

**BCX-14G, BCX-14E, BX-14G, BX-14E,
CNVX-14G AND CNVX-14E
INSTALLATION - OPERATION - MAINTENANCE**



BLODGETT OVEN COMPANY

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PN 39678 Rev AB (5/15)

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Your Service Agency's Address:

Model

Serial number

Oven installed by

Installation checked by

IMPORTANT

WARNING: Improper installation, adjustment, alternation, service or maintenance can cause property damage, injury or death. Read the installation, operation and maintenance instructions thoroughly before installing or servicing this equipment.

INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THE USER SMELLS GAS MUST BE POSTED IN A PROMINENT LOCATION. This information may be obtained by contacting your local gas supplier.

FOR YOUR SAFETY

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

The information contained in this manual is important for the proper installation, use, and maintenance of this oven. Adherence to these procedures and instructions will result in satisfactory baking results and long, trouble free service. Please read this manual carefully and retain it for future reference.

ERRORS: Descriptive, typographic or pictorial errors are subject to correction. Specifications are subject to change without notice.

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Installation

The Blodgett Combi-Oven/Steamer

The Blodgett Combi-Oven/Steamer offers a completely new method of cooking. With the Oven/Steamer you have the choice of two cooking processes: Steam and Hot Air, either...

- Separately
- Combined, or
- In Sequence

And for easy operation you can choose from three modes:



In the **Steam mode** you can:

steam	reheat	reconstitute
stew	thaw	simmer
blanche	preserve	braise
poach		

In the **Hot Air** mode you can:

roast	bake	grill
gratinate	broil	

In the **Combination Steam and Hot Air** mode you can:

defrost	roast	rethermalize
reheat	bake	forced steam

NOTE: CNVX models only operate in hot air mode.

You can also use two or three functions in sequence during one cooking process. We call this:

- combi-steaming
- combi-roasting
- combi-baking

The combination of circulating hot air and steam in the space saving, high performance Combi-Oven/Steamer leads to improvements in the following areas:

- increased productivity in the kitchen
- a reduction in capital expenditures for multiple equipment replacement
- a wider range of menu choices
- a simplified cleaning process

The work process is simplified since products are prepared on or in steam table pans and trays. Food can be cooked, stored, and transported with the same pans. Small amounts of product can be processed efficiently; pre-cooked and convenience foods can be reheated within minutes. Many frozen foods can be processed without pre-thawing. This flexibility in preparation reduces the need for kettles and steam tables since there is no need for large amounts of food to be kept warm for long periods of time.

Today the improvement of food quality is more important than ever. Vegetables are cooked in the Blodgett Combi-Oven/Steamer without water at the optimal temperature of just under 100°C (21°F), maintaining valuable vitamins, minerals, nutrients and trace elements. Cooking meat in the Combi results in less shrinkage and a firmer, juicier product. The Blodgett Combi-Oven/Steamer is being used more and more for baking. Steam and Hot Air modes make it a general purpose baking appliance.



Description of the Combi-Oven/Steamer

ABOUT THE OVEN/STEAMER

Blodgett Combi-Oven/Steamers are quality produced using high-grade stainless steel with first class workmanship.

The multiple speed fan, which is guarded against accidental finger contact, is driven by a quiet and powerful motor. The condenser draws out excess steam from the appliance. Condensation and waste water, which result during steaming and cleaning, are continuously drained.

The use of high quality insulation impedes excessive heat radiation and saves energy.

The Oven/Steamer has optional adjustable legs which adapt easily to slightly uneven surfaces and optional floor stands which are designed for use with all of the table models.

The high performance fresh steam generator with its control system makes it possible to enjoy all of the advantages of a high quality steamer at the flick of a switch. Fresh steam enters the oven cavity without pressure and is circulated at high speed. This process enables quick and gentle cooking and ensures high quality food while providing convenient working methods. The steam generator is completely automatic and protected from running dry.

OVEN/STEAMER OPERATION

The practical oven door, with a viewing window, has a wide swing radius and handle which can be operated easily, even with wet or greasy hands.

Ease of operation is guaranteed through the simple arrangement of the controls. Graphic symbols make the appliance easy for even inexperienced kitchen staff to operate. The Steam On Demand feature allows the operator to add steam at any time while operating in either the Hot Air or Combi modes. This feature is excellent for baking as well as roasting operations. A fourth function, the Cool Down mode, allows the oven cavity to cool down rapidly with the door opened.

Cleaning is kept to a minimum. The interior is sprayed with a self-acting cleaning solution which interacts with steam to easily remove crusts and stains. The oven is designed for easy care and is welded water tight so that the internal cooking cavity may be rinsed with a hose after the steam cleaning process.



Installation

Owner's Responsibilities

INSTALLATION RESPONSIBILITIES PRIOR TO SERVICE STARTUP INSPECTION

You are entitled to a free start-up inspection service by our factory ASAP. Before a factory representative arrives to perform a startup procedure, the owner must already have satisfied the following requirements.

NOTE: Please refer to Leg Attachment and Stacking.

Maximum shelf loading - 60 lbs (27.3 Kg)

1. Oven(s) are uncrated, stacked (if applies) and put in place.

PLUMBING SPECIFICATIONS		
	BCX-14G/AA, BCX-14E/AA BX-14G/AA, and BX-14E/AA	CNVX-14G/AA CNVX-14E/AA
WATER		
Water pressure	40 PSI minimum 50 PSI maximum	
Water connection	3/4" garden hose - Hot and Cold water	3/4" garden hose for spray hose - Cold water only
Water pressure regulator setting	Preset to 30 PSI (207 kPa)	
Minimum requirements	TDS: 40-125 ppm Hardness: 35-100 ppm Chlorides: <25 ppm Silica: <13 ppm Chlorine: <0.2 ppm Chloramine: <0.2 ppm pH: 7.0-8.5	
DRAINAGE		
Drain type	Atmospheric Vented Drain	
Drain connection	2.00" (50.8mm) Copper	
Maximum water drain temperature	140°F (60°C)	



Owner's Responsibilities

ELECTRICAL RATINGS - GAS OVENS BCX-14G/AA, BX-14G/AA AND CNVX-14G/AA					
TYPE OF GAS	GAS INPUT	VOLTAGE	PHASE	AMPS	MOTOR
BCX-14G/AA					
Natural	Steam - 50,000 BTU/Hr	115	1	12	3/4 HP 208-240VAC, 3 phase, 50/60 Hz
	Hot Air - 65,000 BTU/Hr	208-240	1	6	
	Total - 115,000 BTU/Hr				
Propane	Steam - 48,000 BTU/Hr	115	1	12	3/4 HP 208-240VAC, 3 phase, 50/60 Hz
	Hot Air - 65,000 BTU/Hr	208-240	1	6	
	Total - 113,000 BTU/Hr				
BX-14G/AA and CNVX-14G/AA					
Natural	Hot Air - 65,000 BTU/Hr	115	1	12	3/4 HP 208-240VAC, 3 phase, 50/60 Hz
		208-240	1	6	
Propane	Hot Air - 65,000 BTU/Hr	115	1	12	3/4 HP 208-240VAC, 3 phase, 50/60 Hz
		208-240	1	6	
3/4" NPT connector for all U.S. and Canadian installations					

RATINGS - ELECTRIC APPLIANCES BCX-14E/AA, BX-14E/AA AND CNVX-14E/AA							
VOLTAGE	HZ	KW	PHASE	MAX LOAD (AMPS)			MOTOR
				L1	L2	L2	
208	60	19	3	53	53	50	3/4 HP 208-240VAC, 50/60 Hz
240	60	19	3	46	46	43	3/4 HP 208-240VAC, 50/60 Hz
480	60	19	3	23	23	21	3/4 HP 208-240VAC, 50/60 Hz



Installation

Utility Connections - Standards and Codes

THE INSTALLATION INSTRUCTIONS CONTAINED HEREIN ARE FOR THE USE OF QUALIFIED INSTALLATION AND SERVICE PERSONNEL ONLY. INSTALLATION OR SERVICE BY OTHER THAN QUALIFIED PERSONNEL MAY RESULT IN DAMAGE TO THE OVEN AND/OR INJURY TO THE OPERATOR.

Qualified installation personnel are individuals, a firm, a corporation, or a company which either in person or through a representative are engaged in, and are responsible for:

- The installation or replacement of gas piping. The connection, installation, repair or servicing of equipment.
- The installation of electrical wiring from the electric meter, main control box or service outlet to the electric appliance.

Qualified installation personnel must be experienced in such work, be familiar with all precautions required and have complied with all requirements of state or local authorities having jurisdiction.

U.S. and Canadian Installations

Installation must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code, NFPA54/ANSI Z223.1-Latest Edition, the Natural Gas Installation Code CAN/CGA-B149.1 or the Propane Installation Code, CAN/CGA-B149.2 as applicable.

Reference: National Electrical Code, ANSI/NFPA 70-Latest Edition and/or Canadian Electrical Code CSA C22.1 as applicable.

This equipment is to be installed in compliance with the Basic Plumbing Code of the Building Officials and Code Administrators International Inc. (BOCA) and the Food Service Sanitation Manual of the Food and Drug Administration (FDA).

Appliance is to be installed with backflow prevention in accordance with applicable federal, province and local codes.

General Export Installations

Installation must conform with Local and National installation standards. Local installation codes and/or requirements may vary. If you have any questions regarding the proper installation and/or operation of your appliance, please contact your local distributor. If you do not have a local distributor, please call Blodgett Combi at 0011-802-658-6600.





Oven Location and Ventilation

OVEN LOCATION

The well planned and proper placement of your oven will result in long term operator convenience and satisfactory performance.

Certain minimum clearances must be maintained between the oven and any combustible or non-combustible construction. See the table below.

In addition, the following clearances are recommended for servicing.

- Oven body sides - 12" (30cm)
- Oven body back - 12" (30cm)

NOTE: On gas models, routine servicing can usually be accomplished within the limited movement provided by the gas hose restraint. If the oven needs to be moved further from the wall, the gas must first be turned off and disconnected from the oven before removing the restraint. Reconnect the restraint after the oven has been returned to its normal position.

Left Side Heat Shield

Heat sources should not be near the air vents located on the left hand side of the gas appliance.

OVEN MODEL	MINIMUM REQUIRED CLEARANCES		
	Right Side	Left Side	Back
BCX-14G CNVX-14G	1" (25.4mm)	6" (152.4mm)	6" (152.4mm)
BX-14G	1" (25.4mm)	0" (0mm)	6" (152.4mm)
BCX-14E BX-14E CNVX-14E	2" (50.8mm)	2" (50.8mm)	3" (76.2mm)

VENTILATION

The necessity for a properly designed and installed ventilation system cannot be over emphasized. The ventilation system will allow the unit to function properly while removing unwanted vapors and products of combustion from the operating area.

The appliance must be vented with a properly designed mechanically driven exhaust hood. The hood should be sized to completely cover the equipment plus an overhang of at least 6" (15 cm) on all sides not adjacent to a wall. The capacity of the hood should be sized appropriately and provisions made for adequate makeup air.



WARNING!!

Failure to properly vent the oven can be hazardous to the health of the operator; and will result in operational problems, unsatisfactory baking, and possible damage to the equipment. Damage sustained as a direct result of improper ventilation will not be covered by the Manufacturer's warranty.

When installed in the Commonwealth of Massachusetts, this appliance must be interlocked with the hood exhaust system so that the appliance may be operated only when the hood exhaust system is running.

U.S. and Canadian Installations

Refer to your local ventilation codes. In the absence of local codes, refer to the National ventilation code titled, "Standard for the Installation of Equipment for the Removal of Smoke and Grease Laden Vapors from Commercial Cooking Equipment", NFPA-96- Latest Edition.

General Export Installations

Installation must conform with Local and National installation standards. Local installation codes and/or requirements may vary. If you have any questions regarding the proper installation and/or operation of your unit, please contact your local distributor. If you do not have a local distributor, please call Blodgett Combi at 0011-802-658-6600.



Installation

Leg Attachment

LEG OPTIONS

Legs are available in 4" (101mm), 6" (152mm) or 25" (635mm) lengths or low profile casters.

- The 4" (101mm) legs may be used when mounting on a counter.
- The 6" (152.4mm) legs are used on the lower section of a double stacked appliance.
- The 25" (635mm) legs are used for a single appliance located on the floor.

NOTE: For safety reasons, casters must not be used with the 25" (635mm) legs.

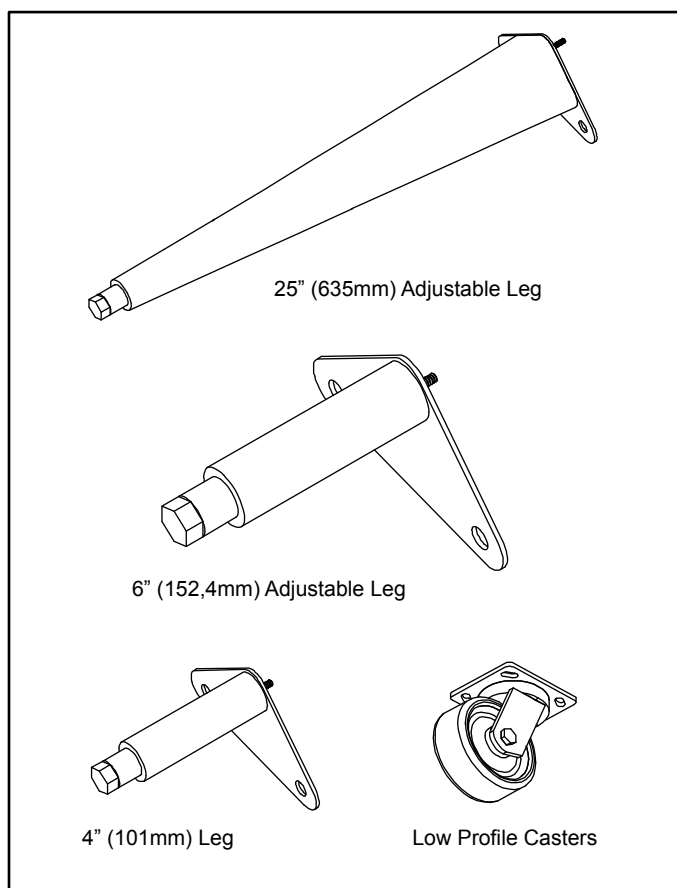


Figure 1

ATTACHMENT

1. Align the threaded stud on one of the front legs to the bolt hole located in the bottom corner of the appliance. Turn the leg clockwise and tighten to the nearest full turn.
2. Align the leg plate holes with the bolt holes. Secure with the two 1/2" bolts provided.
3. Repeat the above steps with the other front leg. If low profile casters are used, install them with the locking casters in the front of the oven. The rear casters do not lock. **Ensure that the locks are set on the front casters.**
4. Tip the oven up on the newly installed front legs. If casters are used, check that the locks are set on the front casters. Repeat the above steps for the rear legs.
5. Level the oven by screwing the adjustable feet in or out as necessary.

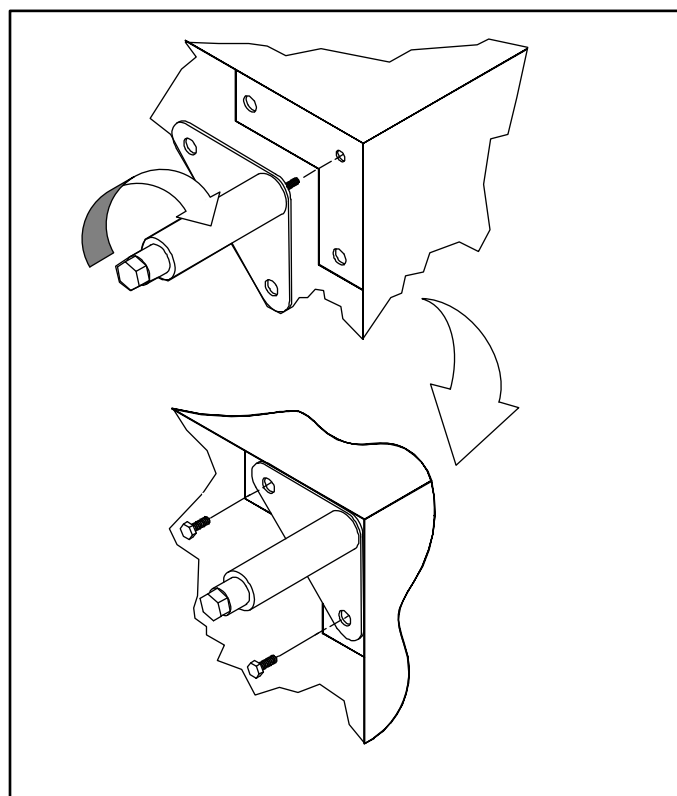


Figure 2



Caster Attachment

1. Place a level on the floor where the casters are to rest.
2. Place shims under the low side until it is level.
3. Mount the shims between the casters and the oven as follows:
 - a. Align the shims and caster holes with the bolt holes.
 - b. Secure with the 1/2" bolts provided.

NOTE: Install them with the locking casters in the front of the oven. The rear casters do not lock. Ensure that the locks are set on the front casters.

4. Tip the oven up on the newly installed casters.

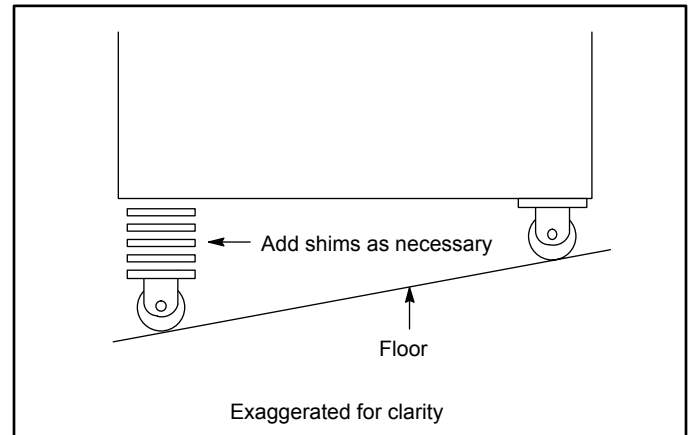


Figure 3



Installation

Stacking



WARNING!!

