Excalibur® NSF Commercial Food Dehydrator

2 Zone - User Manual





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Excalibur®... Leaders in the Field of Commercial Drying Technology

Set Up Instructions

READ THIS FIRST

- 1) Unpack the dehydrator by cutting the steel bands and removing the cardboard, tape and foam padding.
- 2) Unbolt dehydrator from the pallet. Keep the bolts, flat washers, and locking washers in a safe place.
- 3) Open the box containing the stainless steel trays and polyscreens. Remove the back stop and the casters.
- 4) Lay the dehydrator on its hinge side. Attach the back stop and the casters using the 16 5/16 X 1 bolts, the smaller flat washers, and lock washers provided. The swivel casters should be attached to the front of the dehydrator.
- 5) Stand the dehydrator upright on a flat level surface.

- 6) Have a qualified electrician connect your dehydrator to your electrical system.
 - Note: Electrical requirements are the following:

120/208-240V, 60Hz Single Phase 4 Wire, 30 Amp Dedicated Branch Circuit, You can have the electrician wire the unit to 30 amp 4 prong drier pigtail plug or the unit may be hard wired. 220-240V, 50Hz Single Phase 3 Wire, 30 Amp Dedicated Branch Circuit.

- 7) Program your drying profile into the controller exactly as described in the provided quick start procedure.
- 8) Direct all questions or problems to the Excalibur Commercial Service Department at (916) 381-4254.

IMPORTANT!

The Excalibur® Commercial Dehydrator is an innovative, state of the art dehydration unit equipped with a powerful Computer Controller.

Please take time to read this <u>User</u> <u>Manual</u> before you attempt to set the computer profiles. There are several steps to setting the sophisticated controls and operating this unit.



CAUTION or WARNING

Failure to Follow the instructions **EXACTLY** as outlined in the User Manual will cause your Unit to not work properly or will cause your unit to not work at all.

Theory of Operation

Unlike an oven which maintains heat at a constant temperature, the Excalibur® Commercial Dehydrator is a state-of-the-art dehydration unit, which utilizes the innovative technology of temperature cycling.

After you set the time/temperature profile on the computer controller and when a profile is started, the fans begin to run and the heating elements are switched on. The fans will continue to run throughout the whole drying process until the profile is stopped.

The "AIR" temperature rises until the set point (temperature) you entered in the profile is reached. When the set point is reached, the heating elements will switch off. The "AIR" temperature will continue to rise a few degrees due to residual heat in the unit. This is normal and there is minimal effect on the internal food temperature by this rise in "AIR" temperature.

The heating elements remain off until the "AIR" temperature drops several degrees below the set point, at which time, the heating element will turn back on. The temperature will again begin to rise to the set point of the profile. This *cycling is called Hyperwave* and is an important part of the drying process.

Note: The temperature shown on the controller is the temperature of the air in the unit. If the internal temperature of the food/product is of concern, a separate sensor can be used.

Operation of the Unit

The unit is equipped with a computer controller that is divided up into two sections – a Top Zone Section and a Bottom Zone Section. You can run only one zone if you wish, both zones at the same time, or stagger their operation to suit your production needs.

Many users will use one zone (for example the top zone) for a certain type of product and use the other zone for a different type of product.

Programming

Programming the controller is a systematic procedure. The illustrated programming procedures on pages 5-8 are designed to direct the programmer to the next screen once a step is completed.

If, at any time, the step(s) listed in the programming instructions do not coincide with the illustrated display screen(s), return to the Main Menu Screen by pressing the "X" on the Home Page Screen. Or, for further assistance call (954) 202-7419 ext. 417.

Note: Temperature and time values listed in the illustrated programming procedures on pages 5-8 are for display purposes only. The values may or may not match the values listed on the actual controller.

Programming the Controller

Step 1:Load product into top and/or bottom zones

Step 2: Turn Power Switch to the ON Position

 After several seconds the Main Menu Screen appears.

Step 3: Program the "Top Zone" by pressing one of the top OFF buttons from the Main Menu Screen

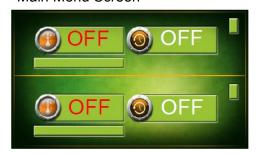
- Press up or down icon on the Home Page Screen to set time and temperature.
- Press check mark icon when finished.

Step 4: Running the Program for the "Top Zone"

There are two choices:



Main Menu Screen



Home Page Screen



Add/Start Screen



Press the icon to begin running a "Single Cycle" time and temperature. The screen will return to the Main Menu to display the program.

OR

To add a "Second Cycle" time and temperature:

Press the plus icon to program a "Second Cycle" time and temperature. Repeat the programming procedures outlined in Step 3.

Press the icon when finished programming the "Second Cycle".

The program is now running a "First and Second Cycle" time and temperature.

NOTE:

- When a Second-Cycle time and temperature is running, a "1" appears in the furthest box to the right. The 1 indicates that the program is running in its first cycle. When the first cycle is complete, the number will change from 1 to 2.
- When a Single-Cycle time and temperature is running, the box will display an "S".
- If a program is not entered, the box will display an "*".







Step 5: Program the "Bottom Zone" by pressing one of the bottom OFF buttons on the main menu screen

Repeat Steps 3-4.



Step 6: Stop running or cancel a current cycle (example)

 From the Main Menu screen, press the





 Choose the stop icon to cancel the current cycle.

Note: If no choice is made within 5 seconds, the screen will revert to the Main Menu with no changes.



Saving and Naming a Program

Step 1: Follow Steps 3-4 in the previous programming procedures

• After all cycle times and temperatures are set, press the diskette icon from the Start Screen.



Step 2: Type the name of your profile on the keyboard screen (example: TOMATO)

- Press the check mark icon when profile is complete
- Press the file icon
- Notice the profile named "TOMATO" is saved. An arrow is pointing to it. Use the arrow icons to select your programmed profile.
- To initiate the selected profile, and begin running the program,

press the check icon.







To delete a profile, press the

