

The "Granny-Safe" connects to 120VAC mains power. That power flows to the power supply where it is converted to 5VDC and supplied to the rest of the project. The microprocessor receives temperature data from hotplate via the temperature sensor. Based on the user input and the temperature of the hotplate the microprocessor adjusts the temperature of the hotplate. The temperature of the hotplate is controlled via the hotplate controller which adjusts how much power flows to the hotplate. The alarm circuitry is enabled when the hotplate temperature exceeds 120°F and after a programmed amount of time the alarm is activated.