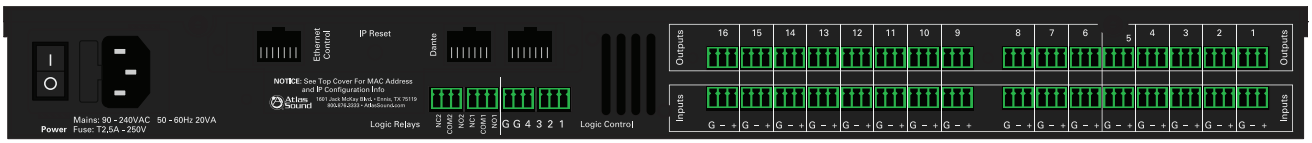
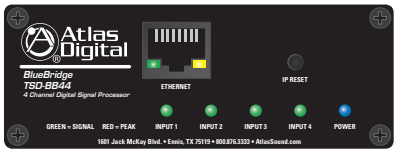
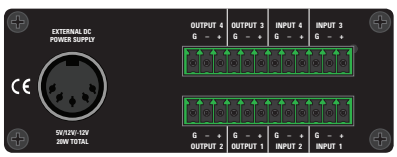
BlueBridge
Tips & Tricks Reference Guide







Tips & Tricks Reference Guide

This Tips & Tricks Reference Guide is designed to showcase ways to save time and create professional layout when designing a system using BlueBridge software.

Note: BlueBridge designer uses many of the Window's® keyboard shortcut commands such as "copy Ctrl+C", "paste Ctrl+V", and "right mouse click copy and paste". This guide illustrates ways to use these shortcuts efficiently in BlueBridge Designer.

Copy and Paste with Numbering

Typically, a design may have multiple elements like gain controls, EQ's, microphones, amplifiers, and speakers that are used more than once in the same design. Elements like a microphone can be added to the BluePrint design grid from the Component Library Pane on the left side of the BluePrint page. (See Figure 1)

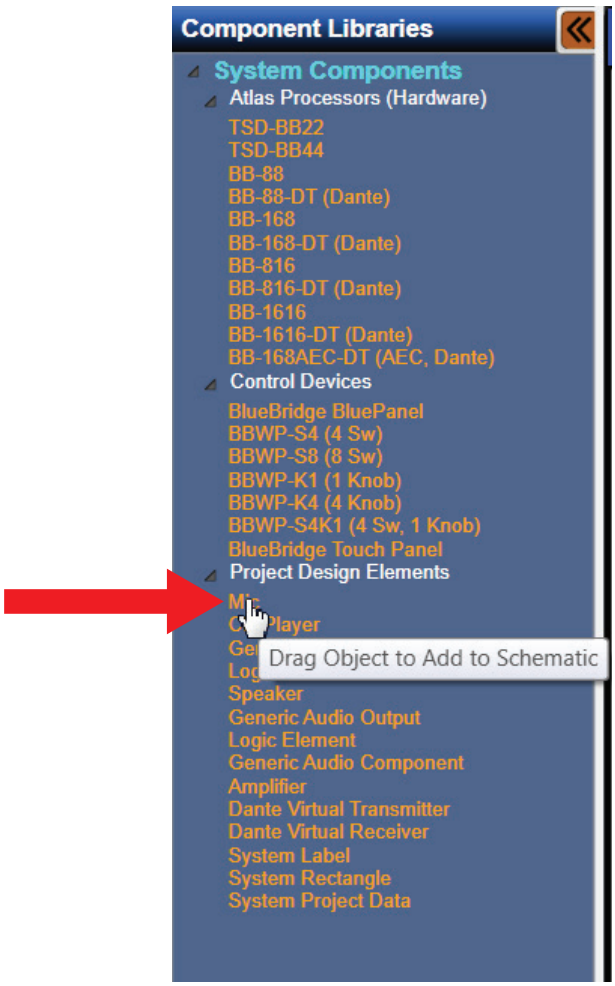


Figure 1

As an example, a design may require 16 microphones. In order to save time during the design, BlueBridge Designer allows the user to copy the first microphone entered into the design using the CTRL+C shortcut command. The paste shortcut, CTRL+V, can then be used to populate the remaining 15 microphones and the software will name them with corresponding consecutive numbers. If the name of any of the microphones is changed all subsequent elements copied from that one will have the same name with a numerical designation, ie. Wireless Mic, Wireless Mic-2, Wireless Mic-3, etc.

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When the Microphone Block is dragged from the Component Library to the blueprint design grid it will be in a selected state, this will be illustrated by the orange highlight around the design element block, in this case the "Mic". The Name can be changed in the Component Properties pane on the right side of the blueprint page. (See Figure 2)

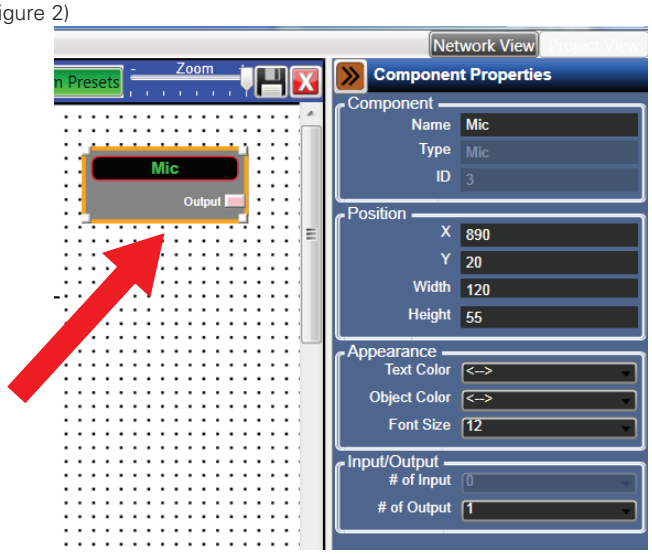

Figure 2

Click the "Name" text box of the "Component" section and add a dash 1 (-1) or an underscore 1 (_1) to the current name or type in a new name with the -1 or _1 at the end. (See Figure 3) This will allow the auto numbering to occur if the design block element is copied and pasted.

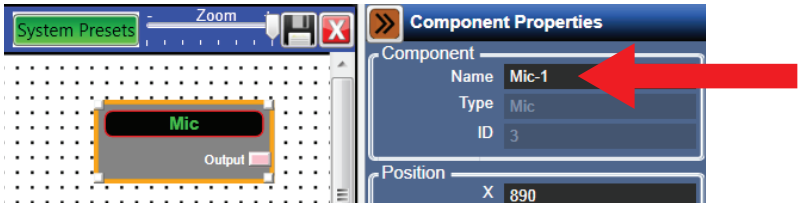

Figure 3

Once the block name has been changed, it can be copied using either CTRL+C or by right clicking the block and selecting copy from the drop down menu. Click anywhere in the grid to deselect the design block and then use CTRL+V or right click and select paste from the drop down menu to paste the consecutive design element.

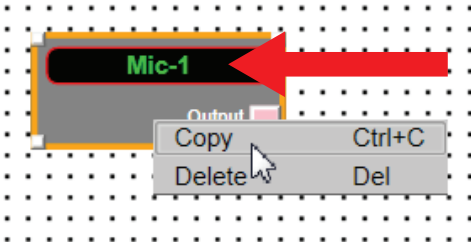

Figure 4

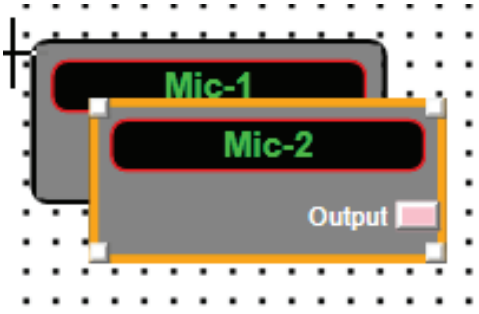

Figure 5

Either "paste" command can be used to populate the required number of design element copies. (See Figure 6)

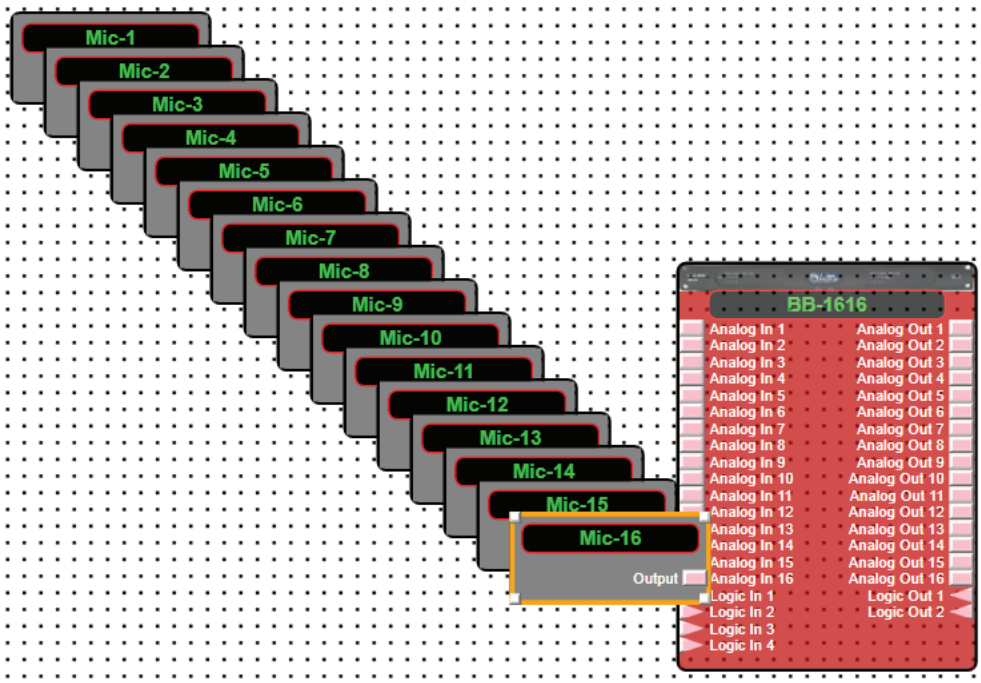

Figure 6

This method can be used with all design elements and DSP modules in a design.

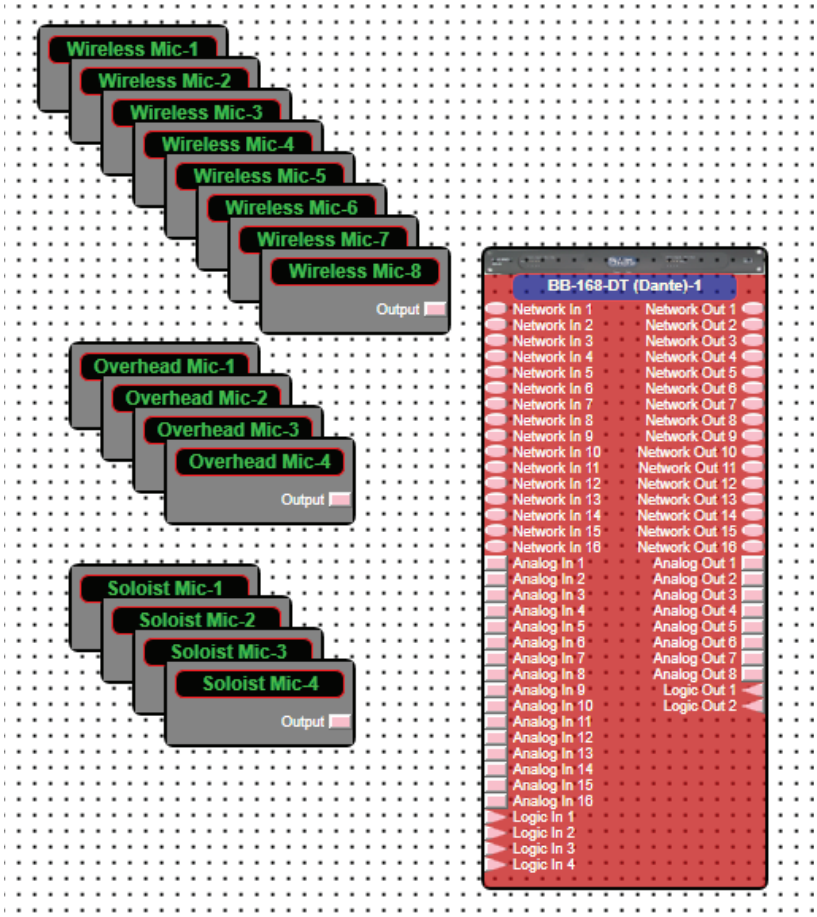

Figure 6b

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Moving Multiple Blocks

Often it is necessary to move and organize blocks in a design to make room for other elements or to make the design look more professional. Multiple design elements can be moved at the same time by using the left mouse button. While holding the left mouse click, the mouse can be dragged to surround all design blocks that need to be moved. A blue line will identify which blocks are being selected. (See Figure 7)

Once all desired design blocks are selected, release the left mouse click. Grouped design blocks will have an orange highlight indicating that they are selected. (See Figure 8)

