

XILICA DESIGNER

Tips and tricks

XILICA

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The intent of this guide is to demonstrate different ways to save time when creating a design in Xilica Designer and generate professional looking layouts.

Xilica Designer uses many standard keyboard commands such as: copy and paste (Cmd + C (Mac) / Ctrl + C (PC) and Cmd + C (Mac) / Ctrl + V (PC), or right click copy and paste.

Copy and paste with Numbering

A typical design may have many of the same design elements such as microphones, amplifiers or speakers. To auto number a group of similar design elements,

1. Click and drag an object from the Component Library menu.

In this example, 8 microphones will be used. Click and drag a 'User Defined Device' to the work area and customize the object in the Object Property menu.

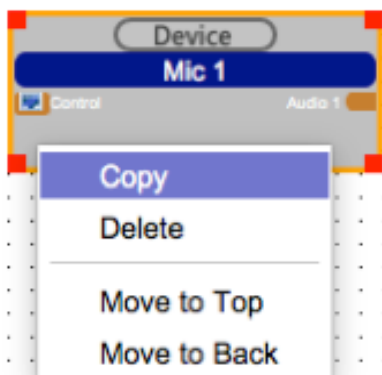


2. The trick is to only name the first module. The 'copy and paste' function will name the rest in a consecutive order. Label the object with a name followed by a number. (Ex. Mic 1)



To duplicate the module,

- a) Right click the module to 'copy'.
OR Cmd + C (Mac), Ctrl + C (PC)



- b) Right click the work area to 'paste'.
OR Cmd + V (Mac), Ctrl + V (PC)

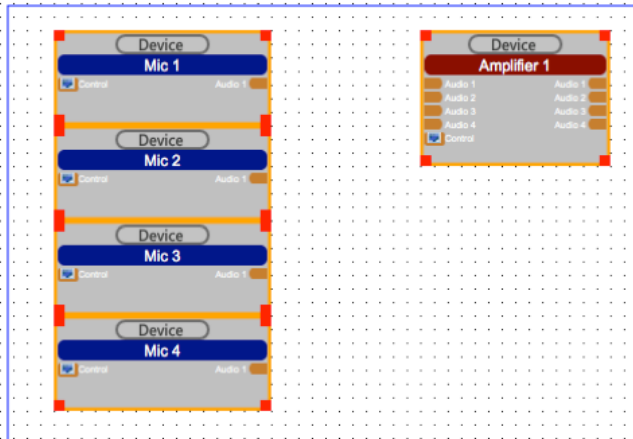


- c) The object will duplicate and the new object will be labelled accordingly.



To auto number a large group of design elements,

a) Click and drag a selection box around the group of modules to select them. In the example, we have 1 x amplifier and 4 x microphones.



b) Copy and paste the modules. The new modules will be named accordingly.

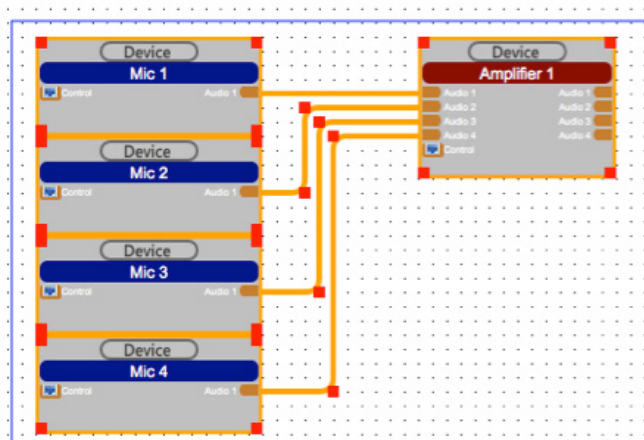


This method works with all design elements and DSP modules in a design.

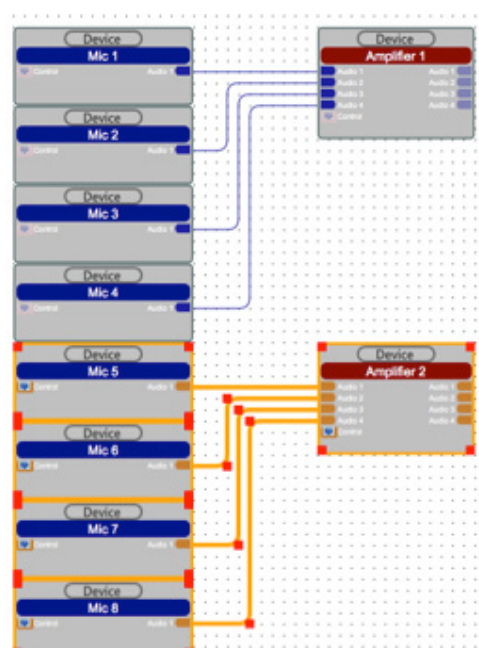
POWER USER TIP 1:

Wire the group of blocks before completing the above section.

a) Click and drag a selection box around the connected group of modules to select them.



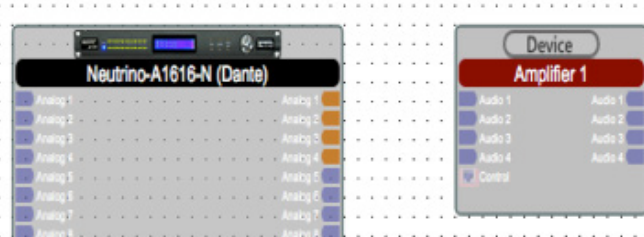
b) Copy and paste the modules. The new modules will be wired and named accordingly.



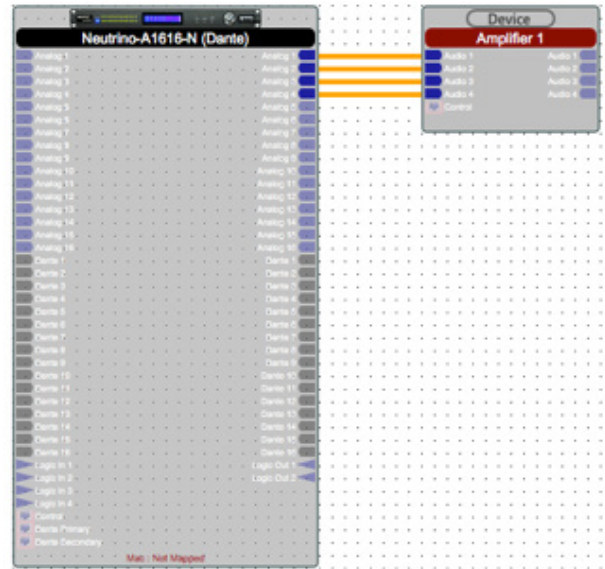
Multiple wiring

Wiring between Blocks can be done in multiples only if the spacing of the nodes is the same and in consecutive order.

a) Select the desired output nodes by dragging a selection box around the outputs or Cmd + Click (Mac) or Ctrl + Click (PC) to select individual nodes.



b) Click and drag the highlighted output nodes to the desired input nodes.

