

REVISED May 2012

Reviewing the Dehydrating Process:

To obtain the best results:

1. Use high quality food; the better the food the better the results.
2. Wash food, use clean utensils and keep work area clean.
3. Pre-treat foods to prevent discoloration.
4. Do not overlap food on shelves.
5. Drying times will vary depending on food thickness, moisture in the food, relative humidity and temperature of the room.
6. Cool food before testing for dryness.
7. Rotate trays 180° if you notice uneven drying.
8. Let food condition in a clean, dry, ventilated area for a week before placing in airtight containers.
9. Reconstitute as needed.
10. Enjoy!

Warranty Information:

The manufacturer warrants this product to be free of defects in materials and workmanship for one year from date of purchase.

WARRANTY PERFORMANCE: During the one year warranty period, a product with a defect will either be repaired or replaced after the product has been inspected by an LEM Service Technician. **NO PRODUCT WILL BE EVALUATED UNLESS THE ORIGINAL SALES RECEIPT OR THE WARRANTY CARD IS ON FILE.** The repaired product will be in warranty for the balance of the one year warranty period. No charge will be made for such repair or replacement.

This warranty does not cover improper installation, misuse, abuse or neglect on the part of the buyer. The warranty is voided if the unit is disassembled, altered or serviced by unauthorized personnel.

IMPORTANT NOTICE: If any parts are missing or defective, please contact our Customer Service Department for assistance at 877-536-7763. (M-F 8:30am to 4:30pm EST) **DO NOT RETURN TO THE STORE WHERE THE ITEM WAS PURCHASED.**



LEM Products
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STAINLESS STEEL FOOD DEHYDRATOR WITH TIMER

USE AND MAINTENANCE INSTRUCTIONS



MODEL 778
*PLEASE READ BEFORE
OPERATING EQUIPMENT*



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Introduction:

Drying food for preservation dates back to the ancient Egyptians. The Spaniards were the first explorers known to use dehydration to prepare food for their expeditions. The method was used extensively in the days of the Lewis and Clark Expedition as they charted the expanse of the Louisiana Land Purchase. Buffalo, elk and deer were plentiful but their success relied heavily on the proper use of the preserving method.

This dehydrator was designed and constructed to help you get the best results possible. The shell is made of durable stainless steel so it is easy to clean and maintain. It will not rust or crack when used properly. The information in this manual is intended to help you get the best results from this equipment. Please read this booklet carefully and call the manufacturer if you have any questions.

Dehydration:

There are no exact rules that apply to food dehydration because room temperature, relative humidity and moisture levels in the food that you are drying can affect your results. To become proficient, it will be necessary to experiment with your drying techniques. If you use too much heat, food may harden on the outside while still being moist inside. Too little heat, your drying times will be very long. But with a little practice, you will be creating tasty, ready to eat snacks in no time.

Important Safeguards:

1. Read ALL of these instructions thoroughly before using.
2. Save these instructions for future reference.
3. Never leave your dehydrator unattended.
4. Close supervision is required if the unit will be used around children.
5. Use only indoors, in a clean, dry location, free of flammable objects.
6. This unit gets hot. Do not touch surfaces while operating.
7. This unit may scratch household surfaces.
8. Do not use if the cord or controls have been damaged in any way.
9. Do not use sharp utensils inside the unit.
10. Turn off unit before plugging or unplugging it from an electrical outlet.
11. Unplug the unit when not in use.
12. Allow unit to cool before cleaning.
13. Clean with a damp cloth and mild detergent.
14. Never immerse unit or cord in water or other liquids.
15. Never plug unit into a damaged electrical outlet.
16. Do not allow the cord to contact the edge of a counter, table or hot surface.
17. The use of attachments or accessories is not recommended by the manufacturer and will void the warranty.
18. Do not attempt to move this unit while it is operating.