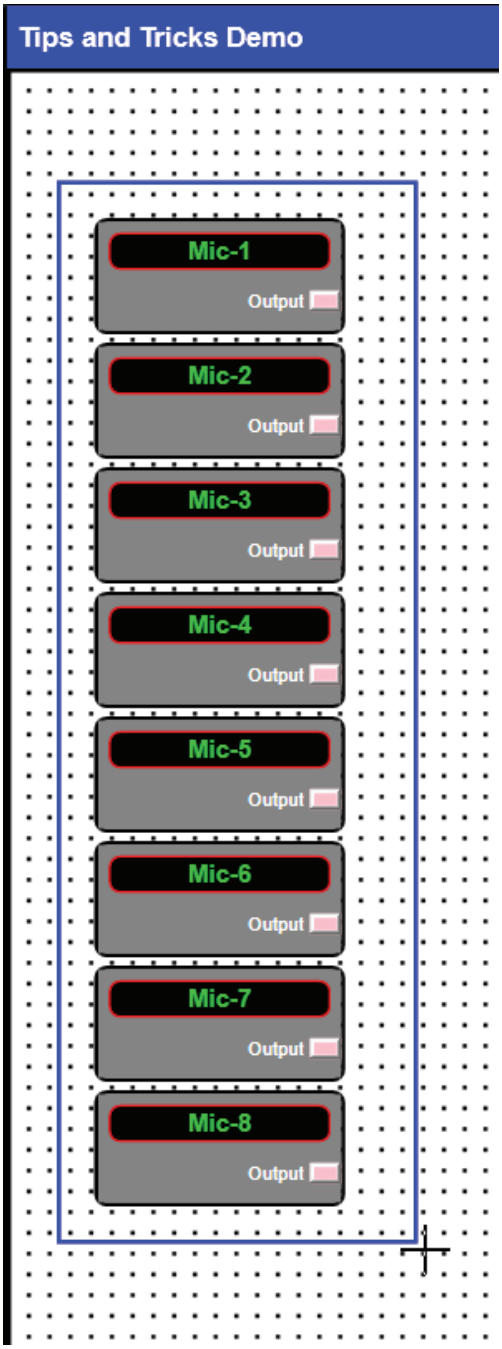

Figure 7

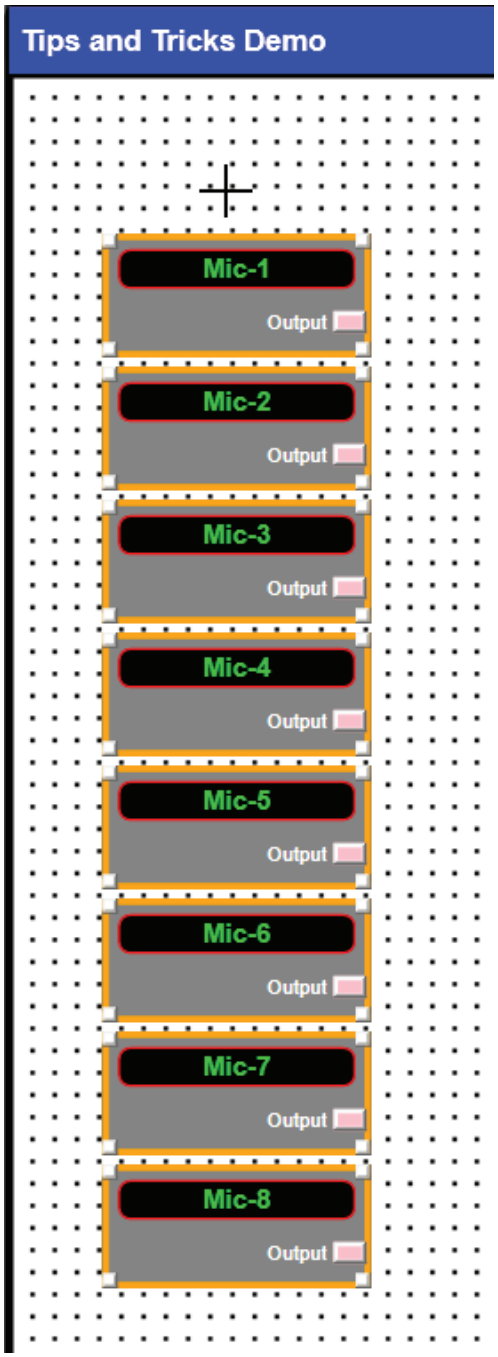

Figure 8

Once the group is selected they can be moved anywhere on the blueprint grid by using the left mouse click and hold function on any of the selected blocks. All of the blocks can then be moved to the desired location on the grid. The arrow keys can also be used to move the selected blocks within the blueprint design.

Customizing Design Elements and DSP Modules

Design elements and DSP modules can be customized using the Component Properties pane on the right side of the blueprint window. This section will demonstrate how to adjust the design block configuration as well as appearance.

In the following example, an amplifier has been added to the blueprint design grid. The default configuration for an amplifier is one Input and one Output. The I/O count can be increased in the "Input/Output" section of the Component Properties pane. (See Figure 9) Select 2 for both the Input and Output to make the amplifier a two channel model.

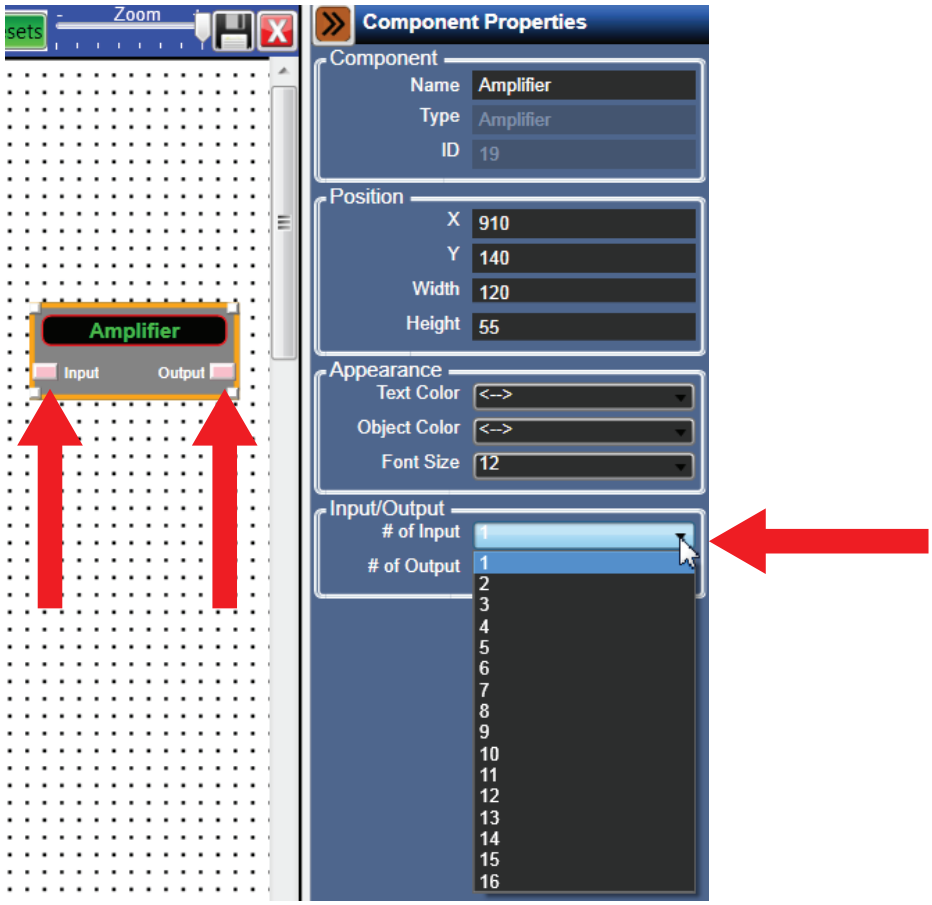

Figure 9

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The Component Library includes prepopulated Atlas Sound product design elements that include model numbers as well as generic design elements. The name assigned to each design element can be changed through the Component Properties menu which will be helpful if a bill of materials will be exported when the design is completed. If more than one of the same unit is going to be used be sure to add the -1 to the name so that when copy and pasted the auto numbering will take affect.

The font size, font color, and text background color can be changed to illustrate the different types or groups of blocks used in a design. The "Appearance" section of the Component Properties has three drop down menus to make these selections. (See Figure 10)

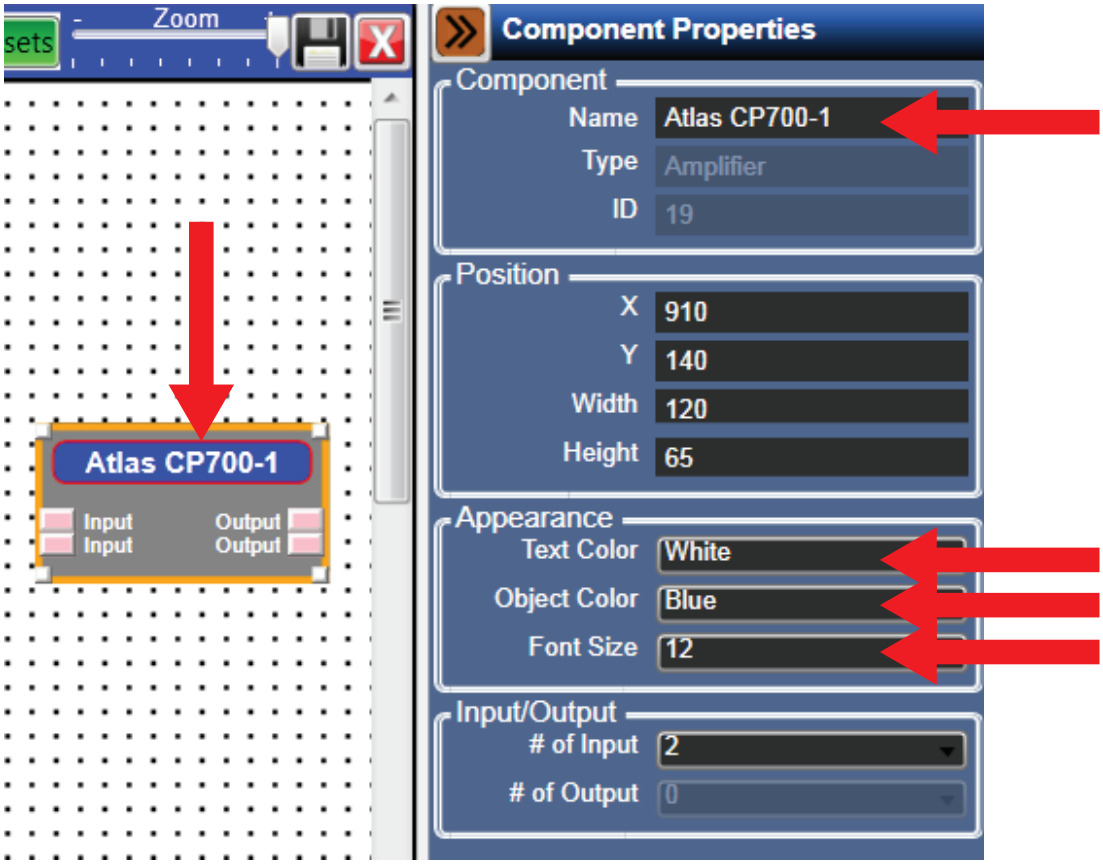

Figure 10

Resizing Design Elements and DSP Modules:

There are times when the Block Name extends beyond the text space available in the block. (See Figure 11) Component names can be abbreviated or the design block can be resized to eliminate this problem.

Changing the size of the block can be done in two different ways. First, in the Component Properties pane, change the width or height value in the "Position" box. (See figure 11). The design block can also be stretched to the desired size by selecting one of the block corners, using left click and hold, and then drag the corner until the block is the desired size. (See Figure 12)

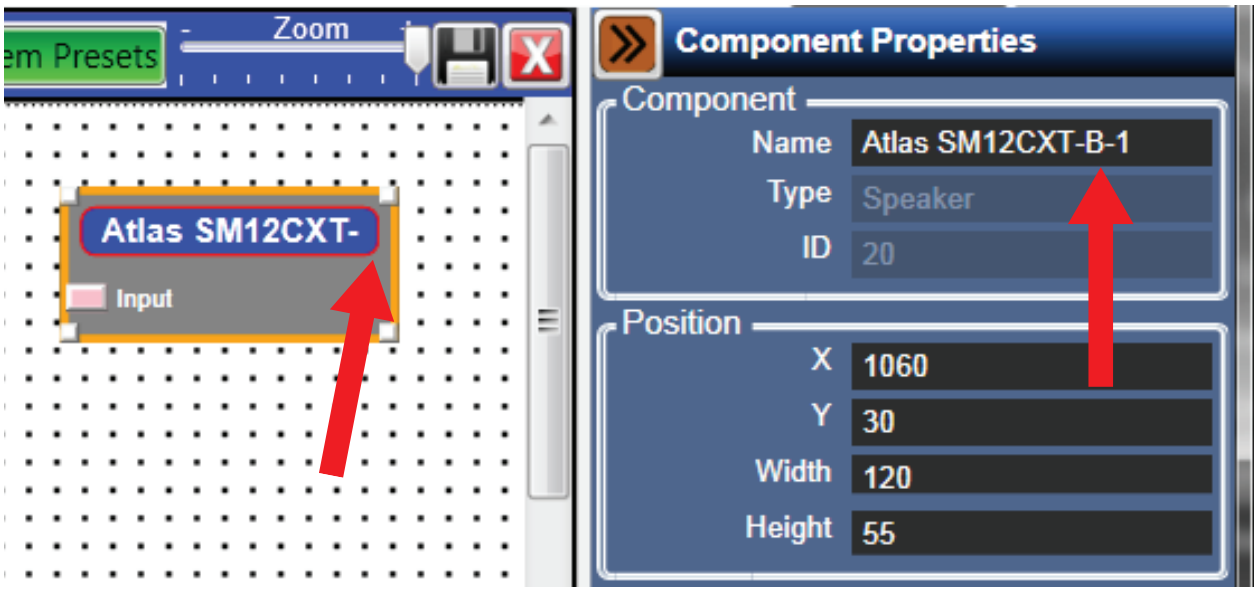

Figure 11

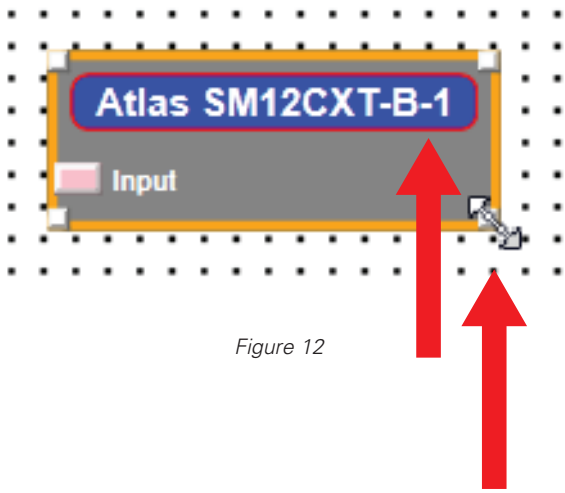

Figure 12

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Auto Numbering Large Groups

A shortcut to number an entire group of design elements is to select an entire group of like elements already numbered and then copy and paste the whole group. The auto numbering function will create the group with consecutive number sets. (This also works with DSP Module blocks.)

Figure 13 shows an amplifier and group of associated loudspeakers.

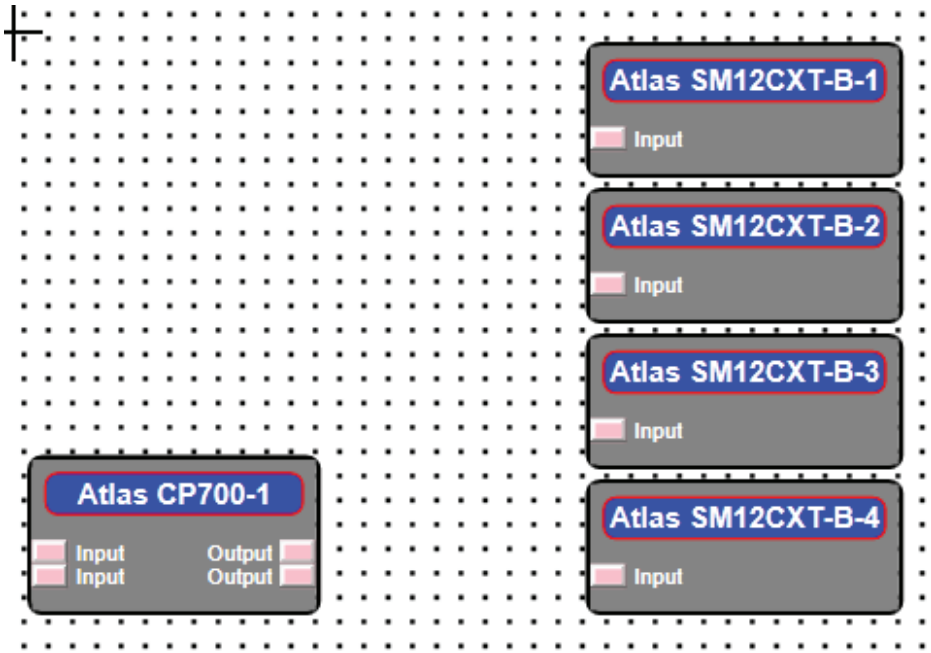

Figure 13

Using the mouse, Left-Click+Hold, select the group by dragging over the selection. (See Figure 14) Release the mouse button and the Design Element Blocks will be surrounded with an orange highlight.

