44 - Cavity sensor	Cavity sensor open	<ol> <li>Oven cavity temperature sensor (N6) has malfunctioned.</li> <li>Oven cavity temperature sensor (N6) wires disconnected.</li> </ol>
E-11	52 - Steam injector	Steam injector sensor open	<ol> <li>Bypass steam temperature sensor (B5) has malfunctioned.</li> <li>Bypass steam temperature sensor (B5) wires disconnected.</li> </ol>
E-11	55 - Tank	Tank sensor open	<ol> <li>Condenser temperature sensor (B3) has malfunctioned.</li> <li>Condenser temperature sensor (B3) wires disconnected.</li> </ol>
E-31	2 - Convection fan (Classic control)	Motor (upper) over temperature	<ol> <li>Check for a blocked fan blade.</li> <li>Check for physical damage of the motor.</li> <li>Check motor high limit.</li> </ol>
E-31	2 - Convection fan (Classic control)	Lower motor over temperature	<ol> <li>Check for a blocked fan blade.</li> <li>Check for physical damage of the motor.</li> <li>Check motor high limit.</li> </ol>
E-31	2 - Convection fan	Motor VFD (upper) over temperature	<ol> <li>Make sure cooling fan(s) are operating.</li> <li>Make sure exhaust vents are clean and free of debris.</li> <li>Make sure oven clearances are met.</li> <li>Ambient temperature greater than 105°F (41°C).</li> </ol>

TROUBLESHOOTING

Code	Component	Description	Troubleshooting steps
E-31	2 - Convection fan	Lower motor VFD over temperature	<ol> <li>Make sure cooling fan(s) are operating.</li> <li>Make sure exhaust vents are clean and free of debris.</li> <li>Make sure oven clearances are met.</li> <li>Ambient temperature greater than 105°F (41°C).</li> </ol>
E-31	44 - Cavity sensor	Chamber over temperature	<ol> <li>Oven cavity temperature sensor (N6) has malfunctioned.</li> <li>Oven cavity temperature sensor (N6) wires disconnected.</li> </ol>
E-31	55 - Tank	Tank sensor over temperature	<ol> <li>Water supply is shut off.</li> <li>Plugged steam bypass hose.</li> <li>Mis-wired condenser temperature sensor (B3).</li> <li>Condenser temperature sensor (B3) has malfunctioned.</li> <li>Cooling-water-solenoid valve (Y2) has malfunctioned.</li> </ol>
E-31	8 - Control Board	Control board too warm	<ol> <li>Make sure cooling fan(s) are operating.</li> <li>Make sure exhaust vents are clean and free of debris.</li> <li>Make sure oven clearances are met.</li> <li>Ambient temperature greater than 105°F (41°C).</li> <li>Check door gasket for damage and proper seal.</li> </ol>
E-31	9 - Interface Board	Interface board too warm	<ol> <li>Make sure cooling fan(s) are operating.</li> <li>Make sure exhaust vents are clean and free of debris.</li> <li>Make sure oven clearances are met.</li> <li>Ambient temperature greater than 105°F (41°C).</li> <li>Check door gasket for damage and proper seal.</li> </ol>
E-55	56 - Vent valve	Vent (upper) not open	<ol> <li>Vent valve monitoring switch has malfunctioned.</li> <li>Vent valve (motor) has malfunctioned. Check for 12 VDC on the motor.</li> </ol>
E-55	56 - Vent valve	Lower vent valve not open	<ol> <li>Vent valve monitoring switch has malfunctioned.</li> <li>Vent valve (motor) has malfunctioned.</li> <li>Check for 12 VDC on the motor.</li> </ol>



Code	Component	Description	Troubleshooting steps
E-62	2 - Convection fan	Motor VFD (upper) over current	<ol> <li>Check oven fan wheel for obstruction.</li> <li>Check all connectors on the motor control. Inspect pins and confirm wires are secure in the connector.</li> <li>If LED on motor control flashes, see error codes for motor control</li> <li>Inspect power down control using on/off button.</li> <li>Cycle power to the oven by unplugging the oven or by turning the main disconnect switch off and then back on.</li> <li>Resume operation of oven. If error code reappears, contact a service provider.</li> </ol>
E-62	2 - Convection fan	Lower motor VFD over current	<ol> <li>Check oven fan wheel for obstruction.</li> <li>Check all connectors on the motor control. Inspect pins and confirm wires are secure in the connector.</li> <li>If LED on motor control flashes, see error codes for motor control</li> <li>Inspect power down control using on/off button.</li> <li>Cycle power to the oven by unplugging the oven or by turning the main disconnect switch off and then back on.</li> <li>Resume operation of oven. If error code reappears, contact a service provider.</li> </ol>
E-66	2 - Convection fan	VFD (upper) error	<ol> <li>Check oven fan wheel for obstruction.</li> <li>Check all connectors on the motor control. Inspect pins and confirm wires are secure in the connector.</li> <li>If LED on motor control flashes, see error codes for motor control</li> <li>Inspect power down control using on/off button.</li> <li>Cycle power to the oven by unplugging the oven or by turning the main disconnect switch off and then back on.</li> <li>Resume operation of oven. If error code reappears, contact a service provider.</li> </ol>
E-66	2 - Convection fan	Lower VFD error	<ol> <li>Check oven fan wheel for obstruction.</li> <li>Check all connectors on the motor control. Inspect pins and confirm wires are secure in the connector.</li> <li>If LED on motor control flashes, see error codes for motor control</li> <li>Inspect power down control using on/off button.</li> <li>Cycle power to the oven by unplugging the oven or by turning the main disconnect switch off and then back on.</li> <li>Resume operation of oven. If error code reappears, contact a service provider.</li> </ol>



