

## Keyes HL8059 3V Heart Rate Monitor for Arduino

Module: MD0366

### Instructions:

Keyes HL8059-3V Heart Rate Module is a heart rate testing monitor. It uses 3VDC power supply, the pulse pin outputs heartbeat data, and the matching 3.5mm headphone jack cable is used with the adhesive pads. The test data is accurate, very anti-interference, and simple to use.

### Specification:

Working Voltage: 3.3VDC

Sustaining Current: 0.01uA

Working Current: 2mA

Operating Temperature: -20°C ~ +60°C

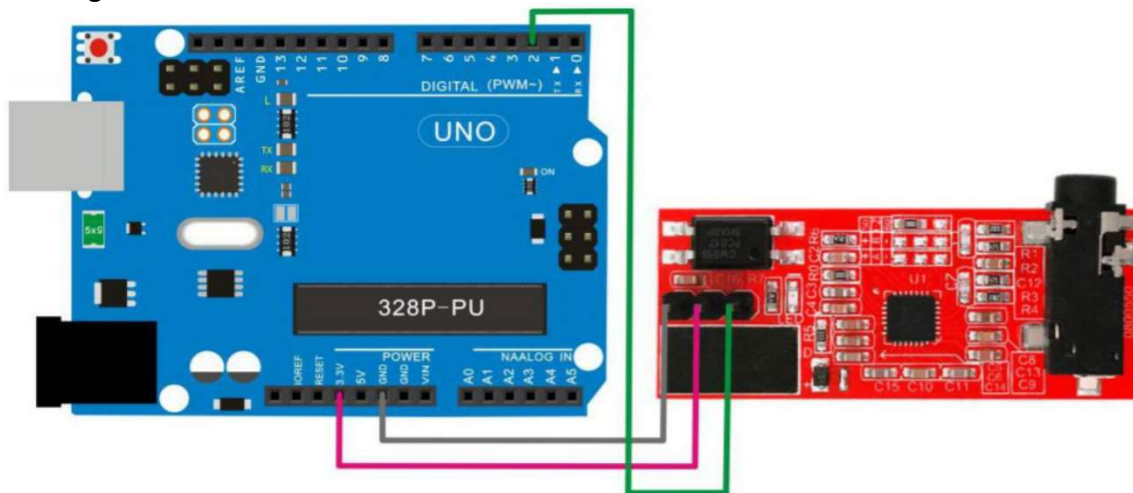
Chip: Exclusively used for professional hear rate monitoring.

High anti-interference: Select 50Hz or 60Hz 3VDC power supply for grid voltage regulation (through 50, 60Hz chip resistor)

Dimensions: 41x18x12mm

Weight: 5g

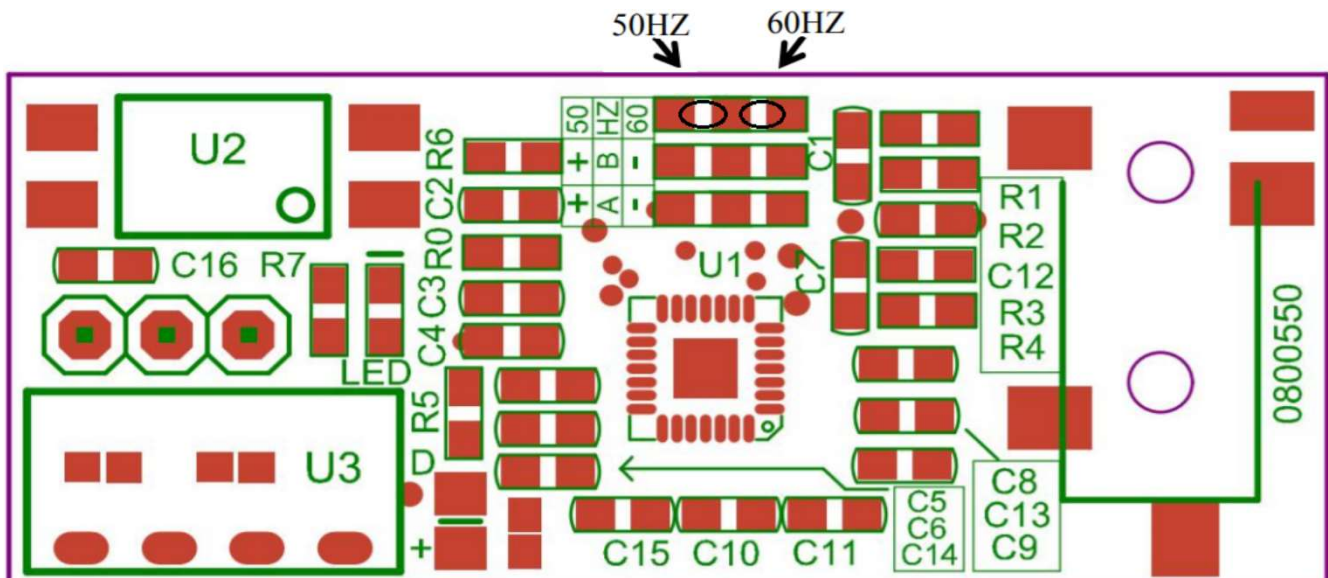
### Connection diagram:



### Selecting frequency:

Select 50HZ or 60HZ power regulator after the DC3V power supply:

By adding a link or zero ohm resistor at the location of the "0" top line of the patch, as shown below



### Test Code:

```
long time = 0;
long old_time = 0;
long difference = 0;
int heart_reat = 0;

void setup()
{
  Serial.begin(9600);
  pinMode(2, INPUT);
  attachInterrupt(0, falling, FALLING);
}
// -----
void loop()
{
}
// -----
void falling()
{
  time = millis();
  difference = time - old_time;
  old_time = millis();
  heart_reat = 60000 / difference;
  Serial.print(difference);
  Serial.print(" ");
  if(heart_reat < 200) Serial.println(heart_reat);
  else Serial.println("Over Max");
}
```

### Test Code:

Insert the cable into the hl8059-3v dc-dc heart rate module, the other end of the connection R to the right atrium, L to the left atrium, COM to the middle of the left and right atrium. Open arduino serial port, baud rate is 9600; On the test board, the D2 lamp was lit with the test man's heart rate, and the test man's heart rate was printed at the same time.