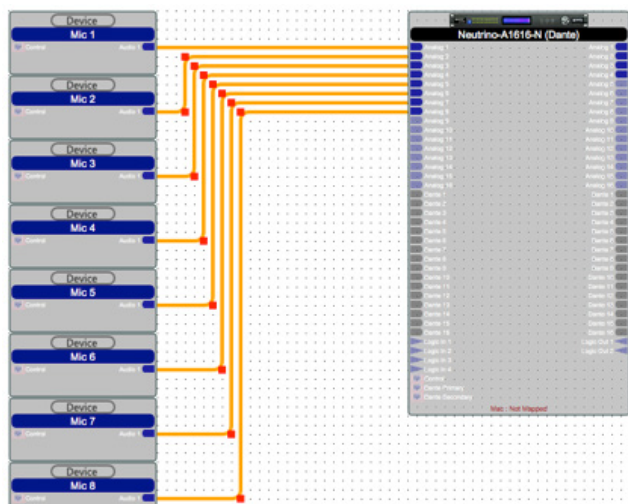


Adjusting multiple wires

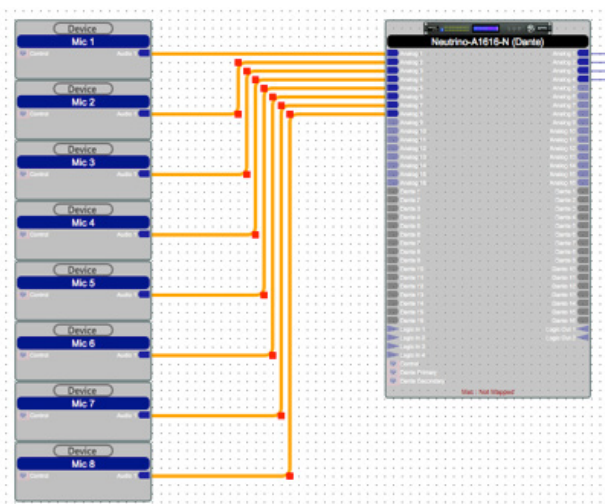
In many cases, wires in a design have to be adjusted to make for a professional product. Wires will need to move to accommodate wire labels or to navigate around other blocks. (This method is the same for single wire adjustment)

To move a wire or a group of wires,

a) Select the wires by clicking and dragging a selection box around the wires.



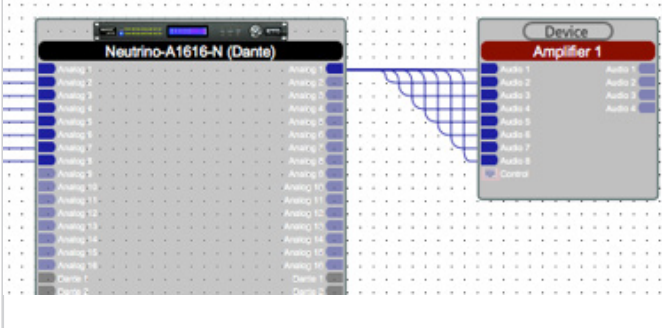
b) Click and drag a red corner node to adjust the wires to the desired location.



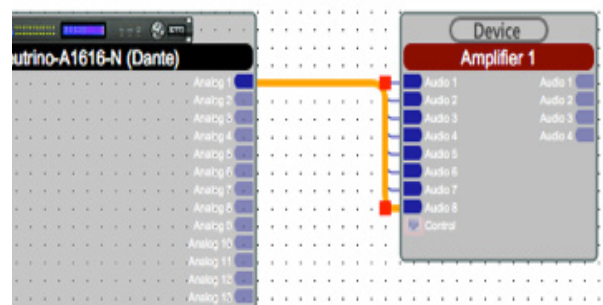
Multiple wire alignment

To make a Professional-looking Blueprint, some wires will need to be stacked. Under normal conditions, the wiring algorithm does not allow wires to overlap each other, as they are drawn individually.

a) Below is an example of multiple inputs connected to one single output node.



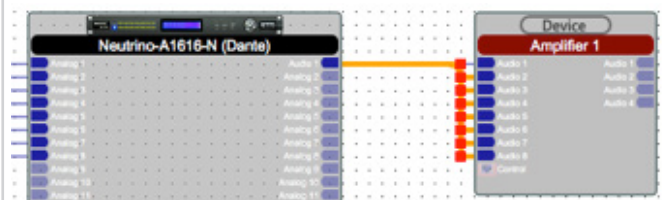
b) Click and drag each wire using the red nodes to move and stack the wires.



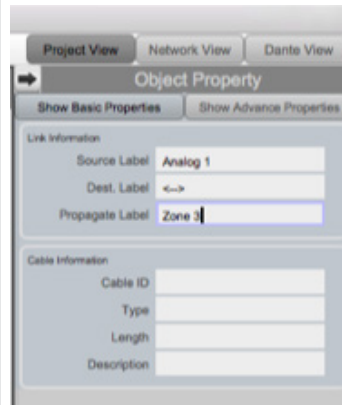
Multi-node population

When a number of Design Element Blocks have been wired to a single output node of one block, all of the nodes can be labelled in one step.

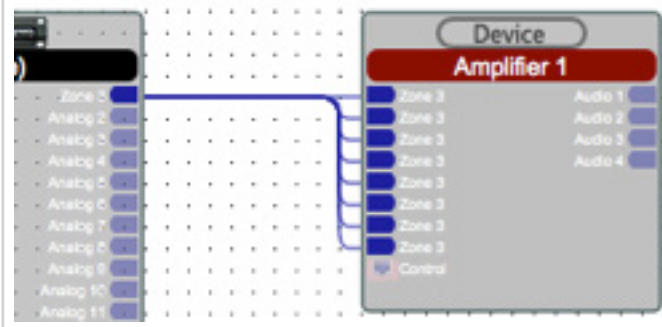
a) Select all the wires connected to the single node by clicking a selection box around the wires.



b) In the Object Property menu, rename the nodes under 'Propagate Label'.



