

```
#include <Stepper.h>
const int stepsPerRevolution = 200; //This is the default for NEMA-17. Try changing it
if you have a different Stepper Motor model.
```

```
int openPin= 8;
int closePin=12;
int relay =2;
```

```
Stepper myStepper = Stepper(stepsPerRevolution, 10, 9, 7, 6); //Pins going to H-
Bride; 9/10 are pairs and 6/7 are pairs.
```

```
void setup()
```

```
{
  // Serial.begin(9600); //Optional to monitor the system.
```

```
  myStepper.setSpeed(200); //This is the default for NEMA-17. Try changing it if you
have a different Stepper Motor model.
```

```
  pinMode(relay, OUTPUT);
  pinMode(openPin, INPUT);
  pinMode(closePin, INPUT);
  digitalWrite(relay, HIGH); //I'm using the NC pin in the relay so this keeps the relay
off when I first start the arduino.
```

```
}
```

```
void loop()
```

```
{
  int openState= digitalRead(openPin); //Button to open the curtain
  int closeState= digitalRead(closePin); //Button to open the curtain
```

```
  if (openState == HIGH){
    //Serial.println("OPEN"); //Optional for monitoring
```

```
    digitalWrite(relay, LOW); //opens power to the H-Bridge
    delay(250); //for tolerance
```

```
    for (int i=1; i<=16; i++){ //Number of steps to close the curtain. Keep testing until
you get the number that works for you.
```

```
    //Serial.println(i); //Optional for monitoring
    myStepper.step(-200);
```

```
    }
    delay(500); //for tolerance
    digitalWrite(relay, HIGH); //turns off H-Bridge
```

```
}
```

```
  if (closeState == HIGH){
    //Serial.println("CLOSE");
    digitalWrite(relay, LOW);
```

```
    delay(250);

    for (int i=1; i<=16; i++){ //Number of steps to close the curtain. Make sure the
steps for OPEN/CLOSE are exactly the same.
    //Serial.println(i);
    myStepper.step(200);
    }

    delay(500);
    digitalWrite(relay, HIGH);
    }
}
```