

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**, **width**, **height**, **x**, **y**.

https://github.com/CedarGroveStudios/CircuitPython_WaveViz

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

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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:

- **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).