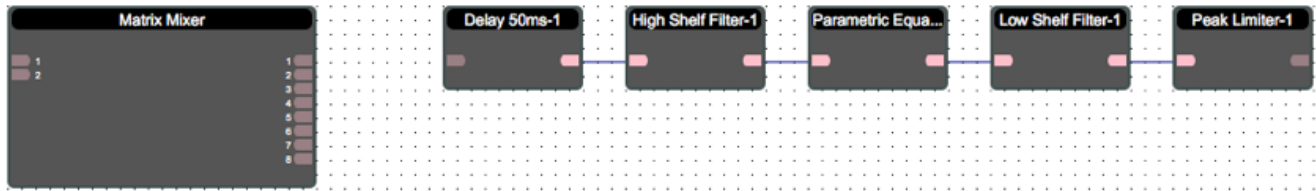
c) The input and output nodes will be renamed with the propagate label.



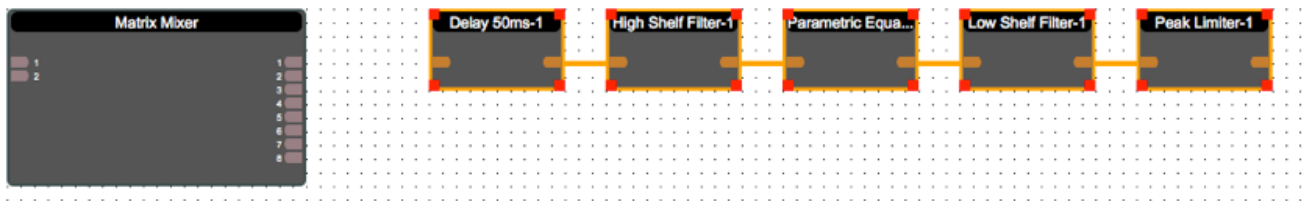
Creating multiple processing chains

Many times in designing audio systems, making multiple processing chains are needed, like in the case of loudspeaker management for multiple zones.

1. Set up a string of parameter modules and rename them to have a '1' at the end of the name.



2. Copy and paste the string of parameter modules to duplicate them,



3. The duplicated modules will be numbered accordingly.



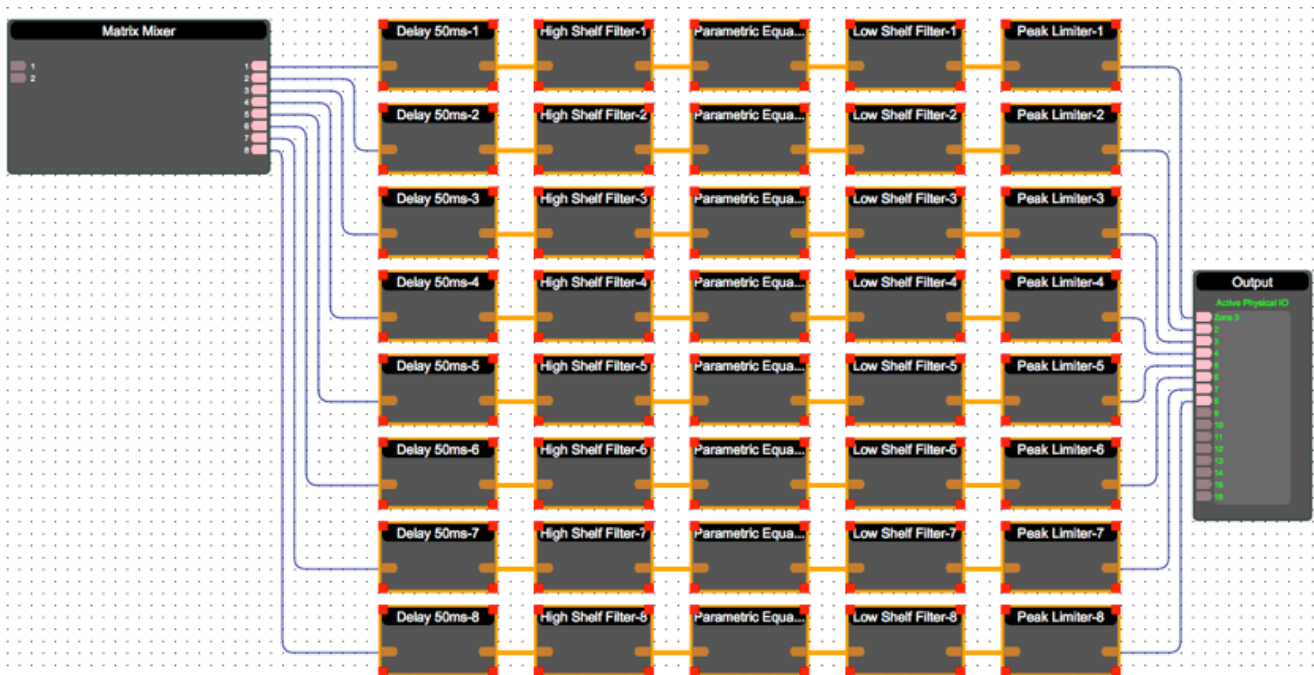
- Connect the modules together using wires.



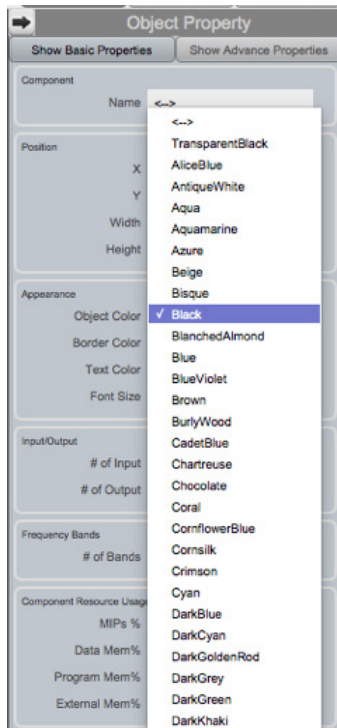
POWER USER TIP 2:

It is helpful in larger designs to color module sections to help stay organized.