Stacking should be performed by qualified installation personnel only. The ovens are heavy. Take care to use proper tools and techniques when lifting and stacking units.

1. Attach the legs or casters to the bottom oven.
2. Place the top oven on the bottom oven. Be sure all four sides are flush.
3. Remove left side oven panels.
4. Bolt the two ovens together from underneath into the two threaded nut retainers.
5. **GAS APPLIANCES ONLY:** Attach the flue vents and gas manifold as shown.

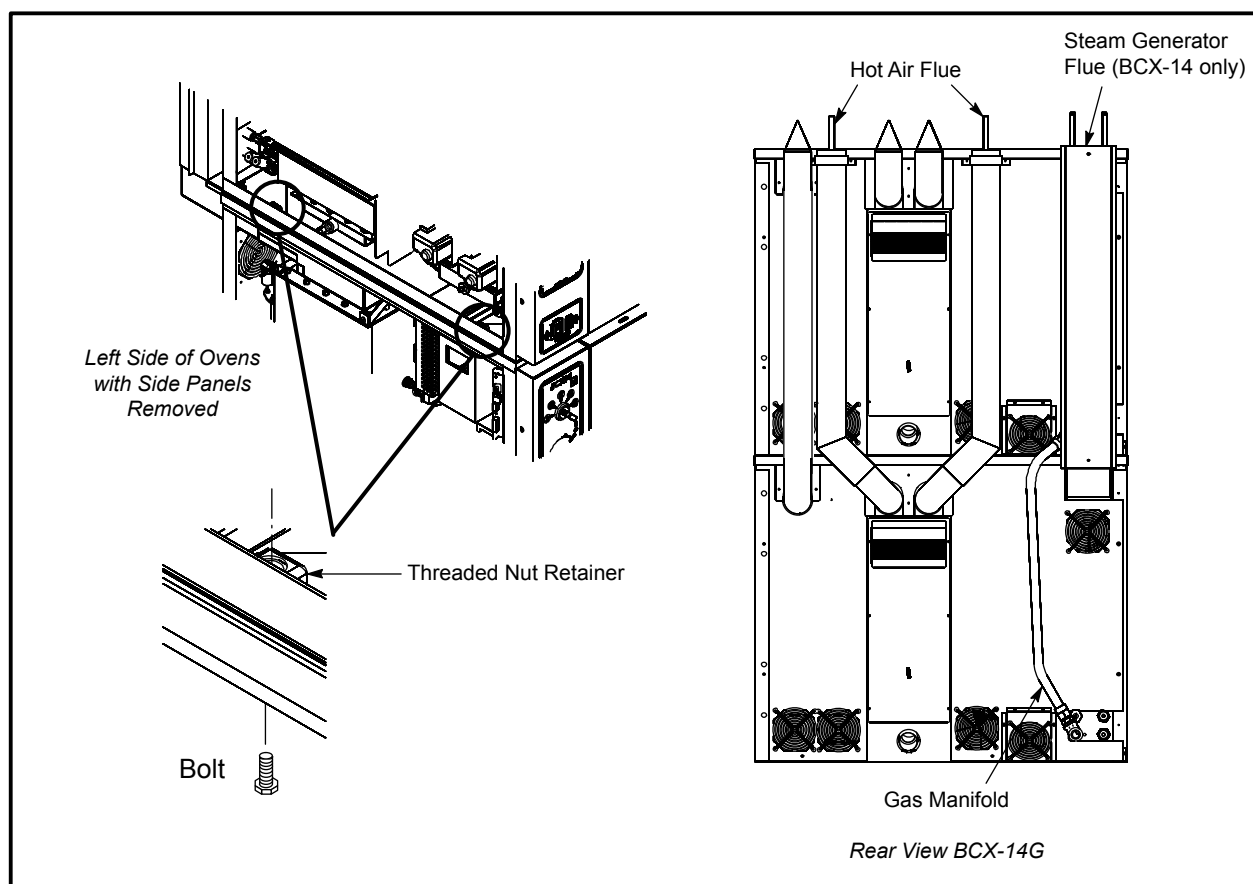


Figure 4

Deliming System Connection and Priming (BCX-14 units only)

DELIMING SYSTEM CONNECTION

1. Push deliming tube onto barbed fitting on oven back.



Figure 5

2. Cut deliming tube to length using the bottom of the deliming fluid reservoir in its mounted position as a guide. Install the jug weight on the deliming fluid reservoir end of the deliming tube.



Figure 6

3. Insert the end of the deliming tube with the jug weight into the deliming solution reservoir.



Figure 7

NOTE: If needed use supplied hose retainers and self drilling screws to route the deliming tube away from hot exhaust ports.

PRIME THE DELIMING PUMP

To prime the delime pump, use the following procedure for your oven control.

Standard Control

1. Rotate the mode switch to COOL DOWN.
2. Press and hold both the Timer knob and the Steam on Demand knob simultaneously. This will turn the pump on.
3. Watch for deliming solution to flow through the tube. Release the two knobs once the delime solution has reached the barbed fitting on the back of the oven.
4. Once the pump is primed, you may turn the mode switch to any position.

MenuSelect™ Control

1. Press the Maintenance key.
2. Scroll to select MANAGER PROGRAM. Push the knob.

NOTE: If the manager password is engaged, it will need to be entered to proceed.

3. Scroll to PRIME DELIME PUMP and push the knob.
4. The display reads, PUSH KNOB TO PRIME. Hold the knob to activate the pump.
5. Watch for deliming solution to flow through the tube. Release the knob once the delime solution has reached the barbed fitting on the back of the oven.
6. Once primed, press the ESC key three times to exit.



Installation

Plumbing Connections

WATER CONNECTION

NOTE: Hot water maximizes steam production but is not required. Cold water may be supplied to both inlets if hot water is not available.

Connect the appliance to quality water via a pressure hose with 3/4" GHT (19mm) couplings. See below for connections. A shut off valve is to be provided adjacent to the oven.



WARNING!!

Operating the appliance without the water regulator installed will invalidate your warranty.

This product must be installed by a licensed Plumber or Gas Fitter when installed within the Commonwealth of Massachusetts.

DRAIN CONNECTION

The drain should be run to an open floor drain avoiding flexible hose that could sag and allow trapped water to accumulate. The customer must supply the piping from the oven to the drain.

Specific water/drain connection for City of Los Angeles

1. Each drain line from the appliance shall be routed without dips or sags to terminate above the flood level rim of an approved indirect waste receptor.
2. The appliance shall be installed in accordance with the manufacturer's printed instructions and the LAPC and LAMC, 1999 editions.
3. A backflow protection device may be required by local codes. If so, install on the potable water system directly ahead of the appliance. The backflow protection device shall be any of the following: an approved pressure type vacuum breaker installed at least 12" above the highest point of use, a double check valve backflow preventer or a reduced pressure principal backflow preventer.

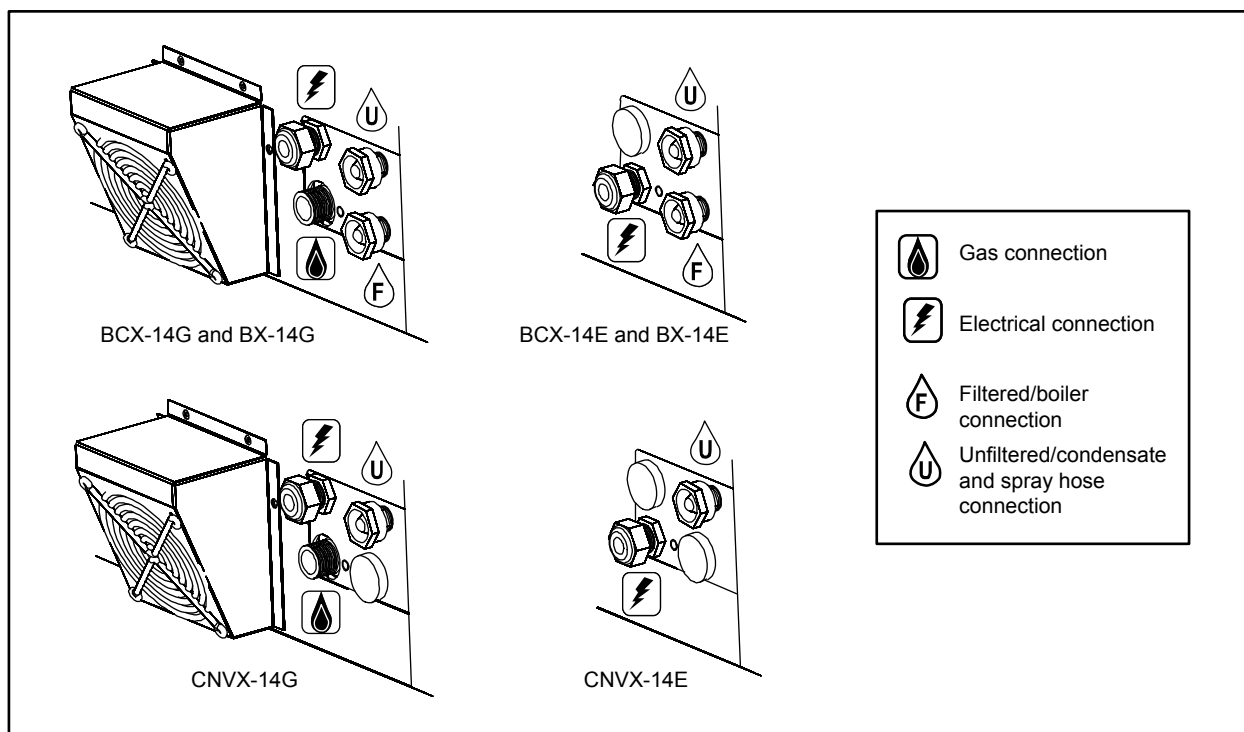


Figure 8

ELECTRICAL CONNECTION

All Models

NOTE: Electrical connections must be performed by a qualified installer only.

Before making any electrical connections to these appliances, check that the power supply is adequate for the voltage, amperage, and phase requirements stated on the rating name plate mounted on the appliance.

The circuit breaker that is used to provide power to this appliance must have a minimum of .076" (3mm) contact spacing. The circuit breaker must meet all Local and National installation standards.

All appliances must be installed in accordance with Local or National Electrical codes.

A wiring schematic is located on the inside of the removable side panel.

NOTE: Disconnect the power supply to the appliance before servicing.



WARNING!!

Improper installation may invalidate your warranty.

Electric Models

A strain relief for the power supply cord is provided. The installer must supply a cord that meets all Local and National installation standards.

Gas Models

U.S. and Canadian Installations

A power cord (115V units only) is supplied with a plug attached. Plug the power cord into the desired receptacle.

This oven model uses a variable frequency inverter drive. Appliances that use variable frequency inverter drives produce high frequency noise and require filters and shielded motor cabling. This causes higher leakage current toward Earth Ground. Especially, at the moment of switching ON this can cause an inadvertent trip of the appliance's ground fault interrupter (GFCI). Some GFCIs are more sensitive than others. Blodgett has qualified the Pass and Seymour brand, part number 2095, 20 A, 125 VAC, 60 Hz, specification grade GFCI duplex receptacle as being immune to the variable frequency inverter drive's noise. Blodgett recommends using this specific GFCI for this model oven.



WARNING!!

If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.



Installation

Gas Connection

GAS PIPING

A properly sized gas supply system is essential for maximum oven performance. Piping should be sized to provide a supply of gas sufficient to meet the maximum demand of all appliances on the line without loss of pressure at the equipment.

Example:

NOTE: BTU values in the following example are for natural gas.

You purchase a BCX-14G to add to your existing cook line.

1. Add the BTU rating of your current appliances.

Pitco Fryer	120,000 BTU
6 Burner Range	60,000 BTU
Deck Oven	50,000 BTU
Total	230,000 BTU

2. Add the BTU rating of the new oven to the total.

Previous Total	230,000 BTU
BCX-14G	115,000 BTU
New Total	345,000 BTU

3. Measure the distance from the gas meter to the cook line. This is the pipe length. Let's say the pipe length is 40' (12.2 m) and the pipe size is 1" (2.54 cm).

4. Use the appropriate table to determine the total capacity of your current gas piping.

The total capacity for this example is 375,000 BTU. Since the total required gas pressure, 345,000 BTU is less than 375,000 BTU, the current gas piping will not have to be increased.

NOTE: The BTU capacities given in the tables are for straight pipe lengths only. Any elbows or other fittings will decrease pipe capacities. Contact your local gas supplier if you have any questions.

Maximum Capacity of Iron Pipe in Cubic Feet of Natural Gas Per Hour

(Pressure drop of 0.5 Inch W.C.)

PIPE LENGTH (FT)	NOMINAL SIZE, INCHES				
	3/4"	1"	1-1/4"	1-1/2"	2"
10	360	680	1400	2100	3950
20	250	465	950	1460	2750
30	200	375	770	1180	2200
40	170	320	660	990	1900
50	151	285	580	900	1680
60	138	260	530	810	1520
70	125	240	490	750	1400
80	118	220	460	690	1300
90	110	205	430	650	1220
100	103	195	400	620	1150

From the National Fuel Gas Code Part 10 Table 10-2

Maximum Capacity of Pipe in Thousands of BTU/hr of Undiluted L.P. Gas at 11" W.C.

(Pressure drop of 0.5 Inch W.C.)

PIPE LENGTH (FT)	OUTSIDE DIAMETER, INCHES		
	3/4"	1"	1-1/2"
10	608	1146	3525
20	418	788	2423
30	336	632	1946
40	287	541	1665
50	255	480	1476
60	231	435	1337
70	215	404	1241
80	198	372	1144
90	187	351	1079
100	175	330	1014

From the National Fuel Gas Code Part 10 Table 10-15

PRESSURE REGULATION AND TESTING

The gas pressure to the appliance must be rated for each appliance while the burners are on. A sufficient gas pressure must be present at the inlet to satisfy these conditions. Refer to the table below for correct gas pressure.

Each appliance has been adjusted at the factory to operate with the type of gas specified on the rating plate.

Each oven is supplied with a regulator to maintain the proper gas pressure. The regulator is essential to the proper operation of the oven and should not be removed.

DO NOT INSTALL AN ADDITIONAL REGULATOR WHERE THE UNIT CONNECTS TO THE GAS SUPPLY UNLESS THE INLET PRESSURE IS GREATER THAN 14" W.C. (1/2 PSI) (37mbar).

The oven and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.45kPa).

The oven must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas piping system at test pressures equal or less than 1/2 psig (3.45kPa).

Prior to connecting the appliance, gas lines should be thoroughly purged of all metal filings, shavings, pipe dope, and other debris. After connection, the appliance must be checked for correct gas pressure.

U.S. and Canadian Installations

Installation must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code, NFPA54/ANSI Z223.1-Latest Edition, the Natural Gas Installation Code CAN/CGA-B149.1 or the Propane Installation Code, CAN/CGA-B149.2 as applicable.

General Export Installations

Installation must conform with Local and National installation standards. Local installation codes and/or requirements may vary. If you have any questions regarding the proper installation and/or operation of your appliance, please contact your local distributor. If you do not have a local distributor, please call Blodgett Combi at 0011-802-658-6600.

GAS PRESSURE					
Gas Type	Inlet Pressure	Orifice Size at Sea Level		Manifold Pressure	
		Hot Air	Steam	Hot Air	Steam
BCX-14G					
Natural	7-14" W.C.	.0531" dia	.042" dia	3.5" W.C.	3.5" W.C.
Propane	12-14" W.C.	.032" dia	.026" dia	10" W.C.	10" W.C.
BX-14G and CNVX-14G					
Natural	7-14" W.C.	.0531" dia	—	3.5" W.C.	—
Propane	12-14" W.C.	.032" dia	—	10" W.C.	—



Installation

Gas Hose Restraint

If the appliance is mounted on casters, a commercial flexible connector with a minimum of 3/4" (1.9 cm) inside diameter must be used along with a quick connect device.

A restraint must be used to limit the movement of the appliance so that no strain is placed upon the flexible connector. The restraint should be fastened to the base frame of the oven as close to the flexible connector as possible. It should be short enough to prevent any strain on the connector. With the restraint fully stretched the connector should be easy to install and quick connect.

The restraint (ie: heavy gauge cable) should be attached without damaging the building. DO NOT use the gas piping or electrical conduit for the attachment of the permanent end of the restraint! Use anchor bolts in concrete or cement block. On wooden walls, drive hi test wood lag screws into the studs of the wall.



WARNING!!

If the restraint is disconnected for any reason it must be reconnected when the appliance is returned to its original position.

U.S. and Canadian installations

The connector must comply with the Standard for Connectors for Movable Gas Appliances, ANSI Z21.69 or Connectors For Moveable Gas Appliances CAN/CGA-6.16 and a quick disconnect device that complies with the Standard for Quick-Disconnect Devices for Use With Gas Fuel, ANSI Z21.41 or Quick Disconnect For Use With Gas Fuel CAN 1-6.9. Adequate means must be provided to limit the movement of the appliance without depending on the connection and the quick disconnect device or its associated piping.

A drip leg must be used at each appliance. Refer to NFPA54/ANSI Z223.1 - Latest Edition (National Fuel Gas Code) for proper drip leg installation.

General export installations

Installation must conform with Local and National installation standards. Local installation codes and/or requirements may vary. If you have any questions regarding the proper installation and/or operation of your appliance, please contact your local distributor. If you do not have a local distributor, please call Blodgett Combi at 0011-802-658-6600.