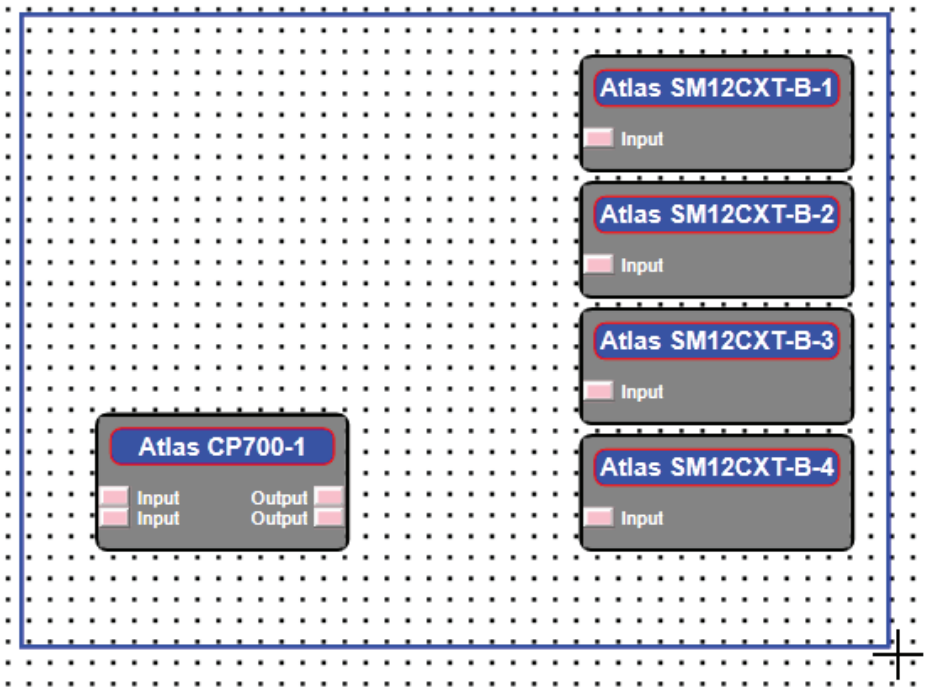

Figure 14

Once the blocks are highlighted, copy the selection using either the mouse or keyboard command. Then use the Paste command to create the consecutive group of blocks. (See Figure 15)

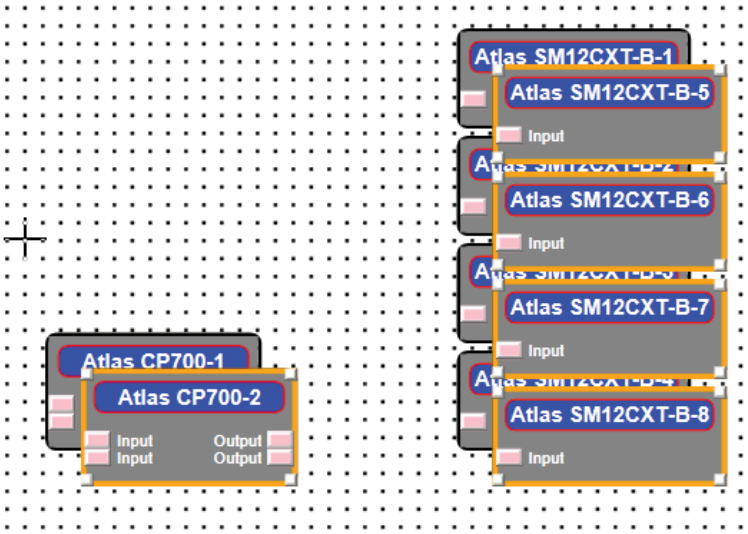

Figure 15

While the new set of blocks is still highlighted, drag them to the desired location using the mouse or arrow keys. (See Figure 16)

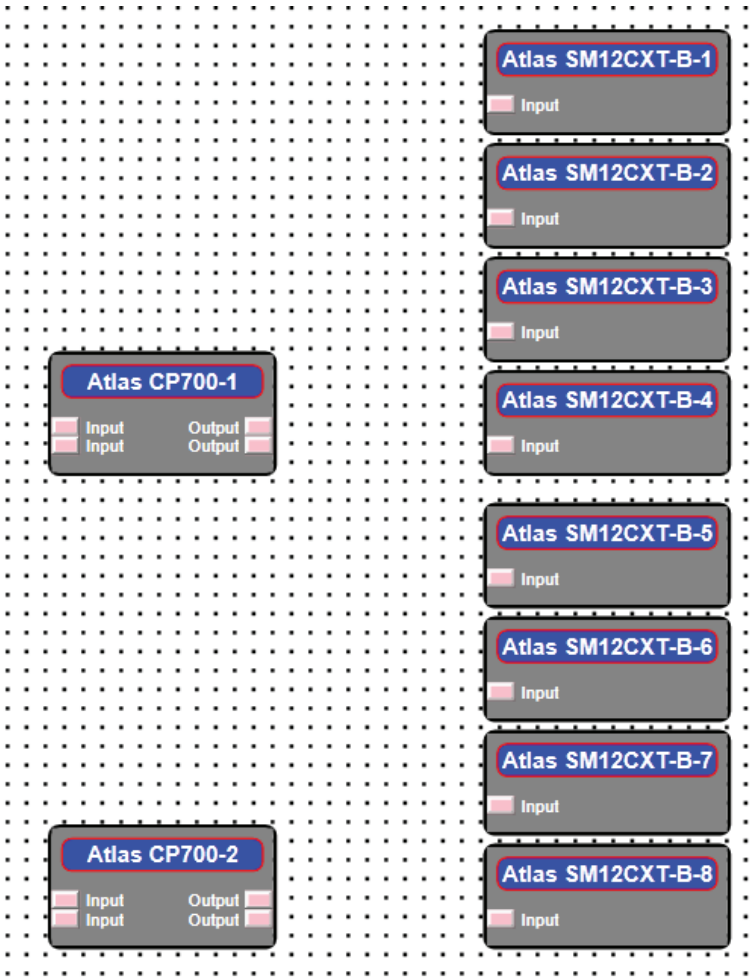

Figure 16

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Power User Tip 1

Wire a group of blocks before copying and replicating the group. (See Figures 17–20)

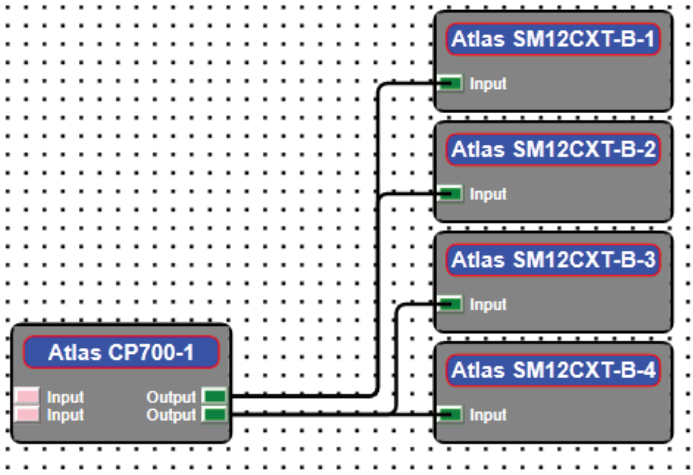

Figure 17

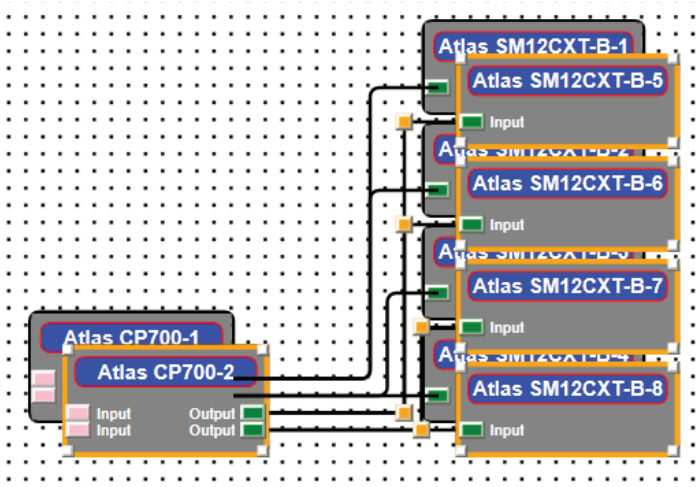

Figure 18

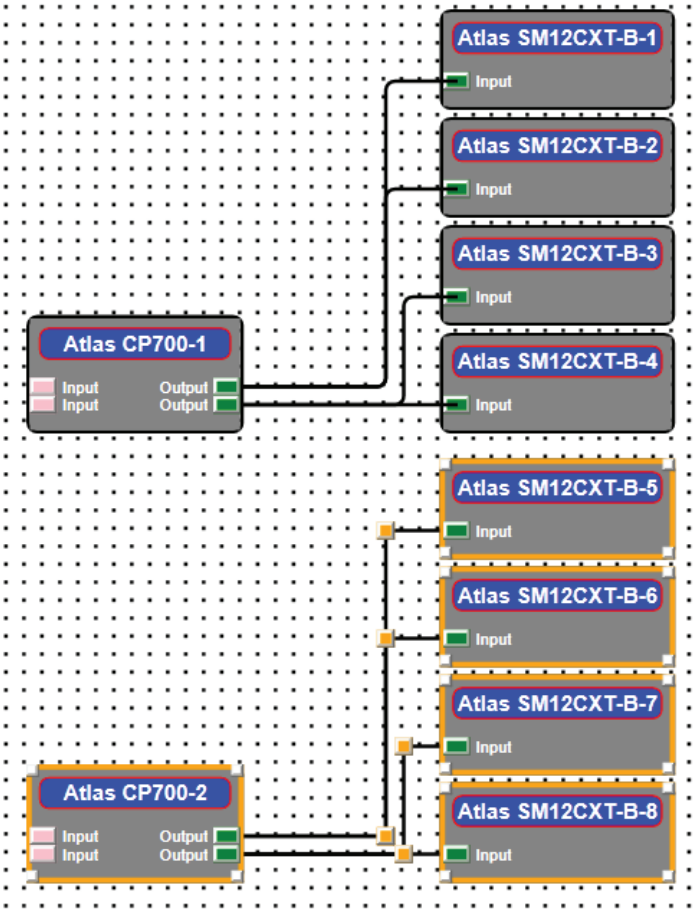

Figure 19

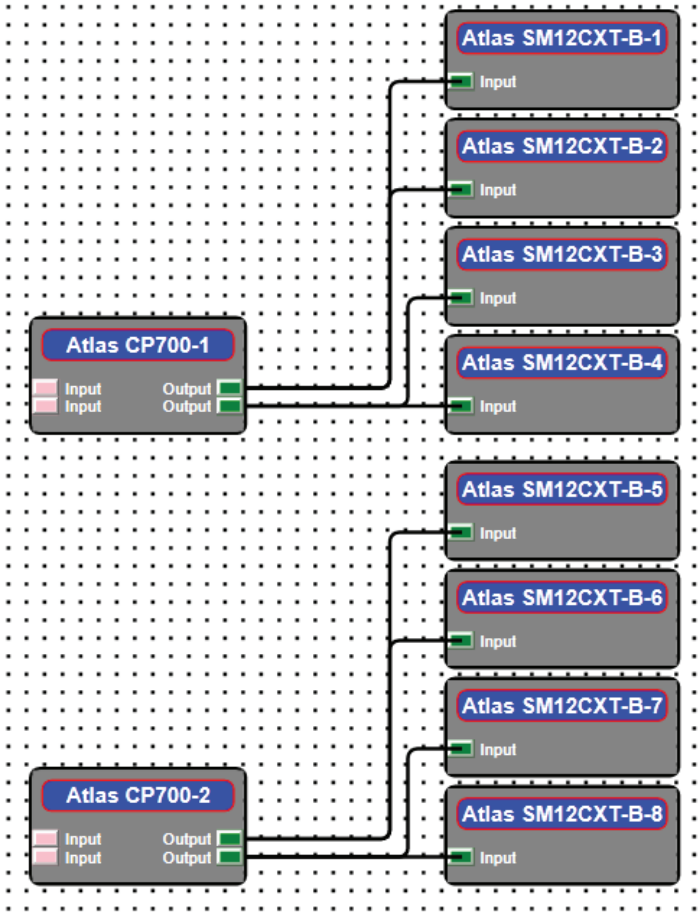

Figure 20

Multiple Wiring

Wiring between blocks can be done in multiples only if the spacing of the nodes is the same and in consecutive order. This is done by first selecting nodes with the mouse (Left-Click+Hold) (See Figure 21)

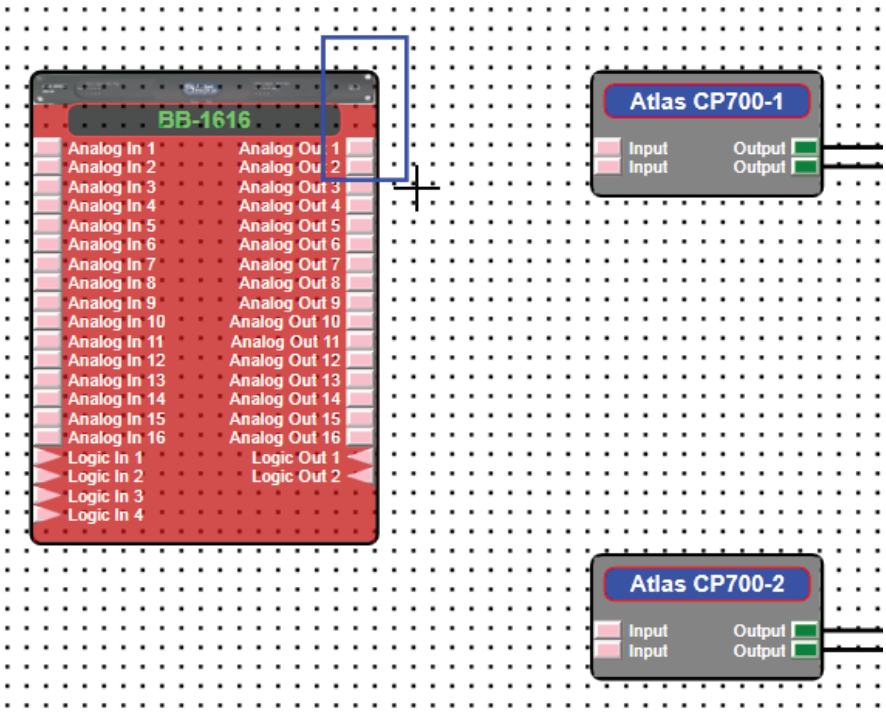

Figure 21

After the selection is made the nodes will be highlighted if properly selected. (See Figure 22)

