v1.0

Tracking the Last Parameter Preset Selected Across Multiple Controllers

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Question:

How can I track Parameter Presets across multiple controllers?
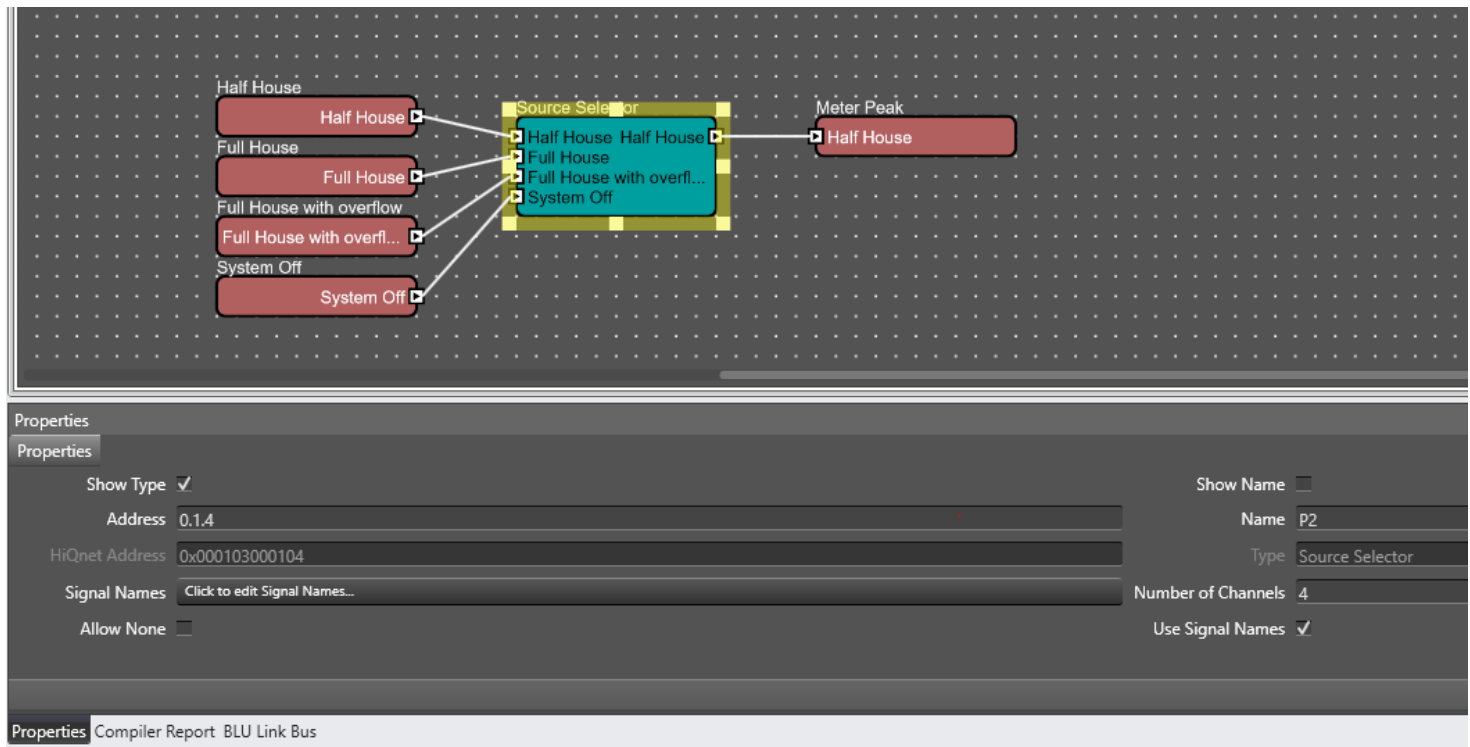
Answer:

Within Audio Architect, a Parameter Preset can be created and later recalled for values of a programmer defined collection of parameters called Parameter Preset Groups. These preset messages are Events not State Variables so there is no mechanism to track what "Preset" the system is in. There are, however, several ways to create an indicator that will show the last preset chosen. Within Audio Architect this is easily done by dragging a Parameter Preset Group from the Design tree onto a Custom Control Panel. This creates a drop-down box that will show the last state of _this_ control. Unfortunately, this control does not work the same when used on an Ethernet Wall Controller or Motion Control Panel.

The following method creates a control that can be added to a Motion Control Panel or an Ethernet Wall Control and will display the last preset chosen. Because this method uses a State Variable this selection will track across multiple Controllers and Audio Architect GUI's.

