

```
// Driving 3-phase Brushless DC Motor with Square-wave
// This sketch is based on the code for the stroboscope project by eLABZ.
// (http://elabz.com/bldc-motor-with-arduino-circuit-and-software/)
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```

```
const int motorDelayActual = 150;
const int motorPin1 =9;
const int motorPin2 =10;
const int motorPin3 =11;
const int motorPinState[]={1, 1, 1, 0, 0, 0};
```

```
int currentStepA=0;
int currentStepB=2;
int currentStepC=4;
long lastMotorDelayTime = 0;
```

```
void setup () {
  pinMode(motorPin1, OUTPUT);
  pinMode(motorPin2, OUTPUT);
  pinMode(motorPin3, OUTPUT);
}
```

```
void loop () {
  if((millis() - lastMotorDelayTime) > motorDelayActual) {
    currentStepA = currentStepA ++;
    if(currentStepA > 5) currentStepA = 0;
    if(currentStepA < 0) currentStepA = 5;

    currentStepB = currentStepB ++;
    if(currentStepB > 5) currentStepB = 0;
    if(currentStepB < 0) currentStepB = 5;

    currentStepC = currentStepC ++;
    if(currentStepC > 5) currentStepC = 0;
    if(currentStepC < 0) currentStepC = 5;

    lastMotorDelayTime =millis();
    analogWrite(motorPin1, 254 * motorPinState[currentStepA]);
    analogWrite(motorPin2, 254 * motorPinState[currentStepB]);
    analogWrite(motorPin3, 254 * motorPinState[currentStepC]);
  }
}
```

```
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```