

Data Sheet

ARD 2

Arduino Compatibles

Controllers, Shields, Modules & Sensors

Arduino-Compatible 8-Digit Display Module

ARD2-2073

- Display 8 characters
- Requires just 5 pins to control the module
- Includes 5-pin header

These 8-digit display modules are perfect for any project that needs to display small amounts of characters. Controlled by a 74HC595 chip.

Specifications

Operating Voltage (V)	3.3 or 5
Static Operating Current (mA)	5
Maximum Operating Current (mA)	80
Chip	74HC595D

Dimensions

Length (mm)	72
Width (mm)	24
Height (mm)	10

Pinout

Board	Arduino	Description
VCC	3.3V	Power
GND	GND	Ground Connection
RCLK	5	Serial Latch
SCLK	7	Serial Clock Input
DIO	6	Serial Data Input



Page 1 of 4



Your Science & Technology
Supply Specialists

www.wiltronics.com.au

WILTRONICS

Wiltronics Research Pty. Ltd. ABN 26 052 173 154
5-7 Ring Road, Alfredton VIC 3350 | P.O Box 4043, Alfredton VIC 3350
sales@wiltronics.com.au | Phone: (03) 5334 2513 | Fax: (03) 5334 1845

Data Sheet

ARD 2

Arduino Compatibles

Controllers, Shields, Modules & Sensors

Test Code

```
const int clock = 7; //SCK
const int latch = 5; //RCK
const int data = 6; //DIO

byte value[] = { B11111001, // 1
                 B10100100, // 2
                 B10110000, // 3
                 B10011001, // 4
                 B10010010, // 5
                 B10000010, // 6
                 B11111000, // 7
                 B10000000, // 8
                 B10010000, // 9
                 B11000000, // 0
                 B11111111}; // display nothing

byte digit[] = { B00000001, // left segment
                 B00000010,
                 B00000100,
                 B00001000,
                 B00010000,
                 B00100000,
                 B01000000,
                 B10000000}; // right segment

byte ii = 0;

byte v0, v1, v2, v3, v4, v5, v6, v7;
byte vvalue = value[0];

void setup() {
  pinMode(clock, OUTPUT);
  pinMode(latch, OUTPUT);
  pinMode(data, OUTPUT);

  cli(); // stop interrupts
```

Page 2 of 4



**Your Science & Technology
Supply Specialists**

www.wiltronics.com.au

 **WILTRONICS**

Wiltronics Research Pty. Ltd. ABN 26 052 173 154
5-7 Ring Road, Alfredton VIC 3350 | P.O Box 4043, Alfredton VIC 3350
sales@wiltronics.com.au | Phone: (03) 5334 2513 | Fax: (03) 5334 1845

Data Sheet

ARD 2

Arduino Compatibles

Controllers, Shields, Modules & Sensors

Test Code

```
//set timer0 interrupt at 980Hz
TCCR0A = 0;// set entire TCCR0A register to 0
TCCR0B = 0;// same for TCCR0B
TCNT0 = 0;//initialize counter value to 0
OCR0A = 255;//(must be <256) --> 16000000 / (prescaler*255) = 980 Hz
TCCR0A |= (1 << WGM01);
TCCR0B |= (1 << CS01) | (1 << CS00); //prescaler = 64
TIMSK0 |= (1 << OCIE0A);
sei();//allow interrupts

v0=v1=v2=v3=v4=v5=v6=v7=0;
}

ISR(TIMER0_COMPA_vect){
  ii++;
  if (ii==8) ii=0;

  if (ii==0) { vvalue = v0; }
  else if (ii==1) { vvalue = v1; }
  else if (ii==2) { vvalue = v2; }
  else if (ii==3) { vvalue = v3; }
  else if (ii==4) { vvalue = v4; }
  else if (ii==5) { vvalue = v5; }
  else if (ii==6) { vvalue = v6; }
  else if (ii==7) { vvalue = v7; }

  digitalWrite(latch,LOW);
  shiftOut(data,clock,MSBFIRST,B11111111);
  shiftOut(data,clock,MSBFIRST,B11111111);
  digitalWrite(latch,HIGH);

  digitalWrite(latch,LOW);
  shiftOut(data,clock,MSBFIRST,digit[ii]);
  shiftOut(data,clock,MSBFIRST,value[vvalue]);
```

Page 3 of 4



**Your Science & Technology
Supply Specialists**

www.wiltronics.com.au

 **WILTRONICS**

Wiltronics Research Pty. Ltd. ABN 26 052 173 154
5-7 Ring Road, Alfredton VIC 3350 | P.O Box 4043, Alfredton VIC 3350
sales@wiltronics.com.au | Phone: (03) 5334 2513 | Fax: (03) 5334 1845

Data Sheet

ARD 2

Arduino Compatibles

Controllers, Shields, Modules & Sensors

Test Code

```
digitalWrite(latch,HIGH);
}

long i;

void loop() {

  for (i=1;i<=99999999;i++) {
    v7 = i % 10;
    v6 = (i / 10) % 10;
    v5 = (i / 100) % 10;
    v4 = (i / 1000) % 10;
    v3 = (i / 10000) % 10;
    v2 = (i / 100000) % 10;
    v1 = (i / 1000000) % 10;
    v0 = (i / 10000000) % 10;
    delay(30);
  }
}
```

Source and further examples: <https://playground2014.wordpress.com/arduino/3461bs/>

Page 4 of 4



**Your Science & Technology
Supply Specialists**

www.wiltronics.com.au

 **WILTRONICS**

Wiltronics Research Pty. Ltd. ABN 26 052 173 154
5-7 Ring Road, Alfredton VIC 3350 | P.O Box 4043, Alfredton VIC 3350
sales@wiltronics.com.au | Phone: (03) 5334 2513 | Fax: (03) 5334 1845