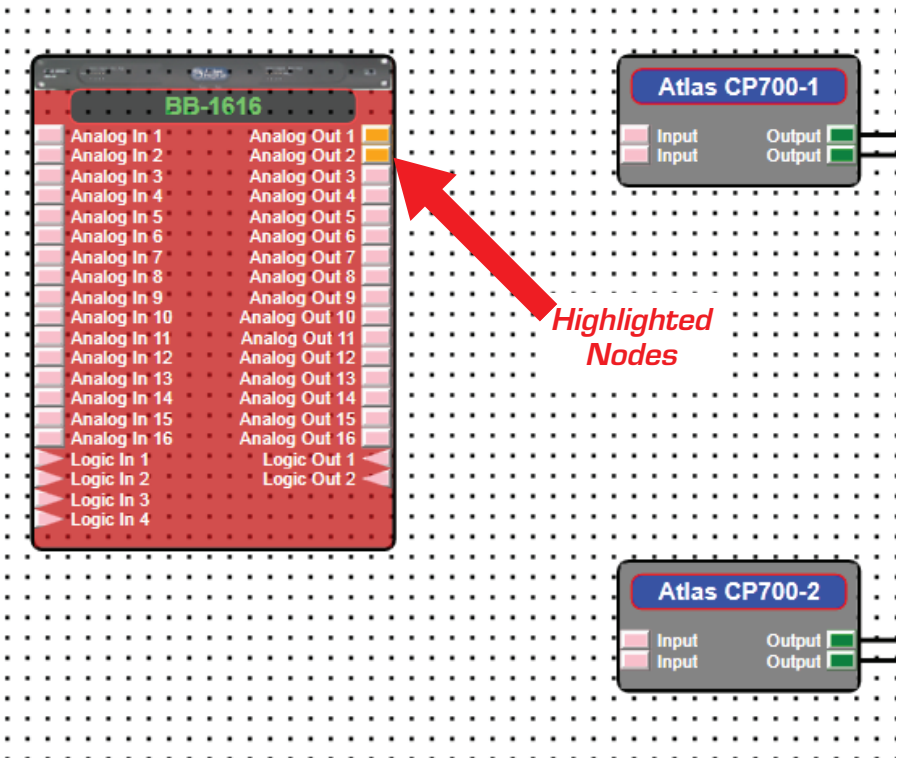

Figure 22

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Left-Click+Hold the selected Nodes. (See Figure 23)

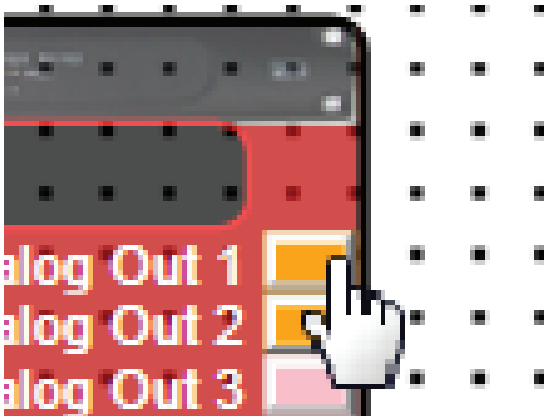

Figure 23

Still holding the left mouse button, move the cursor to the desired "Drop" location. The origin and end points will turn Red. (See Fig.24) Release the mouse button and the wires will appear. (See Figure 25)

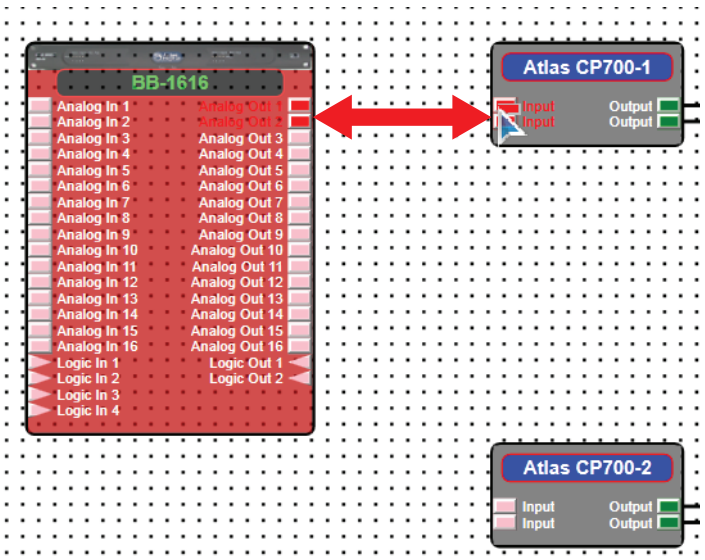

Figure 24

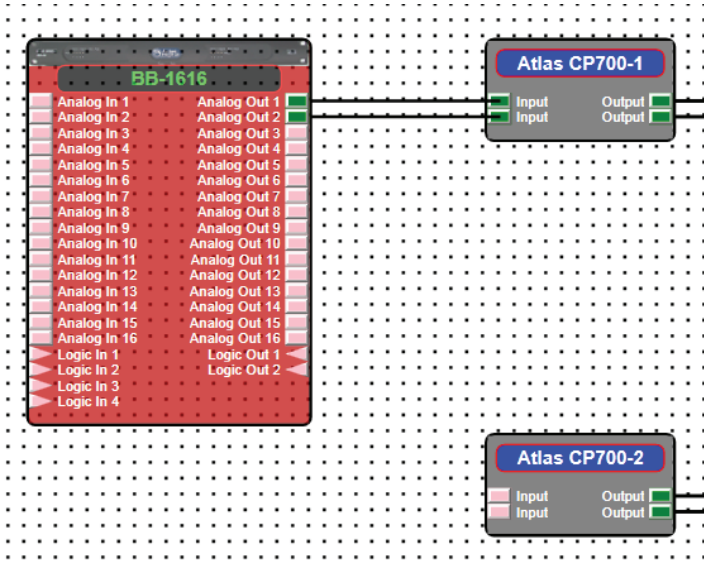

Figure 25

Adjusting Wires

When wire connections are made, the wires will appear in the blueprint design. The wire(s) may need to be moved to accommodate a ID/cable tag. (See figure 26)

The easiest method to move a wire or group of wires is to select a corner segment of the wire(s). vLeft-Click+Hold and select the corner of the wire. (See Figure 27)

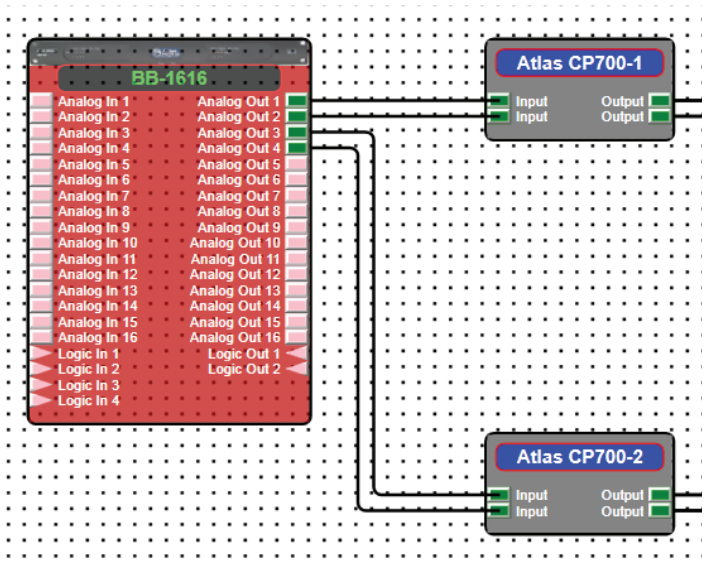

Figure 26

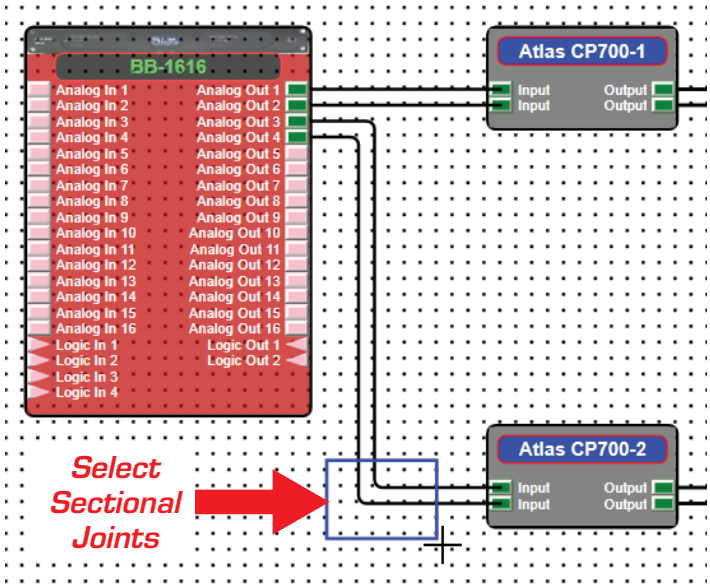

Figure 27

When the selection is complete the segment end will be highlighted. See Figure 28)

Use either the keyboard arrow keys or the mouse (as illustrated in figure 29) to move the wires.

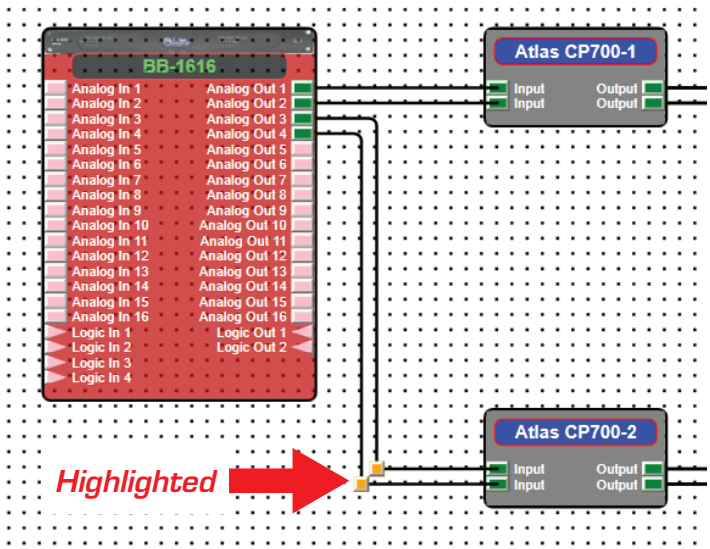

Figure 28

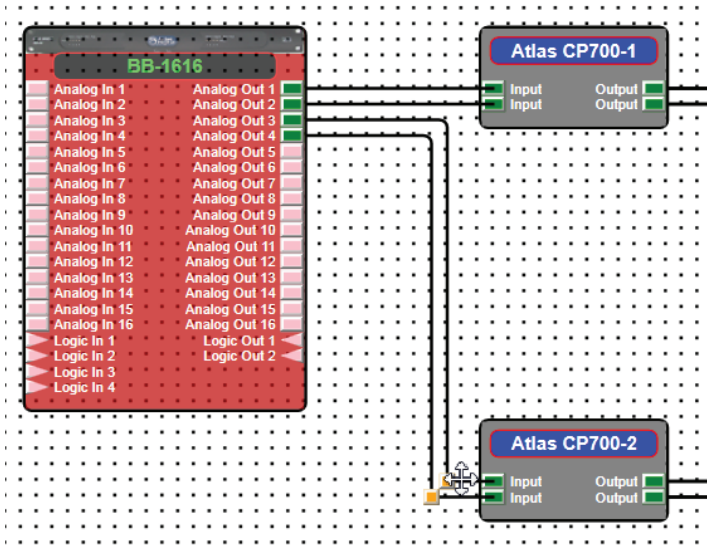

Figure 29

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Overlaying Connected Wires

Figure 30 shows an amplifier and a string of 70.7V speakers. The wires mustv be connected one at a time. Figure 31 shows the start of the wiring process. Drag and drop to each speaker.

Figure 30

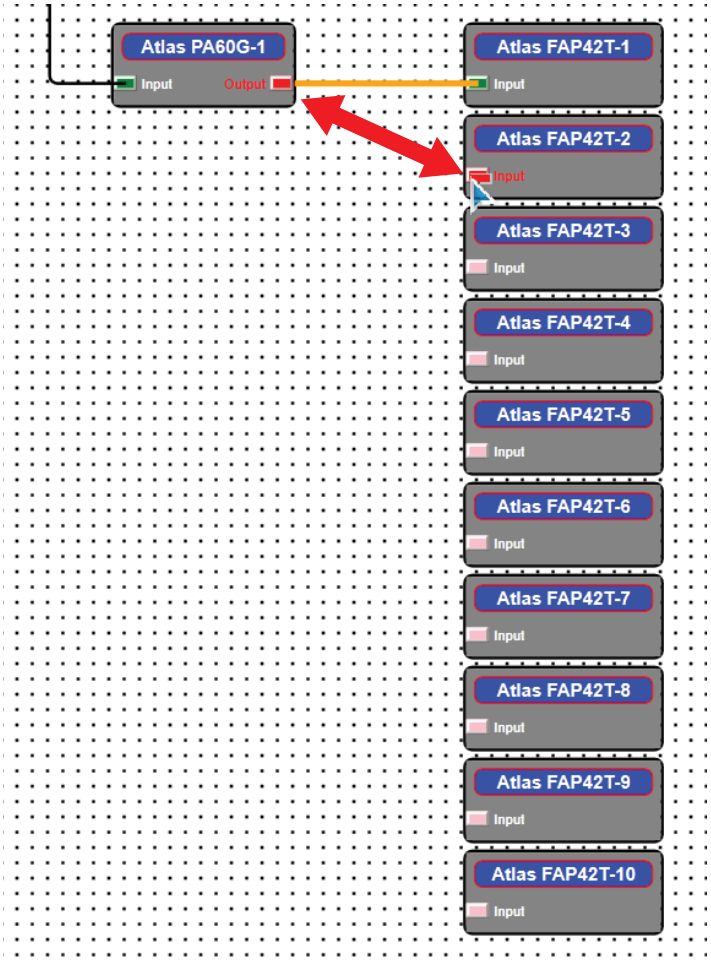

Figure 31

The auto-wire function will place the wires as they are connected. The wires can be overlayed in the blueprint to present a clean design and to show that each speaker is connected to the same speaker run. Start by determining what wire path fits best in the design by selecting and moving one wire. (See figure 32) Highlight each successive wire and drag or use the arrow keys to overlay that wire on the first. (See figure 33)

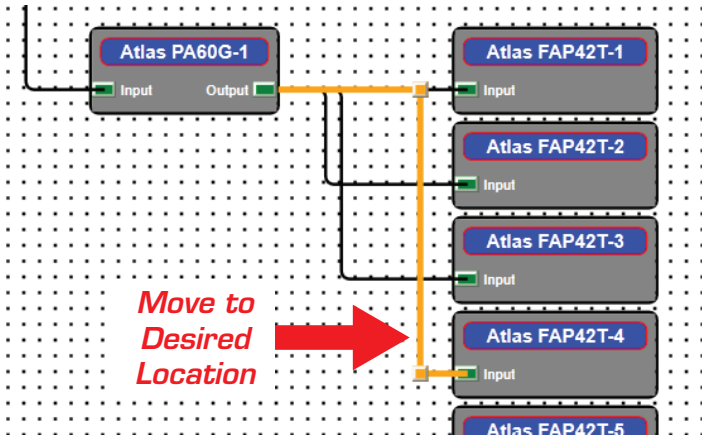

Figure 32

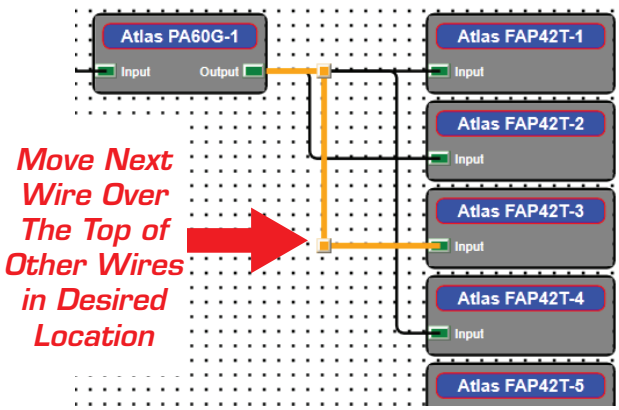

Figure 33

Figure 34 represents the finished look of the blueprint with all speaker wires overlayed into a single wire run.

