**Lostech Circuitry Manipulation**

This form of ward represents the PC manipulating highly specialized devices, such as circuitry from geth, or lostech devices, from the Protheans or older civilizations. Pieces of the fundamental circuitry of the devices in question will be represented by 1” tiles with a stylized schematic design on them.

Tiles of a particular color will only represent one particular type of highly specialized device or circuitry in any given game. We will make it clear on signs or at handout what kind of device a particular color of tile represents. Unless otherwise specified, **tiles of two different colors are not compatible.**

The Lostech Circuitry Manipulation mechanic represents constructing a working device from scavenged or otherwise acquired parts, to fulfill some use in game.

# 1 Tiles

This is a complete set of the types of tiles used in this mechanic. The important features of these tiles are the number of **ports** on each tile, and their location on the tile. Above, we have:

- two 0-port tiles in the lower left and lower right corners
- two 1-port tiles in the upper right
- three 2-port “straight” tiles in the center
- four 2-port “corner” tiles in the center bottom
- two 3-port tiles in the upper left
- one 4-port tile in the center top

Each tile has four sides; we will refer to each side as “ported” (if it has a port) or “flat” (if it does not).

# 2 Tile Grids

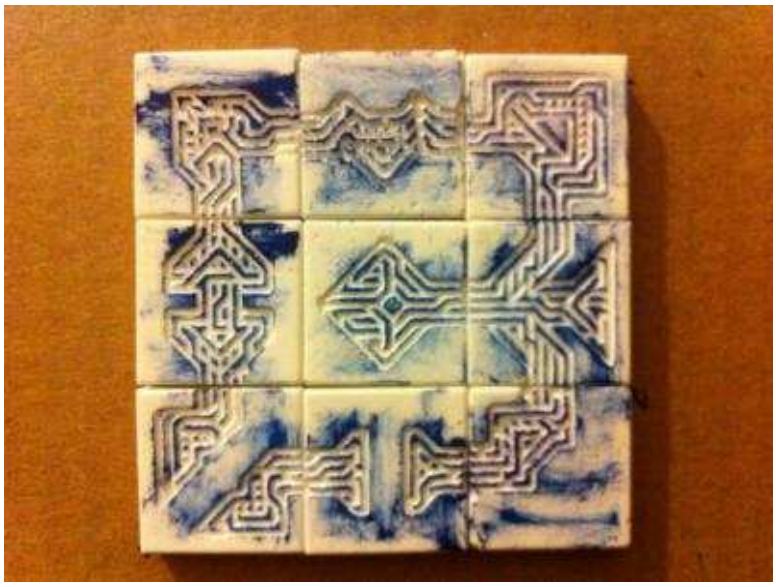
Projects using the tiles in this mechanic will be described in the form of an NxM grid, possibly with **inputs** on the sides of the grid. **Inputs** on the sides of the grid for a particular project will be clearly marked. The project is completed by assembling tiles in the designated NxM grid according to a few invariants:

- Ported sides must touch other ported sides; flat sides must touch other flat sides.
- The edge of the grid is by default flat; anywhere there is an **input**, however, that grid side is considered ported.
- The entire grid must be filled with tiles.

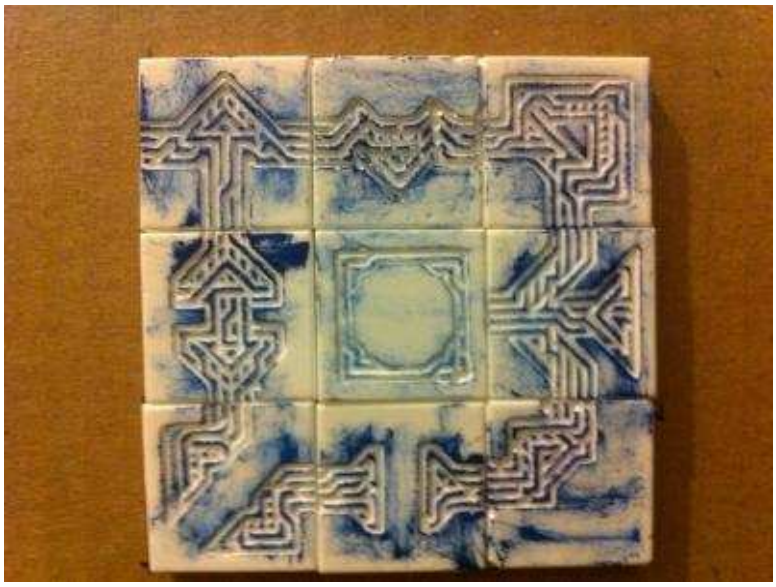
While in theory this could allow degenerate constructions of grids of 0-port tiles with 1-port tiles used to satisfy the constraints of any grid **inputs**, in practice, tile frequency should force the construction of somewhat more complicated tile designs.

# 3 Examples

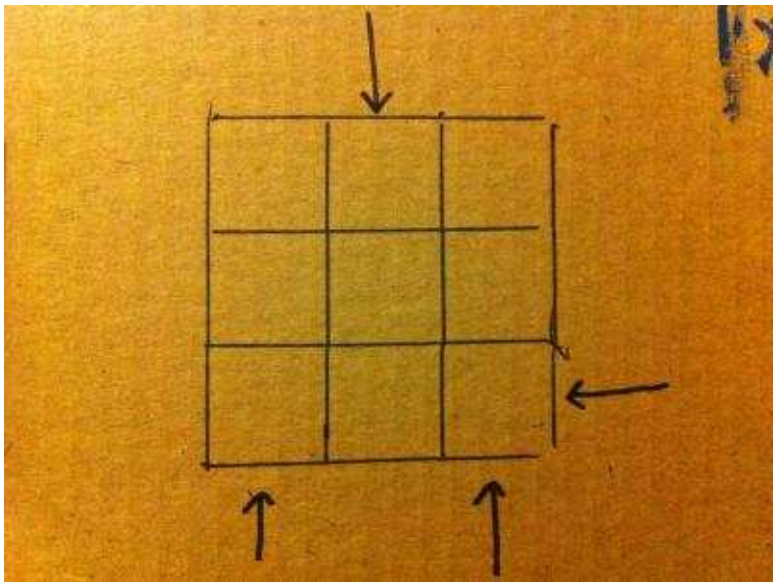
This is an example of a valid construction of a 3x3 grid with no **inputs**:



This is an example of an invalid construction of a 3x3 grid with no **inputs**. The center tile violates the ported/flat invariant with the center-right tile, and the top-left tile violates the ported/flat invariant with the edge of the grid as there is no **input** on the grid side to receive the ported left side of the top-left tile.



This is an example of a possible 3x3 grid with **inputs** that one might find in game, on a sign or otherwise described.



This is an example of one way to fill that 3x3 grid with **inputs**. There are, obviously, others.