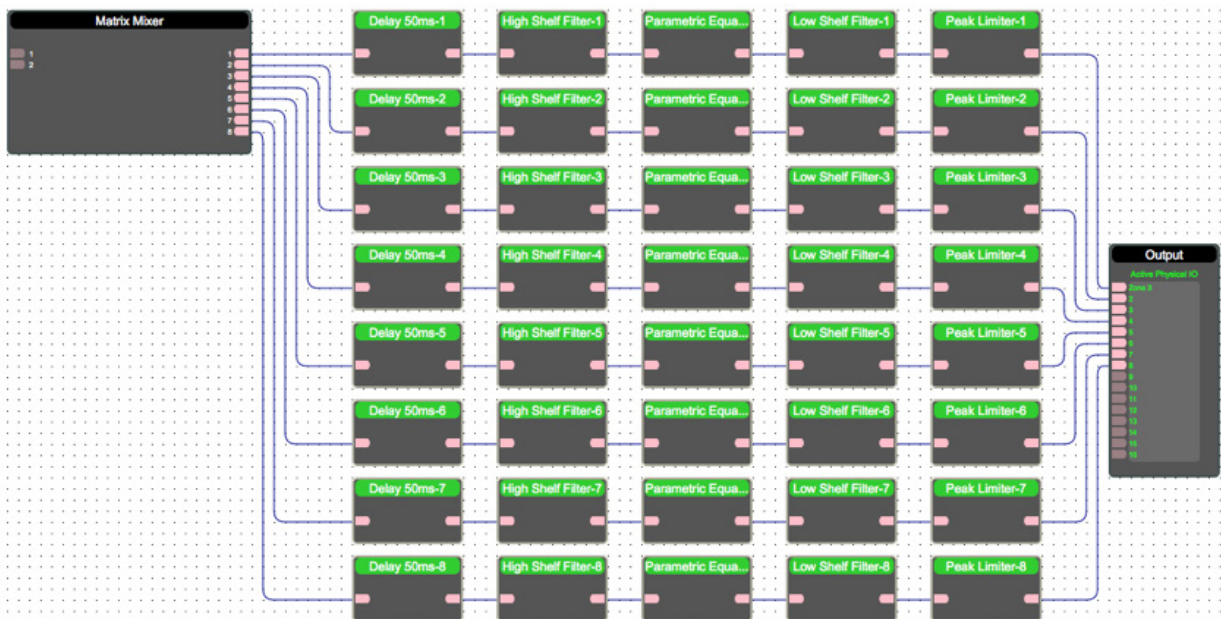
- Select the processing modules by dragging a selection box around the module section.



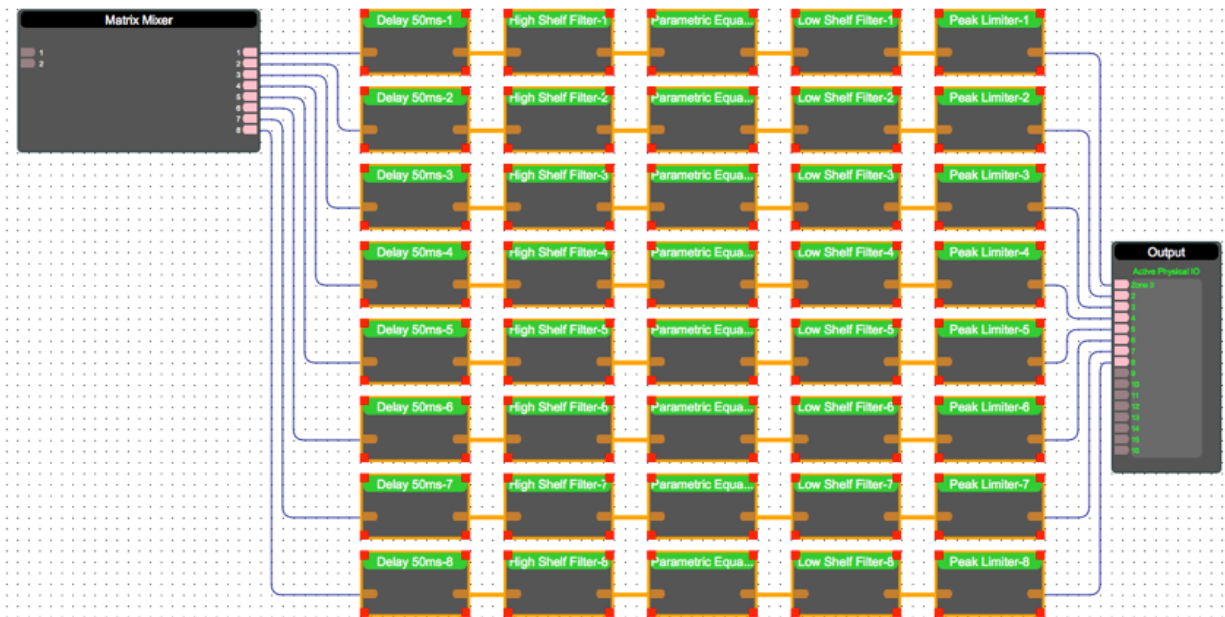
- In the Object property menu, change the color of the module blocks.



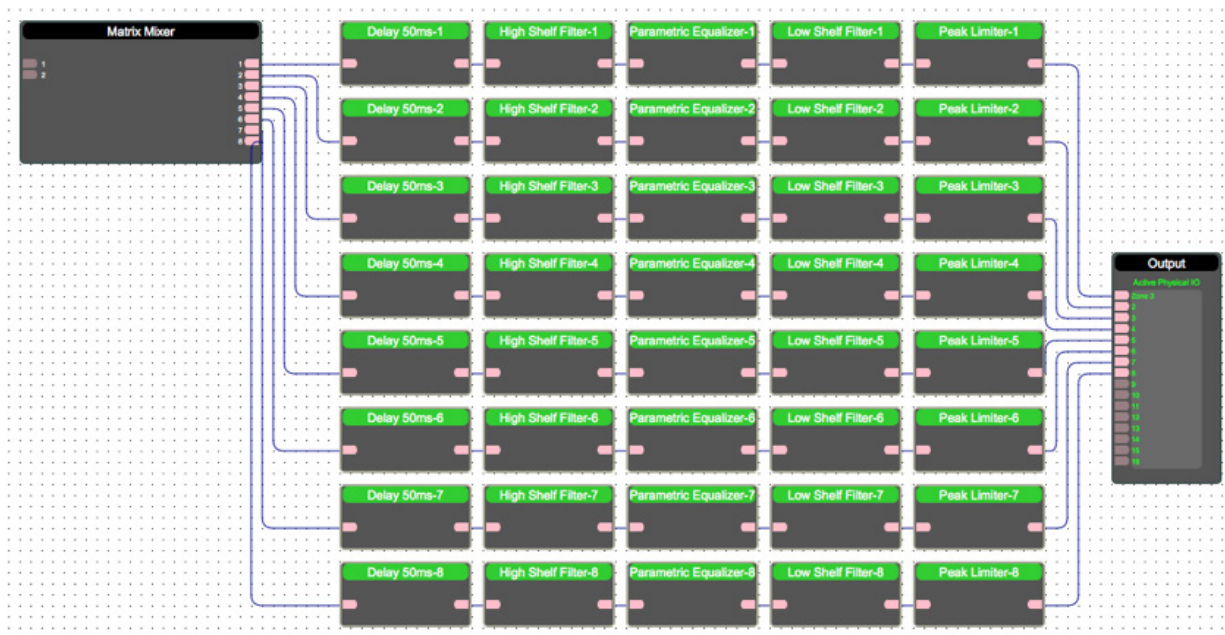
- The selected modules are now easily differentiated from the other design elements in the schematic.