Figure 34

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Multi-Node Naming

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

Highlight one wire by clicking on it. (See Figure 35) In the Component Properties pane type in the desired node name into the "Propagate Label" text box in the "Link Information" section. (See Figure 36)

Figure 35

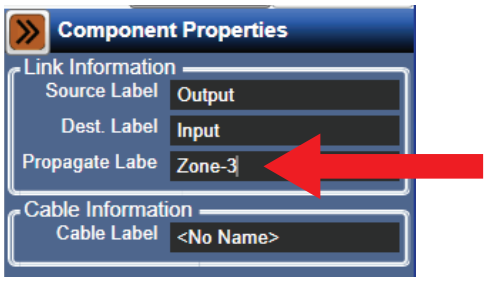

Figure 36

Figure 37 represents the finished look of the drawing with the node name populating in all of the blocks.

Figure 37

Creating Multiple Processing Chains

Creating multiple processing chains commonly required in system designs is easily accomplished using the BlueBridge Designer software.

Figure 38 shows a common string of DSP modules used to make up a loudspeaker management set up. Once the desired modules have been dragged into the design grid, the names need to be changed to work with this shortcut.

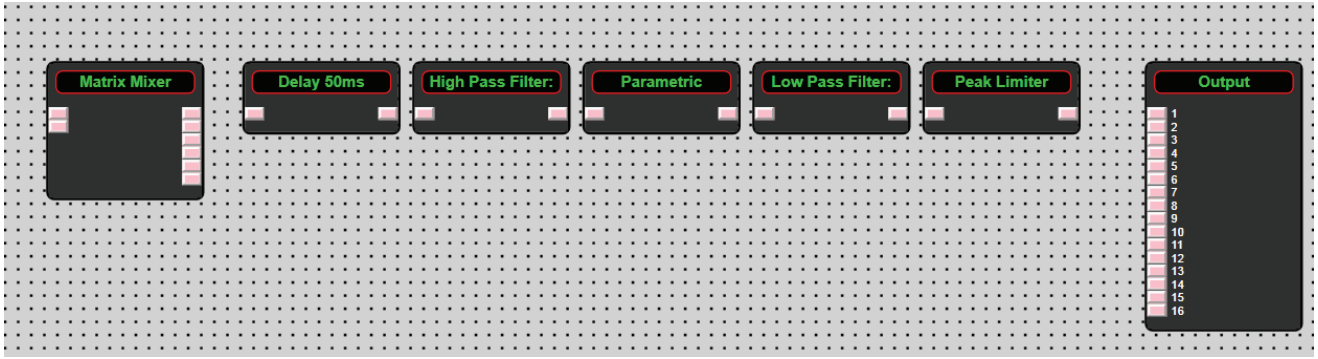

Figure 38

The first step is to set-up the names for the first string of blocks to have a 1 or -1 at the end of each name. (See Figure 39)

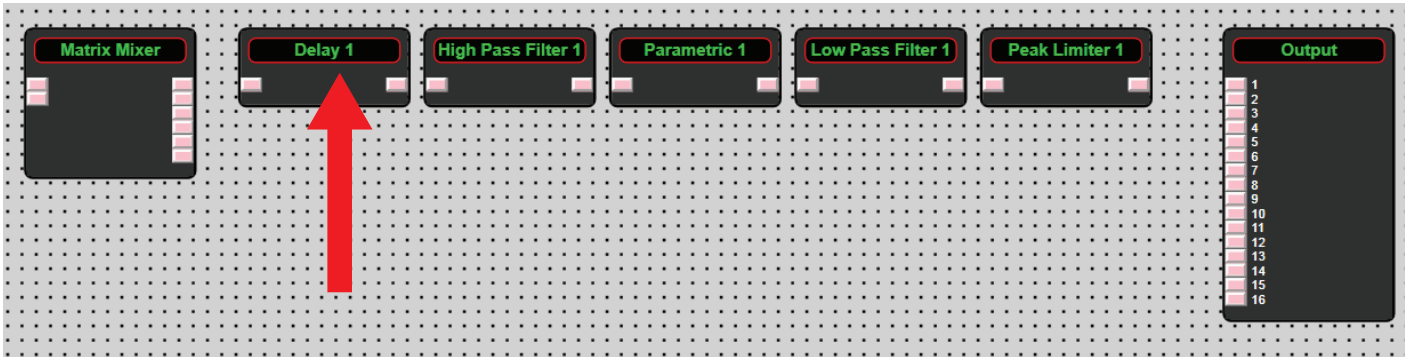

Figure 39

The second step requires wiring the nodes between the blocks. (See Figure 40)

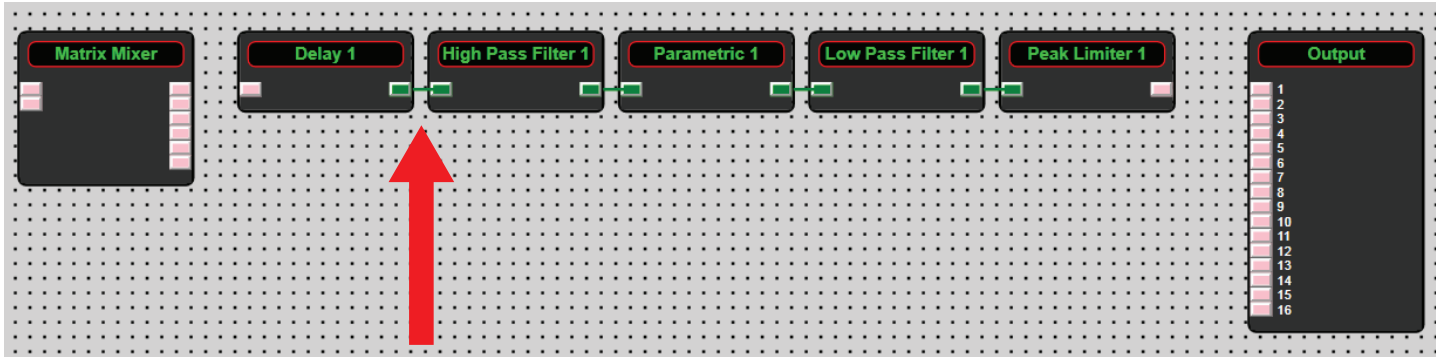

Figure 40

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Select (Left-Click+Hold) the entire set of blocks so they are highlighted. (See Figure 41)

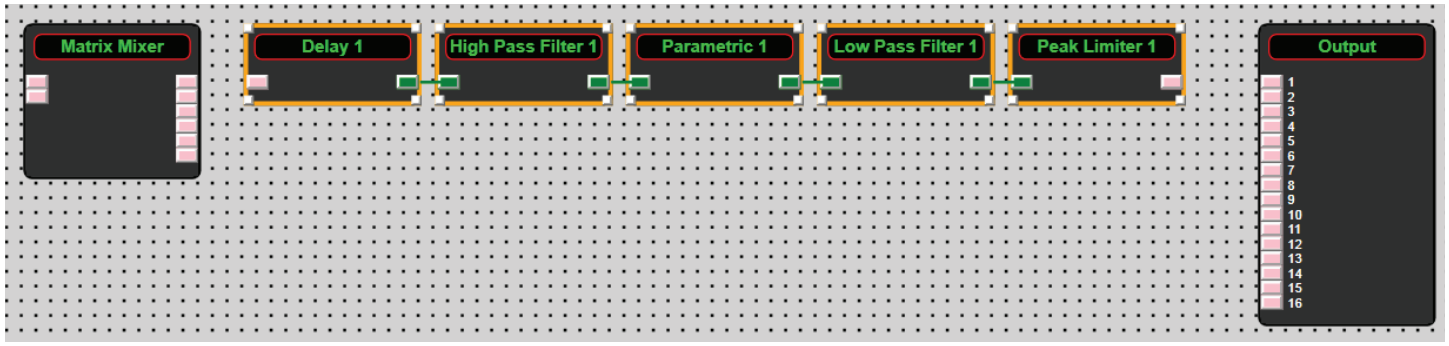

Figure 41

Copy and paste the entire group or string of blocks needed as complete processing chains. Notice how the numbering carries through in each string of blocks. (See Figure 42)

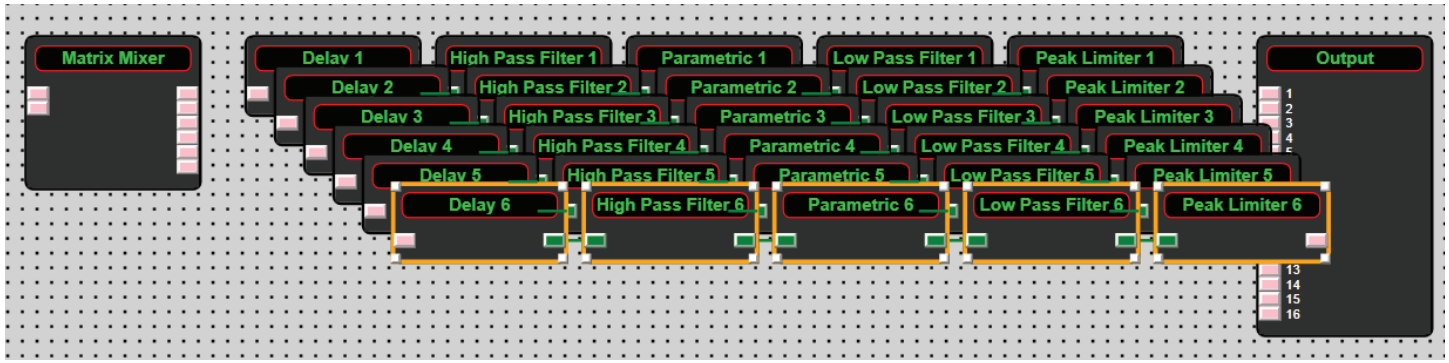

Figure 42

The processing chains can be arranged by selecting individual chains (Left-Click+Hold) and moving to desired locations. (See Figure 43)

Figure 43

In figure 44 the wiring has been completed.

Figure 44

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Power User Tip 2

It is helpful in larger designs to give sections of processing a unique look. In figure 45 all loudspeaker management blocks have been "Selected". Once the blocks have been selected the appearance can be changed using the Component Libraries in the Appearance text boxes. In this example, the text has been changed to black, the text background has been changed to yellow, and the font size has been increased to 14 point. (See figure 46)

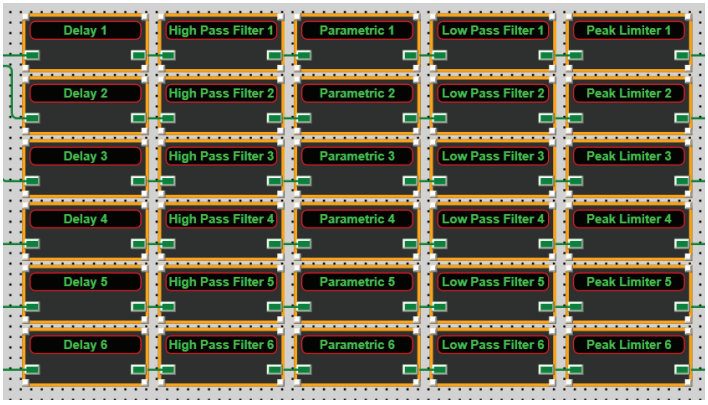

Figure 45

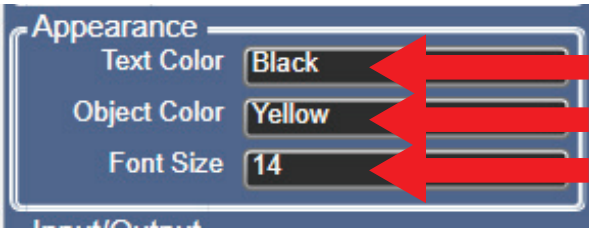

Figure 46

Figure 47 illustrates these changes. Notice that with the increased font size, the High Pass Filter numbers do not fit.

Figure 47

In Figure 48, the High Pass Filter Blocks can be stretched to show the numbering. (See Resizing Design Elements and DSP Modules section)

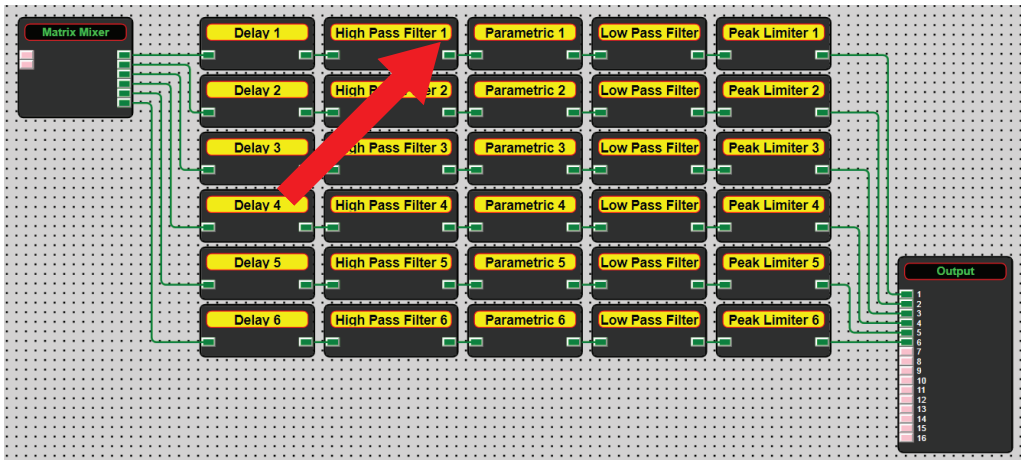

Figure 48

Working with DSP Modules

DSP modules can be added to the design using the Component Libraries. Each module can be configured for multiple Inputs and Outputs. In this example, the compressor by default has a one Input/one Output configuration. This can be changed to a stereo compressor using the drop down menu found in the "Input/Output" section under the Component Properties pane.

