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// Turntable Driver for 28BYJ-48 stepper motor
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#include <Stepper.h>
const int stepsPerRevolution = 200; // change this to fit the number of steps per revolution
// for your motor

// initialize the stepper library on pins 2 through 5:
Stepper myStepper(stepsPerRevolution, 5, 3, 2, 4); // order is important to fire the windings in turn
int Pin06Read ; // step -neg - setup variable to hold pin 6 value
int Pin07Read ; // step +pos - setup variable to hold pin 7 value
int stepperspeed ; // setup variable for the speed of the turntable rotation

void setup() // setup procedure runs only once when program starts
{
  digitalWrite(6, HIGH); // set pin 6 to 5 volts
  digitalWrite(7, HIGH); // set pin 7 to 5 volts
  stepperspeed = 1 ; // set stepper speed variable to 1 to begin with
  myStepper.setSpeed(0) ; // set stepper speed to zero to begin with
  myStepper.step(0); // set stepper steps to zero to begin with
}

void loop() // main loop that runs round and round all the time
{
  Pin06Read = digitalRead(6) ; // Check if Pin 6 is HIGH or LOW
  Pin07Read = digitalRead(7) ; // Check if Pin 7 is HIGH or LOW

  // read the Turntable speed preset sensor value:
  int sensorReading = analogRead(A0); // ask what value the speed preset is set to
  // map it to a range from 0 to 100:
  int motorSpeed = map(sensorReading, 0, 1023, 0, 100); // 1023 is the step setting for tis motor
  // set the motor speed:
  if (motorSpeed > 0) { // if the mapped motor speed is set to greater than 0 by the preset
    myStepper.setSpeed(motorSpeed); // set the rotation speed as set by preset
    // step 1/100 of a revolution:
  }

  // check which button is being pressed
  if (Pin06Read == LOW) // if pin 6 is zero volts then make motor step 1 (pushed)
  {
    myStepper.step(1); // Motor steps one step in (say) clockwise direction
  }
  else // otherwise if pin 6 is set to 5 volts (not being pushed)
  {
    myStepper.step(0); // stop the motor rotating
  }
  if (Pin07Read == LOW) // if pin 7 is zero volts then make motor step -1 (pushed)
  {
    myStepper.step(-1); // Motor steps one step in (say) anti-clockwise direction
  }
  else // otherwise if pin 7 is set to 5 volts (not being pushed)
  {
    myStepper.step(0); // stop the motor rotating
  }
}

```