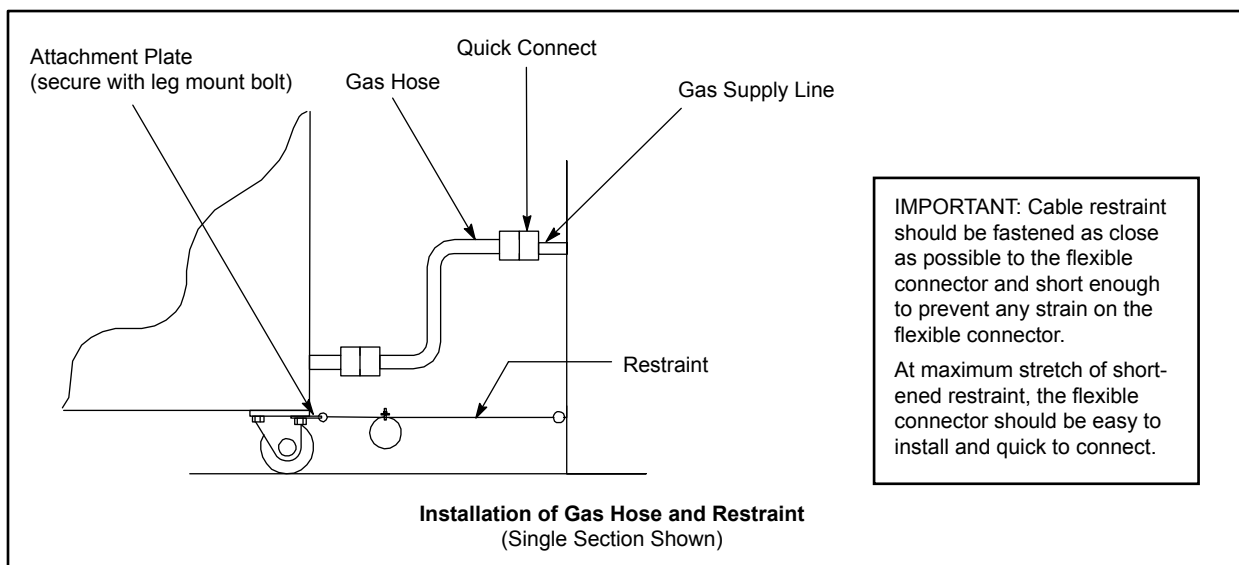


Figure 9



Adjustments

Before applying power to the appliance for the first time, check for the following conditions:

- All electrical safety provisions have been adhered to and the electrical connections are correct.
- Water is connected, turned on and all of the connections are water tight.
- The pan holders are inserted into the oven cavity.
- Cardboard has been removed from oven cavity.
- Gas has been turned on, if gas unit.

DOOR ADJUSTMENT

The door catch may be adjusted in and out using the following procedure:

1. Flip the rubber boot on the catch towards you.
2. Loosen the locknut to make adjustment.
3. Rotate the catch clockwise or counter clockwise to get proper adjustment.
4. Retighten locknut, assuring the catch is vertical.
5. Flip the rubber boot back into position.

The hinges can also be adjusted as follows:

1. Loosen the two 1/4-20 bolts on the top of the hinge plate and the two bolts on the bottom hinge plate.
2. Apply pressure to the door on the corners to get the proper seal. While pushing, tighten the bolts in place.

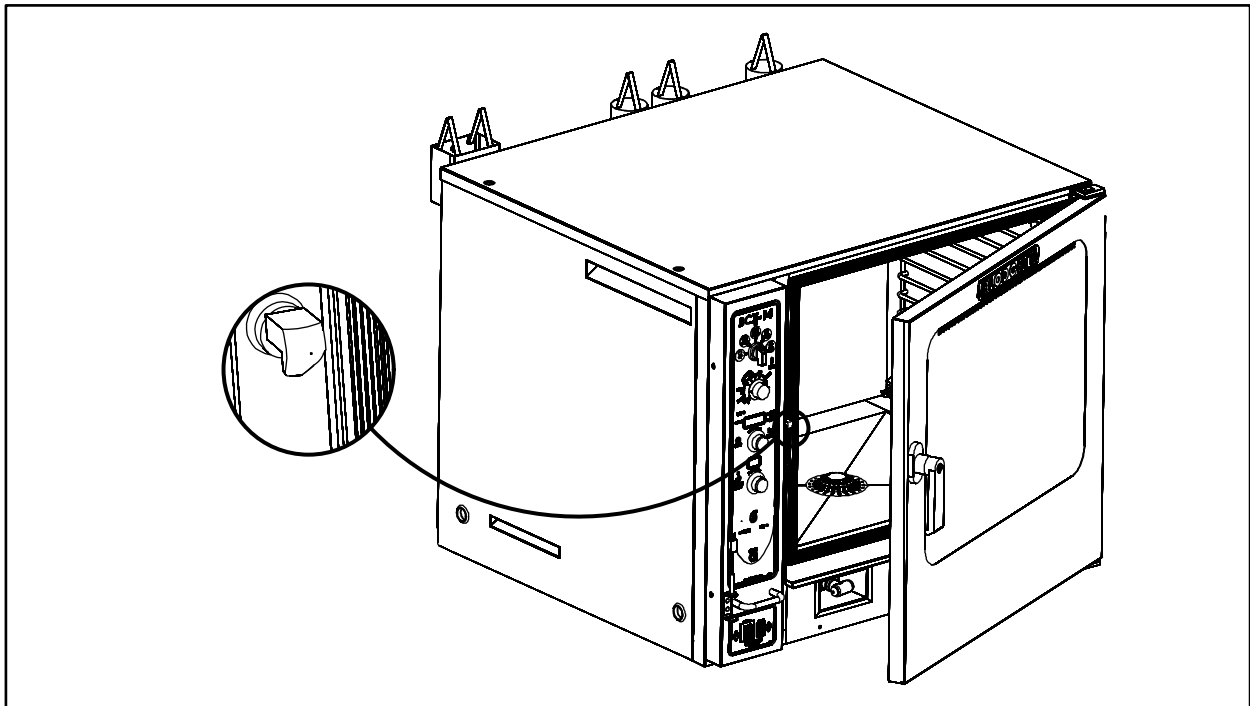


Figure 10



Installation

Final Check Lists



WARNING!!

Final check list must be performed by a qualified installer only.

ELECTRICAL CONTROL COMPARTMENT

- Voltage to appliance matches rating plate

PLUMBING FINAL CHECK

- Incoming water pressure within appliance specification.
- Atmospheric vented drain in place.
- Water feed lines intact without leaks.
- Ensure proper clearance as detailed.
- Delime system has been primed. BCX-14 only.

OVEN OPERATIONAL TESTS

NOTE: Checks to be made by customer or authorized service agent.

Cool Down Mode

- Check that the fan runs with the door open.

Steam Mode - BCX-14 and BX-14 only

Turn on STEAM mode and set thermostat to steam. Verify the following:

- Heat demand lamp is on.
- Heat demand lamp shuts off at approximately 212°F (100°C).
- Set timer for 1 minute by rotating the knob. Be sure the buzzer sounds when the time expires.
- Run light (power light) turns on.
- Unit produces steam, window fogs, door seal does not leak.

Combi Mode - BCX-14 and BX-14 only

Turn to COMBI mode, set thermostat to 350°F (177°C) and verify:

- Heat demand lamp is on.
- Oven is heating.
- Heat demand lamp shuts off at 350°F (177°C) and oven maintains 350°F (177°C).
- Fan shuts off with door open.

Hot Air Mode - All models

Turn to HOT AIR mode and set thermostat to 400°F (204°C) and verify:

- Heat demand lamp is on.
- Oven is heating.
- Heat demand lamp shuts off at 400°F (204°C) and oven maintains 400°F (204°C).
- Fan shuts off with door open.

Steam On Demand Mode - BCX-14 and BX-14 only

Turn the oven to Hot Air mode. Set Steam On Demand for 1 minute. Press the Steam On Demand knob and verify:

- Steam demand lamp is on.
- Steam demand lamp shuts off after approximately 1 minute.

Lights

- Press switch to ensure lights come on.

Cavity Vent

- Press switch to ensure that the vent opens and closes.

Fan Speed

- Press switch to ensure all fan speeds work.



Safety Information for Gas Units

The information contained in this section is provided for the use of qualified operating personnel. Qualified operating personnel are those who have carefully read the information contained in this manual, are familiar with the functions of the oven and/or have had previous experience with the operation of the equipment described. Adherence to the procedures recommended herein will assure the achievement of optimum performance and long, trouble-free service.

Please take the time to read the following safety and operating instructions. They are the key to the successful operation of your Blodgett oven.



SAFETY TIPS

For your safety read before operating

What to do if you smell gas:

- What to do if you smell gas:
- DO NOT try to light any appliance.
- DO NOT touch any electrical switches.
- Use an exterior phone to call your gas supplier immediately.
- If you cannot reach your gas supplier, call the fire department.

What to do in the event of a power failure:

- Turn all switches to off.
- DO NOT attempt to operate the appliance until the power is restored.

NOTE: In the event of a shut-down of any kind, allow a five (5) minute shut off period before attempting to restart the oven.

General safety tips:

- DO NOT use tools to turn off the gas control. If the gas cannot be turned off manually do not try to repair it. Call a qualified service technician.
- If the oven needs to be moved for any reason, the gas must be turned off and disconnected from the appliance before removing the restraint cable. Reconnect the restraint after the oven has been returned to its original location.
- DO NOT remove the control panel cover unless the oven is unplugged.



Operation

Power Switches

CONTROLS IDENTIFICATION

1. HEAT CONTROL SWITCH

Gas Ovens - Used to turn gas on or off.

Electric Ovens - Used to turn power to the elements on or off.

2. CIRCUIT BREAKER - Used to turn power to the unit on or off. This switch should always stay ON.

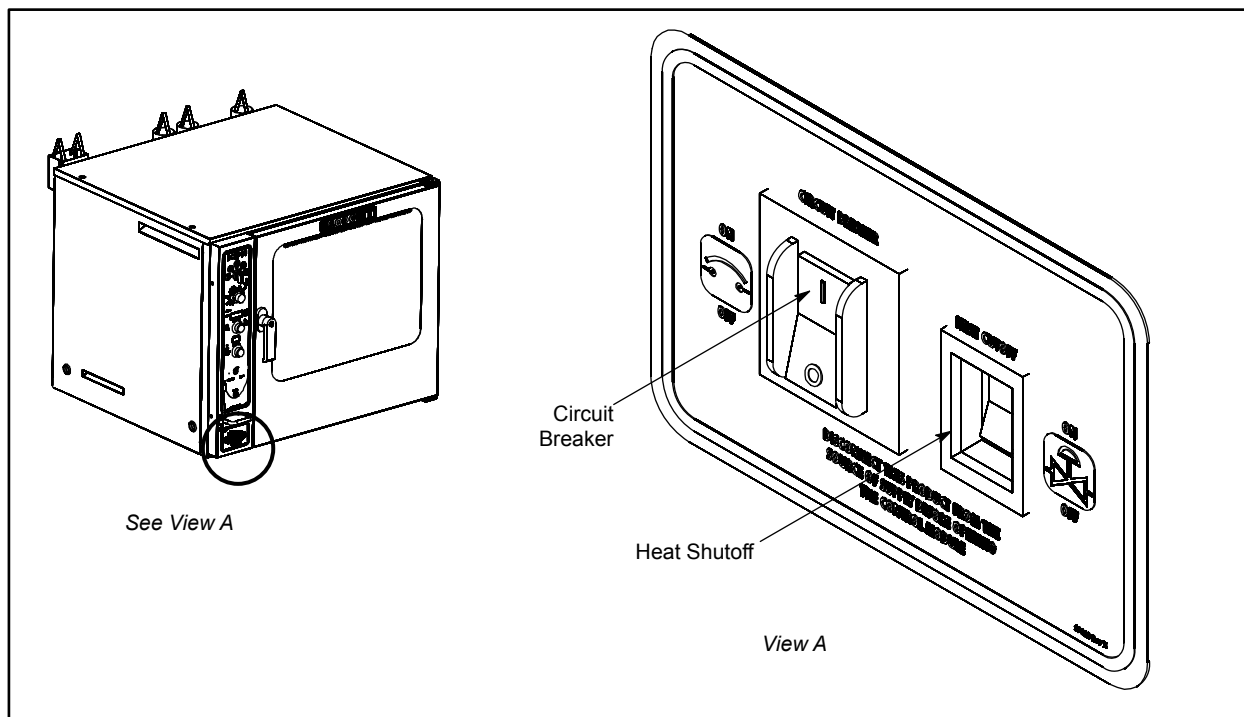


Figure 11



Standard Controls for Models BCX-14 and BX-14

CONTROLS IDENTIFICATION

1. MODE SELECTOR SWITCH - turns power to the oven on or off. Allows selection of Steam, Hot Air, Combi or Cool Down Modes.
2. DISPLAY - displays time and temperature information.
3. TEMPERATURE DIAL - used to set desired cooking temperature.
4. HEAT LAMP - lights when the oven is calling for heat
5. TIMER LED - lights when the cook time is displayed
6. PROBE ACTUAL LED - lights when the actual probe temperature is displayed
7. PROBE SETPOINT LED - lights when the core set-point temperature is displayed
8. TIMER/PROBE KNOB - use to select and set either cook time or probe temperature
9. STEAM ON DEMAND DISPLAY - displays the steam on demand time
10. STEAM ON DEMAND LAMP - lights when steam on demand is activated.
11. STEAM ON DEMAND KNOB - use to set duration for steam on demand
12. LIGHTS KEY - press to turn the oven lights on and off
13. FAN SPEED KEY - used to select fan speed.
14. CAVITY VENT KEY - used to open or close vent to release steam from cavity. The vent is open when the LED is lit.
15. DELIME LAMP (BCX-14 ovens only) - Flashes when steam generator deliming is needed. Remains steady when deliming process is active.
16. FILL LAMP - illuminated until the steam generator is filled with water.
17. PROBE CONNECTION - used to connect the core temperature probe to the control.

NOTE: Model BX-14 ovens do not have a fill lamp.

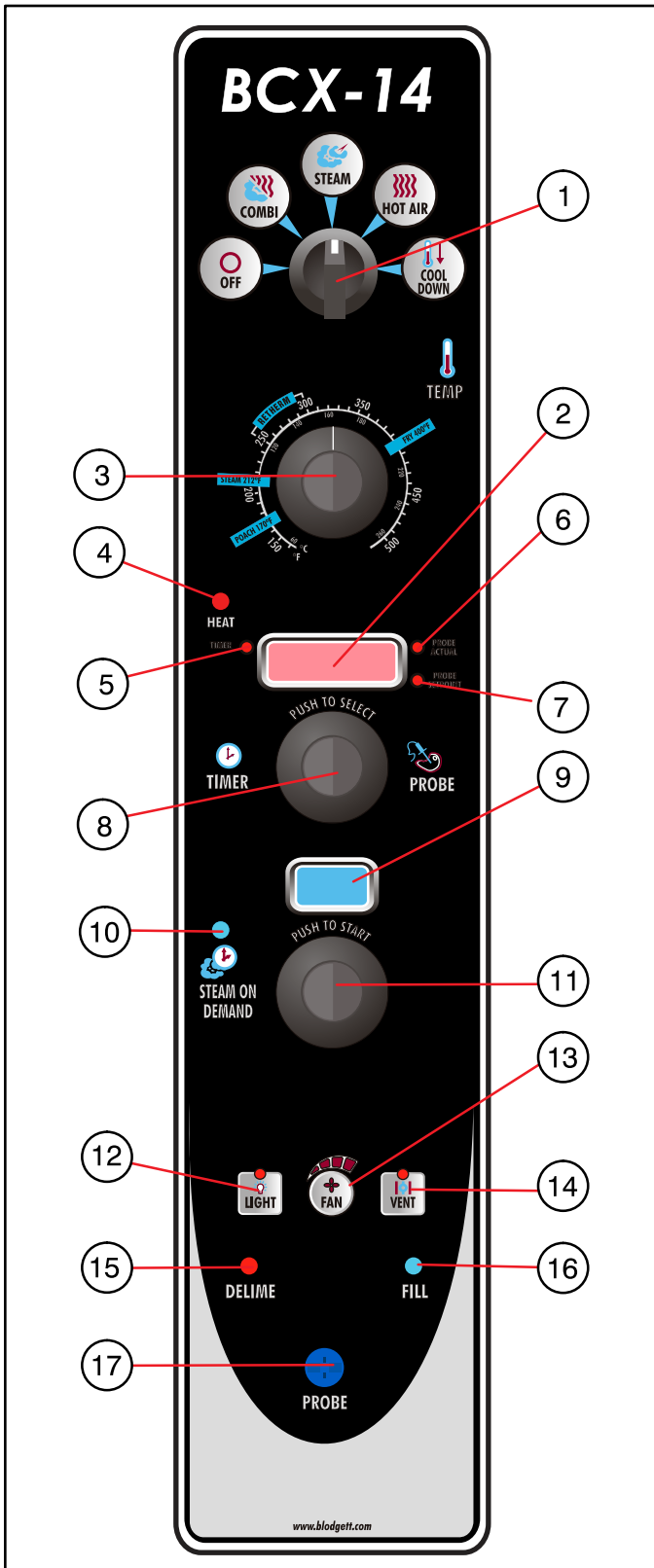


Figure 12



Operation

Standard Controls for Models BCX-14 and BX-14

TIMER COOKING

1. Press the TIMER/PROBE KNOB (8) to select the timer mode. The TIMER LED lights.
2. Turn the MODE SELECTOR Switch (1) to the desired function.
3. Set the TEMPERATURE DIAL (3) to the desired cook temperature.

For Steam mode, set the temperature no higher than 212°F (100°C).

For poaching, turn the temperature dial to the POACH position, 180°F (82°C).

The optimum temperature for Combi mode is 300-350°F (149-177°C).

4. When the oven has reached the cook temperature, load the product.
5. Rotate knob to enter the desired cook time in the display. You can clear the display by rotating counter clockwise. The timer begins on its own.
6. The temperature, time and mode can be altered at any time during the cooking process.
7. When the timer reaches 00:00, the buzzer sounds. Press or rotate the TIMER/PROBE KNOB (8) counter clockwise to silence the buzzer. Remove the product.