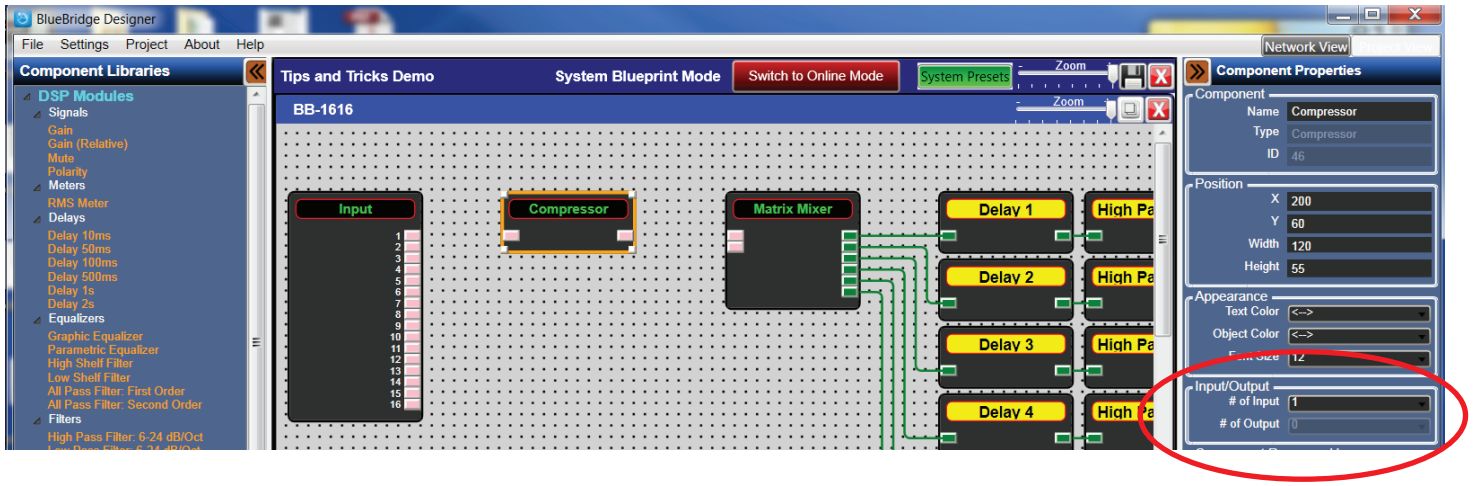

Figure 49

Select the desired number I/O for the DSP Module. (See Figure 50) The DSP Module will increase in size to accommodate the added I/O nodes. (See Figure 51)

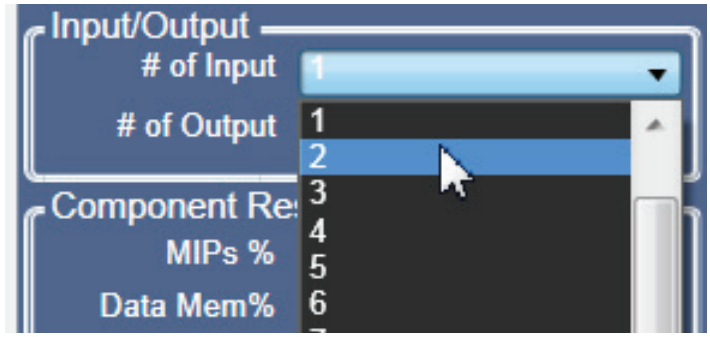

Figure 50

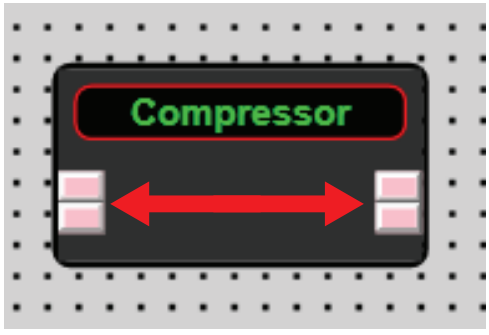

Figure 51

Parametric Equalizers (PEQ) all start with 1 filter band. (See Figure 52)

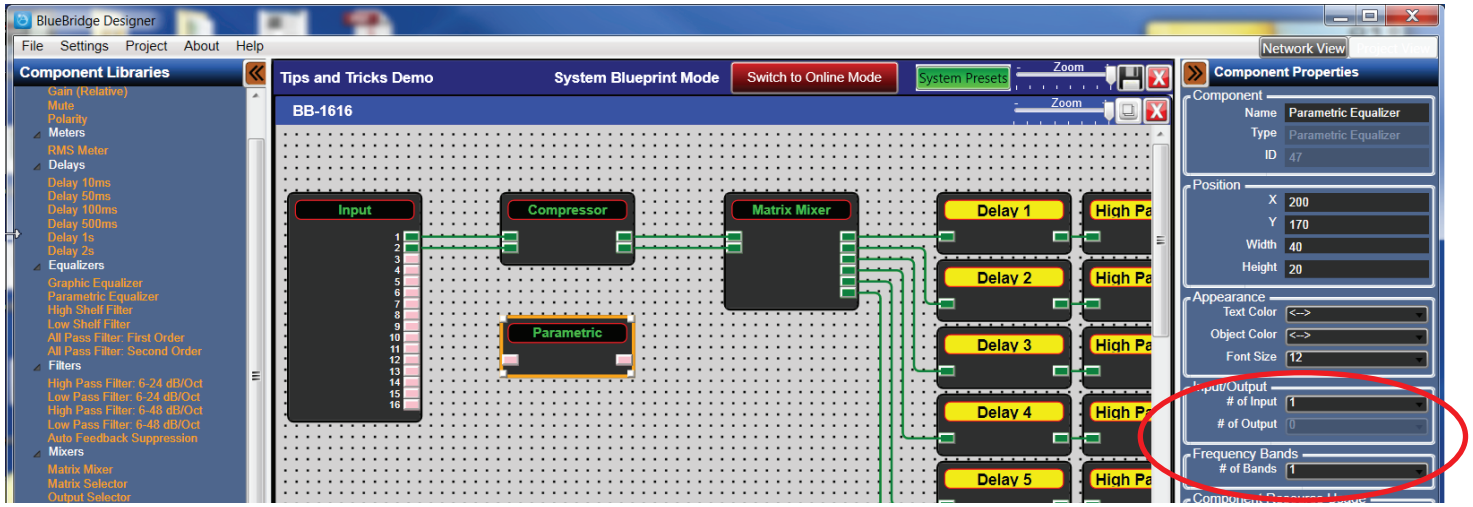

Figure 52

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More bands can be added using the drop down box found in the Frequency Band section of the Component Libraries. (See Figure 53) Figure 54 show the two bands inside the DSP Module.

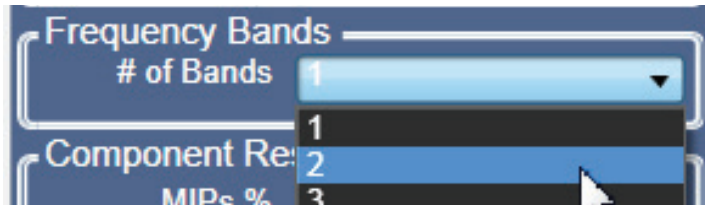

Figure 53

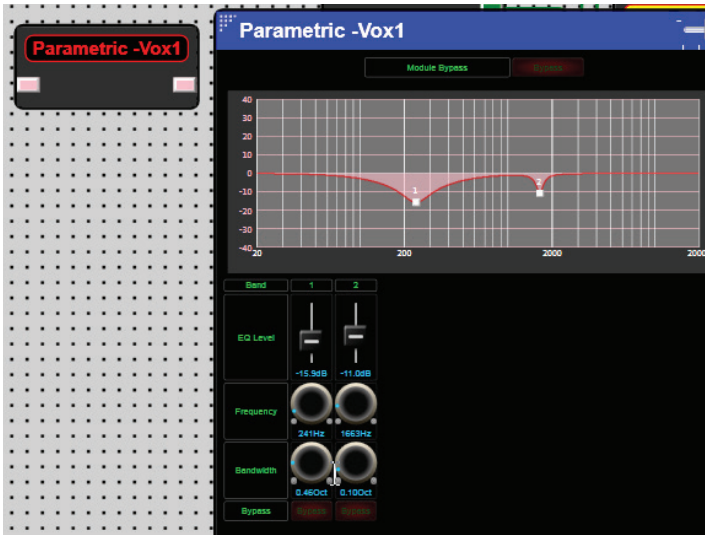

Figure 54

When a multiple amount of DSP Modules will have/need the same or similar settings, the first module can be set up, adjusted and then copied and pasted. (See figure 55) Notice the sixth PEQ in figure 56 has the same settings as figure 54.

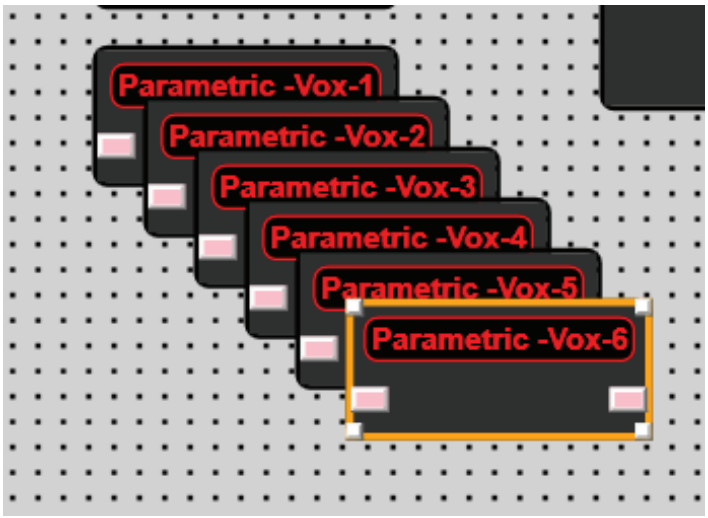

Figure 55

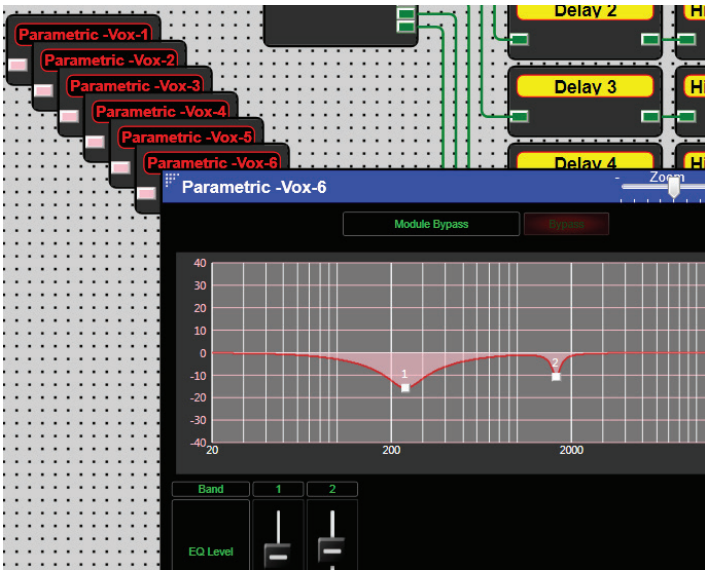

Figure 56

Manipulating and Adding Segments to Wires

This section discusses and illustrates multi-segment wiring. In figure 57 the six PEQ's are wired to the Output block. However the loudspeaker management blocks are going to get in the way for the standard auto wiring function to negotiate.

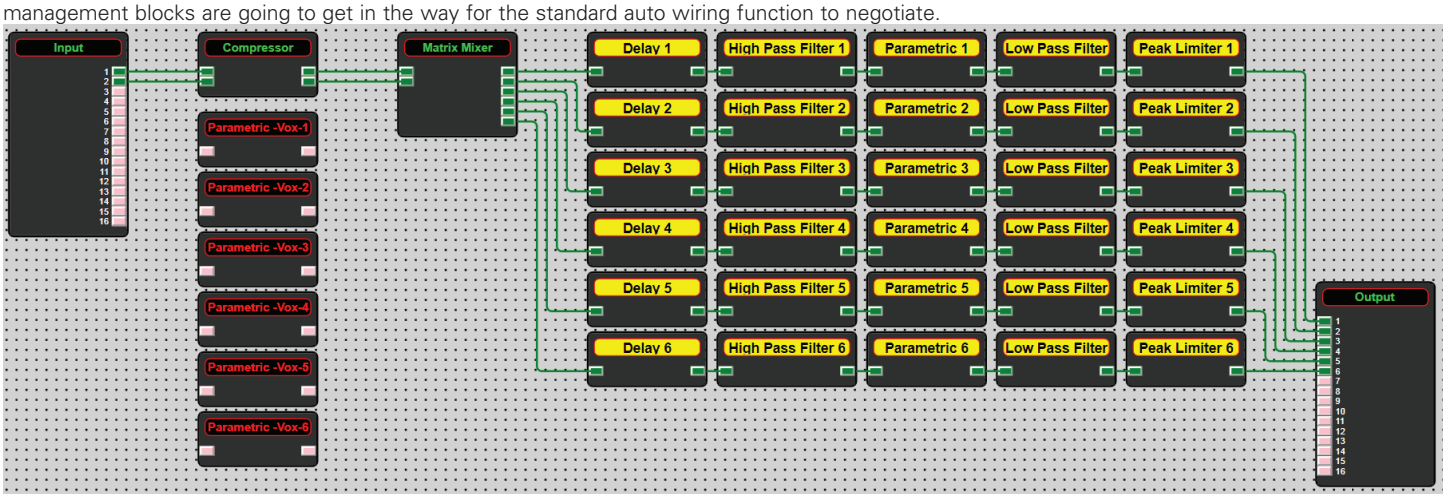

Figure 57

Wiring PEQ1 to the output block causes the wire to go across the last set of blocks in the loudspeaker management section. (See Figure 58)

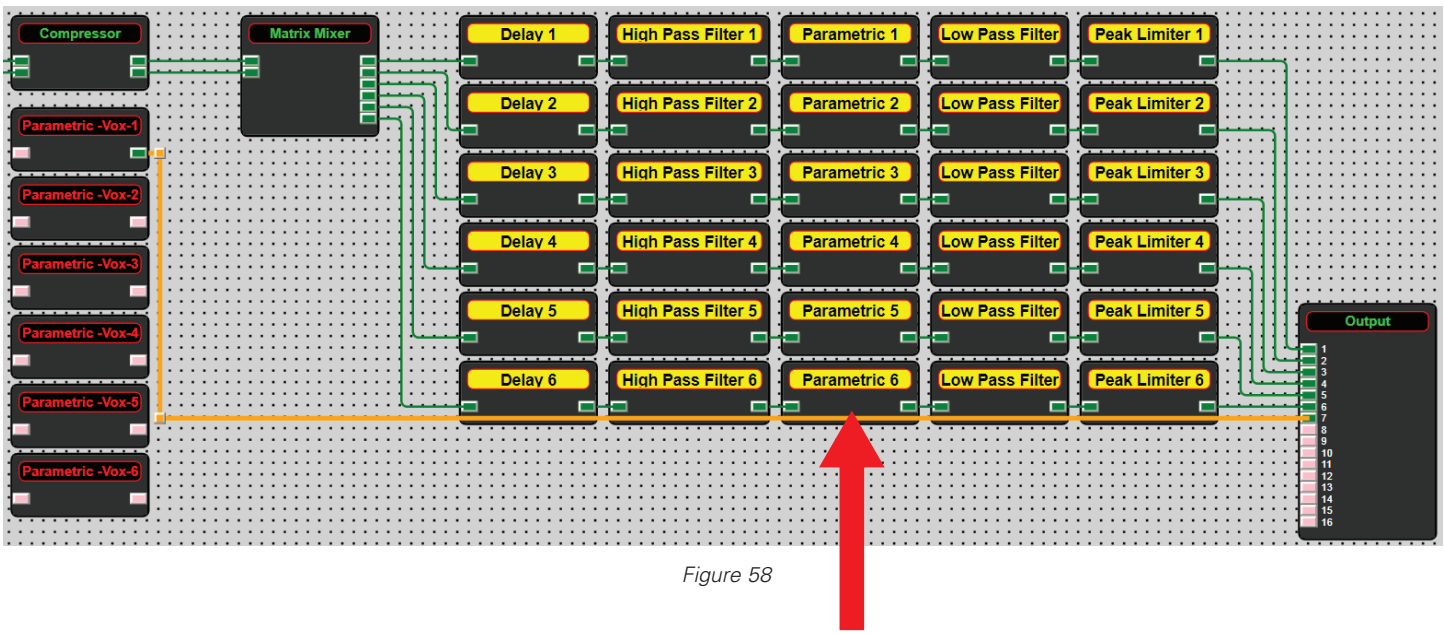

Figure 58

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Segments must be added to the wire in order to avoid wiring over other blocks in the design.