Within the Soundweb London Audio Configuration Window, create a Noise Generator for each one of the presets needed on the control. In this example I will use four. Name each of the Noise Generators the same as your Presets. Here I've chosen Half House, Full House, House w/ Overflow and System Off.
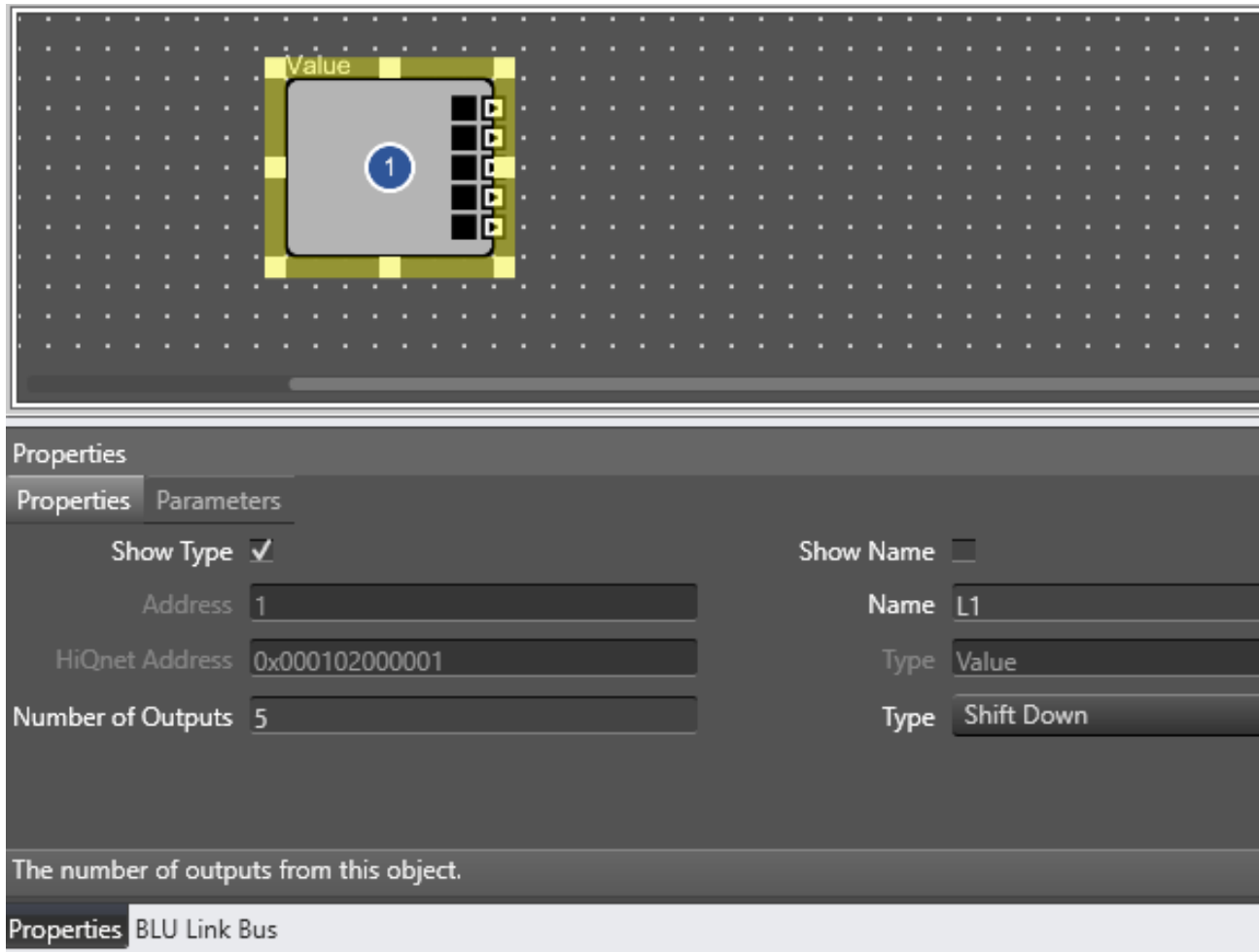
Next add a Source Selector. In the Properties Window, change the number of inputs to match the number of Noise Generators you are using. Make sure 'Allow None' is set to 'No', and change 'Use signal names' to yes. This will display the names of the Noise Generators in the drop-down list. Wire the Noise Generators to the Source Selector. You can wire the output of the Source Selector to a meter to prevent the Compiler from generating a warning, but this is not necessary.

Double click the Source Selector to open its Default Control Panel and move it out of the way, we'll come back to it later.