PROBE COOKING

1. Press the TIMER/PROBE knob (8) to select the probe setpoint mode. The PROBE SETPOINT LED (7) lights.
2. Rotate the knob to enter the desired final cook temperature in the display.
3. Insert the core probe into the product. Load product into the oven and close the door. Be sure that the terminal end of the core probe is outside of the oven and clear of the door.
4. Connect the core probe to the PROBE CONNECTION (17) at the bottom of the control.
5. The display gives the actual core probe temperature by pressing the TIMER/PROBE knob (8) again.
6. When the product reaches the final cook temperature the buzzer sounds.

COOL DOWN

NOTE: The unit can be cooled down rapidly for steaming, cleaning, etc.

1. To cool down the oven cavity, open the door and select Cool Down on the MODE SELECTOR Switch (1).

STEAM ON DEMAND

How to set the Steam On Demand feature:

While in the Hot Air or Combi mode, the unit can be set to steam for a timed period. At the end of the timed cycle the unit reverts back to the original setting. Steam On Demand can be used at any time during the cook cycle.

NOTE: Steam On Demand is not available in steam mode.

1. Turn the STEAM ON DEMAND KNOB (11) to set the desired length of time. The time is displayed in the STEAM ON DEMAND DISPLAY (9).
2. Press the STEAM ON DEMAND KNOB (11). The STEAM ON DEMAND LAMP (10) lights.

Uses for Steam On Demand:

Most of the ideas came from our creative customers. Experiment with this feature on your own and let us know of any new uses.

- Add a minute or two at the beginning when baking bread for a shiny crust.
- Kick start large loads such as 20 or more chickens. By starting large loads with 5 to 8 minutes of steam you help the oven recover and cut the cooking time by more than 10%.
- Bake bagels without boiling. By starting raw bagels with 1 to 2 minutes of steam you can achieve a beautiful crust.
- Cream caramel is great at 230°F to 250°F in the Combi mode using 2 minutes of on demand steam.
- When cooking chicken wings, try setting the oven in the Combi mode at 375°F and use 3 minutes of Steam On Demand. This method will stop the tips from burning. Total cooking time is approximately 12 minutes.
- Pork ribs tend to pull off the bone better when using 5 to 8 minutes of Steam On Demand. Try ribs in the Combi mode at 350°F.



MenuSelect™ Control for Models BCX-14 and BX-14

CONTROL DESCRIPTION

1. START/STOP KEY - press to start, cancel or pause the bake
2. COOL DOWN KEY - initiates oven cool down cycle
3. BAKE MORE KEY - press at the end of a bake cycle to add additional bake time in one minute increments.
4. DISPLAY - displays time or temperature and other information related to oven function and/or programming.
5. DIAL - used to enter set points, time, and programmable settings. Also used to select the programmed product.
6. TEMP KEY - used to set or change the bake temperature
7. TIME KEY - used to set or change the bake time.
8. COMBI KEY - press to enter combi mode
9. STEAM KEY - press to enter steam mode
10. HOT AIR KEY - press to enter hot air mode
11. RETHERM KEY - press to enter retherm mode, this mode uses steam to reheat frozen or precooked product. Retherm has a temperature limit of 250-300°F.
12. STEAM ON DEMAND KEY - used to initiate steam injection cycle
13. PROBE KEY - press to use core probe cooking
14. FAN KEY - press to select the fan speed
15. LIGHT KEY - press to turn the lights on and off.
16. VENT KEY - press to manually open and close the oven vent
17. PROGRAM KEY - press to enter product programming and save programmed settings.
18. ESCAPE KEY - press to back up one step during programming
19. MAINTENANCE KEY - press to enter manager programming and save programmed settings
20. ALPHA/NUMERIC KEYPAD - used to program recipes.
21. POWER KEY - used to place control in and out of standby mode.

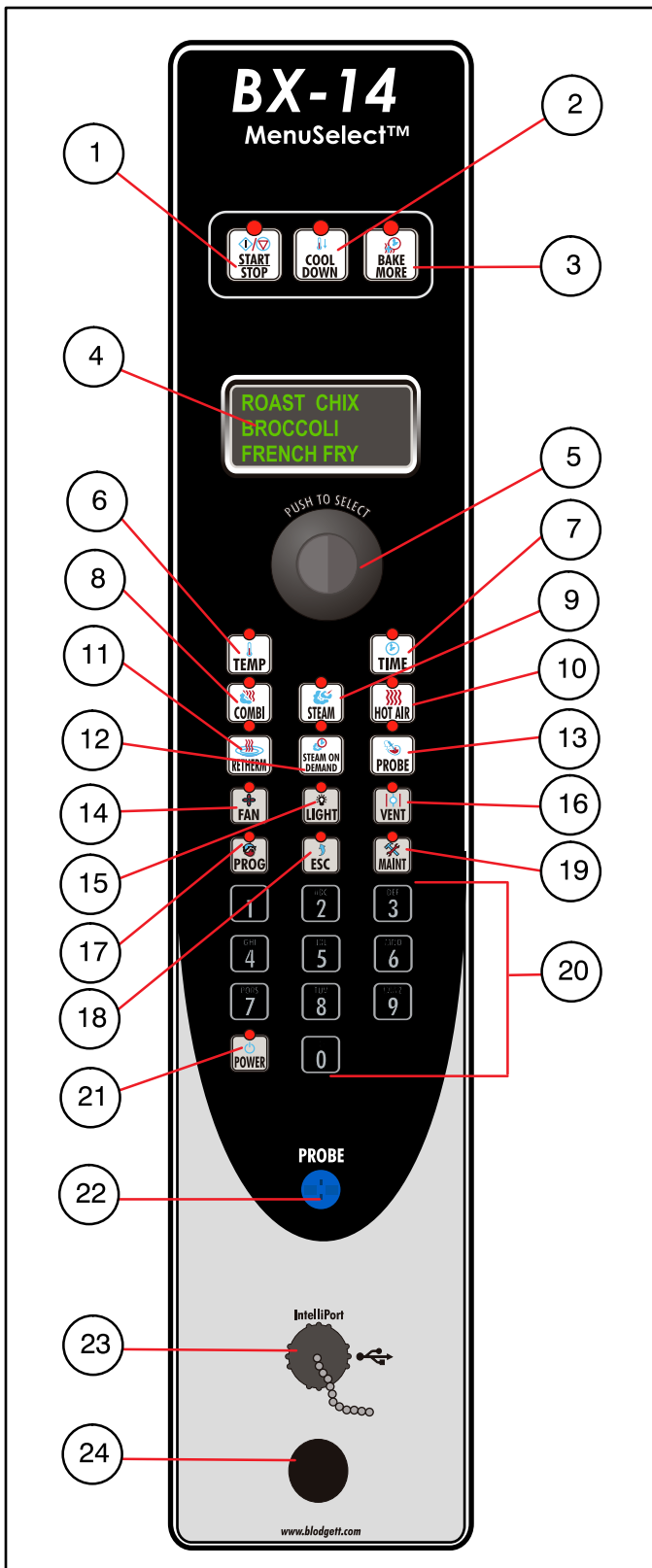


Figure 13



Operation

MenuSelect™ Control for Models BCX-14 and BX-14

22. CORE PROBE CONNECTION - plug core temperature probe in here when using probe cooking
23. USB Port and COVER - Use to transfer recipes and data to/from the control
24. BUZZER - The buzzer is turned on/off through the oven control.

OVEN STARTUP

1. Be sure the gas shutoff switch and/or circuit breaker switch below the control panel are in the on position. The display flashes OFF PRESS POWER KEY TO START.

NOTE: If the real time clock and auto wake up functions are enabled the display reads PRESS POWER KEY TO START AUTO START.

2. Press the POWER KEY (21). The display reads PREHEAT and the oven heats to the last manual set temperature in the hot air mode. The display flashes READY / IDLE and the alarm beeps 5 times when the oven is at temperature and ready to bake.

MANUAL COOKING

1. Turn the DIAL (5) until the display reads MANUAL.
2. Press the TIME KEY (7). Rotate the dial, or use the alpha/numeric keypad to enter the desired bake time. Press the center of the dial to set the bake time.

NOTE: Time is set in one minute increments using the dial. To set time in less than one minute increments use the alpha/numeric keypad.

3. Press the TEMP KEY (6). Rotate the dial, or use the alpha/numeric keypad to enter the desired bake temperature. Press the center of the dial to set the bake temperature. The oven preheats to the new temperature.

NOTE: Temperature is set in 5 degree increments using the dial. To set time in less than 5 degree increments use the alpha/numeric keypad.

4. Press the desired mode key, combi, steam, hot air or retherm.

If Combi or Retherm are selected, rotate the dial, or use the alpha/numeric keypad to enter the desired percentage of steam.

NOTE: Retherm has a temperature limit of 250-300°F.

5. When the display flashes READY / IDLE, open the doors. Load the product.
6. Press the START/STOP KEY (1) to begin the bake cycle. The timer counts down and the display alternates between the cooking mode and the name of the product.

PROGRAMMED COOKING

1. Turn the DIAL (1) until the name of the product is highlighted. Press the center of the dial to select. The oven preheats to the programmed temperature in the correct cooking mode. The display flashes READY / IDLE and the alarm beeps 5 times when the oven is at temperature and ready to bake.
2. Open the doors. Load the product.
3. Press the START/STOP KEY (1) to begin the bake cycle. The timer counts down and the display alternates between the cooking mode and the name of the product.

PROBE COOKING

1. Press the PROBE key (13) to select the probe mode. The display reads CORE PROBE COOK & HOLD. Turn the dial to select either YES or NO. Press the center of the dial to select.

If YES is selected, Cook & Hold has been enabled. In the Cook & Hold mode, the oven cavity lowers to the product pull temperature as the product cooks.

If NO is selected, Cook & Hold has not been enabled the cavity maintains the cook temperature.

2. Turn the DIAL to enter the desired product pull temperature in the display. Press the center of the dial to save the pull temperature.
3. Press the TEMP KEY (6). Rotate the dial, or use the alpha/numeric keypad to enter the desired bake temperature. Press the center of the dial to set the bake temperature. The oven preheats to the new temperature.

NOTE: Temperature is set in 5 degree increments using the dial. To set time in less than 5 degree increments use the alpha/numeric keypad.



MenuSelect™ Control for Models BCX-14 and BX-14

- Press the desired mode key, combi, steam, hot air or retherm.

If Combi or Retherm are selected, rotate the dial, or use the alpha/numeric keypad to enter the desired percentage of steam.

NOTE: Retherm has a temperature limit of 250-300°F.

- Insert the core probe into the product. Load product into the oven and close the door. Be sure that the terminal end of the core probe is outside of the oven and clear of the door.
 - Connect the core probe to the PROBE CONNECTION (22) at the bottom of the control.
- NOTE: Do not connected the probe before the cook mode has been selected.*
- The display gives the actual core probe temperature as well as the oven set temperature.
 - When the product reaches the pull temperature the buzzer sounds.
 - Press the START/STOP KEY (1) to silence the buzzer.

If using Cook & Hold - The cavity temperature continues to drop to the product pull temperature and the display counts up, telling the operator long the product has been held. Disconnect the core probe and remove the product when ready.

If not using Cook & Hold - The cavity remains at the cook temperature. The display does not count up. Disconnect the core probe and remove the product when the buzzer sounds.

DURING ANY COOK CYCLE

Steam On Demand

While in the Hot Air, Combi or retherm modes, the unit can be set to steam for a timed period of up to 20 minutes. At the end of the timed cycle the unit reverts back to the original setting. Steam On Demand can be used at any time during the cook cycle.

- Press the STEAM ON DEMAND KEY (12).
- Rotate the dial, or use the alpha/numeric keypad to enter the desired steam on demand time. Press the center of the dial to initiate Steam on Demand cycle.

NOTE: Steam on Demand time is set in one minute increments using the dial. To set time in less than one minute increments use the alpha/numeric keypad.

- The Steam on Demand LED flashes until the steam time has expired.

Venting Moisture from the Oven Cavity

- Press the VENT KEY (16). This manually opens the vent until the key is pressed again to close it.

Pause a Bake Cycle

- To pause a cook cycle, press the START/STOP KEY (1). The LED on the start/stop key flashes. The bake cycle will pause until the key is pressed again.

Cancel a Cook Cycle

- To cancel the cook cycle, press and hold the START/STOP KEY (1).

At the End of Any COOK Cycle

- An alarm sounds, the display reads DONE.
- If more bake time is desired, press the BAKE MORE KEY (3). This will add an additional one minute of time for each press of the key.
- When you are satisfied with the bake, press the START/STOP KEY (1) to silence the alarm. Open the door to remove the product.

Oven Shutdown

- Press the COOL DOWN KEY (2). The display reads AUTO COOL DOWN ACTUAL TEMP. To speed up the cool down process, open the doors and press the VENT KEY (16) to open the vent.
- When the oven has cooled down, the display reads OFF PRESS POWER KEY TO START.

NOTE: The lights shut off and the vent closes automatically at the end of the cool down cycle.



Operation

MenuSelect™ Control for Models BCX-14 and BX-14

PRODUCT PROGRAMMING

Entering the Program Mode

1. Press the PROGRAM KEY (17). If the control is password protected, the display reads ENTER CODE. Use the alpha/numeric keypad to enter the manager passcode 3124, then press the center of the dial to enter the program mode.

Naming a Product Recipe

NOTE: Use the following procedure to name a new product or edit the name of an existing product.

1. For a new recipe, turn the dial to the first open product. Press the center of the dial to select.

To edit an existing name, rotate the dial to the name to be changed. Press the center of the dial to select.

2. Use the dial to scroll down to Edit Name. Press the center of the dial to enter the edit name menu.

3. Turn the dial or use the alpha/numeric keypad to select the first character. Press the center of the dial to advance to the next character. Repeat for all remaining characters.

NOTE: Product names may be up to 10 characters long and can contain spaces. Use the #1 key to insert spaces in a recipe name.

NOTE: To select letters using the keypad, press the appropriate key once if you need the first letter on the key, twice for the second and three times for the third. For example to enter the letter L press the #5 key three times.

4. Press the PROG KEY (17). With SAVE highlighted, press the dial to save the product name.

Programming a Product Recipe

NOTE: The control can hold 99 recipes. Each recipe may have up to 6 cooking stages.

1. Turn the dial to highlight the name of the product to be programmed. Press the center of the dial to select the product.
2. The display reads PRODUCT NAME: STAGE 1. Press the center of the dial to select the stage.
3. Rotate the dial, or use the alpha/numeric keypad to enter the desired bake time. Press the center of the dial to set the bake time.

NOTE: Time is set in one minute increments using the dial. To set time in less than one minute increments use the alpha/numeric keypad.

4. Rotate the dial to select the desired cooking mode. Choose from combi, steam, hot air or retherm. Press the center of the dial to set the cook mode.

If Combi or Retherm are selected, rotate the dial, or use the alpha/numeric keypad to enter the desired percentage of steam.

5. Rotate the dial, or use the alpha/numeric keypad to enter the desired cook temperature. Press the center of the dial to set the bake temperature.

NOTE: Temperature is set in 5 degree increments using the dial. To set time in less than 5 degree increments use the alpha/numeric keypad.

NOTE: Retherm has a temperature limit of 250-300°F.

6. Rotate the dial to select the desired fan speed.
7. Rotate the dial to select the fan rotation cycle. Choose between manual or auto.

NOTE: This is the length of time the fan will rotate in one direction before reversing.

If manual is selected, rotate the dial or use the alpha/numeric keypad to enter the desired fan cycle. Press the dial to set the fan cycle.

If auto is selected, the program will use the default fan cycle setting. The default is set through the Manager Programming.

8. Rotate the dial to set the vent position. Choose between OPEN or CLOSE. Press the center of the dial to set the vent position.
9. Use the dial to scroll down to PRODUCT NAME: STAGE 2. Press the center of the dial to select stage 2.
10. Repeat steps 2-9 for all remaining stages.
11. When all stages have been programmed, press the PROGRAM KEY (17). To save the programming, use the dial to scroll to YES. Press the center of the dial. The control exits the program mode.



MenuSelect™ Control for Models BCX-14 and BX-14

USING THE USB PORT

1. With the power on, remove the cover of the USB port (23) and insert the USB drive.
2. Press the MAINTENANCE KEY (19).
3. Turn the dial to highlight MANAGER PROGRAM. Press the center of the dial to select.
4. Turn the dial to highlight either COPY RECIPE FROM USB or COPY RECIPE TO USB, then press the center of the dial to select.
5. When the transfer is complete, press any key to return to the menu.
6. Turn the dial to highlight EXIT. Press the center of the dial to select. The display returns to the previous menu.
7. Turn the dial to highlight EXIT. Press the center of the dial to select.

MANAGER PROGRAMMING

Entering the Manager Program Mode

1. Press the MAINTENANCE KEY (19). If the control is password protected, the display reads ENTER CODE. Use the alpha/numeric keypad to enter the manager passcode 3124, then press the center of the dial to enter the program mode.
2. Turn the dial to highlight OVEN SETUP. Press the center of the dial to select the product.

Programming Auto Start

NOTE: The Auto Start function enables the oven to turn on at a programmed time of day and preheat to a programmed temperature.

1. Turn the dial to highlight AUTO START. Press the center of the dial to select.
2. Turn the dial to select either ON or OFF. Press the center of the dial to select.

If ON is selected, the display reads AUTO START 24 HOUR TIME 00:00. Turn the dial to enter the time you would like the oven to begin preheating. Press the center of the dial to select.

The display reads AUTO START TEMP XXX. Turn the dial to enter the desired preheat temperature. Press the center of the dial to select.