Code	Component	Description	Troubleshooting steps
E-78	19 - Voltage sensor	Voltage monitor too low	<ol> <li>Possible VFD failure.</li> <li>Check supply voltage at the main terminal block.</li> <li>Check supply voltage to the VFD.</li> </ol>
E-78	2 - Convection fan	VFD (upper) under voltage	<ol> <li>Possible VFD failure.</li> <li>Check supply voltage at the main terminal block.</li> <li>Check supply voltage to the VFD.</li> </ol>
E-78	2 - Convection fan	Lower VFD under voltage	<ol> <li>Possible VFD failure.</li> <li>Check supply voltage at the main terminal block.</li> <li>Check supply voltage to the VFD.</li> </ol>
E-79	19 - Voltage sensor	Voltage monitor too high	<ol> <li>Possible VFD failure.</li> <li>Check supply voltage at the main terminal block.</li> <li>Check supply voltage to the VFD.</li> </ol>
E-79	2 - Convection fan	VFD (upper) over voltage	<ol> <li>Possible VFD failure.</li> <li>Check supply voltage at the main terminal block.</li> <li>Check supply voltage to the VFD.</li> </ol>
E-79	2 - Convection fan	Lower VFD over voltage	<ol> <li>Possible VFD failure.</li> <li>Check supply voltage at the main terminal block.</li> <li>Check supply voltage to the VFD.</li> </ol>
E-80	2 - Convection fan	VFD (upper) memory error	<ol> <li>Possible VFD failure.</li> <li>Check supply voltage at the main terminal block.</li> <li>Check supply voltage to the VFD.</li> <li>Replace the VFD.</li> </ol>
E-80	2 - Convection fan	Lower VFD memory error	<ol> <li>Possible VFD failure.</li> <li>Check supply voltage at the main terminal block.</li> <li>Check supply voltage to the VFD.</li> <li>Replace the VFD.</li> </ol>
E-88	1 - Heater	Gas ignition failure (upper)	<ol> <li>Power down control using ON/OFF button.</li> <li>Cycle power to the oven by unplugging the oven or turning off the breaker.</li> <li>Inspect top of oven for anything blocking the exhaust flue of the oven.</li> <li>Make sure ventilation hood is turned on and working properly.</li> <li>Make sure gas line is properly connected to the oven and the gas shut off valve is in the open position.</li> <li>Check gas pressure on the inlet of the gas valve. (NG 5.5"-14" w.c., LP 7"-14" required).</li> <li>Follow troubleshooting tree in the service manual.</li> </ol>



Code	Component	Description	Troubleshooting steps
E-88	1 - Heater	Lower gas ignition failure	<ol> <li>Power down control using ON/OFF button.</li> <li>Cycle power to the oven by unplugging the oven or turning off the breaker.</li> <li>Inspect top of oven for anything blocking the exhaust flue of the oven.</li> <li>Make sure ventilation hood is turned on and working properly.</li> <li>Make sure gas line is properly connected to the oven and the gas shut off valve is in the open position.</li> <li>Check gas pressure on the inlet of the gas valve. (NG 5.5"-14" w.c., LP 7"-14" required).</li> <li>Follow troubleshooting tree in the service manual.</li> </ol>
E-90	1 - Heater	Gas blower failure (upper)	<ol> <li>Power supply cable is not connected to combustion blower motor.</li> <li>Speed control cable is not connected to combustion blower motor.</li> <li>Combustion blower motor is blocked, rotation is impeded, or motor has malfunctioned.</li> <li>Faulty control board.</li> </ol>
E-90	1 - Heater	Lower gas blower failure	<ol> <li>Power supply cable is not connected to combustion blower motor.</li> <li>Speed control cable is not connected to combustion blower motor.</li> <li>Combustion blower motor is blocked, rotation is impeded, or motor has malfunctioned.</li> <li>Faulty control board.</li> </ol>
E-93	8 - Control Board	State synchronization error between the interface board and control board	<ol> <li>Power supply cable is not connected to combustion blower motor.</li> <li>Speed control cable is not connected to combustion blower motor.</li> <li>Combustion blower motor is blocked, rotation is impeded, or motor has malfunctioned.</li> <li>Faulty control board.</li> </ol>
E-94	10 - Control Board Communications	Communication error between Interface Board and Control Board	<ol> <li>Cycle power by unplugging or turning off the breaker, then turn it back on.</li> <li>Check CAN cable connections.</li> <li>CAN cable defective.</li> <li>Control board, low voltage, connector defective.</li> <li>Display board connector defective.</li> </ol>
E-94	2 - Convection fan	VFD (upper) communication error	<ol> <li>Cycle power by unplugging or turning off the breaker, then turn it back on.</li> <li>Check communication cable between the motor control and the control board.</li> <li>Cable defective.</li> <li>Motor control connector defective.</li> <li>Control board connector defective.</li> </ol>