Switch to the Logic Configuration Window and add a Logic Value object. In the Properties window change the type from Binary to Shift Down. Set the number of outputs to match the number of inputs on the source selector and add one more. In this example it has 5 outputs (4+1). This is done to account for the 'None' state of the Source Selector object. Even though we deselected 'Allow None' in the objects Properties, this just removes the selection from the drop-down box in the Default Control Panel. From the standpoint of Logic, it is still the first state of that parameter.
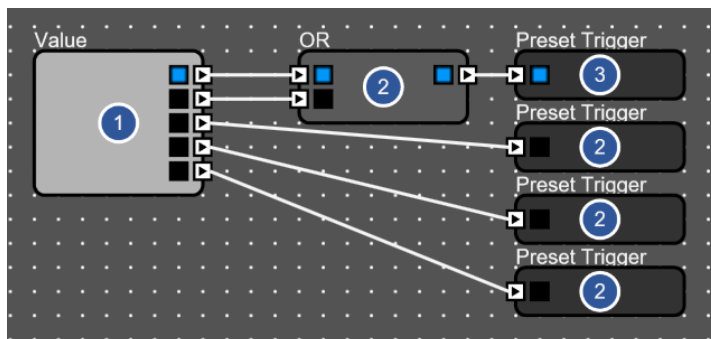

Now we will focus back on the Default Control Panel for the Source Selector. Hold CTRL then click and drag the drop-down Box from the control panel over to the Logic Value *object* in the Logic Configuration Window. This will create a new Logic Link between these two objects.
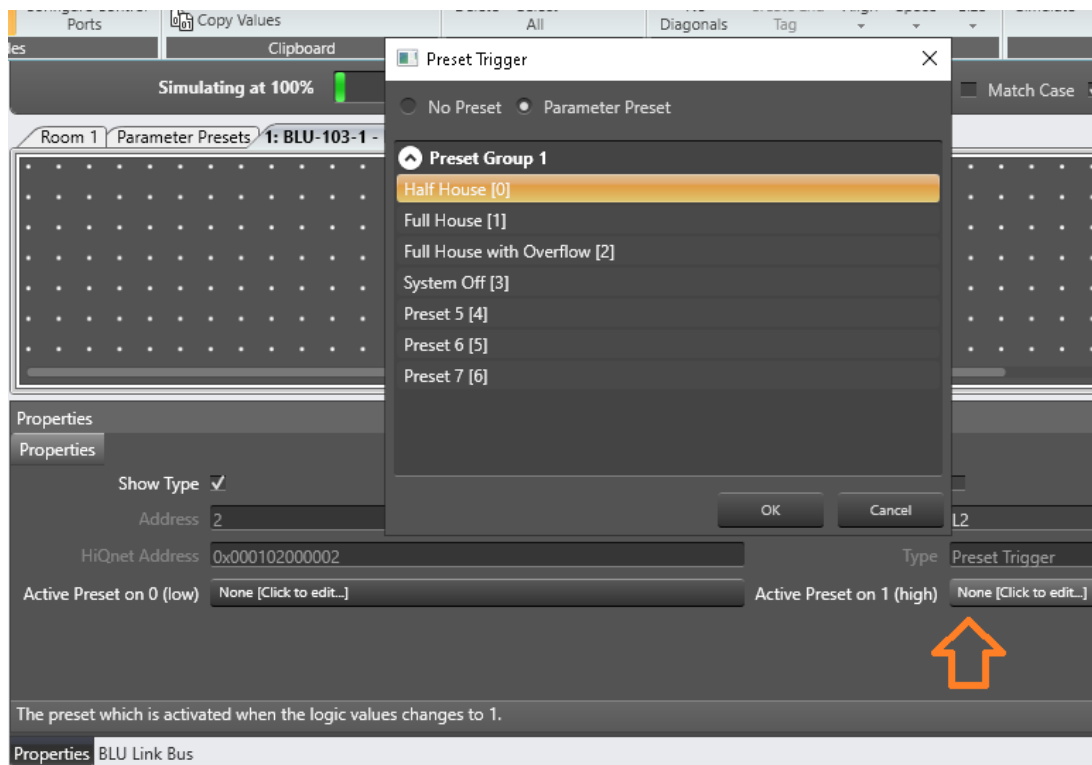
In the Logic Configuration Window, add the correct number of Preset Trigger objects, in this example four. Add a logic OR object. Wire the first two outputs of the Logic Value object to the two inputs of the Logic OR.

Wire the output of the logic OR to the first Preset Trigger. Wire the remaining outputs on the Logic Value object to the three remaining Preset Triggers.

Select the first Preset Trigger and choose 'Preset to trigger on 1'. Select Parameter Preset at the top of the window and choose the appropriate Parameter Preset from the list. Repeat this process for each of the remaining Preset Triggers.

The Source Selector drop-down box can be copied to any number of Audio Architect Control Panels, Motion Control Panels or Ethernet Wall Controllers. All the controllers will display the same information