PROGRAMMING OVEN SETUP

These menus allow the manager to set up basic oven functions

1. Turn the dial to highlight OVEN SETUP. Press the center of the dial to select.
2. Turn the dial to highlight MANAGER PROGRAM. Press the center of the dial to select.
3. Turn the dial to highlight the oven function you wish to change. Press the center of the dial to select. Choose from the following functions:

Recipe Password - Select YES or NO to enable password protection on recipe programming. If YES is selected the passcode 3124 must be entered to change recipe programming.

Temp Unit - Select either degrees F or C.

Cool Down Temp - Select the set temperature for the oven to achieve in Cool Down mode

Temp Disp Rate - Set the rate, in seconds, at which the display switches between actual and setpoint temperature

Input Rsp Time - Set the length of time allowed to input each variable when programming recipes before control automatically exits out

Setback Time - When not used for a period of time, the oven temperature will automatically reduce to conserve energy. This variable sets the length of time the oven remains at the idle temperature before being lowered.

Ready Beep - Select either ON or OFF. This is the audible alarm that sounds when the oven has reached the set temperature.

Cook Done Beep - Select either ON or OFF. This is the audible alarm that sounds when the product cook time has expired.

Cook Cool Fan - Select either YES or NO. This function allows the control to display OPEN OVEN DOOR when you are attempting to lower the set temperature of the oven.

Restore Manual SE - Select either YES or NO. This variable enables the oven to remember the last settings used for manual cooking.

NOTE: The following apply to BCX models only.

Boiler Set Temp Preheat - Select the temperature in the boiler when it is in stand by

Boiler Set Temp Cook - Select the temperature in the boiler when steam is being produced



Operation

MenuSelect™ Control for Models BCX-14 and BX-14

Delime Fill Time - Set the length of time the boiler continues to fill with deliming solution beyond the standard water level in order to ensure all of the scale present in the boiler is removed.

Delime Interval - Set the length of time between deliming intervals

Delime Time - Set the time during the day when the display alerts the user to delime

Flush Interval - Set the length of time between boiler flushes

Flush Time - Set the time during the day when the display alerts the user to flush the boiler

4. After editing a function, press the center of the dial to save.
5. When all desired functions have been edited, turn the dial to highlight EXIT. Press the center of the dial to exit the manager programming mode.



Standard Controls for Models CNVX-14

CONTROLS IDENTIFICATION

1. MODE SELECTOR SWITCH - turns power to the oven on or off. Allows selection of Hot or Cool Down Modes.
2. TEMPERATURE DIAL - used to set desired cooking temperature.
3. DISPLAY - displays time and temperature information.
4. HEAT LAMP - lights when the oven is calling for heat
5. PROBE ACTUAL LED - lights when the actual probe temperature is displayed
6. PROBE SETPOINT LED - lights when the core setpoint temperature is displayed
7. TIMER/PROBE KNOB - use to select and set either cook time or probe temperature
8. LIGHTS KEY - press to turn the oven lights on and off
9. FAN SPEED KEY - used to select fan speed.
10. CAVITY VENT KEY - used to open or close vent to release steam from cavity.
11. PROBE CONNECTION - used to connect the core temperature probe to the control.

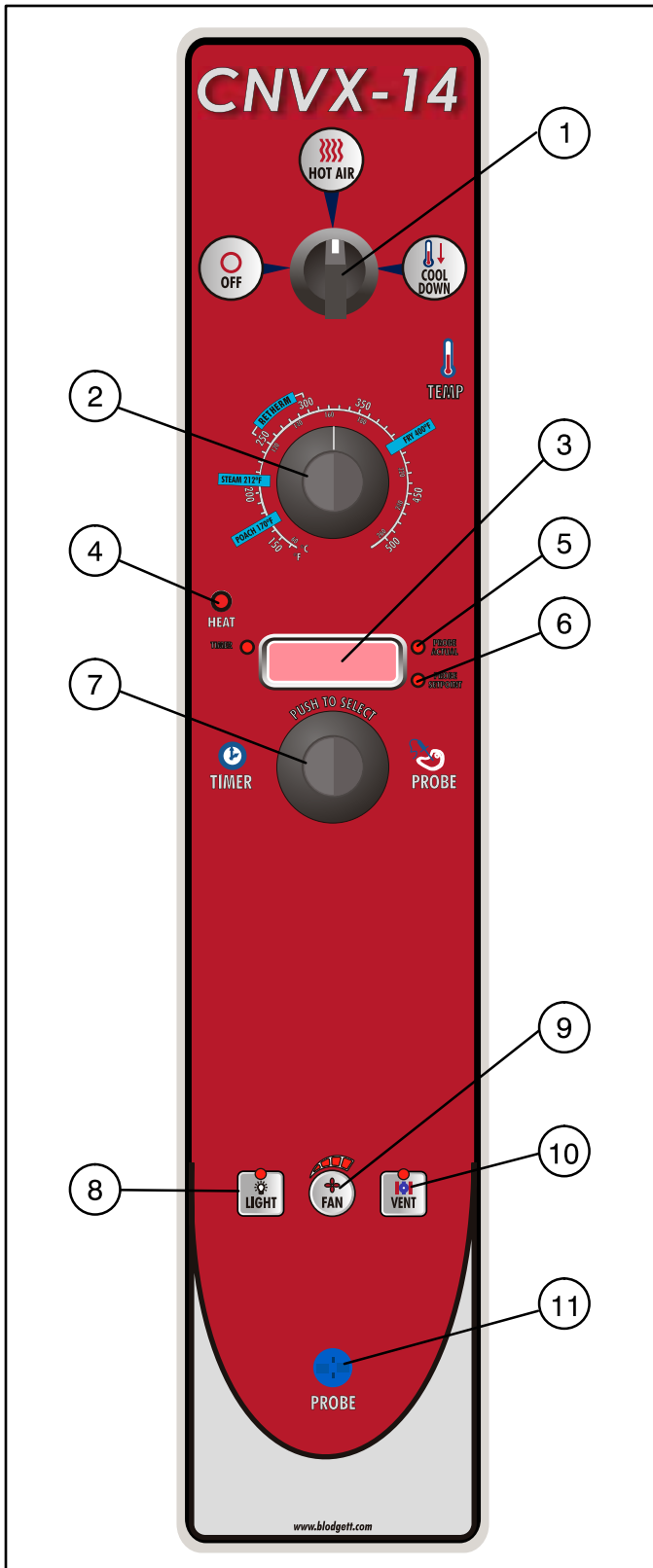


Figure 14



Operation

Standard Controls for Models CNVX-14

TIMER COOKING

1. Press the TIMER/PROBE KNOB (7) to select the timer mode. The TIMER LED lights.
2. Turn the MODE SELECTOR Switch (1) to the desired function.
3. Set the TEMPERATURE DIAL (2) to the desired cook temperature.
4. When the oven has reached the cook temperature, load the product.
5. Rotate knob to enter the desired cook time in the display. You can clear the display by rotating counter clockwise. The timer begins on its own.
6. The temperature and time can be altered at any time during the cooking process.
7. When the timer reaches 00:00, the buzzer sounds. Press or rotate the TIMER/PROBE KNOB (2) counter clockwise to silence the buzzer. Remove the product.

PROBE COOKING

1. Press the TIMER/PROBE knob (7) to select the probe setpoint mode. The PROBE SETPOINT LED (6) lights.
2. Rotate the knob to enter the desired final cook temperature in the display.
3. Insert the core probe into the product. Load product into the oven and close the door. Be sure that the terminal end of the core probe is outside of the oven and clear of the door.
4. Connect the core probe to the PROBE CONNECTION (11) at the bottom of the control.
5. The display gives the actual core probe temperature by pressing the TIMER/PROBE knob (7) again.
6. When the product reaches the final cook temperature the buzzer sounds.

COOL DOWN

NOTE: The unit can be cooled down rapidly for cleaning, etc.

1. To cool down the oven cavity, open the door and select Cool Down on the MODE SELECTOR Switch (1).



MenuSelect™ Control for Model CNVX-14

CONTROLS IDENTIFICATION

1. START/STOP KEY - press to start, cancel or pause the bake
2. COOL DOWN KEY - initiates oven cool down cycle
3. BAKE MORE KEY - press at the end of a bake cycle to add additional bake time in one minute increments.
4. DISPLAY - displays time or temperature and other information related to oven function and/or programming.
5. DIAL - used to enter set points, time, and programmable settings. Also used to select the programmed product.
6. TEMP KEY - used to set or change the bake temperature
7. TIME KEY - used to set or change the bake time.
8. FAN KEY - press to select fan speed.
9. LIGHT KEY - press to turn the oven interior lights on or off
10. VENT KEY - press to manually open and close the oven vent
11. PROGRAM KEY - press to enter product programming and save programmed settings
12. ESCAPE KEY - press to back up one step during programming
13. MAINTENANCE KEY - press to enter manager programming and save programmed settings
14. ALPHA/NUMERIC KEYPAD - used to program recipes.
15. POWER KEY - used to place control in and out of standby mode.
16. PROBE KEY - press to use core probe cooking
17. PROBE CONNECTION - used to connect the core temperature probe to the control.
18. USB Port and COVER - Use to transfer recipes and data to/from the control
19. BUZZER - The buzzer is turned on/off through the oven control.

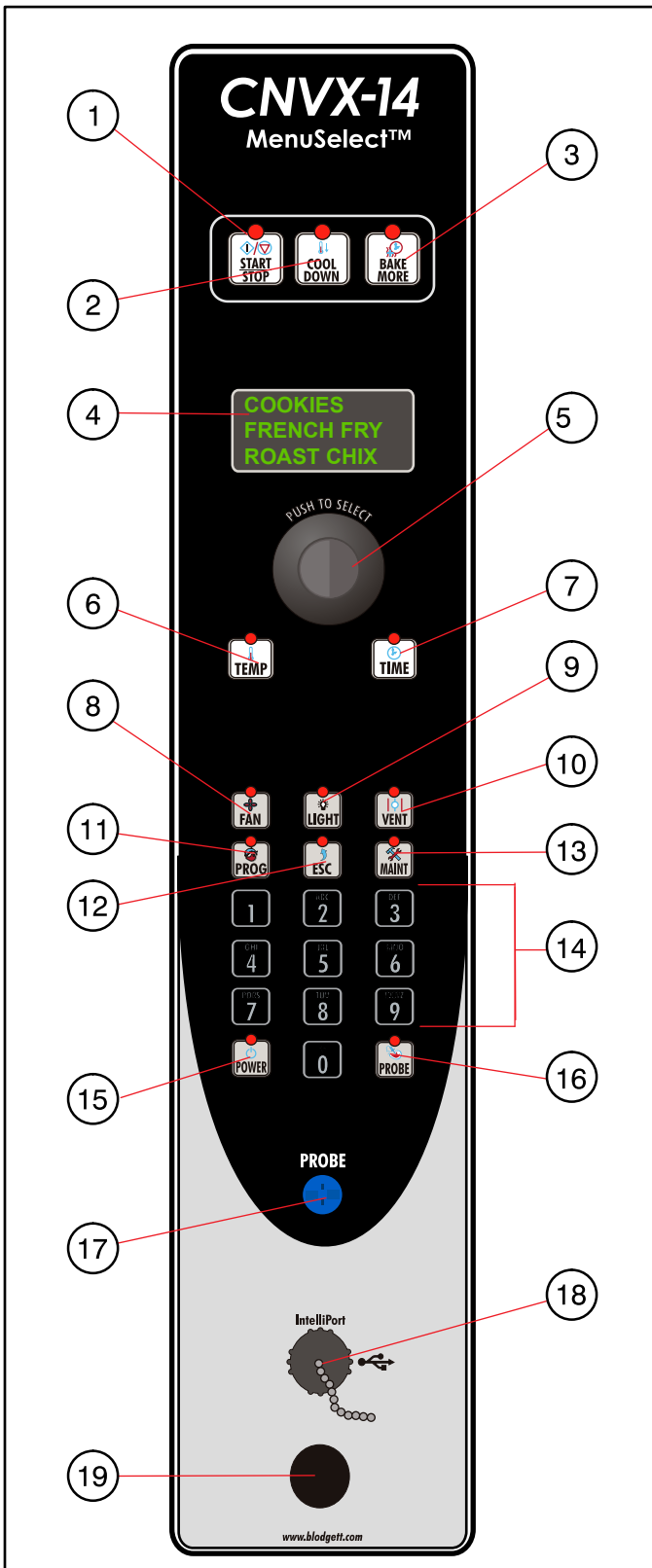


Figure 15



Operation

MenuSelect™ Control for Model CNVX-14

OPERATION

OVEN STARTUP

1. Be sure the gas shutoff switch and/or circuit breaker switch below the control panel are in the on position. The display flashes OFF PRESS POWER KEY TO START.

NOTE: If the real time clock and auto wake up functions are enabled the display reads PRESS POWER KEY TO START AUTO START.

2. Press the POWER KEY (15). The display reads PREHEAT and the oven heats to the last manual set temperature in the hot air mode. The display flashes READY / IDLE and the alarm beeps 5 times when the oven is at temperature and ready to bake.

MANUAL COOKING

1. Turn the DIAL (5) until the display reads MANUAL.
2. Press the TIME KEY (7). Rotate the dial, or use the alpha/numeric keypad to enter the desired bake time. Press the center of the dial to set the bake time.

NOTE: Time is set in one minute increments using the dial. To set time in less than one minute increments use the alpha/numeric keypad.

3. Press the TEMP KEY (6). Rotate the dial, or use the alpha/numeric keypad to enter the desired bake temperature. Press the center of the dial to set the bake temperature. The oven preheats to the new temperature.

NOTE: Temperature is set in 5 degree increments using the dial. To set time in less than 5 degree increments use the alpha/numeric keypad.

4. When the display flashes READY / IDLE, open the doors. Load the product.
5. Press the START/STOP KEY (1) to begin the bake cycle. The timer counts down and the display alternates between the cooking mode and the name of the product.

PROGRAMMED COOKING

1. Turn the DIAL (5) until the name of the product is highlighted. Press the center of the dial to select. The oven preheats to the programmed temperature in the correct cooking mode. The display flashes READY / IDLE and the alarm beeps 5 times when the oven is at temperature and ready to bake.
2. Open the doors. Load the product.
3. Press the START/STOP KEY (1) to begin the bake cycle. The timer counts down and the display alternates between the cooking mode and the name of the product.

PROBE COOKING

1. Press the PROBE key (16) to select the probe mode. The display reads CORE PROBE COOK & HOLD. Turn the dial to select either YES or NO. Press the center of the dial to select.

If YES is selected, Cook & Hold has been enabled. In the Cook & Hold mode, the oven cavity lowers to the product pull temperature as the product cooks.

If NO is selected, Cook & Hold has not been enabled the cavity maintains the cook temperature.

2. Turn the DIAL to enter the desired product pull temperature in the display. Press the center of the dial to save the pull temperature.
3. Press the TEMP KEY (6). Rotate the dial, or use the alpha/numeric keypad to enter the desired bake temperature. Press the center of the dial to set the bake temperature. The oven preheats to the new temperature.

NOTE: Temperature is set in 5 degree increments using the dial. To set time in less than 5 degree increments use the alpha/numeric keypad.

4. Insert the core probe into the product. Load product into the oven and close the door. Be sure that the terminal end of the core probe is outside of the oven and clear of the door.
5. Connect the core probe to the PROBE CONNECTION (17) at the bottom of the control.

NOTE: Do not connected the probe before the cook mode has been selected.

6. The display gives the actual core probe temperature as well as the oven set temperature.



MenuSelect™ Control for Model CNVX-14

- When the product reaches the pull temperature the buzzer sounds.
- Press the START/STOP KEY (1) to silence the buzzer.

If using Cook & Hold - The cavity temperature continues to drop to the product pull temperature and the display counts up, telling the operator long the product has been held. Disconnect the core probe and remove the product when ready.

If not using Cook & Hold - The cavity remains at the cook temperature. The display does not count up. Disconnect the core probe and remove the product when the buzzer sounds.

DURING ANY COOK CYCLE

Venting Moisture from the Oven Cavity

- Press the VENT KEY (10). This manually opens the vent until the key is pressed again to close it.

Pause a Bake Cycle

- To pause a cook cycle, press the START/STOP KEY (1). The LED on the start/stop key flashes. The bake cycle will pause until the key is pressed again.

Cancel a Cook Cycle

- To cancel the cook cycle, press and hold the START/STOP KEY (1).

At the End of Any COOK Cycle

- An alarm sounds, the display reads DONE.
- If more bake time is desired, press the BAKE MORE KEY (3). This will add an additional one minute of time for each press of the key.
- When you are satisfied with the bake, press the START/STOP KEY (1) to silence the alarm. Open the door to remove the product.

OVEN SHUTDOWN

- Press the COOL DOWN KEY (2). The display reads AUTO COOL DOWN ACTUAL TEMP. To speed up the cool down process, open the doors and press the VENT KEY (10) to open the vent.
- When the oven has cooled down, the display reads OFF PRESS POWER KEY TO START.

NOTE: The lights shut off and the vent closes automatically at the end of the cool down cycle.

PRODUCT PROGRAMMING

Entering the Program Mode

- Press the PROGRAM KEY (11). If the control is password protected, the display reads ENTER CODE. Use the alpha/numeric keypad to enter the manager passcode 3124, then press the center of the dial to enter the program mode.

Naming a Product Recipe

NOTE: Use the following procedure to name a new product or edit the name of an existing product.

- For a new recipe, turn the dial to the first open product. Press the center of the dial to select.

To edit an existing name, rotate the dial to the name to be changed. Press the center of the dial to select.

- Use the dial to scroll down to Edit Name. Press the center of the dial to enter the edit name menu.
- Turn the dial or use the alpha/numeric keypad to select the first character. Press the center of the dial to advance to the next character. Repeat for all remaining characters.

NOTE: Product names may be up to 10 characters long and can contain spaces. Use the #1 key to insert spaces in a recipe name.

NOTE: To select letters using the keypad, press the appropriate key once if you need the first letter on the key, twice for the second and three times for the third. For example to enter the letter L press the #5 key three times.

