

Pet Food Dispenser Briefing

Purpose:

This engineering project serves as a pet food dispenser. It is able to dispense dry food, not wet food, for pets such as dogs & cats. In addition, candy or food that is not wet or slimy can be used, like skittles.

Components:

The components of this project are an Adafruit Metro MO Express, an ultrasonic distance sensor, an LCD with an i2c backpack, a 180-rotation micro servo, a power switch, a single-color LED, and a battery pack with batteries.

Notes:

On the LCD, “*Servo forward*” fills up the food wheel; “*Servo backward*” empties out the food.

The message “*Ready in: _*” indicates how many seconds are left until the dispenser can be activated. This time limit, as well as other time durations, can be changed in the code.

The message “*Ready to feed*” indicates that the dispenser can be activated by bringing an object into close proximity of the ultrasonic sensor. Afterward, the dispenser will fill up and empty out.

Red wires correspond to 5V; black wires correspond to GND.