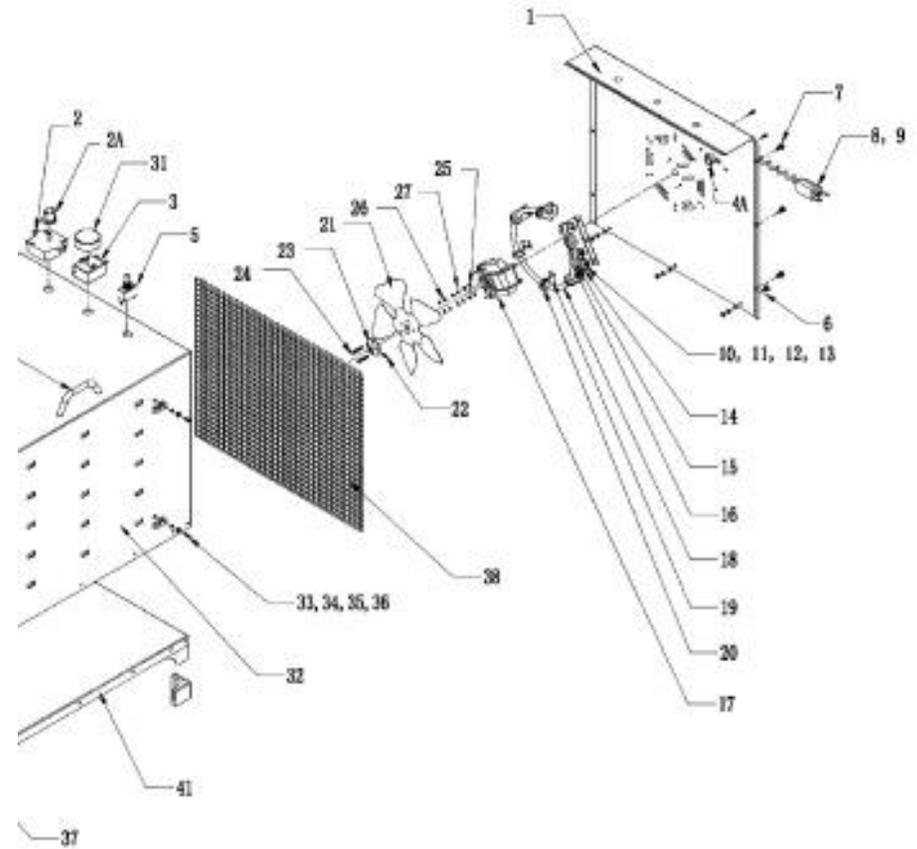


DIAGRAM FOR STAINLESS STEEL FOOD DEHYDRATOR

DIAGRAM FOR BREAKOUT OF 4A THERMAL BREAKER

Operating Instructions Continued:

- Fan must be running during operation. If fan fails to run call manufacturer.
- If drying is uneven, use oven mitts to turn the shelves 180°.
- When dehydrating is complete, use oven mitts to remove the front panel by sliding it straight up. Set it aside on a heat-resistant surface. Slide shelves out and remove finished product.
- Note: Moisture may collect on the bottom of the unit during operation and can be wiped out with a paper towel. Avoid touching the walls and shelves with your bare hands as burns may result.

Food Storage:

Dried foods should be allowed to condition before being placed into a storage container. Generally, let stand about 1 week in a dry, well-ventilated and protected area. The conditioning time allows for further drying and removes most of the remaining moisture in the food. Dried foods can be placed into clean, dry, and insect resistant containers, preferably glass jars. Heavy gauge plastic freezer bags can also be used. Eliminate as much air as possible before sealing the bag.

Vacuum sealers provide ideal storage when properly used. The less air present, the less potential for the formation of molds. Stored foods should be checked monthly for insects and mold. Discard if either is present.

Reconstitution:

Dried foods do not need to be reconstituted for consumption. Many people prefer to eat them in their dried state. If you want to reconstitute your food, here are some basic guidelines. Soak food in unsalted water for 3-7 minutes and then prepare as usual. If you are boiling them, use the same water they soaked in to preserve nutrients.