- Press the PROG KEY (11). With SAVE highlighted, press the dial to save the product name.



Operation

MenuSelect™ Control for Model CNVX-14

PROGRAMMING A PRODUCT RECIPE

NOTE: The control can hold 99 recipes. Each recipe may have up to 6 cooking stages.

1. Turn the dial to highlight the name of the product to be programmed. Press the center of the dial to select the product.
2. The display reads PRODUCT NAME: STAGE 1. Press the center of the dial to select the stage.
3. Rotate the dial, or use the alpha/numeric keypad to enter the desired bake time. Press the center of the dial to set the bake time.

NOTE: Time is set in one minute increments using the dial. To set time in less than one minute increments use the alpha/numeric keypad.

4. Rotate the dial, or use the alpha/numeric keypad to enter the desired cook temperature. Press the center of the dial to set the bake temperature.

NOTE: Temperature is set in 5 degree increments using the dial. To set time in less than 5 degree increments use the alpha/numeric keypad.

NOTE: Retherm has a temperature limit of 250-300°F.

5. Rotate the dial to select the desired fan speed. Choose from gentle, low, high or turbo. Press the center of the dial to set the fan speed.
6. Rotate the dial to select the fan rotation cycle. Choose between manual or auto.

NOTE: This is the length of time the fan will rotate in one direction before reversing.

If manual is selected, rotate the dial or use the alpha/numeric keypad to enter the desired fan cycle. Press the dial to set the fan cycle.

If auto is selected, the program will use the default fan cycle setting. The default is set through the Manager Programming.

7. Rotate the dial to set the vent position. Choose between OPEN or CLOSE. Press the center of the dial to set the vent position.
8. Use the dial to scroll down to PRODUCT NAME: STAGE 2. Press the center of the dial to select stage 2.
9. Repeat steps 2-9 for all remaining stages.
10. When all stages have been programmed, press the PROGRAM KEY (11). To save the programming, use

the dial to scroll to YES. Press the center of the dial. The control exits the program mode.

USING THE USB PORT

1. With the power on, remove the cover of the USB port (18) and insert the USB drive.
2. Press the MAINTENANCE KEY (13).
3. Turn the dial to highlight MANAGER PROGRAM. Press the center of the dial to select.
4. Turn the dial to highlight either COPY RECIPE FROM USB or COPY RECIPE TO USB, then press the center of the dial to select.
5. When the transfer is complete, press any key to return to the menu.
6. Turn the dial to highlight EXIT. Press the center of the dial to select. The display returns to the previous menu.
7. Turn the dial to highlight EXIT. Press the center of the dial to select.

MANAGER PROGRAMMING

Entering the Manager Program Mode

1. Press the MAINTENANCE KEY (13). If the control is password protected, the display reads ENTER CODE. Use the alpha/numeric keypad to enter the manager passcode 3124, then press the center of the dial to enter the program mode.
2. Turn the dial to highlight OVEN SETUP. Press the center of the dial to select the product.

Programming Auto Start

NOTE: The Auto Start function enables the oven to turn on at a programmed time of day and preheat to a programmed temperature.

1. Turn the dial to highlight AUTO START. Press the center of the dial to select.
2. Turn the dial to select either ON or OFF. Press the center of the dial to select.

If ON is selected, the display reads AUTO START 24 HOUR TIME 00:00. Turn the dial to enter the time you would like the oven to begin preheating. Press the center of the dial to select.

The display reads AUTO START TEMP XXX. Turn the dial to enter the desired preheat temperature. Press the center of the dial to select.



MenuSelect™ Control for Model CNVX-14

Programming Oven Setup

These menus allow the manager to set up basic oven functions

1. Turn the dial to highlight OVEN SETUP. Press the center of the dial to select.
2. Turn the dial to highlight MANAGER PROGRAM. Press the center of the dial to select.
3. Turn the dial to highlight the oven function you wish to change. Press the center of the dial to select. Choose from the following functions:

Recipe Password - Select YES or NO to enable password protection on recipe programming. If YES is selected the passcode 3124 must be entered to change recipe programming.

Temp Unit - Select either degrees F or C.

Cool Down Temp - Select the set temperature for the oven to achieve in Cool Down mode

Temp Disp Rate - Set the rate, in seconds, at which the display switches between actual and setpoint temperature

Input Rsp Time - Set the length of time allowed to input each variable when programming recipes before control automatically exits out

Setback Time - When not used for a period of time, the oven temperature will automatically reduce to conserve energy. This variable sets the length of time the oven remains at the idle temperature before being lowered.

Ready Beep - Select either ON or OFF. This is the audible alarm that sounds when the oven has reached the set temperature.

Cook Done Beep - Select either ON or OFF. This is the audible alarm that sounds when the product cook time has expired.

Cook Cool Fan - Select either YES or NO. This function allows the control to display OPEN OVEN DOOR when you are attempting to lower the set temperature of the oven.

Restore Manual SE - Select either YES or NO. This variable enables the oven to remember the last settings used for manual cooking.

4. After editing a function, press the center of the dial to save.
5. When all desired functions have been edited, turn the dial to highlight EXIT. Press the center of the dial to exit the manager programming mode.



Operation

SmartTouch Touchscreen Control for Models BX-14 & CNVX-14

CONTROL DESCRIPTION

1. DISPLAY - displays information related to oven function and/or programming.
2. CORE PROBE CONNECTION - plug core temperature probe in here when using probe cooking
3. USB Port and COVER - Use to transfer recipes and data to/from the control
4. HEAT CUTOFF - used to turn gas on or off (HV-100G only)
5. CIRCUIT BREAKER - Used to turn power to the unit on or off.

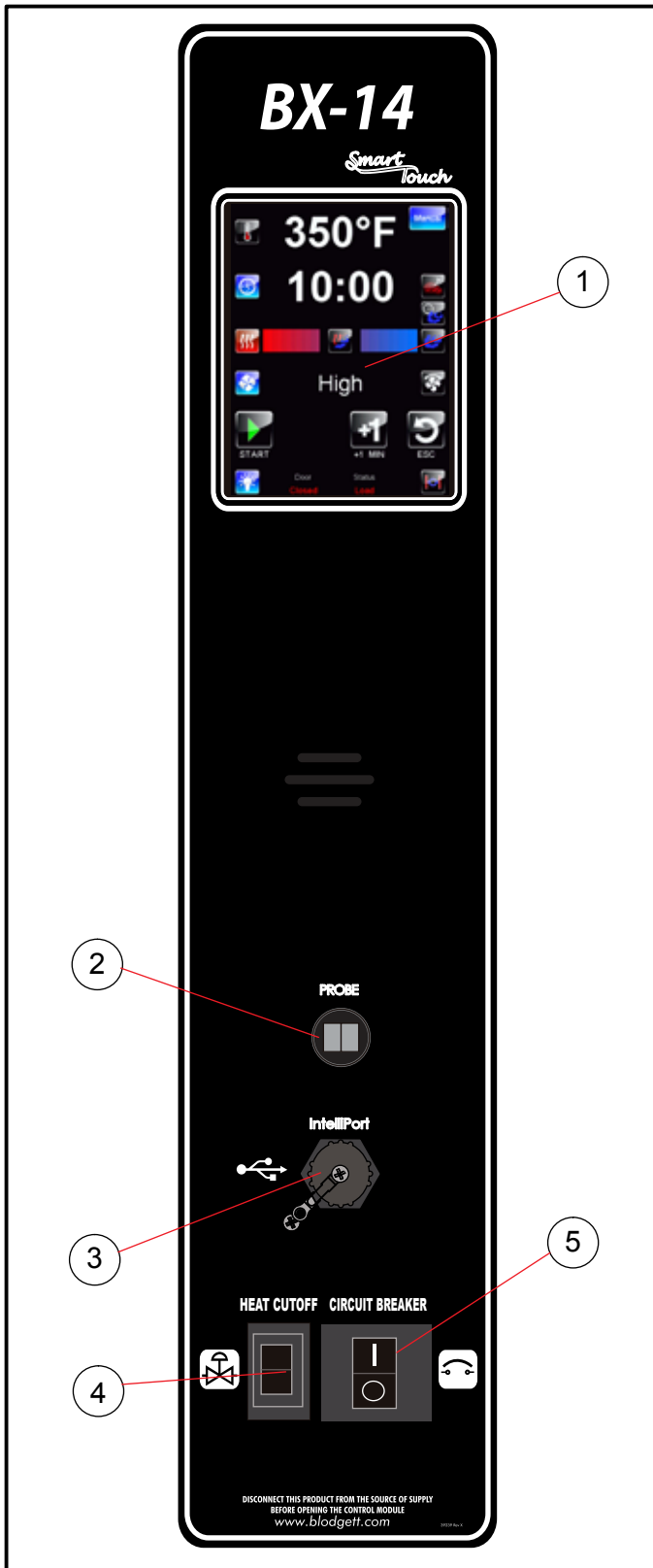


Figure 16

SmartTouch Touchscreen Control for Model BX-14 BX-14 & CNVX-14

MANUAL MODE COOKING

1. Select the POWER button to turn on the oven and proceed to the manual screen.



Figure 17



Operation

SmartTouch Touchscreen Control for Model BX-14 & CNVX-14

2. Set the desired cook settings.

Temperature - Press the temperature text and enter the desired oven temperature on the keypad provided. Press SAVE & EXIT key to return to this screen.

Cook Time - Press the time text and enter the desired cook time on the keypad provided. Press SAVE & EXIT to return to this screen.

Core Probe Cooking - To use the core probe cooking feature, press the PROBE COOK icon. Press the temperature text that appears and enter the desired product core temperature on the keypad provided. Press SAVE & EXIT key to return to the manual cook screen. Insert a product probe in the probe outlet on the control panel. To use the HOLD option, press the HOLD key. Once activated, key will be blue. To escape from probe cooking press the time icon.

Modes (BX-14 only) - Press the HOT AIR icon to run in Hot Air mode. The hot air icon highlights in red when active. The Steam icon highlights in blue when active. Press the Combi icon and enter the desired humidity percentage on the keypad provided. Press SAVE & EXIT to return to the manual cook screen.

Steam on Demand (BX-14 only) - Press the Steam On Demand key and enter the desired time period of 100% humidity. Press SAVE & EXIT to return to the manual cook screen. The steam on demand timer will start and the icon will flash blue while active. To stop the timer, hit the icon and press CLEAR then SAVE & EXIT.

Fan Speed - With the FAN icon highlighted, press the fan speed text (Gentle, Low, High or Turbo). When Turbo is displayed, press the text again to reduce the fans speed to Gentle.

Fan Reversal Interval - To adjust the fan reversal time, press the FAN REVERSAL icon. Then press the time text and enter the desired reversal interval on the keypad provided. Press SAVE & EXIT key to return to this screen.

Vent Position - At any time the vent can be opened or closed by toggling the VENT icon. When the icon is highlighted the vent is open.

Lights - At any time the lights can be turned on or off by toggling the LIGHT icon.

3. Press START Icon to begin cooking. Press Cancel key to stop cooking. Press +1 MIN to add 1 minute to the cook time.

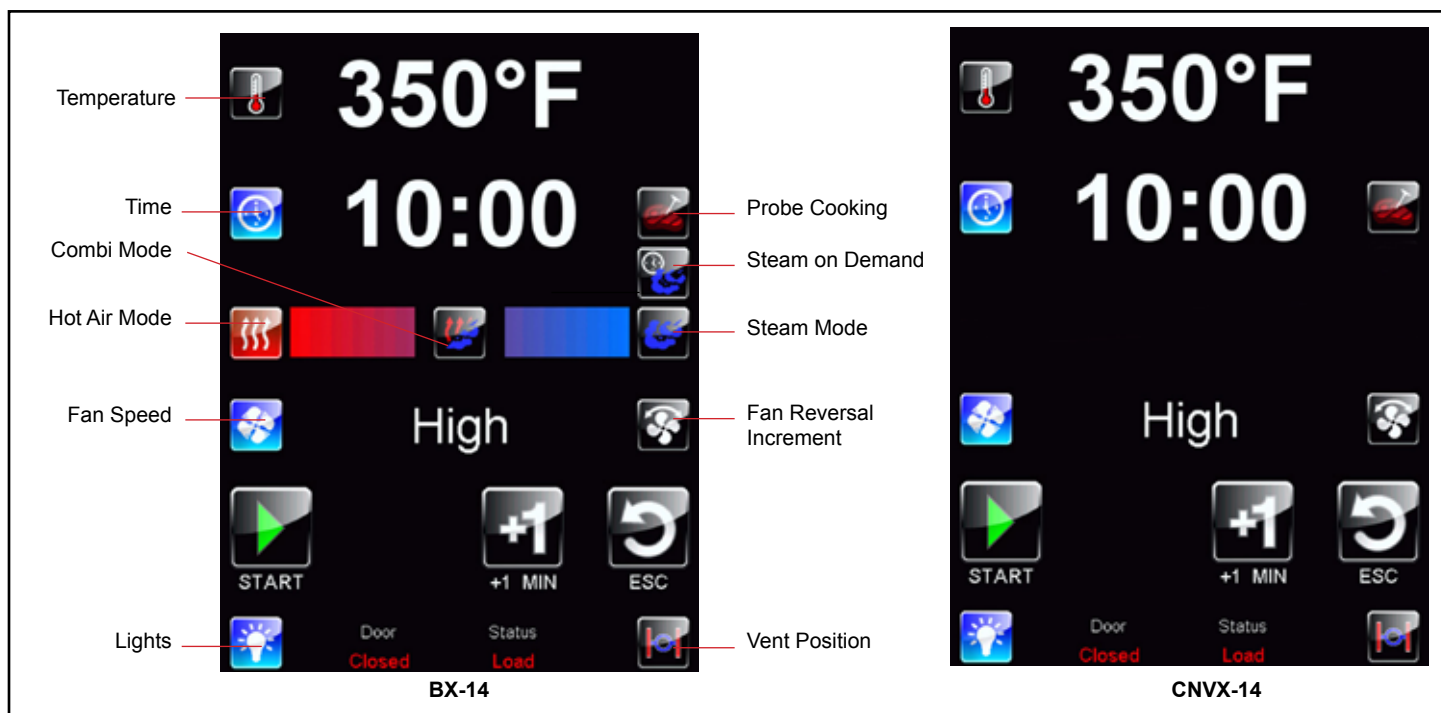


Figure 18

SmartTouch Touchscreen Control for Model BX-14 & CNVX-14

MENU MODE COOKING

1. On a manual screen, press the ESC key to exit the screen.
2. Select the MENU icon to cook using the pre-programmed menu items.



Figure 19

3. Push the SELECT ITEM key in the top right corner of the screen. *BX-14 screen shown.*



Figure 20

4. Select the desired food category for your product.



Figure 21

5. Within the food category, select the desired product you wish to cook.



Figure 22

6. Once selected the control returns to the Menu Cooking screen. Press the START KEY to begin the cook cycle.



Operation

SmartTouch Touchscreen Control for Model BX-14 & CNVX-14

SHELF COOKING

1. Select the SHELF COOKING key.

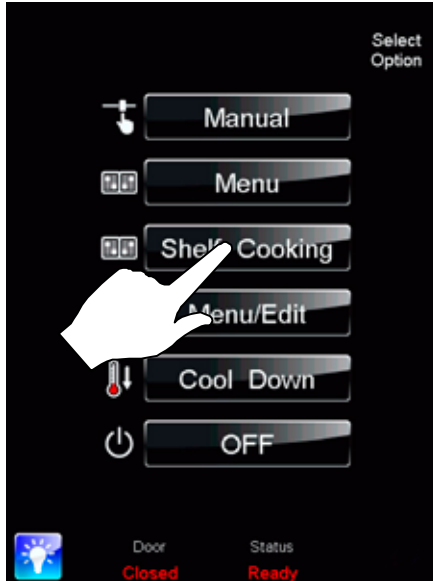


Figure 23

2. Select which shelves you intend to place the selected food item on. Press selected item icon in the upper right corner of the screen to add different items that share the same cook temperature but may have different cook times.

Once preheated, start icons will appear. You can choose start all or start individual shelves.



Figure 24

3. During the cook cycle, individual shelf cook timers will count down as the product is cooked. If you wish to cancel the bake, you can press the STOP ALL key, or you can stop individual shelves.

To add time, select +1 MIN key for individual shelves or +1 MIN ALL key to add time to all shelves. Each time the key is pressed, 1 minute of cook time is added.

Press STOP again to reset to the original values. CLEAR ALL to clear all products from all shelves. All Shelves must be cleared to escape the screen.

Once the bake is complete the beeper will sound.



Figure 25

SmartTouch Touchscreen Control for Model BX-14 & CNVX-14

EDITING A MENU

1. Select the MENU/EDIT icon to edit the recipes in the menu mode.

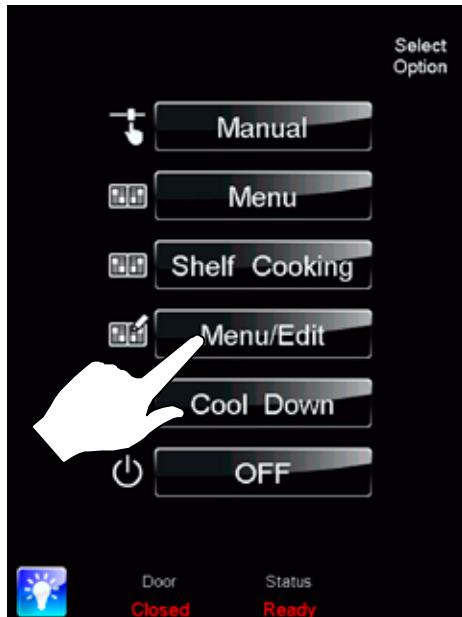


Figure 26

2. Select the EDIT ITEMS icon to edit the menu items.

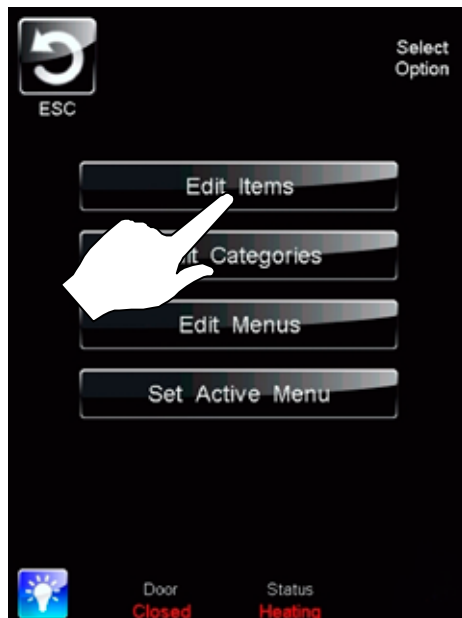


Figure 27

3. To edit an existing item, select the item while the EDIT ITEMS key is highlighted.

To delete an Item, select the item while the DELETE key is highlighted.