Code	Component	Description	Troubleshooting steps
E-94	2 - Convection fan	Lower VFD communication error	<ol> <li>Cycle power by unplugging or turning off the breaker, then turn it back on.</li> <li>Check communication cable between the motor control and the control board.</li> <li>Cable defective.</li> <li>Motor control connector defective.</li> <li>Control board connector defective.</li> </ol>
E-102	59 - Ventless hood	Ventless hood filter Fault	<ol> <li>Check if filters are installed.</li> <li>Check if filters are clogged.</li> <li>Check operation of hood motor.</li> </ol>
E-105	6 - Chamber	Low water pressure	<ol> <li>Water supply not connected.</li> <li>Water supply is shut off.</li> <li>Water supply to oven blocked or obstructed (check filter).</li> </ol>
E-109	6 - Chamber	Chamber high limit	<ol> <li>Oven has experienced an overheat condition.</li> <li>Cooling fan has malfunctioned.</li> <li>Heat relay is stuck closed.</li> <li>Connection between high limit switch and Control Board (CB) is faulty.</li> <li>High limit switch has malfunctioned.</li> </ol>
E-606	6 - Chamber	Error during cleaning cycle	<ol> <li>Manually clean the oven.</li> <li>Manually rinse the oven.</li> <li>Make sure to remove chemicals before resuming operation of oven.</li> <li>Contact a service provider.</li> </ol>
E-999	48 - Personality handler	IB and CB dip switch settings not set correctly	<ol> <li>Power down control using ON/OFF button.</li> <li>Cycle power to the oven by unplugging the oven or by turning the main disconnect switch off and then back on.</li> <li>Resume operation of oven. If error reappears, contact a service provider.</li> </ol>



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#### Is the convection Remove the obstruction from Start fan wheel physically YES the fan wheel and retest. blocked? NO Is the Controller Area Network (CAN) cable properly Repair the seated at Variable Frequency Drive NO connection and (VFD) S600 connector retest. and the Control Board (CB) YES connector X27? Is there continuity Replace the faulty CAN from end to end on all NO cable and retest. CAN cable wires? Reconnect the cable, Measure AC Is there AC voltage on the Variable voltage YES Frequency Drive (VFD) at S105 present? across L & N. NO YES Determine which leg of AC power Is there a solid is missing. L (L1) on the S105 If the LED light on the VFD green LED light on gets voltage from Circuit Breaker is blinking, please reference the VFD? C/B 4. Check that the C/B is the Touch Motor Control ◄ NO not tripped. N (L2) gets power from Error Codes page in the Relay 50. Make sure Relay Service Manual. 50 is energized and closing. YES Proceed to the next page.

#### E5 Prodigi Pro Only: Convection Motor Not Spinning

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#### E5 Prodigi Pro Only: Convection Motor Not Spinning



#### **Touch Motor Control Error Codes**

#### The LED is located on the variable frequency drive (VFD) ① of the oven.

Type of Error	Indication	Cause of Error
Undervoltage	LED flashing sequence, with 1 flash per period.	Voltage of intermediate circuit is less than 250V.
<mark>Overvoltag</mark> e	LED flashing sequence, with 2 flashes per period.	Voltage of intermediate circuit exceeds 445V.
Excess Temperature	LED flashing sequence, with 3 flashes per period.	Temperature sensor in the power unit is more than 199°F (93°C).
Current Peak	LED flashing sequence, with 4 flashes per period.	Blocked motor, detected by current peak monitoring from 900 rpm rotating field.
Overcurrent	LED flashing sequence, with 5 flashes per period.	Intermediate circuit current exceeds 4.0A.
Short-circuit	LED flashing sequence, with 6 flashes per period.	Release of interrupt at intermediate circuit current larger than 53.0A.
Power on	LED flashing sequence, with 7 flashes per period.	Effective mains voltage does not correspond to jumper setting 115V/230V.
Watchdog	LED flashing sequence, with 8 flashes per period.	Watchdog of the microcontroller released, program crash.



