

# **Technical Description of Air Fryer**

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## **Definition**

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Everyone must know or have heard of air fryer somewhere on the internet. Air fryer was quite trending in the past few years, but do people ever wonder what it really is and what is it for? Air fryer is compact, countertop appliance that uses convection heating to circulate air around your food. Hence it can be used to stimulate deep frying food since it produce food that with similar crispy texture compare to those deep frying food, but you only need to put a little, or no oil to the food, which makes it less fat when consuming. Also, instead of using ovens. Microwaves, air fryers can be used to cook or heat up other food (can be used for roasting, grilling, or even baking muffins or desserts) easier by simply just click the button and set up the timer.

## **Overview**

Air fryers can have different colors, but most of them will be black. Air fryers can be distinguished into three different types. But today I am only talking about classic air fryers. These are the most common air fryers that we have been using. It usually consists of two different shapes. One will be an egg shape, with less cooking surface area. Another one will be a square shape, with larger cooking surface. For both shapes of classic air fryers, it will be looking like a trash bin overall.

On the top front of the fryers, there are either buttons or a rotatable object, which is called a timer knob, where you can rotate it to set a timer for the air fryer. On the bottom front of the fryers, there is a handle pops out, that will be the basket you are going to put your food inside. The size of air fryers is all depending on how many people the fryer is serving, the size of the fryer will mostly change horizontally, meaning the length and width of fryers will change but the height will remain constant.

## **Components**

### **Main components:**

- **Air fryer base**-The base that is responsible heating the food.
- **Basket base**- The pan/ pot with a handle that holds the basket and being put inside of the air fryer base.
- **Basket**- The plate to hold foods and being placed on the basket base.

### **Sub parts:**

- **Element**-The power source to produce heat up the air from air intake.
- **Fan**- spread the heat generated by the element units to the food.
- **Control panel**- a circular screen where it contains cooking and unit controls.

- **Air intake**- Puts in air to heat for cooking.
- **Exhaust vent**- for air to come out.
- **Timer**- a + - button that control cooking time
- **Temperature control**- a + - button that control temperature of heat generated by the element units.
- **On/off** – turn on or turn off the machine.
- **Number screen**- a led screen in the middle of the control panel.

## Explanation

In order to have the air fryer functioning, which is able to cook food. We need to combine all those components. We can separate the whole air fryer into two parts. The fryer part and the basket part. Basket part is composed by having the basket placed on top of the basket base, the basket should slide into the gap of the basket base perfectly. The Fryer base can consist of three parts, control panel, air entrance/exit, interior part.

- Control panel is usually on the top front part of the fryer base, the number screen is in the center of the control panel, the on/off feature is below the number screen. The timer is in the left side of the number screen, the temperature control is in the right side of the number screen.

- Air entrance and exit part is in the back of the fryer base, where the entrance is located on the back top, putting air inside the fryer, and air exit is located in the back bottom of the base, release air.
- Interior part can be called as power part, which is consist of the element units(power unit) and fans. They are in the interior of the top of the fryer.

When fryer is plugged in, the element units will heat up air putted through the air entrance, the fan will push these air onto the food.

## Visuals

### Parts Diagram

Refer to this diagram and associated table to better understand the controls and operation of the Air Fryer.



Item #	Name	Description
1.	Basket	Place food in the basket to be cooked.
2.	Basket release	Press the basket release button to release the basket from the pan.
3.	Basket handle	Basket handle includes the basket release control.
4.	Pan	The pan holds the cooking basket.
5.	Control Panel	Contains cooking and unit controls.
6.	Air Intake	Pulls in air to heat for cooking.
7.	Hot Air Outlet	Heated air exit.
8.	Power Cord	To connect unit to grounded power source.
9.	LED Display	Displays current time/temperature value.
10.	On/Pause	Press to turn unit on or pause cooking.
11.	Timer	0-30 minute timer.
12.	Menu	Select from 7 cooking options.
13.	Temperature Control	Select cooking temperature.

#### Settings

- Cake
- Chicken
- Fish
- French Fries
- Meat
- Shrimp
- Steak

## **Conclusion**

After done watching all these descriptions of the air fryer. I suppose you might want to consider buying one to try and worry about the price. But since the component of air fryers are not expensive and the magnification is not complicated, hence the price of classic air fryer is usually at the range of \$40 -\$70. Although the air fryer is convenient and easy to use for those people who is lazy to cook or busy to cook, but eating food cooked by the air fryer for a long period of time might not be healthy to your body. According to the research, it says "Air frying equipment is not known to cause cancer, but the process of air frying does result in the formation of certain compounds, like acrylamide, which are linked to cancer development. Acrylamides are chemicals that are classified as probable human carcinogens."

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