To create a new item, select the NEW ? icon while the EDIT key is highlighted.



Figure 28



Operation

SmartTouch Touchscreen Control for Model BX-14 & CNVX-14

- Each recipe is made up of steps containing seven settings - temperature, time, fan, etc. A new step is needed when you desire a different setting within a step.

To edit a setting within a particular step, press the icon for that setting. A keypad will appear for you to input your value.

To add a step, press the + key icon.

To edit a step, press the arrow keys on the bottom left hand corner of the screen to highlight the step you wish to edit. Follow the instructions above to edit the settings.

To delete a step, use the arrow keys on the bottom left hand corner of the screen to highlight the step you wish to delete. Press the red X icon to delete the highlighted step.

Once you are finished, press the DISK icon to save the changes.



BX-14 screen



CNVX-14 screen

Figure 29

SmartTouch Touchscreen Control for Model BX-14 & CNVX-14

EDITING A CATEGORY

1. Select the MENU/EDIT icon to edit the recipes in the menu mode.

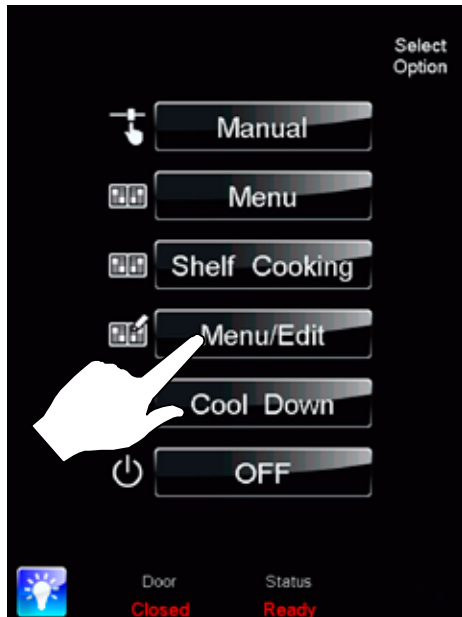


Figure 30

2. Select the EDIT CATEGORIES icon to select which items are in each category.

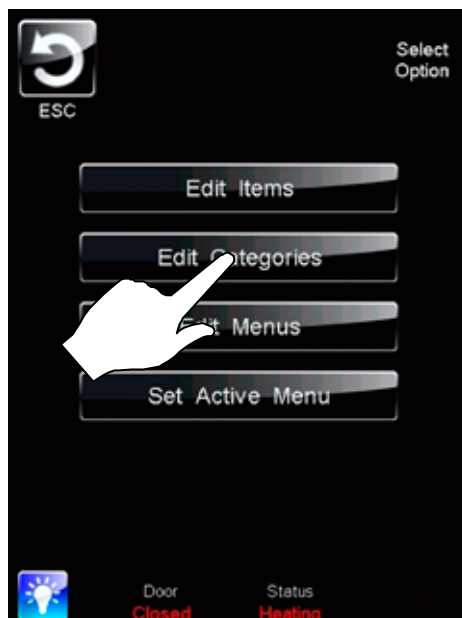


Figure 31

3. To edit an existing category, select the category while the EDIT key is highlighted.

To delete a category, select the category while the DELETE key is highlighted.

To create a new category, select the NEW ? icon while the EDIT key is highlighted.

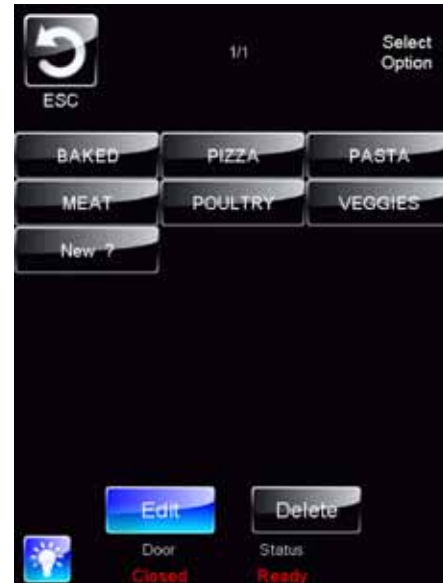


Figure 32

4. Select what you would like to edit.

To edit the name, press the EDIT NAME key. A keyboard will appear, enter the desired name and press ENTER to return to this menu.



Figure 33



Operation

SmartTouch Touchscreen Control for Model BX-14 & CNVX-14

5. To edit the category icon, press the category icon displayed in the category edit screen. The Select Icon screen is displayed. Select the desired icon. To view more icon options, press the arrow key.

Once the category icon is selected, the category edit screen is displayed. Press the DISK icon to save your changes.



Figure 34

6. To edit items within a category, press the SELECT ITEMS key on the edit category screen.

Select the items you would like to appear within the category. When complete, press ESC key to return to the previous menu. Press the DISK icon to save your changes.



Figure 35



SmartTouch Touchscreen Control for Model BX-14 & CNVX-14

CREATING NEW MENU ITEMS

1. Select the EDIT ITEMS key.

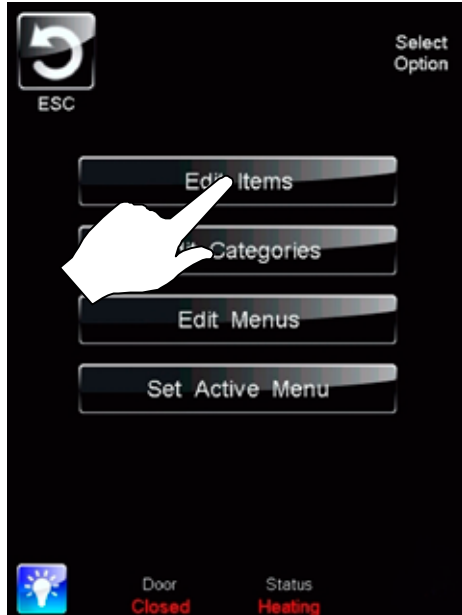


Figure 36

2. Select New?
3. Select the food icon to be displayed. Use the arrow keys to page through the available icons. Press the desired icon to select and return to the previous screen.
4. Name the item. Press the blank shelf below the icon to name the recipe. A keyboard will appear. Enter the desired name. Press ENTER when finished to return to the previous screen.

5. **Program the recipe steps** - Each recipe is made up of steps containing seven settings - temperature, time, fan, etc. A new step is needed when you desire a different setting within a step.

To edit a setting within a particular step, press the icon for that setting. A keypad will appear for you to input your value.

To add a step, press the + key icon.

To edit a step, press the arrow keys on the bottom left hand corner of the screen to highlight the step you wish to edit. Follow the instructions above to edit the settings.

To delete a step, use the arrow keys on the bottom left hand corner of the screen to highlight the step you wish to delete. Press the red X icon to delete the highlighted step.

Once you are finished, press the DISK icon to save the changes.

6. To file recipe under an existing category, press the EDIT CATEGORIES key. Select the desired category. Press the SELECT ITEMS key. Highlight the new item. Press the ESC key. The disk will be displayed, press to save your changes.



Operation

SmartTouch Touchscreen Control for Model BX-14 & CNVX-14

CREATING NEW CATEGORIES

1. Select the EDIT CATEGORIES key.

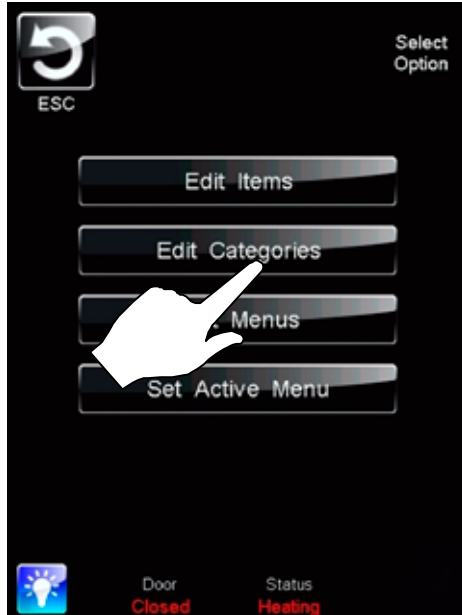


Figure 37

2. Select New?
3. Select the category icon to be displayed. Use the arrow keys to page through the available icons. Press the desired icon to select and return to the previous screen.

4. Press EDIT NAME. A keyboard will appear. Enter the desired name. Press ENTER when finished to return to the previous screen.
5. Press SELECT ITEMS. Select items to be filed in the new category. Items will be highlighted as they are selected. Press ESC key to return to the previous screen. The disk will be displayed, press to save your changes.
6. To display the category, it must be added to the default menu as follows:

Press the EDIT MENUS key. Select the DEFAULT key. Select the CATEGORIES key. Highlight the new category. Press the ESC key to return to the previous screen. The disk will be displayed, press to save your changes.



SmartTouch Touchscreen Control for Model BX-14 & CNVX-14

TRANSFERRING RECIPES USING THE USB

1. Return to the power screen.



Figure 38

2. Press the TOOLS key. Enter the code 6647 on the keypad.

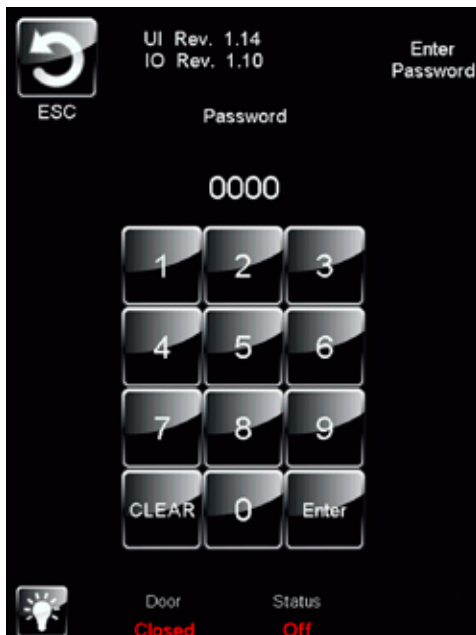


Figure 39

3. Press the MANAGE MENU DATA key. Insert the USB drive into the Intelliport.

To Store Menu Data to a USB

1. Press the STORE MENU DATA to USB key to transfer recipes to the USB.

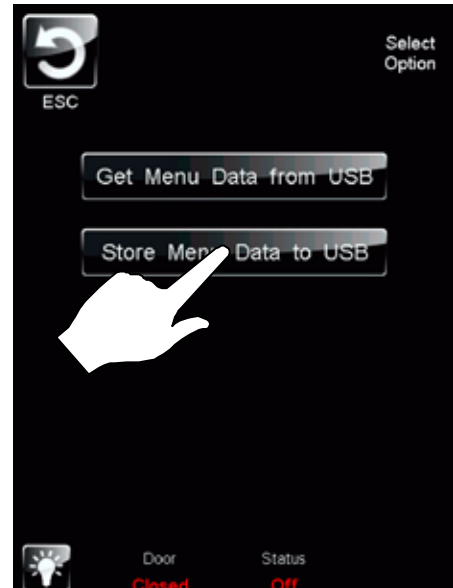


Figure 40

2. The keyboard screen is displayed. Use to enter desired file name. Press the ENTER key when finished.

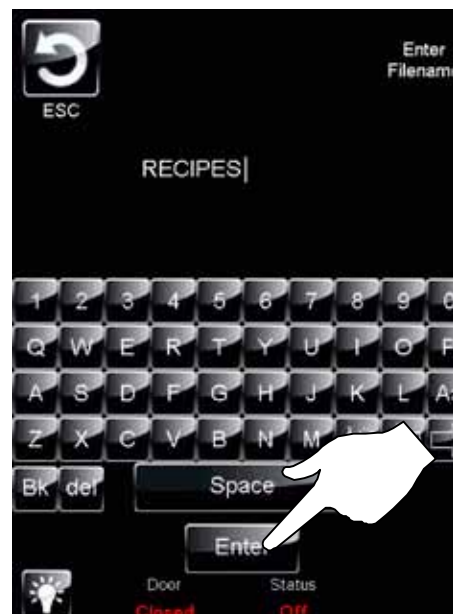


Figure 41



Operation

SmartTouch Touchscreen Control for Model BX-14 & CNVX-14

3. The status screen appears to display the download status. The display returns to the previous screen when download is complete.



Figure 42

4. Press the ESC key to exit USB screen.

To Retrieve Menu Data from USB

1. Press the GET MENU DATA from USB key to transfer recipes from the USB.

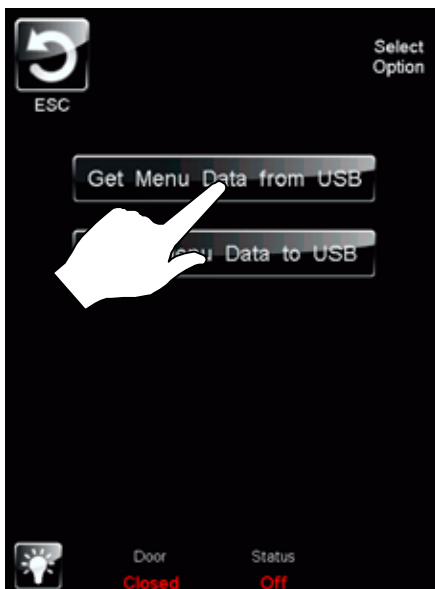


Figure 43

2. The control displays all menu (.MNU) files on the USB drive. Select the desired file.

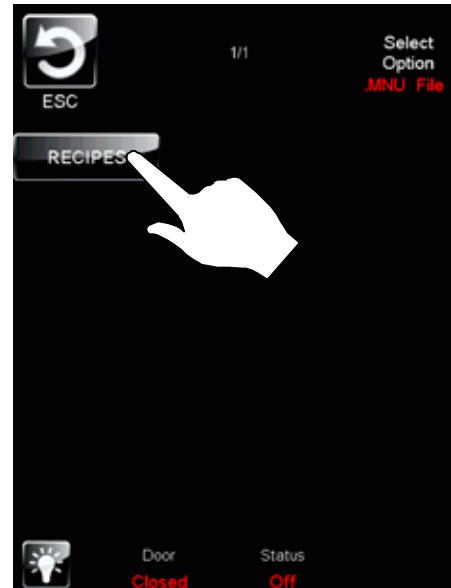


Figure 44

3. The overwrite warning screen appears. Press YES to continue

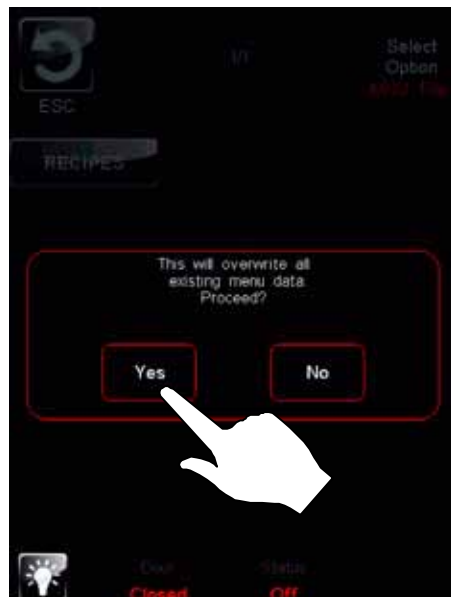


Figure 45

4. The status screen appears to display the upload status. The display returns to the previous screen when upload is complete.
5. Press the ESC key to exit USB screen.



SmartTouch Touchscreen Control for Model BX-14 & CNVX-14

COOL DOWN

1. To cool down the unit, press the COOL DOWN icon.

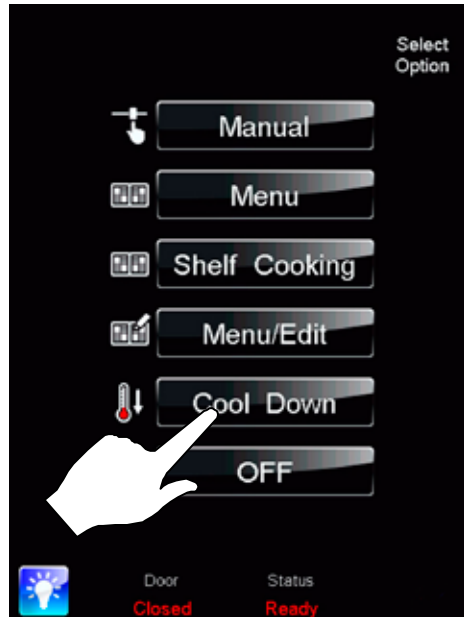


Figure 46

2. The oven will toggle between cooling and open door in yellow until the oven is cool. Once cool, the oven will go to standby.

NOTE: If the oven is shut down with the circuit breaker switch at the bottom of the front panel, the display will return to the power screen. Select your option to begin.



Figure 47



Maintenance

Spray Bottle Operating Procedure

NOTE: Only use a commercial oven cleaner/degreaser with the spray bottle. DO NOT use chemicals that are not intended as oven cleaners. See chemical manufacturer's information for intended use.