- In the example, the PEQ title text is cut off. To resize objects, select the module section.

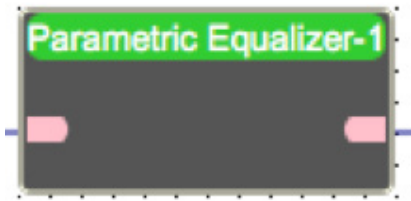


Adjust the module size by clicking and dragging a red corner node or adjusting the width and height in the Object Property menu.

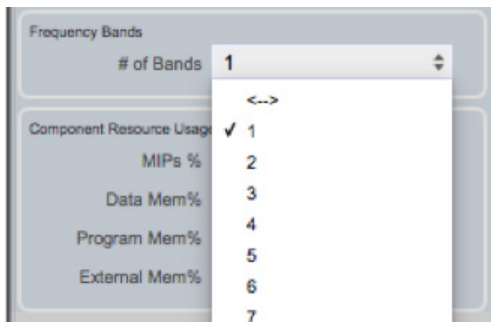


Working with DSP modules

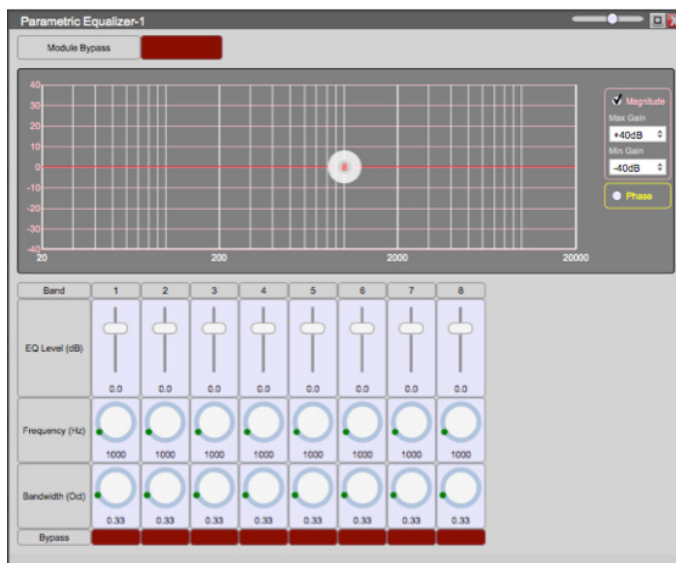
Parametric Equalizers (PEQ) all start with 1 filter band.



More bands can be added in the Object Property menu in the Frequency band section.



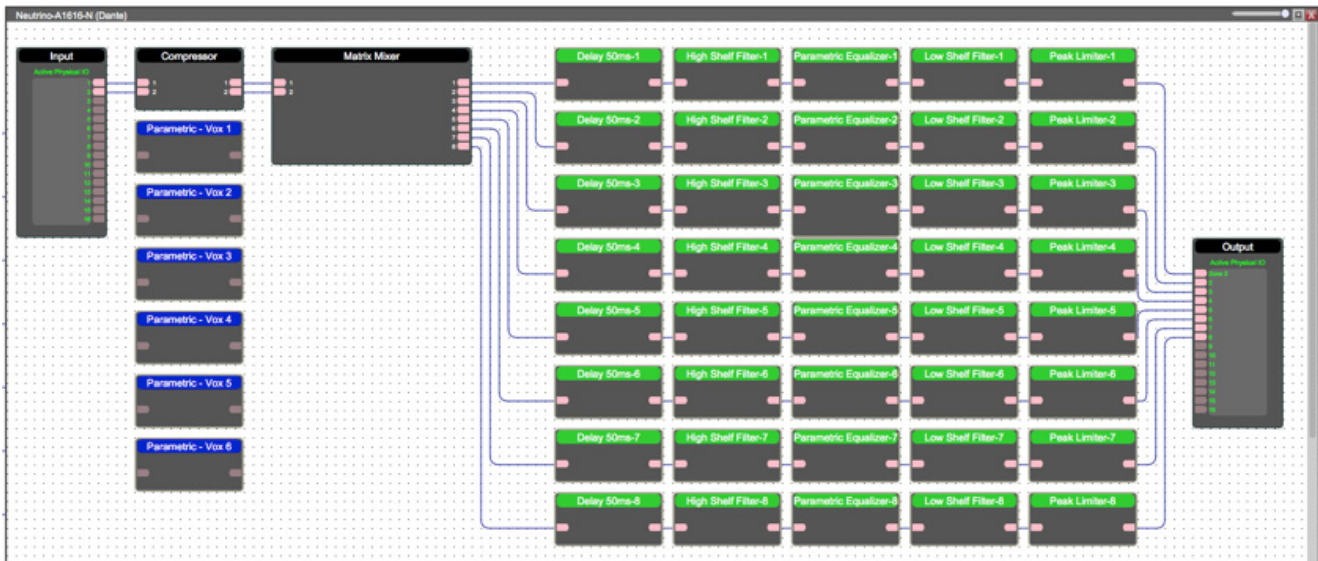
Double click the PEQ module to see the frequency bands available.



When multiple DSP Modules will need the same or similar settings, the first module can be set up, then copied and pasted.