If you plan to soak foods for more than 1 hour, they should be placed in the refrigerator to prevent bacterial growth. One cup of dried vegetables will reconstitute to about 2 cups. One cup of dried fruit will reconstitute to about 1-1/2 cups. Reconstitution times will vary depending on the thickness of the food and the water temperature used. Warm water will speed reconstitution but may result in some flavor loss.

Cleaning:

To clean the unit, remove the shelves and wash separately. Wipe off both the exterior and interior surfaces of the unit with a damp cloth and mild detergent. Do not use scouring pads or abrasive cleansers as this may mar the finish.

NEVER IMMERSE THE UNIT OR POWER CORD IN WATER OR OTHER LIQUIDS.

Food Drying Guides:

The following charts are guidelines for the preparation of various fruits, vegetables and meats. Drying times will vary depending on the room temperature, relative humidity and moisture levels in the food that you are drying. If the moisture level is high, the drying time will be on the high end of the range.

Keep in mind that drying times are also affected by the amount of food placed on the shelves. Over loading the shelves will slow the drying time and may produce poor results. When dehydrating foods, it is important to check on the dryness of the product. If the product is not thoroughly dried, mold may form during storage. To test for dryness, remove a piece of food from the dehydrator and allow cooling to room temperature. Bend and tear the piece to check for internal moisture.

IMPORTANT: Before you place meat in Dehydrator it is highly recommended that you heat the meat to an internal temperature of at least 160° BEFORE the dehydrating process. This assures that any bacteria present will be destroyed with wet heat.

Food Drying Guide, Vegetables at 125°F

FOOD	PREPARATION	TEST	TIME
Asparagus	Wash & cut into 1" pieces.	Crunchy	4-6 hrs.
Beans, Green or Waxed	Wash, remove ends, cut into 1" pieces.	Crunchy	9-12 hrs.
Beets	Remove all but 1/2" of the top, scrub thoroughly, steam blanch until tender. Peel and cut into 1/4" thick slices.	Pliable	9-12 hrs.
Broccoli	Wash & trim. Cut stems into 1/4" pieces. Dry florets whole.	Crunchy	10-14 hrs.
Cabbage	Wash & trim. Cut into 1/8" strips.	Crunchy	8-11 hrs.
Carrots	Wash & trim tops. Peel or scrape if desired. Cut into 1/8" thick slices.	Pliable	7-11 hrs.
Celery	Wash, separate leaves and stalks. Cut stalks into 1/4" strips.	Crunchy	3-10 hrs.
Corn	Shuck corn and remove silk. Steam until milk is set. Cut kernels from cob and spread on plastic screen. Stir several times during drying.	Crunchy	7-10 hrs.
Cucumber	Wash & trim. Cut into 1/8" slices.	Pliable	4-8 hrs.
Eggplant	Wash & peel. Cut into 1/4" slices.	Pliable	4-8 hrs.
Mushroom	Wash and cut into 3/8" slices.	Pliable	4-7 hrs.
Parsnips	Scrub thoroughly, steam blanch until tender. Peel if desired and cut into 3/8" thick slices.	Pliable/ Tough	7-11 hrs.
Peppers	Wash and remove stems, seeds and white section. Pat dry. Cut into 1/4" thick strips or rings.	Pliable	4-8 hrs.
Potatoes	Use New Potatoes. Wash, peel if desired. Steam blanch 4-6 minutes. Cut French fry style. 1/4" slices, 1/8" thick circles or grate.	Crunchy/ Pliable	7-13 hrs.
Summer Squash	Wash & peel. Cut into 1/4" slices.	Pliable	10-14 hrs.
Tomatoes	Wash and remove stems. Slice into 1/4" circles. For cherry tomatoes, slice in half, dry skin side down.	Pliable	5-9 hrs.
Zucchini	Wash, peel if desired. Cut into 1/8" slices or chips.	Crunchy	7-11 hrs.

