

cedargrove_waveviz

A CircuitPython class to create a positionable **displayio.TileGridGroup** object from a **synthio.ReadableBuffer** wave table. The class inherits all properties of a TileGrid object including **bitmap**, **pixel_shader**, **x**, **y**, and provides the bitmap properties of **width**, **height**.

https://github.com/CedarGroveStudios/CircuitPython_WaveViz

<https://docs.circuitpython.org/en/latest/shared-bindings/displayio/#displayio.TileGrid>

- Author(s): JG for Cedar Grove Maker Studios

Implementation Notes

Software and Dependencies:

- Adafruit CircuitPython firmware for the supported boards: <https://circuitpython.org/downloads>

```
class cedargrove_wavebuilder.WaveViz(*, wave_table, x, y, width,height, plot_color=0x00FF00, grid_color=0x808080,
back_color=None)
```

Create a positionable **displayio.TileGrid** object from a **synthio.ReadableBuffer** wave table.

Parameters:	<ul style="list-style-type: none">• wave_table – The synthio waveform object of type 'h' (signed 16-bit). No default.• x — The tile grid's x-axis coordinate value. No default.• y — The tile grid's y-axis coordinate value. No default.• width — The tile grid's width in pixels. No default.• height — The tile grid's height in pixels. No default.• plot_color – The waveform trace 24-bit integer RGB color value. Defaults to 0x00FF00 (green).• grid_color – The perimeter grid 24-bit integer RGB color value. Defaults to 0x808080 (gray).• back_color – The grid background 24-bit integer RGB color value. Defaults to None (transparent).
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wave_table(new_wave_table)

The **synthio** waveform object. Read/write.

width

The tile grid's width in pixels. Read-only.

height

The tile grid's height in pixels. Read-only.

max_result

The full-scale value of the plotted image (from **wave_table**). Read-only.