Right click on the wire that needs to be adjusted, and select 5 Segment Wire. (See figure 59)

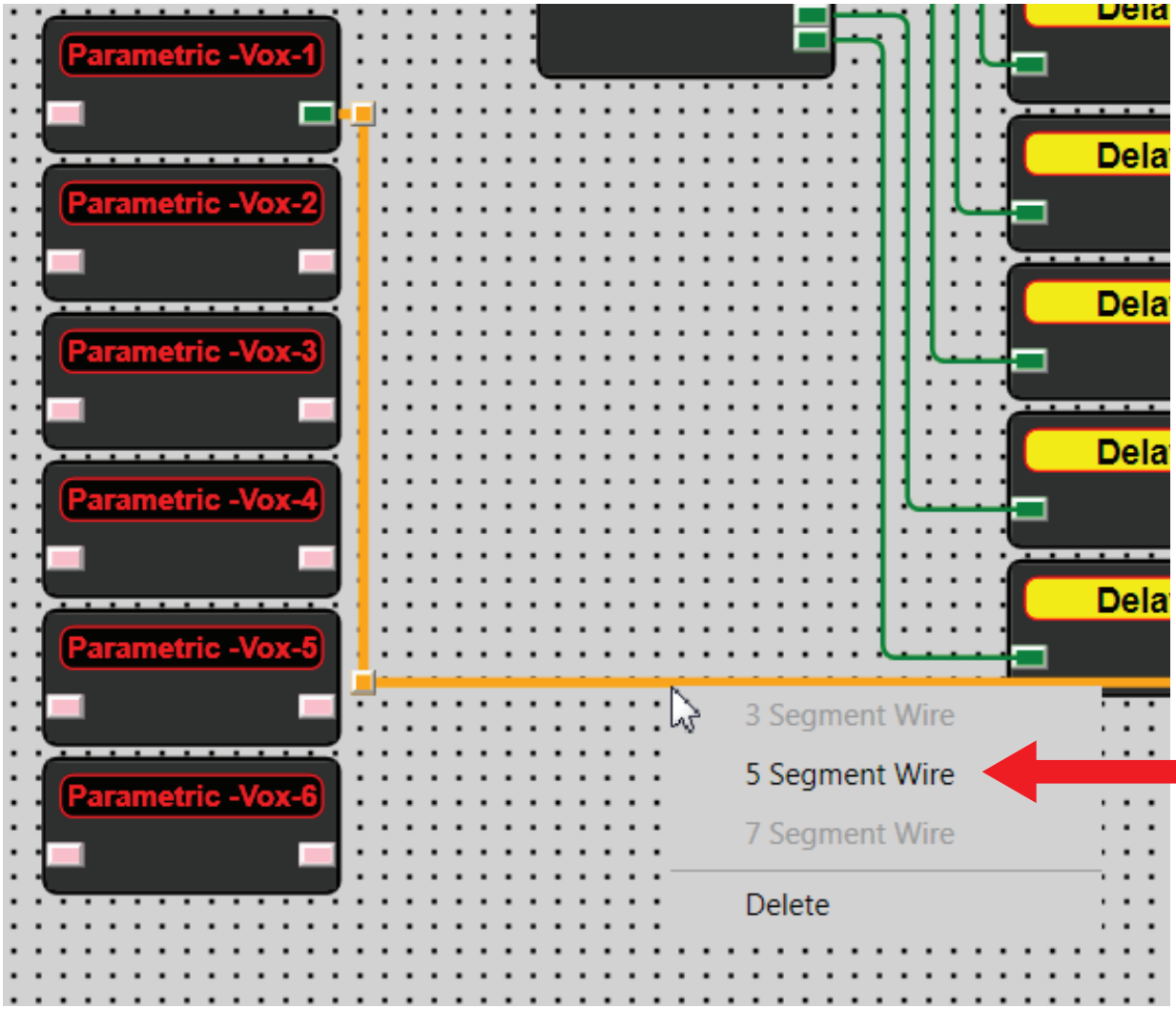

Figure 59

The wire will generate additional segments. (See Figure 60)

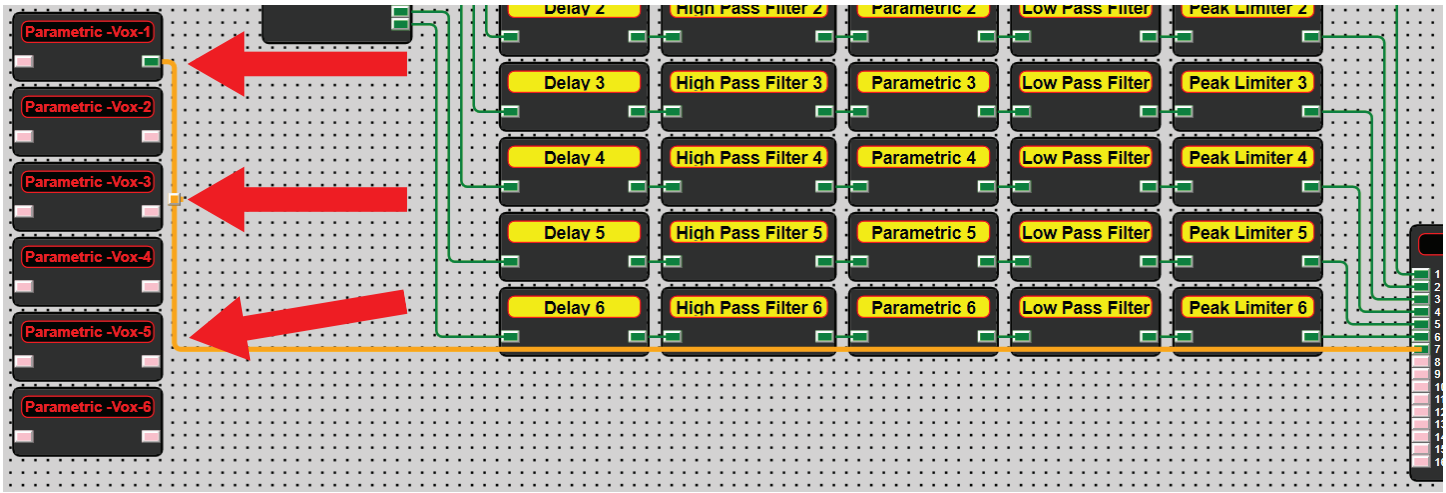

Figure 60

Left-Click+Hold to select the first sectional joint. (See Figure 61)

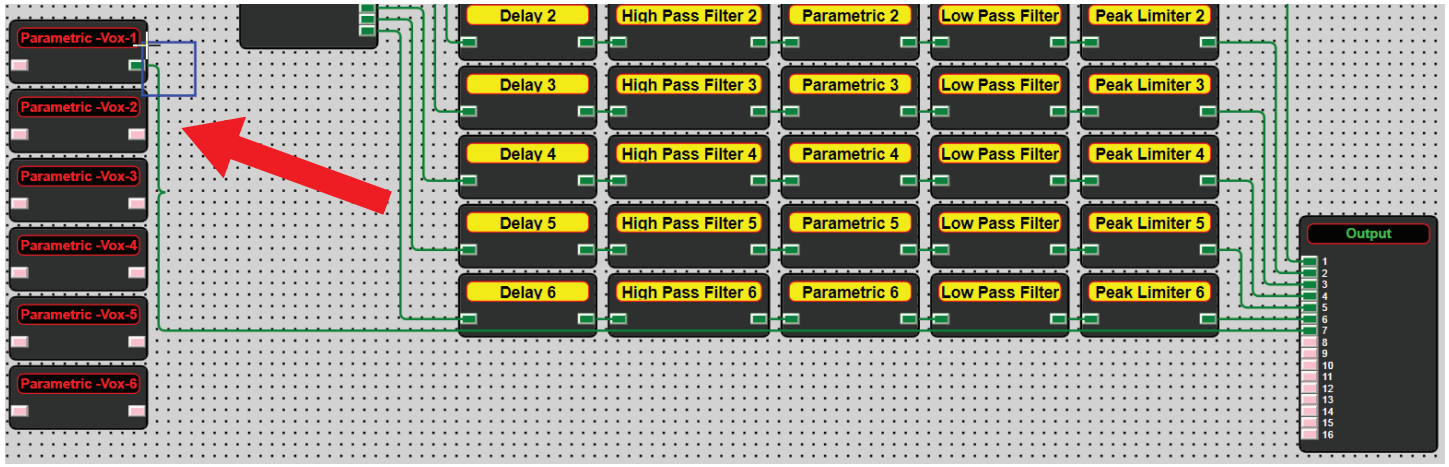

Figure 61

When the sectional joint is highlighted, it can be moved using the keyboard arrow keys or dragged to a new location using the mouse. (See Figure 62)

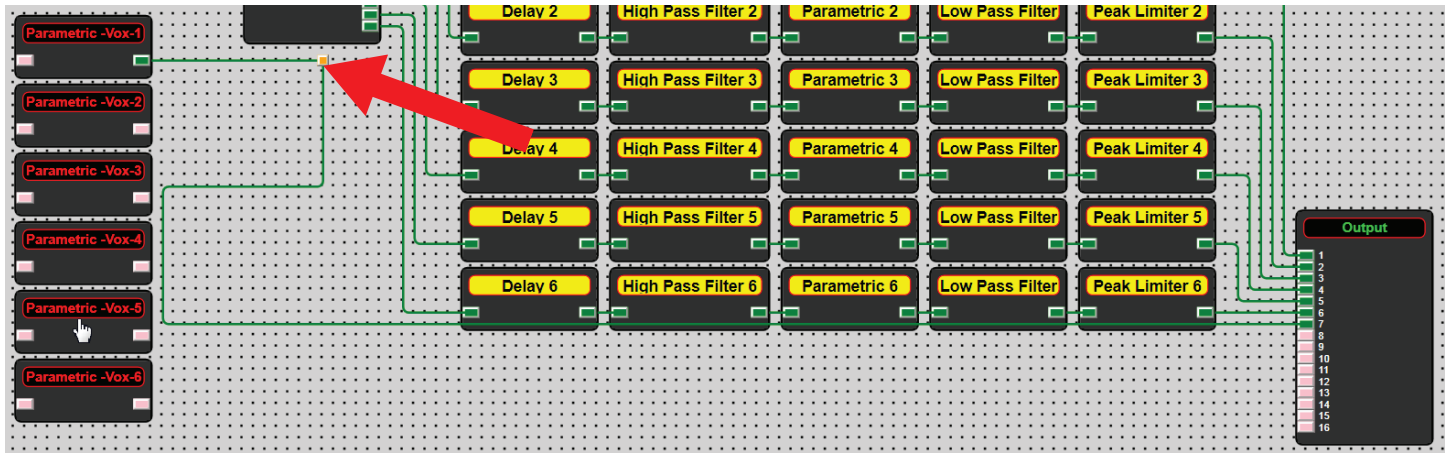

Figure 62

It is recommended to work fromv one sectional joint to the next. (See Figures 63–66)

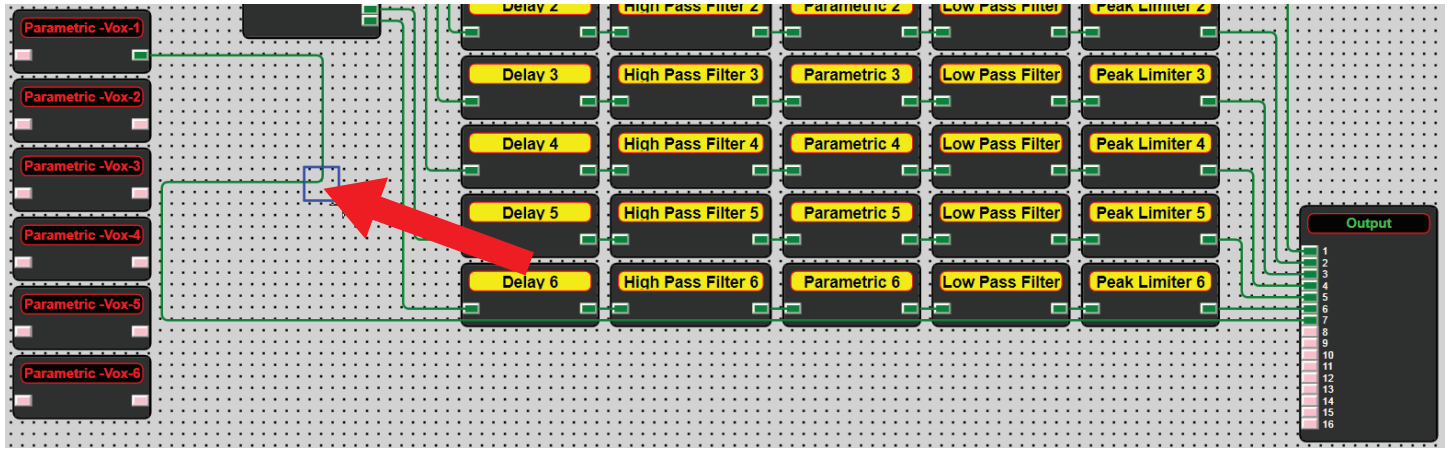

Figure 63

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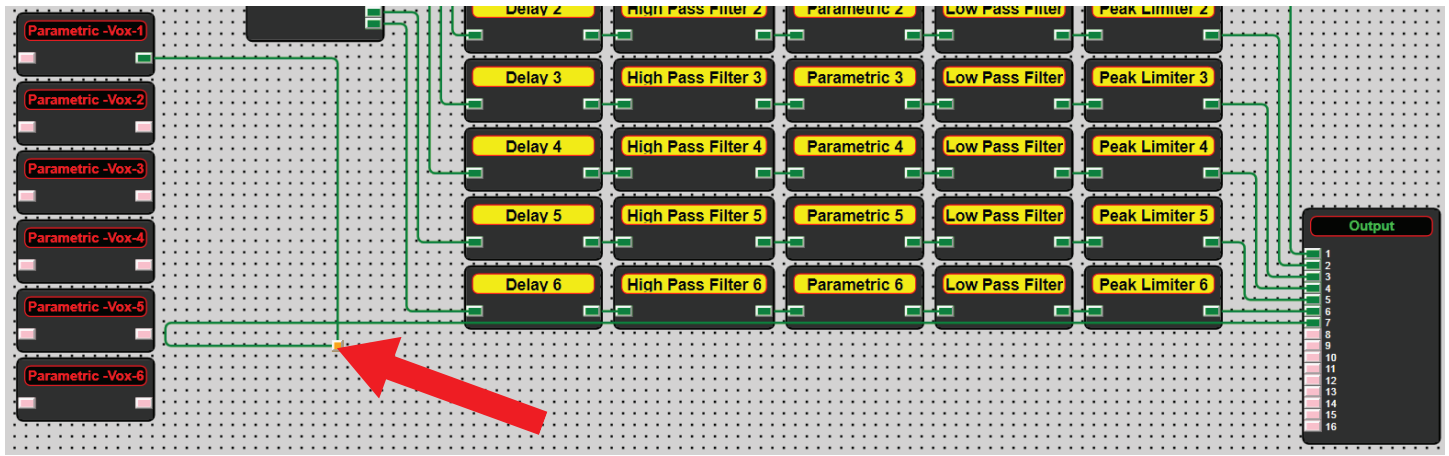

