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# **Adafruit HT16K33 Documentation**

***Release 1.0***

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# CHAPTER 1

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## Matrices

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```
class ht16k33_matrix.HT16K33 (i2c, address=0x70)
    The base class for all displays. Contains common methods.

    blink_rate ([rate ])
        Get or set the blink rate. Range 0-3.

    brightness ([brightness ])
        Get or set the brightness. Range 0-15.

    show ()
        Refresh the display and show the changes.

    fill (color)
        Fill the whole display with the given color.

    pixel (x, y [, color ])
        Get or set the color of a given pixel.

class ht16k33_matrix.Matrix16x18
    A double matrix or the matrix wing.

class ht16k33_matrix.Matrix8x8
    A single matrix.

class ht16k33_matrix.Matrix8x8x2
    A bi-color matrix.
```





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### Segment Displays

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**class** ht16k33\_seg.**Seg14x4** (*i2c*, *address=0x70*)

Alpha-numeric, 14-segment display.

**scroll** (*self*, *count=1*)

Scroll the display by specified number of places.

**put** (*self*, *char*, *index=0*)

Put a character at the specified place.

**push** (*self*, *char*)

Scroll the display and add a character at the end.

**text** (*text*)

Display the specified text.

**number** (*number*)

Display the specified decimal number.

**hex** (*number*)

Display the specified hexadecimal number.

**class** ht16k33\_seg.**Seg7x4** (*i2c*, *address=0x70*)

Numeric 7-segment display. It has the same methods as the alphanumeric display, but only supports displaying decimal and hex digits, period and a minus sign.



## CHAPTER 3

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### Indices and tables

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