## **E10 Convection Motor Short Circuit**





#### **E10 Shorted Sensor or Probe**

Rev 1\_2-16-24





# **E11 Open Sensor or Probe**

Rev 1\_2-16-24



# E31 Cavity Sensor Over Temp



# E31 Cavity Sensor Over Temp (continued)

Rev 1\_2-16-24


#### E31 Control Board (CB) Over Temp





### E31 Interface Board (IB) Over Temp



#### E31 Prodigi Pro: Fan Motor Over Temp





#### E31 Tank Sensor Over Temp



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#### E55 Vent Valve (Upper or Lower)





### E62 VFD Overcurrent Upper or Lower (Pro Only)



#### **E66 Control Board Communication Error**





## E66 VFD Communication Error (Upper or Lower)





#### E78 VFD Undervoltage (Pro Only)



### E78 VFD Undervoltage (Pro Only)(continued)

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#### E79 VFD Overvoltage Upper or Lower (Pro Only)





#### E80 VFD Memory Error (Pro Only)





#### **E88 Error - Gas Ignition Failure**



# E88 Error - Gas Ignition Failure (Continued)





#### E90 Gas Combustion Motor Failure (upper or lower)





### E93 Control Board (CB) Synchronization Error





### E94 Prodigi Pro Only: Communication Error

NOTE: The single variable frequency drive (VFD) in a table top oven will be identified as the "UPPER" or #1 VFD. The two VFDs in a roll-in oven will be identified as the "UPPER" or #1 and the "LOWER" or #2 VFD.



#### **E105 Low Water Pressure**





## E109 High Limit Error





### **E109 High Limit Error (continued)**





#### **E606 Error During Clean Cycle**





#### **E999 DIP Switch Not Set Properly**





### Prodigi, Gas: No Steam at 212°F (100°C)



#### **Cleaning System is Not Operating**



#### Prodigi: Electric, No Steam at 212°F (100°C)



# Prodigi: Electric, No Steam at 212°F (100°C)

### Continued













### No Liquid Clean Injection (Continued)





### **No Rinse Water During the Cleaning Cycle**



#### **No Smoke Production During Smoke Cycle**





### **Oven Dead — No Display or Operation**



#### **Oven Dead — No Display or Operation**

(Continued, Page 2)



# **Oven Dead** — No Display or Operation

(Continued, Page 3)





### **Prodigi Pro, Electric: No Convection Heat**



## **Prodigi Pro: Electric, No Convection Heat**




## 77790

6.10,10.10,7.20 380-415V 3Ph

## 77791

6.10 208-240V 1Ph



**77792** 6.10, 10.10, 7.20 208-240V 3Ph



**77794** 6.10,10.10,7.20 440-480V 3Ph



**77796** 10.20 208-240V 3Ph



77797

10.20 380-415V 3Ph



**77798** 10.20 440-480V 3Ph

## 77799

20.10 208-240V 3Ph





77800

20.10 380-415V 3Ph



**77801** 20.10 440-480V 3Ph



**77802** 20.20 208-240V 3Ph

**77803** 20.20 380-415V 3Ph



**77804** 20.20 440-480V 3Ph



**77807** 6.10,10.10,7.20,10.20 120V **NG/LP** 



**77808** 6.10,10.10,7.20,10.20 208-240V **GAS** 



**77809** 20.10,20.20 120V **GAS** 

**77812** 20.10,20.20 208-240V **GAS** 









Menomonee Falls, WI U.S.A. Phone 800 -558-8744 | +1-262-251-3800 | alto-shaam.com

ASIA Shanghai, China Phone +86-21-6173-0336

AUSTRALIA Brisbane, Queensland Phone 800-558-8744

CANADA Concord, Ontario Canada Toll Free Phone 866-577-4484 Phone +1-905-660-6781 FRANCE Aix en Provence, France Phone +33(0)4-88-78-21-73

**GMBH** Bochum, Germany Phone +49 (0)234 298798-0

ITALY Padua, Italy Phone +39 3476073504

**INDIA** Pune, India Phone +91 9657516999 MEXICO Phone +52 1 477-717-3108

MIDDLE EAST & AFRICA Dubai, UAE Phone +971-4-321-9712

CENTRAL & SOUTH AMERICA Miami, FL USA Phone +1 954-655-5727