

The operating principle description of WBP-TP-660

The LCD of the microwave oven displays 00:00, when it is in AC or DC input model. You can set the cooking time you want by pressing a certain button. Press START/STOP button on the operator control panel to start/stop the cooking time. The product begins to work automatically, if you don't press the start button after setting the cooking time. There are several cooking models for you to choose on the PCB (the product works with the same power no matter which model it is in) . The control chip in the PCB sends out working order to the control board after you set the cooking time. Then the control board outputs a signal of pulse which makes the power board working with AC high frequency output (in AC model) or DC high frequency (in DC model) after it receives working order from the PCB. As the output current comes to the high frequency high pressure transformer, it is transformed into high tension current, and output the working voltage of the magnetic controller through high frequency pressure rectifier. The product begins to work as the magnetic controller start working.

The magnetron is a radio transmitter, if it was on a radio mast it would be able to send radio signals a long way. But it is inside a metal box which keeps the signal in. The frequency of the transmitter is 2460Mhz(megahertz), which is a wavelength of 12cm, rather than short waves, medium waves or long waves. In microwave cooking, the radio waves penetrate the food and excite water and fat molecules pretty much evenly throughout the food. Anything with water in it has all these molecules being moved this way and that by the electrical field, and heated up.

Microwaves in this frequency range have another interesting property: they are not absorbed by most plastics, glass or ceramics. The dishes, walls of the oven, etc., don't pick up radio, so don't get heated up.