Manipulating and adding segments to wires

In this section, the 6 blue PEQs will be wired to the output block.



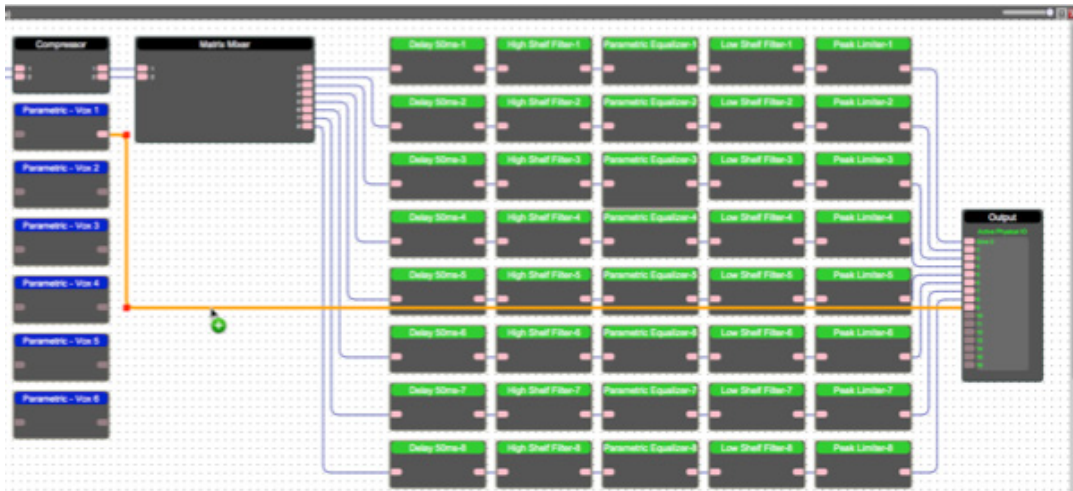
As you can see, the automatic wiring function overlaps the Loudspeaker management blocks.



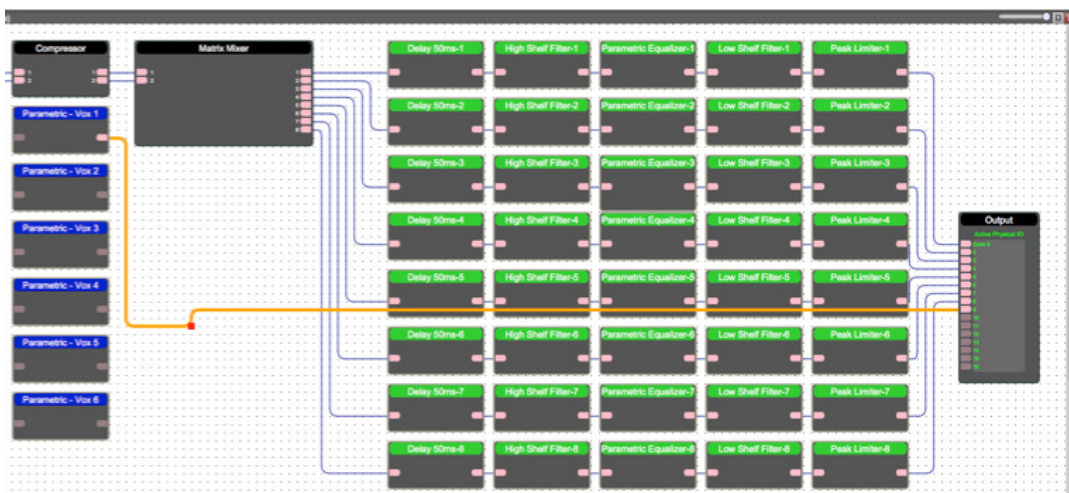
Simply add segments to the wire to avoid overlapping other design elements.

To add a wire segment,

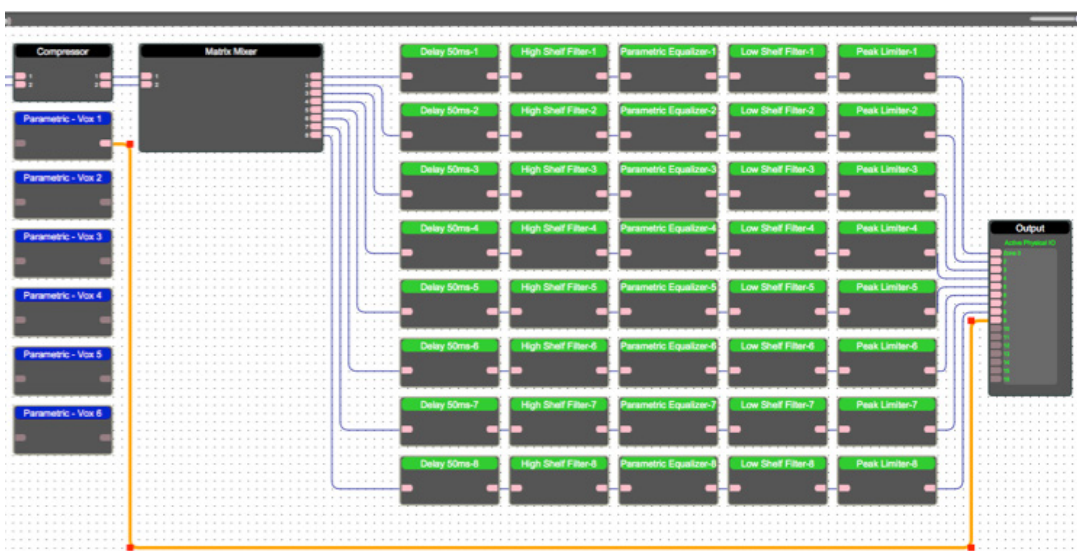
1. Select the wire.
2. Hover over the wire. You will see a green circle with a plus sign.