1. Unscrew the sprayer head and fill the container to the MAX mark. Screw the head assembly on firmly to ensure an airtight seal. The liquid must be clean and free from foreign matter. Do not overfill - space must be left for compressing air.



Figure 48

2. To build up pressure, pump approximately 20 full strokes when the container is filled with liquid. The higher the pressure, the finer the spray. If the container is only partially filled, then more pumping is required to compress the additional air space.



Figure 49

3. To spray, depress the trigger with your thumb.



Figure 50

4. Adjust spray nozzle for a wide spray pattern.
5. After a period of spraying, the pressure will drop. Re-store the pressure by operating the air pump.
6. Release pressure after use by inverting the spray head and depressing the trigger or by slowly unscrewing the spray head assembly which will allow air to escape from around the filling aperture.
7. After use, rinse the spray bottle with clean water and check that the hole in the nozzle is perfectly clean and clear. Warm water (not hot) used with a household detergent is a useful cleaning agent for this purpose.

NOTE: Further information can be found in the instruction leaflet supplied with your spray bottle.



WARNING!!

Protective clothing and eyewear should be worn while using cleaning and deliming agents.

To order additional bottles or spray heads use the following part numbers:

Complete Spray Bottle - P/N R0006

Spray Head Repair Kit - P/N R6332



Cleaning and Preventive Maintenance

DAILY CLEANING

Cleaning the Interior

Daily cleaning of the oven is essential for sanitation, and to ensure against operational difficulties. The stainless steel cavity may corrode with improper cleaning of the oven. Use an oven cleaning detergent in conjunction with the supplied spray bottle.

For difficult cleaning, allow the spray-on oven cleaner to work longer before rinsing.

1. Open the oven door. Place the oven in cool down mode. Let the oven cool to below 140°F (60°C).
2. Fill the spray bottle with a mild oven detergent. **DO NOT use abrasive cleaners on your Blodgett Combi. Be sure to follow the MSDS or safety instructions on the bottle of your oven cleaner.** We recommend the following cleaners:

Greasecutter Plus by Ecolab

EZ Clean by Cellow

Advance Oven Cleaner by Diversey-Lever

3. Pump the bottle twenty times to build up pressure. The higher the pressure, the finer the spray. Spray the oven interior. Turn the nozzle to adjust the spray pattern.
4. Close the door. Place the oven in steam mode for 10 minutes.
5. When finished steaming, open the door and rinse the interior with the attached spray hose.



Figure 51

6. Leave the door open overnight to vent the oven. If the oven will not be used for an extended period of time, place the oven in hot air mode to dry.



Figure 52

Cleaning the Exterior

The exterior of the appliance may be cleaned and kept in good condition with a light oil. Saturate a cloth and wipe the appliance when it is cold; wipe dry with a clean cloth.



WARNING!!

DO NOT spray the outside of the oven with water or clean with a water jet. Cleaning with a water jet can impregnate chlorides into the stainless steel, causing the onset of corrosion.

Clean the air intake / cooling fan behind the oven so that it is free of all lint, grease or other inhibitors of air flow. Keeping this area free of obstruction will extend the life of the components.

PREVENTIVE MAINTENANCE

The best preventive maintenance measures are the proper initial installation of the equipment and a program for cleaning the appliance routinely. The Oven/Steamer requires no lubrication. Contact the factory, the factory representative or a local Blodgett Combi service company to perform maintenance and repairs should they be required.



Maintenance

Cleaning and Preventive Maintenance

BX-14 BOILERLESS OVEN WEEKLY CLEANING

In addition to the daily cleaning, it is necessary to clean behind the fan guard of this oven on a weekly basis. This is necessary for proper functioning of the oven. Scale will build up on the fan and heat source leading to a less efficient oven.

1. Open the oven door. Place the oven in cool down mode. Let the oven cool to below 140°F (60°C).
2. Once cool, turn the oven off.
3. Remove the oven racks and the rack guides on the left side.



Figure 53

4. Rotate the two screws on the left side of the fan guard. Swing the fan guard toward the front of the oven.



Figure 54

5. Fill the spray bottle as described in the Daily Cleaning procedure. Thoroughly spray cleaner onto the fan, heat source and back of the fan guard. Resecure the fan guard.



Figure 55

6. Close the door. Place the oven in the steam mode for approximately 10 minutes.
7. After ten minutes, swing the fan guard towards the front of the oven. Use plenty of water to rinse all of the cleaner off.



Figure 56

8. Return the fan guard to the closed position. Rotate the two screws to secure the fan guard.
9. Reinstall the rack guides and oven racks.
10. Leave the oven door open overnight to vent the oven. If the oven will not be used for an extended period of time, place the oven in hot air mode to dry the interior cavity.



Flushing the Boiler - BCX Models Only

STANDARD CONTROL

A flush of the boiler is required every 24 hours and happens either automatically or can be initiated at any time.

NOTE: In order to flush the oven, the water and gas supply must be left on.

- If the mode switch is in the OFF position and a flush is required, the flush will automatically run.
- If the boiler is too hot to drain, the flush will begin when the boiler water temperature drops below 140°F (60°C).

To manually initiate a flush sequence

1. If the oven is hot, place it in the Cool Down mode with the door open until the cavity is below 140°F (60°C).
2. Close the door, turn the mode switch to the Cool Down position. Push and hold the timer knob until the flush begins.

NOTE: If the boiler water temperature is too high, the flush will start automatically when the water temperature drops below 140°F (60°C).

3. The flush completes in about 25 minutes. When complete, the oven shuts off automatically.

To cancel a flush sequence

1. Push and hold the Steam on Demand knob. The display reads "FLUSH ABORT NO".
2. Rotate the timer knob until the display reads "FLUSH ABORT YES". Push in the timer knob to cancel the flush.

If the flush was required and tries to start again, push and hold the timer knob until 24:00 appears in the display. Rotate the knob to enter the amount of time (HH:MM) desired before the next automatic flush sequence.

MENUSELECT™ CONTROL

A flush of the boiler is required every 24 hours and happens either automatically or can be initiated at any time.

NOTE: In order to flush the oven, the water and gas supply must be left on.

- If the oven is off (the display reads "OFF - PRESS POWER KEY TO START") and a flush is required, the flush will automatically run.
- If the boiler is too hot to drain, the flush will begin when the boiler water temperature drops below 140°F (60°C).

To manually initiate a flush sequence

1. If the oven is hot, place it in the Cool Down mode with the door open until the cavity is below 100°F (38°C).
2. Close the door, press the MAINT key, turn the knob until "FLUSH" is highlighted. Push the knob to select.
3. Scroll to "START FLUSH". Push the knob to select.
4. The display reads "FLUSH PROGRAMMING - START FLUSH - NO". Rotate the knob until the display reads "FLUSH PROGRAMMING - START FLUSH - YES". Push the knob to select.
5. The flush completes in about 25 minutes. When complete, the oven shuts off automatically.

To cancel a flush sequence

1. Press the ESC key. The display reads "NEXT FLUSH TIME - HH:MM 24:00". Rotate the knob or use the keypad to enter the amount of time (HH:MM) desired before the next automatic flush sequence.



Maintenance

Deliming

BCX COMBI OVENS

Deliming of the steam generator is the single most important preventative maintenance task. Lime will build up inside the steam generator, reducing efficiency and causing damage to the boiler.



WARNING!!

Problems caused by insufficient deliming are not covered by the warranty.



WARNING!!

Deliming solutions are hazardous and can cause burns to the skin and eyes. Wear protective clothing and eyewear.



WARNING!!

DO NOT cook while deliming.

1. Be sure the container delivering the deliming agent to the appliance is full. **Be sure to follow the MSDS or safety instructions on your deliming agent.** Use a non-diluted deliming agent.



Figure 57

2. Ensure that the deliming pump has been primed. Refer to the Deliming System Connection & Priming if you are uncertain.

BCX WITH STANDARD CONTROL

This control comes equipped with a delime lamp to indicate when the steam generator needs to be delimed. The delime lamp will flash when the steam generator has been run for the preset interval. This is a warning only, the oven can be used all day before deliming. The delime sequence can be run at anytime regardless of the flashing delime indicator.

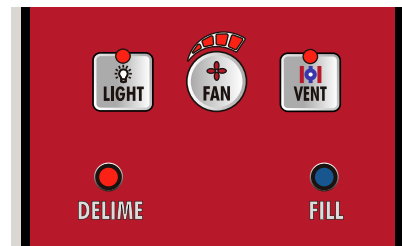


Figure 58

NOTE: Once the deliming process has been started, the oven cannot be used until deliming is complete, approximately 45 minutes.

Deliming the Boiler with the Standard Control

1. If the oven is hot, place in the Cool Down mode with the door open until the cavity is below 140°F (60°C).
2. With the mode switch in Cool Down, push and hold the Steam on Demand knob until the delime lamp flashes faster. Then release the knob. The display reads "TO START DELIME TURN MODE SWITCH TO OFF".



Figure 59

3. Close the oven door. Turn the oven to the Off mode. The display reads "DELIME STEP 1 OF 14".

The remainder of the process is automatic. The delime lamp stays lit until deliming is completed.



Deliming

- When the delime lamp goes out, the oven can be used normally.

To Cancel the Deliming Process

- To cancel the deliming process, push and hold the Steam on Demand knob. The display reads “DELIME ABORT NO”.
- Rotate the timer knob until the display reads “DELIME ABORT YES”. Push the timer knob.

If the delime process was not required or chemical has not been pumped into the boiler yet, the delime is immediately cancelled.

If chemical is in the boiler, the delime process will advance to step 9 of the process in order to flush the chemical from the boiler.

BCX WITH MENSELECT™ CONTROL

When it is time to delime your BCX, the display reads “DELIME REQUIRED START DELIME YES”. To postpone the delime, turn the knob until the display reads “DELIME REQUIRED START DELIME NO”. Push the knob.

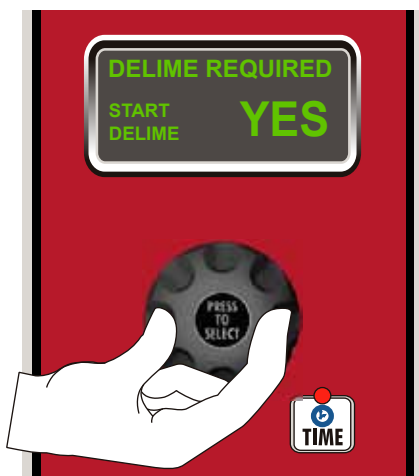


Figure 60

The message will return until the unit is delimed. This is a warning only, the oven can be used all day before deliming. The delime sequence can be run at anytime.

NOTE: Once the deliming process has been started, the oven cannot be used until deliming is complete, approximately 45 minutes.

Deliming the Boiler with the MenuSelect™ Control

- If the oven is hot, place in the Cool Down mode with the door open until the cavity is below 140°F (60°C).

- After the cool down the unit will automatically turn itself off. Close the door. Press the maintenance key.

If a delime is required when the power key is pressed, the display reads “DELIME REQUIRED START DELIMING YES”. In this case, skip to step 5.

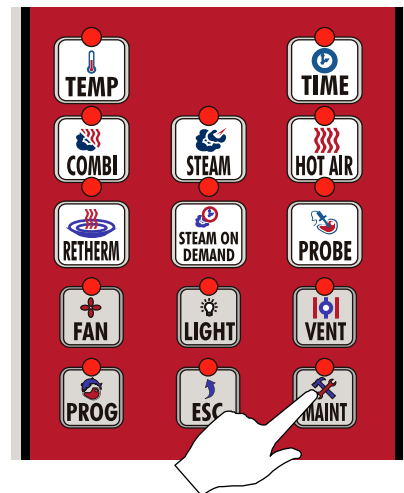


Figure 61

- Turn the dial to highlight “DELIME”. Press the center of the dial to select.



Figure 62



Maintenance

Deliming

4. Turn the dial to highlight “START DELIME”. Press the center of the dial to select.



Figure 63

5. Turn the dial to highlight YES, this confirms that you want to begin the deliming process. Press the center of the dial to select. The remainder of the process is automatic. The display shows the step number and progress by %.



Figure 64

6. When the deliming process is complete, the control will turn itself off. The oven can now be used normally.



Figure 65

To Cancel the Deliming Process

1. To cancel the deliming process, push and hold the ESC key. The display reads “DELIME ABORT? NO”.
2. Rotate the knob until the display reads “DELIME ABORT? YES”. Press the knob to select.
3. The control returns to the Off mode.



BX-14 BOILERLESS OVEN

It may be necessary to delime the oven interior and behind the fan guard. This is necessary for proper functioning of the oven. Lime will build up on the fan and heat source leading to a less efficient oven.

1. Open the oven door. Place the oven in cool down mode. Let the oven cool to below 140°F (60°C).
2. Fill the spray bottle with a non-diluted deliming agent. **Be sure to follow the MSDS or safety instructions on your deliming agent.**
3. Pump the bottle twenty times to build up pressure. The higher the pressure, the finer the spray
4. Remove the oven racks and the rack guides on the left side.



Figure 66

5. Rotate the two screws on the left side of the fan guard. Swing the fan guard toward the front of the oven.



Figure 67

6. Thoroughly spray deliming agent onto the fan, heat source and back of fan guard. Wait 10 minutes.



Figure 68

7. After ten minutes, use the spray hose and plenty of water to rinse all of the deliming agent off. Repeat steps 6 & 7 if necessary.

NOTE: If the lime scale is hard to remove or takes multiple applications, your water filtration system may be insufficient or your filters may need to be changed.



Figure 69

8. Return the fan guard to the closed position. Rotate the two screws to secure the fan guard.
9. Reinstall the rack guides and oven racks.
10. Leave the oven door open overnight to vent the oven. If the oven will not be used for an extended period of time, place the oven in hot air mode to dry the interior cavity.



Maintenance

Deliming

DELIMING INTERVAL SETTING - BCX ONLY

Refer to figure below to determine the correct deliming interval for your appliance. Find your location and the corresponding potentiometer setting. These values are general and are guidelines only. Your specific water quality may be harder or softer. Adjust the deliming interval to your specific water quality.

NOTE: If you have the oven connected to a filter system, the water hardness may be reduced. Check with filter supplier for details.

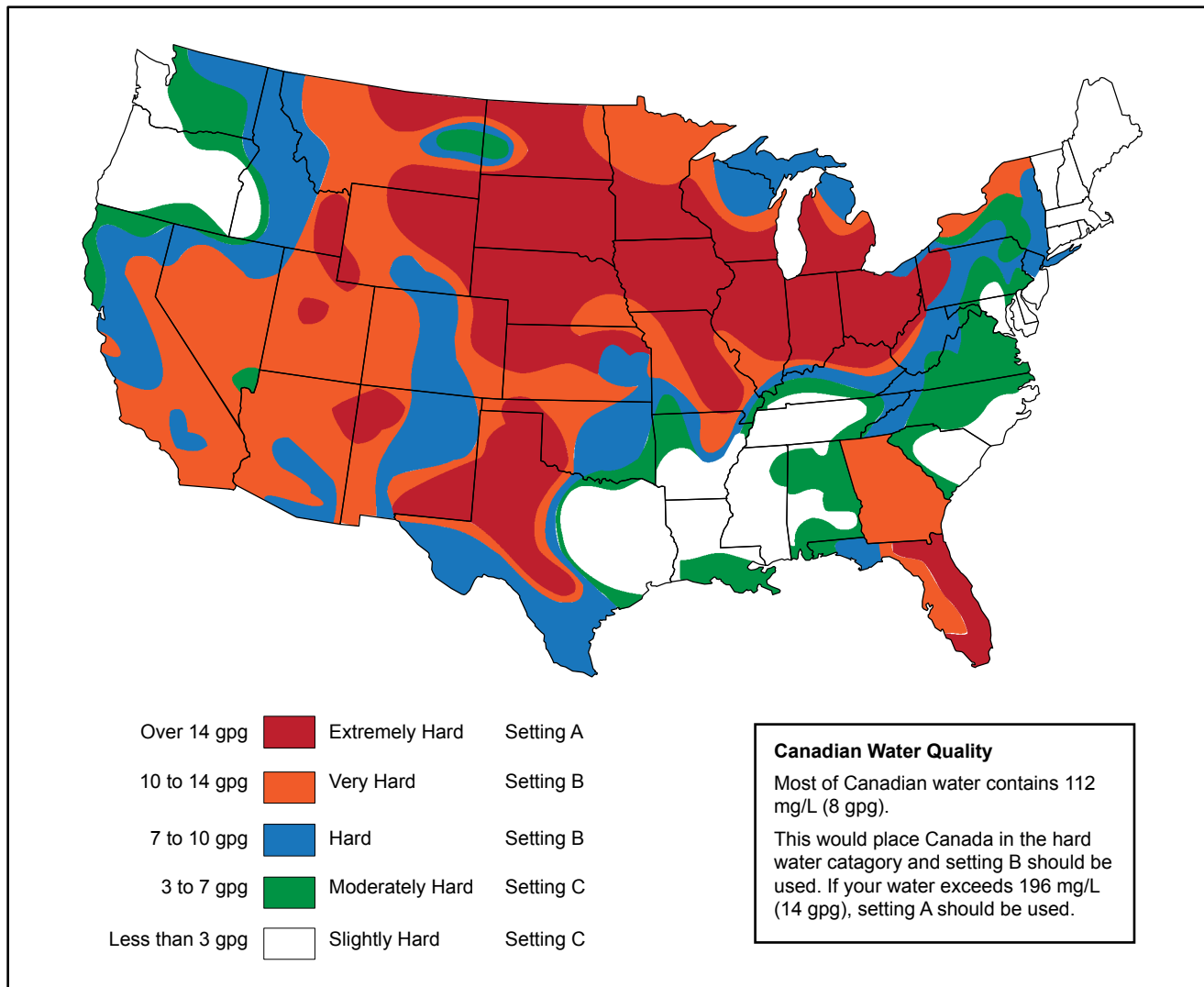


Figure 70