Food Drying Guide, Fruits at 135°F

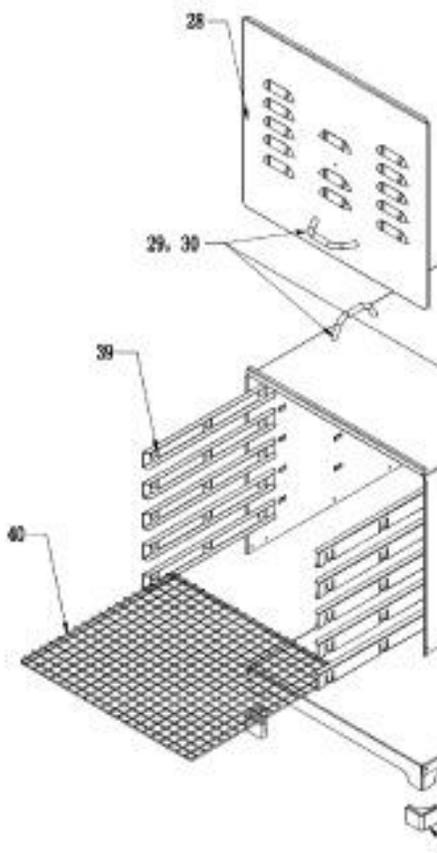
FOOD	PREPARATION	TEST	TIME
Apples	Wash, core, and peel if desired. Cut into 1/4" slices. Dust with cinnamon if desired.	Pliable	7-15 hrs.
Apricots	Wash, halve and remove pit. Slice if desired and dry skin side down.	Pliable	21-29 hrs.
Bananas	Wash, peel and slice into 1/8" slices.	Pliable	7-10 hrs.
Figs	Wash, cut out blemishes, quarter. Dry skin side down.	Pliable	22-30 hrs.
Kiwi	Wash, peel and slice into 1/4" slices.	Crisp	8-15 hrs.
Nectarines	Wash, halve and remove pit. Slice into 3/8" slices and dry skin side down.	Pliable	8-17 hrs.
Peaches	Wash, halve and remove pit. Slice into 1/4" slices and dry skin side down.	Pliable	8-16 hrs.
Pears	Wash, core and peel if desired. Cut into 1/4" slices or quarter.	Pliable	8-16 hrs.
Pineapple	Peel, remove fibrous eyes, remove core. Cut into 1/4" slices or wedges.	Pliable	11-18 hrs.
Rhubarb	Wash, cut into 1" lengths.	Pliable	6-10 hrs.
Strawberries	Wash, cut out caps, slice 1/4" thick.	Crisp	7-15 hrs.
Watermelon	Cut off rind, cut into wedges and remove seeds.	Pliable & Sticky	8-10 hrs.

Food Drying Guide, Jerky at 145°F-150°F

FOOD	PREPARATION	TEST	TIME
Jerky	Use lean meat and remove as much fat as possible. Cut uniform 1/4" thick or less slices. Do not overlap slices on the shelves. It is highly recommended that you heat meat to 160°F prior to dehydrating.	Pliable	3-4 hrs. meat temp. should reach 145°-150°F

PARTS LIST FOR STAINLESS STEEL FOOD DEHYDRATOR

Ref.	Description	Qty
1	Back Panel	1
2	Timer	1
2A	Timer Knob	1
3	Temperature Adjustment Unit	1
4A	Thermal Breaker	1
5	Off/On Switch	1
6	Lower Back Panel Washers, Screws & Nuts	3 ea.
7	Back Panel Screws	6
8	Power Cord Clip	1
9	Power Cord	1
10	Porcelain Insulator Bolts	3
11	Porcelain Insulator Washers	15
12	Porcelain Insulator Nut Washers	3
13	Porcelain Insulator Nuts	8
14	Silk Wire Covering	1
15	Outer Porcelain Insulators	3
16	Inner Porcelain Insulators	3
17	Fan Motor	1
18	Heating Element	1
19	Heating Element Porcelain Insulators	6
20	Heating Element Stands	5
21	Fan	1
22	Fan Bolt	2
23	Fan Connector Plate	1
24	Fan Connector Bolts	4
25	Fan Connector Nuts	4
26	Fan Connector Washers	4
27	Fan Connector Lock Washers	4
28	Front Panel	1
29	Handle Bolts	6
30	Handles	3