3. Click and drag the point in the wire and a new segment will be created.

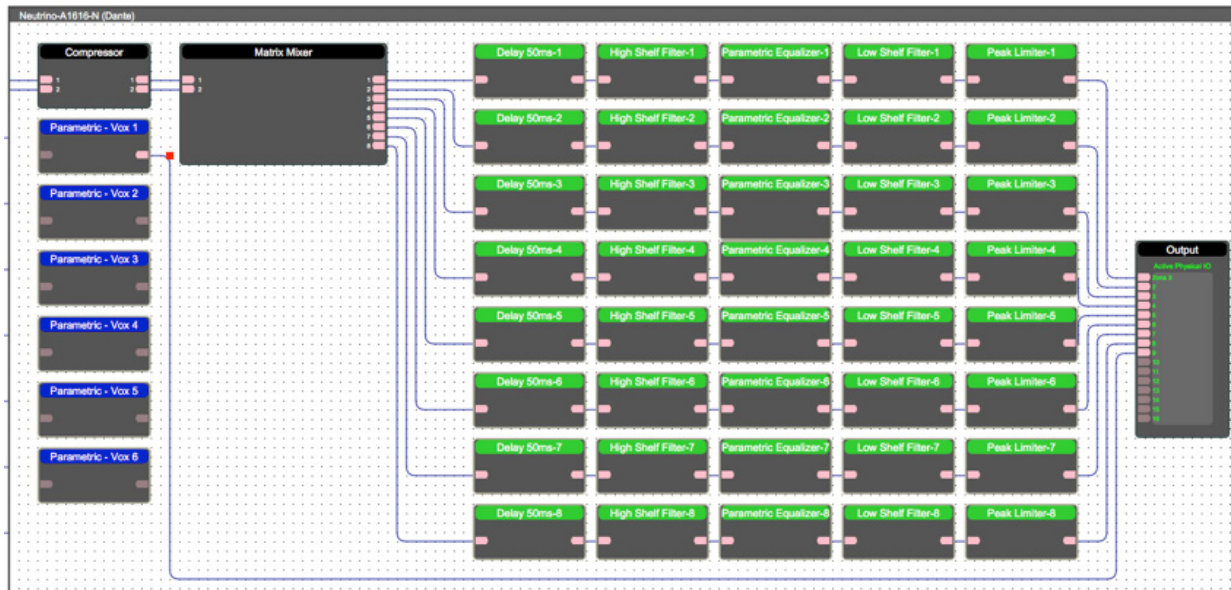


4. Drag the red node to adjust the wire.

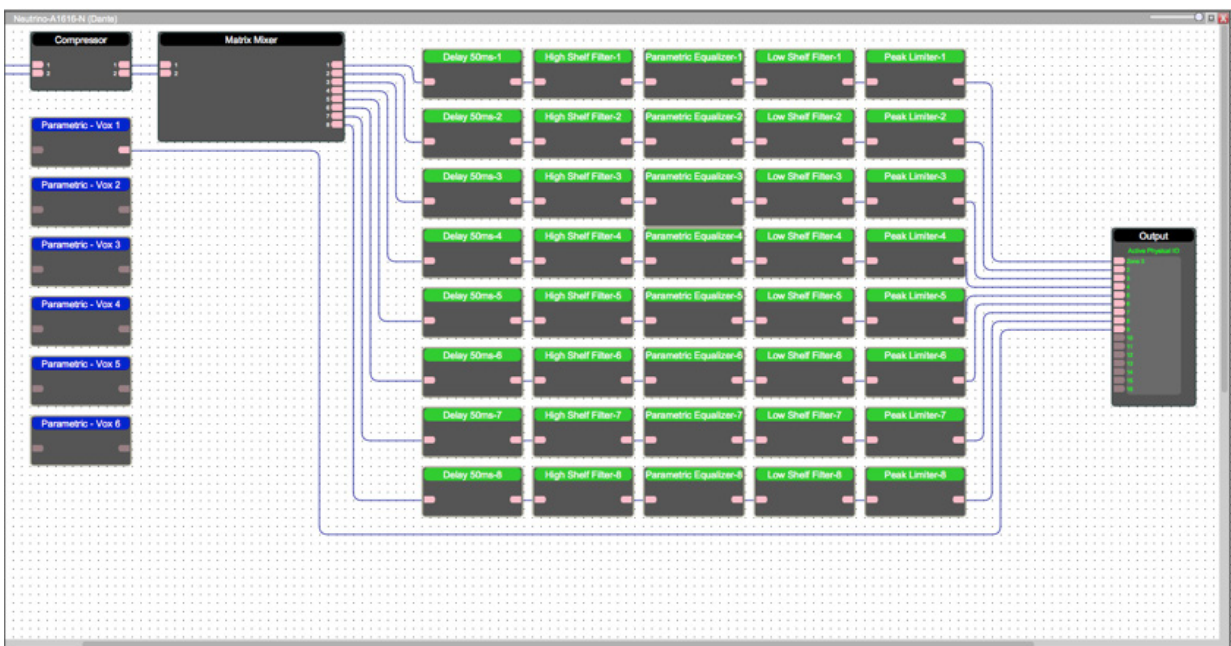


To move one single point,

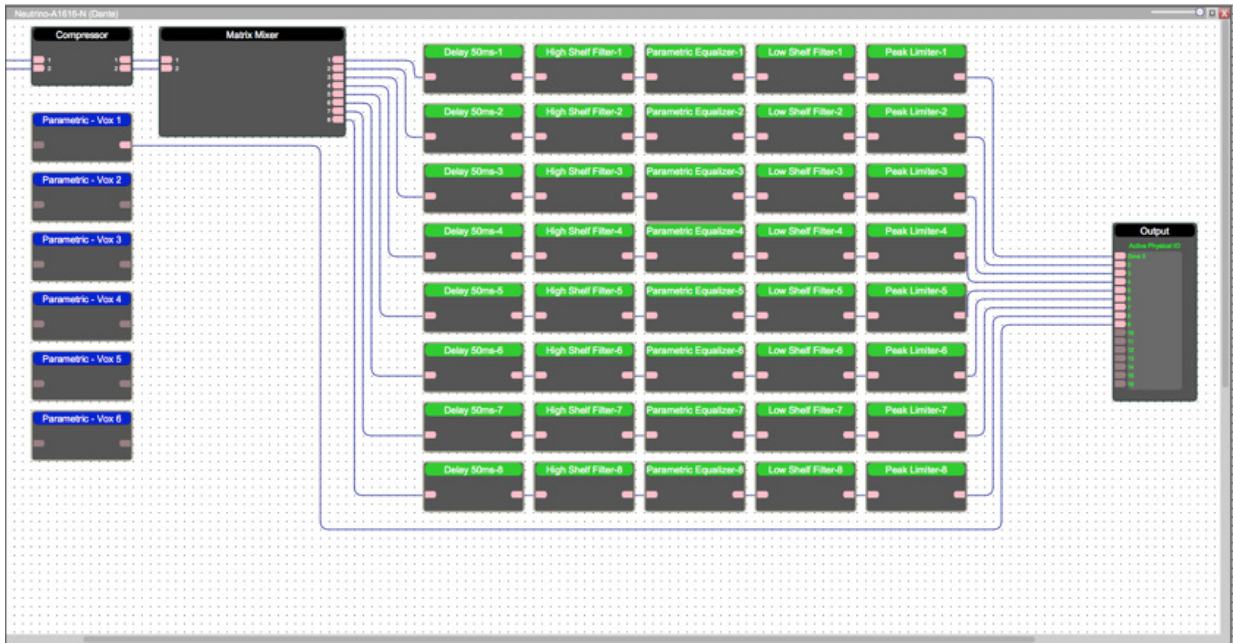
1. Click on the corner of the wire.
2. A red wire node will appear.