Figure 64

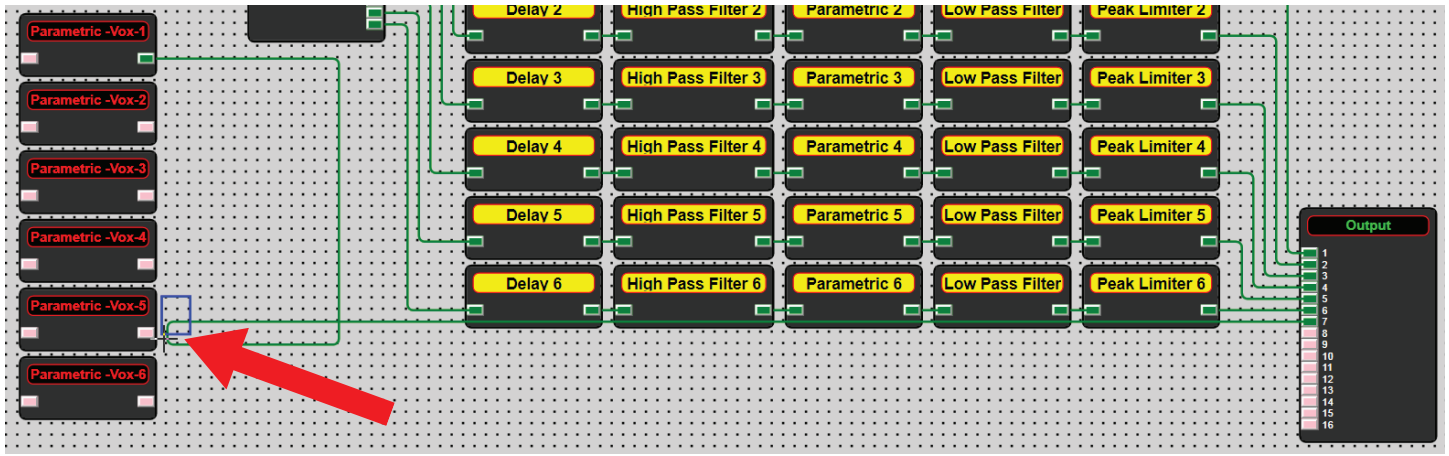

Figure 65

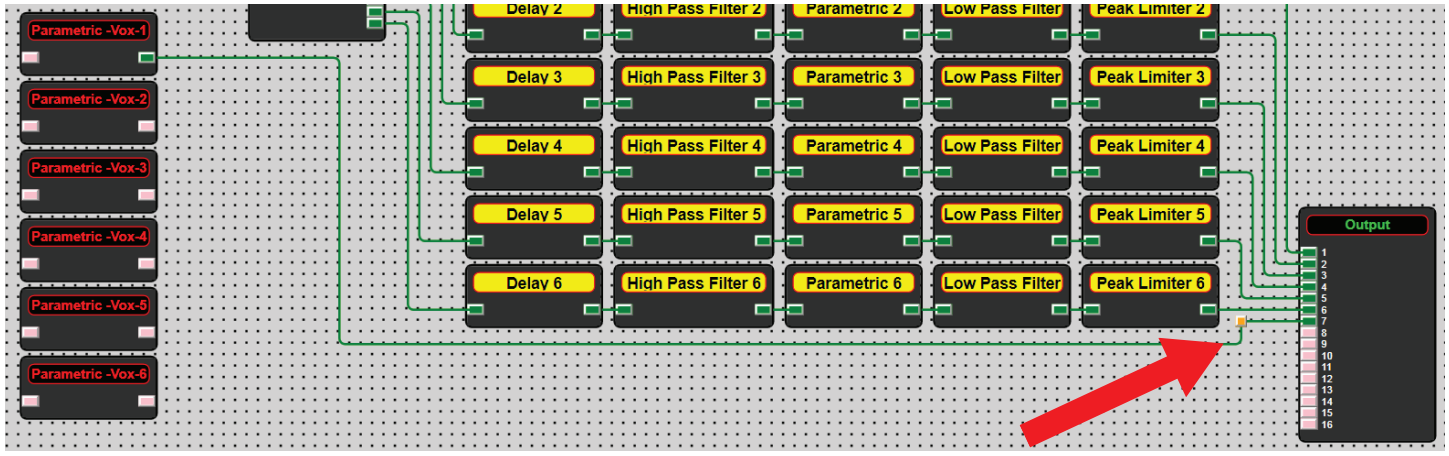

Figure 66

Repeat the steps illustrated in the figures above to complete the design. (See Figure 67)

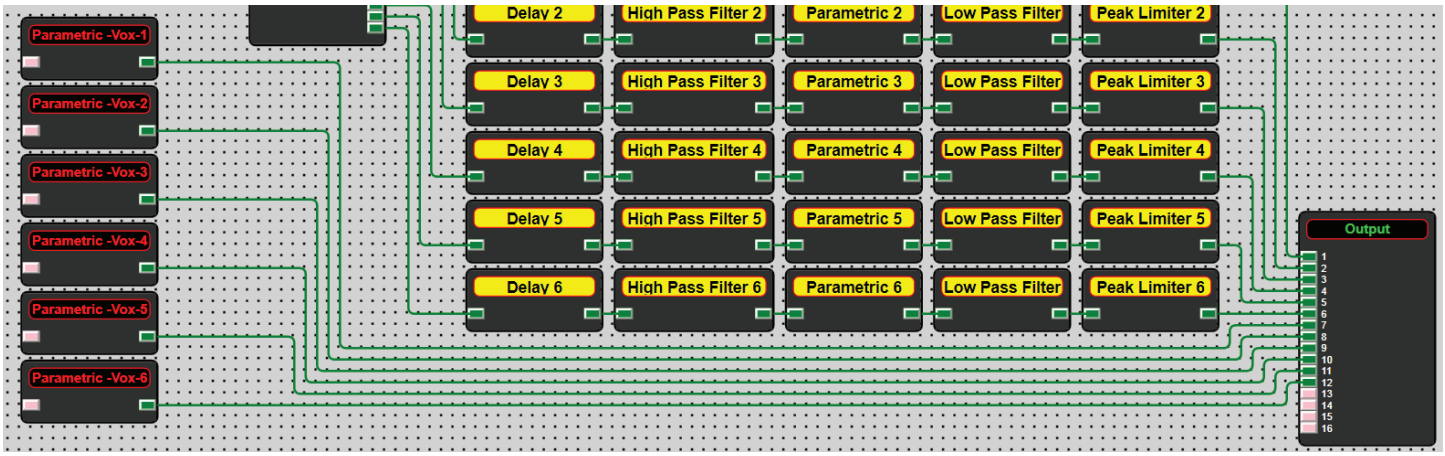

Figure 67

Multiple wires can be adjusted simultaneously by selecting sectional joints for all the wires being adjusted. (See figure 68)

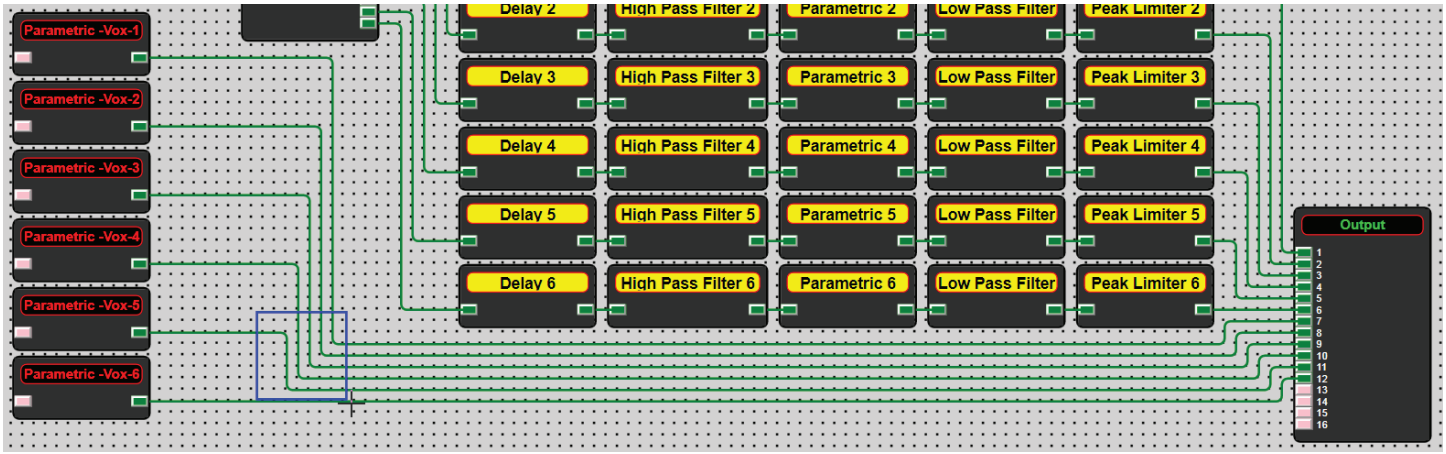

Figure 68

When sectional joints are highlighted, they can be moved using the keyboard arrow keys or dragged to a new location using the mouse. (See Figure 69)

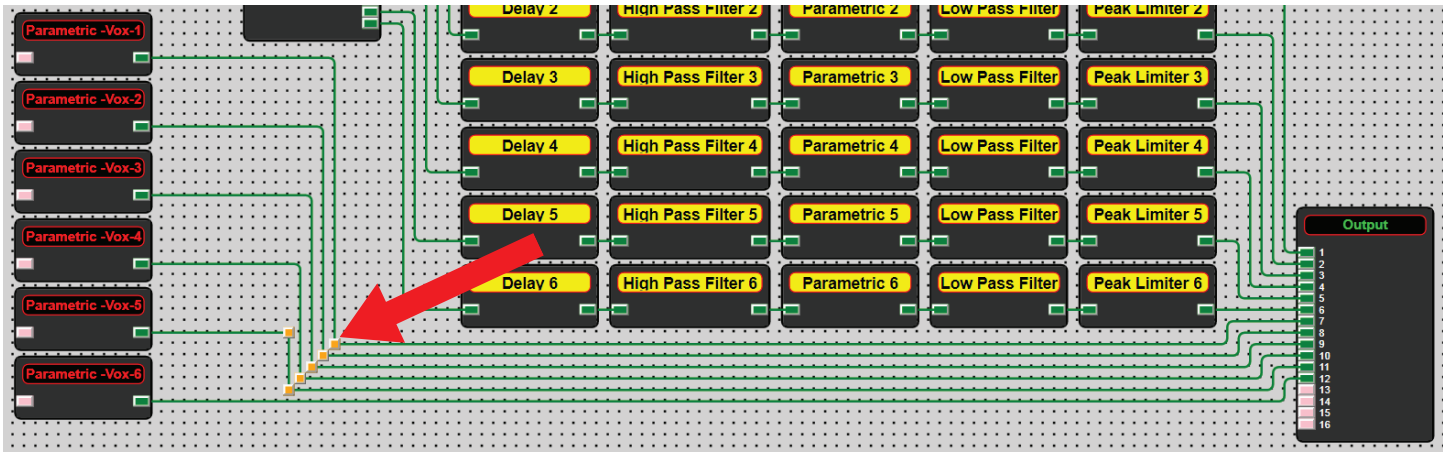

Figure 69

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Selection has been moved in one step. (See Figure 70)

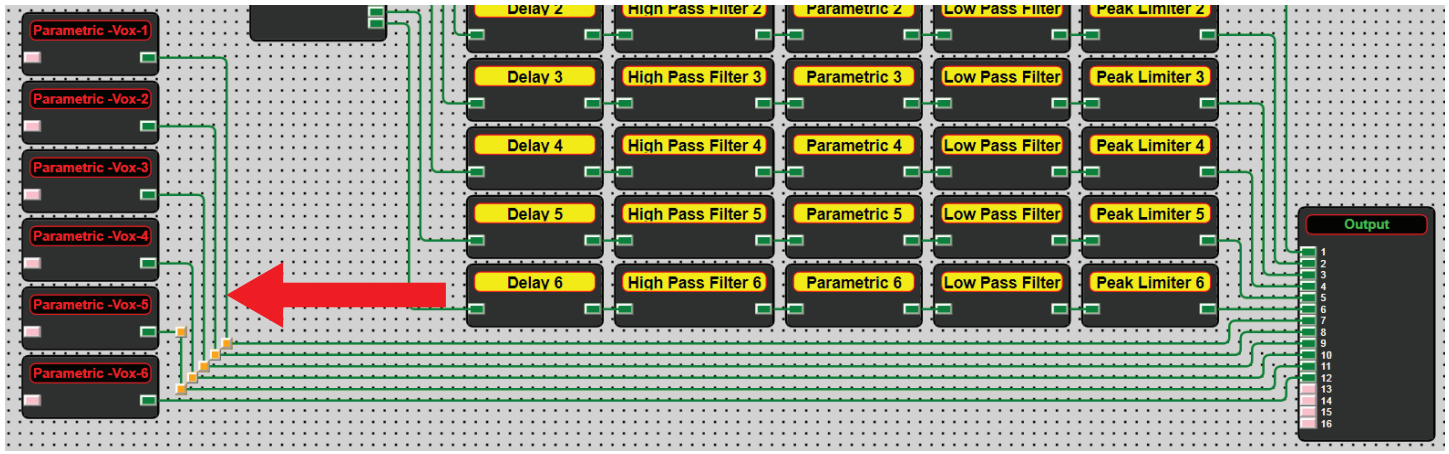

Figure 70