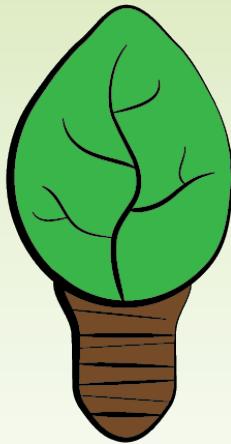


# Solar Food Dehydrator User Manual

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The Greengineers



## Introduction:

Dehydration is one of the most advantageous methods of food preservation. It is simple, fast, and healthy. Using a food dehydrator also contributes to reducing waste: No need to throw any fresh fruit away anymore! Instead, preserve your food and embrace the diversity of dried fruit and vegetable.

The solar dehydrator is designed to extract moisture from fruit and vegetable. It is designed to work in an autonomous manner. The process of drying is enabled by a constant airflow and a controlled temperature and humidity level. All the innovative technical features are powered by solar energy, so as to make the product sustainable.

Our dehydrator is both efficient and eco-friendly, and will introduce you to alternative cuisine in a way you will enjoy.



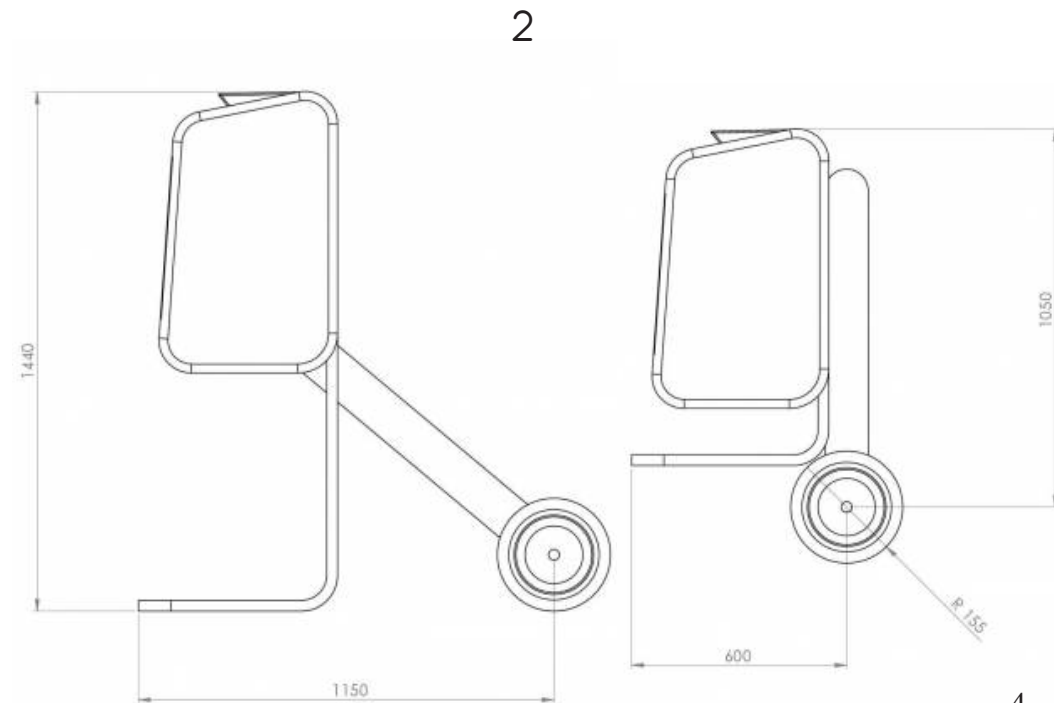
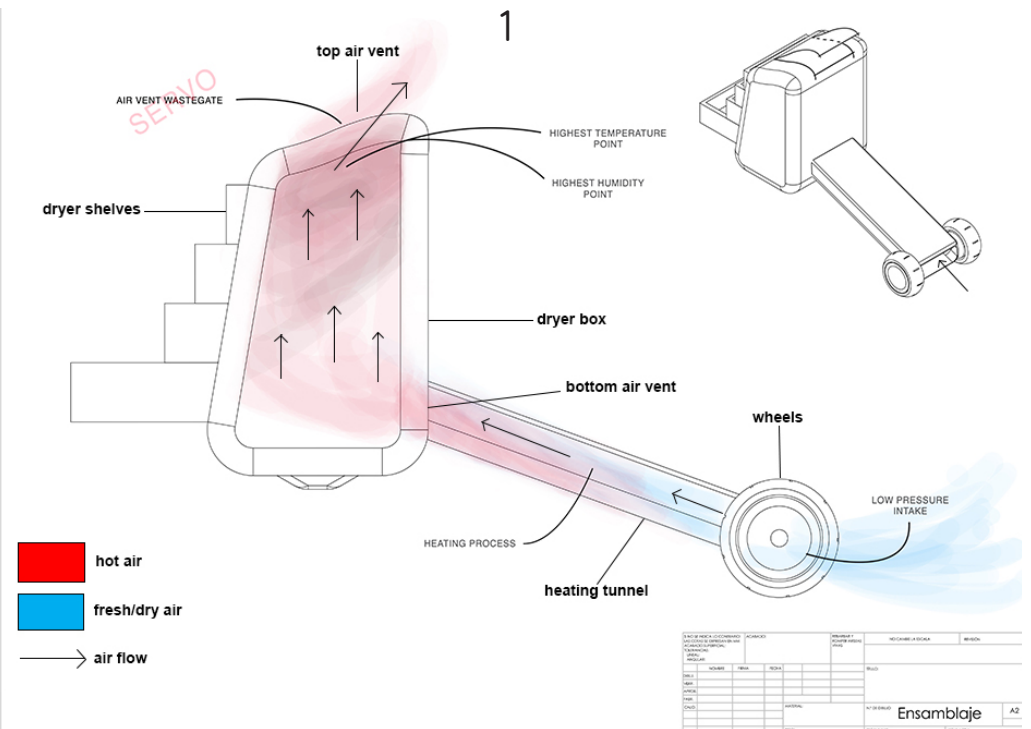
## Components & Functionalities:

The dehydrator consists of:

- a heating tunnel: Fresh, dry air from the outside gathers in the tunnel and is heated up, before entering the dryer box through an air vent.
- a dryer box: This is where the drying process takes place. The box or "food chamber" contains the removable dryer shelves, on which the food is loaded. Once the air has risen to the top of the box, it is rejected through the top vent.
- air vents: Both top and bottom air vent open and close automatically, due to integrated motors.
- a control unit: The control unit is located in the outside box, connected to the food chamber. The temperature and humidity values, measured by a sensor, are displayed on the LCD screen. The buttons on the LCD screen enable you to set the approximate duration of the drying process. The buzzer alerts you, once the process is over.

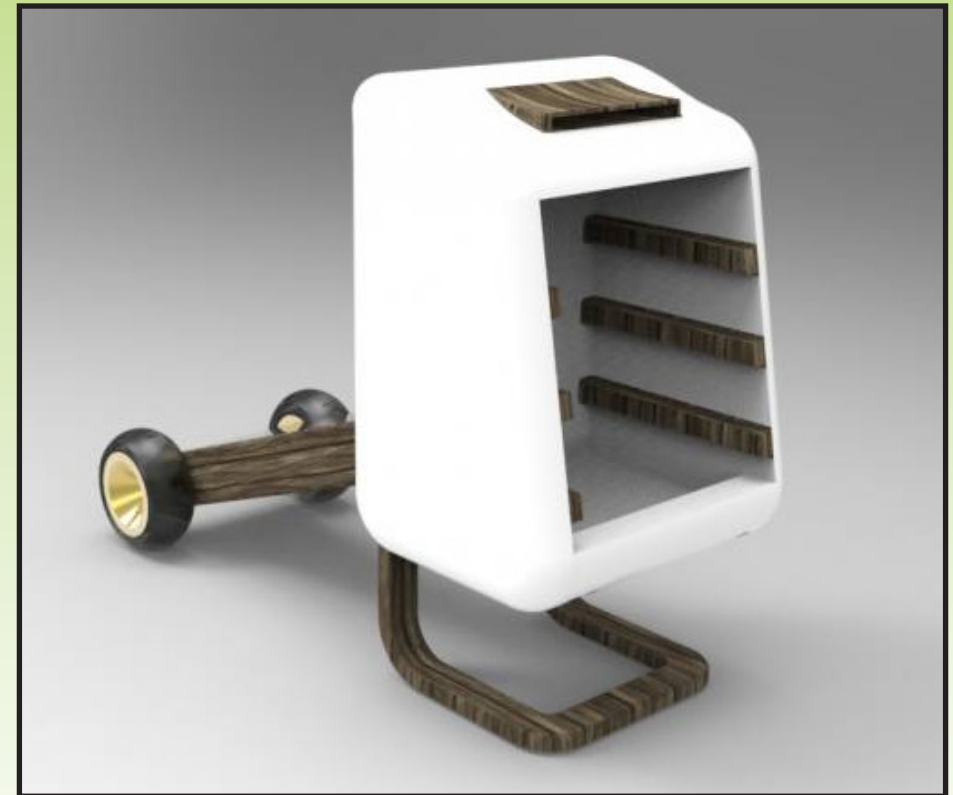
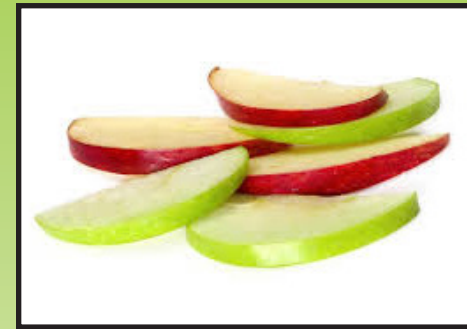
## Design & Features:

The dehydrator is portable: The height of the legs and the inclination of the tunnel are adjustable. Once folded (as seen on picture 2), the set of stable wheels and the handle on the dryer box make it easy to move the device around.



## Drying your own food:

- 1) Wash and cut the ripe fruit and vegetable into thin slices (0.5 cm to 1 cm thickness).
- 2) Place the dehydrator in a sunny spot of your garden or terrace (preferably a spot which is exposed to sunlight for most of the day) .
- 3) Unfold the dehydrator to its stable position, as shown in the picture (Incline the heating tunnel and pull out the legs).
- 4) Remove the shelves from the dryer box. Load the slices of fruit and vegetable evenly on the trays, then place them back inside the box.
- 5) Shut the front door of the dryer box.
- 6) Switch on the control unit, Make sure both vents are open (this should happen automatically) and the temperature and humidity values are displayed on the screen.
- 7) With the buttons on the LCD screen, set the approximate duration of dehydration, according to the table on page 7 and 8. (The drying process will take 6 to 30 hours, depending on the type of fruit or vegetable, and on the weather.)
- 8) Once your food has dried, carefully remove the shelves once again, and collect your dried fruit and vegetable.
- 9) Savour it as a healthy snack, as an additional ingredient in your breakfast Müesli, or as a special condiment to any meal.



Dehydrations time depending on the fruit and vegetable:

### FRUITS

Apples	7-15 hours
Apricots	20-28 hours
Bananas	6-10 hours
Berries	10-15 hours
Cherries	13-21 hours
Cranberries	10-12 hours
Figs	22-30 hours
Grapes	22-30 hours
Kiwi	7-15 hours
Nectarines	8-16 hours
Peaches	8-16 hours
Pears	8-16 hours
Persimmons	11-19 hours
Pineapple	10-18 hours
Prune Plums	22-30 hours
Rhubarb	6-10 hours
Strawberries	7-15 hours
Watermelon	8-10 hours

### VEGETABLES

Asparagus	5-6 hours
Beans, Green or Wax	8-12 hours
Beets	8-12 hours
Broccoli	10-14 hours
Cabbage	7-11 hours
Carrots	6-10 hours
Celery	3-10 hours
Corn	6-10 hours
Cucumber	4-8 hours
Eggplant	4-8 hours
Greens	3-7 hours
Mushrooms	3-7 hours
Okra	4-8 hours
Onions	4-8 hours
Parsnips	7-11 hours
Peas	4-8 hours
Peppers / Hot Peppers	4-8 hours
Popcorn	4-8 hours
potatoes	6-14 hours
pumpkin	7-11 hours
Summer Squash	10-14 hours
Tomatoes	5-9 hours
Turnips	8-12 hours
Winter Squash	7-11 hours
Yams	7-11 hours

## Tips:

- The dehydrator is water-resistant, however, it should be sheltered from rain if possible.
- To avoid excess humidity, it is advised to keep the dehydrator indoors during nighttime.
- If the dried food is to be preserved for a longer period of time, make sure to store it in air-tight glass recipients, away from sunlight.
- Avoid peeling the fruit and vegetable before drying it: Most of the vitamins are in the skin.
- Pouring lemon juice over the sliced fruit and vegetable before drying them stops them from oxidising and changing colour.
- Remove the pits or stones from fruit such as cherries or plums, to accelerate the drying process.
- Test if fruit or vegetable has finished drying, by putting pressure on the thickest spot of the slice. If it is firm, and not soft or squishy, the food is ready.

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