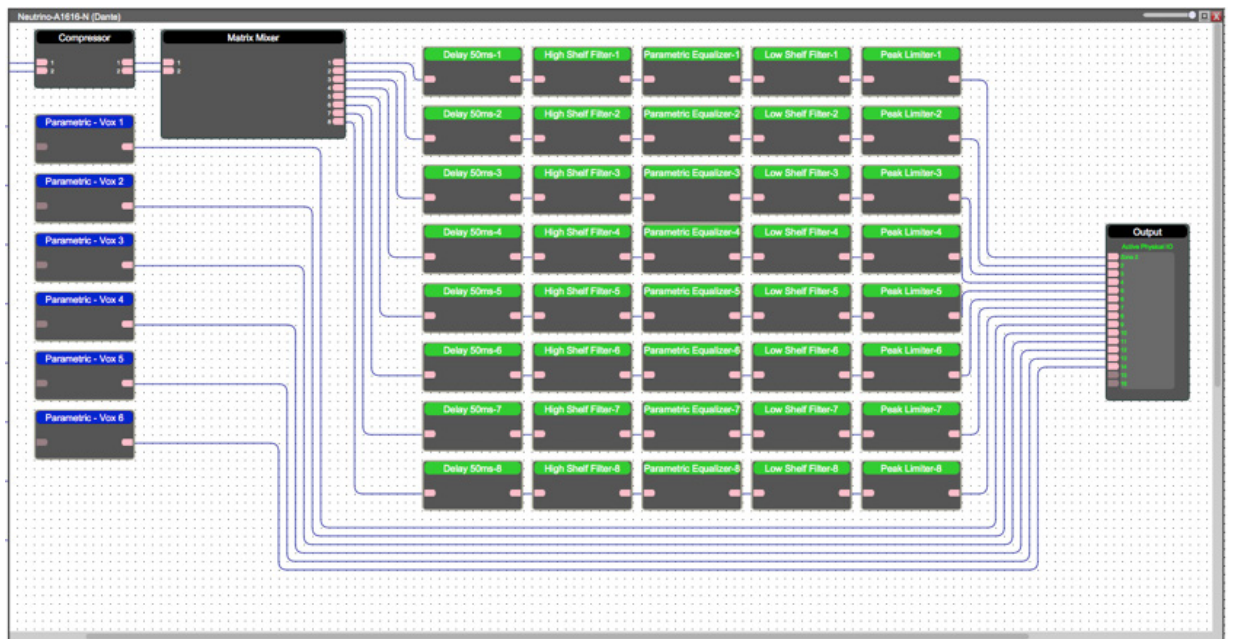
3. Click and drag the corner node to adjust the single wire point.
The design schematic may need to be adjusted to make room for the wires.



4. Click and drag the corner node to adjust the single wire point.
The design schematic may need to be adjusted to make room for the wires.

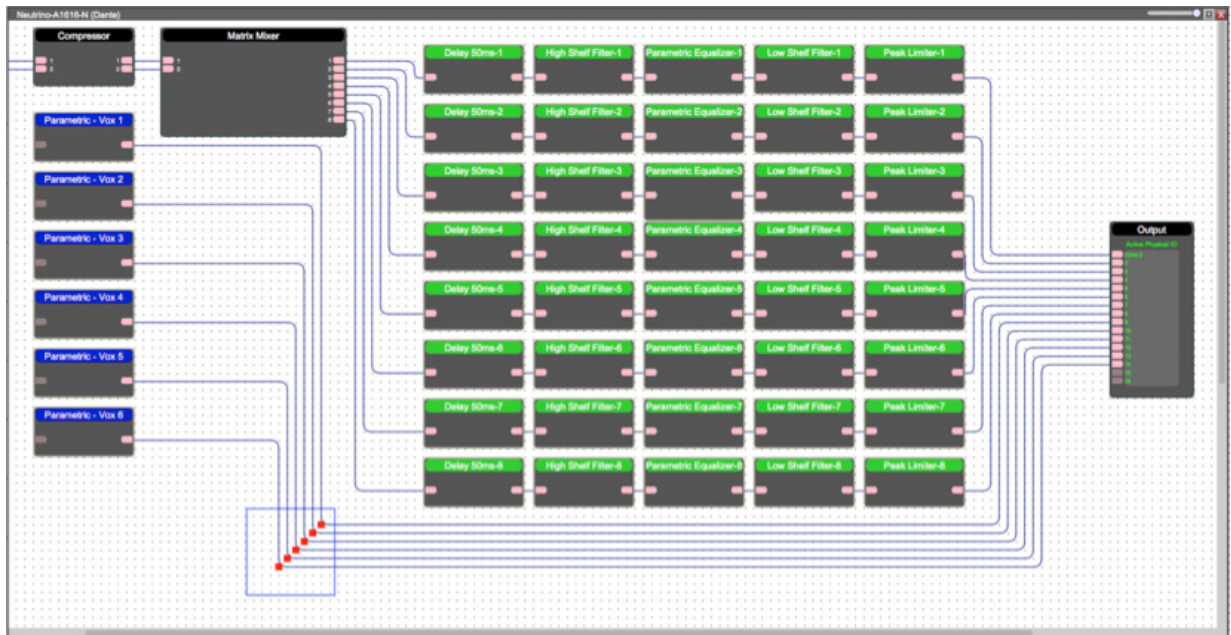


5. Connect and adjust all the wires accordingly.



To adjust multiple wires at once,

1. Click and drag a selection box around the wire corners.
2. The red corner nodes will appear. You may click and drag to adjust the wire or use your keyboard arrow keys.





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