Definitions naming

The terms used to create a matrix can be confusing.

To generate a matrix map for your coding project, you will need to use the LEDMatrix library #defines to configure this table generator. (My *LEDMatrix-21* library can use an XYTable[] lookup array to more quickly generate LED output, including irregular or very large arrays).

While neither the Adafruit DotStar library or the older LEDMatrix libraries can use a XYTable[] for LED position lookup, here is a table relating the names between the DotStar and the LEDMatrix libraries.

DOT STAR terms	LEDMatrix terms	Description
Enter your value in the Adafruit_DotStarMatrix() constructor	MATRIX_WIDTH MATRIX_HEIGHT	Number of LEDs in the overall display. DOTSTAR does not have required define for the overall display size.
DS_MATRIX_TOP DS_MATRIX_BOTTOM	TOP_DOWN BOTTOM_UP	Position of the FIRST LED in the FIRST MATRIX; pick two, e.g.
DS_MATRIX_LEFT DS_MATRIX_RIGHT	LEFT_2_RIGHT RIGHT_2_LEFT	Note: LEDMatrix libraries use negative values in the MATRIX_WIDTH and MATRIX_HEIGHT above. My generator splits these out here.
DS_MATRIX_ROWS DS_MATRIX_COLUMNS	HORIZONTAL_MATRIX VERTICAL_MATRIX	LEDs WITHIN EACH MATRIX are arranged in horizontal rows or in vertical columns, respectively; pick one or the other.
DS_MATRIX_PROGRESSIVE	HORIZONTAL_MATRIX VERTICAL_MATRIX	
DS_MATRIX_ZIGZAG	HORIZONTAL_ZIGZAG_MATRIX VERTICAL_ZIGZAG_MATRIX	All rows/columns WITHIN EACH MATRIX proceed in the same order, or alternate lines reverse direction; pick one
Name: matrix, TILE	Name: BLOCK or CELL	
none	MATRIX_TILE_WIDTH MATRIX_TILE_HEIGHT	Number of LEDs in each matrix/tile/BLOCK/CELL (not the total display). DOTSTAR does not have required define for the matrix/tile size.
none	MATRIX_TILE_H MATRIX_TILE_V	Number of tiles arranged horizontally and vertically in the overall display. DOTSTAR does not have required define
DS_TILE_LEFT DS_TILE_RIGHT	LEFT_2_RIGHT RIGHT_2_LEFT	Position of the FIRST MATRIX (tile) in the OVERALL DISPLAY; pick two
DS_TILE_TOP DS_TILE_BOTTOM	TOP_DOWN BOTTOM_UP	
DS_TILE_ROWS DS_TILE_COLUMNS	HORIZONTAL_BLOCKS VERTICAL_BLOCKS	The matrices in the OVERALL DISPLAY are arranged in horizontal rows or in vertical columns, respectively; pick one or the other.
DS_TILE_PROGRESSIVE DS_TILE_ZIGZAG	HORIZONTAL_ZIGZAG_BLOCKS VERTICAL_ZIGZAG_BLOCKS	The ROWS/COLUMS OF MATRICES (tiles) in the OVERALL DISPLAY proceed in the same order for every line, or alternate lines reverse direction; pick one. When using zig-zag order