Ref.	Description	Qty
31	Temperature Adjustment Knob	1
32	Dehydrator Housing	1
33	Fan Guard Bolts	4
34	Fan Guard Nuts	4
35	Fan Guard Washers	4
36	Fan Guard Attachment Pieces	4
37	Rubber Feet	4
38	Fan Guard	1
39	Wire Shelf Brackets	10
40	Wire Shelves	10
41	Dehydrator Floor	1

Preparation of Foods (Pre-Treatment):

For best results, select the freshest foods available to dehydrate. Note that immature fruits and vegetables do not have as much color and flavor, as do those that are fully matured. Foods should be dehydrated as soon as possible after being harvested. Foods high in sugar such as apples, pears, peaches and bananas are prone to darkening as a result of oxidation of the sugars. Below are some pre-treatments that will help reduce this effect.

Lemon and pineapple juice are natural antioxidants. Place the sliced produce in the juice for a few minutes. Remove, drain and place on the dehydrator shelf. For extra flavor, try sprinkling on cinnamon, Jell-O powders or other sweeteners.

Ascorbic acid mix, a form of vitamin C, which is available at most health food stores, comes in either a tablet or a powder form. Use about 2-3 tablespoons of powder or ground tablets per quart of water. Stir to completely dissolve powder. Place fruit into the solution for 2-3 minutes. Remove, drain and place on the dehydrator shelf.

Sodium Bisulfite can be purchased at your local pharmacy. If you or anyone who will be eating the food has any known chemical allergies, you should check with your physician before using this chemical. Be certain to ask for food grade (safe) product only. Mix 1 teaspoon of sodium bisulfite in 1 quart of water. Place the sliced fruit in the solution for 2-3 minutes. Remove, drain and place on the dehydrator shelf.

Blanching is used primarily to prepare fruits and vegetables for dehydrating that have skins that will toughen during drying. This process helps lock in the color and flavor as well as soften the skin of grapes, cherries, prunes and plums. There are two blanching methods, water and steam.

- **Water blanching** – Fill a large pan about half full with water. Bring water to a boil. Use tongs to place food directly into the water, cover pan and blanch for about 3 minutes. Remove, drain and place on the dehydrator shelf.

- **Steam blanching** – Using a steamer pot such as one used in Chinese cooking, put 2-3 inches of water in the pan and bring to a boil. Place food into steamer basket, place in pan and cover. Steam food for about 5 minutes. Remove and place on the dehydrator shelf.

Operating Instructions:

For the safest and best results, read all of the instructions first.

1. Examine the carton and the unit for any damage that may have occurred during shipping. Contact the manufacturer and the carrier to report any damage.
2. Fill out and return the product warranty card. The card must be on file for your warranty to take effect.
3. Make sure the power switch is turned off. Place the unit on a clean, dry surface away from children and pets. Plug into an undamaged electrical outlet. Warning: Do not use an extension cord with your dehydrator.
4. Follow your recipe for the food that you wish to dehydrate then place the food evenly on the shelves provided. The manufacturer recommends using cooking spray on the shelves to prevent sticking. Do not overlap food items.
5. Carefully place shelves onto the rails inside the unit and slowly slide them in. Forcing the shelves may damage the heating assembly.
6. Slide the door into place.
7. Turn power toggle switch on and set desired temperature by turning the corresponding knob on the top of the unit. Monitor the internal temperature and adjust as needed. Unit **WILL NOT OPERATE** until timer switch is set to 1.) "ON" for continuous running or 2.) set to the number of hours you want the unit to run. The unit will shut off automatically after the set time has elapsed. You must turn the timer off when using "ON" setting.