




How to use the Comparison Palette Tutorial

Functions -> Programming -> Comparison













Once you have opened up the project you want to add a comparison function to, open the Functions palette and open up the Programming palette. Under the Programming palette, select the

Comparison palette  which should bring you to a palette with numerous different types of comparison functions.

Now select the comparison that you wish to use and place it in the block diagram. For each comparison function, the input to the top (let's call it A) is compared to the input of the bottom (let's call it B) such that the expression that gets evaluated is $A < \text{comparator} > B$. For example, for

Greater?  the comparison executed would be $A > B$ and for Less?  the comparison is $A < B$.

The following is a complete list of comparison functions that behave as defined above:

			Equal?	Not Equal?	Greater?
			Less?	Greater or Equal?	Less or Equal?
			Equal to 0?	Not Equal to 0?	Greater than 0?
			Less than 0?	Greater or Equal to 0?	Less or Equal to 0?

Notice that the comparison functions each take in an I32 or a double data type and outputs a Boolean data type. If the comparison evaluates as true, then the comparison function outputs True, otherwise it outputs False.

For example, say we want to compare two random values and see if the first random number is greater than a constant .5. Notice in Figure 1, that the random number is wired to the top pin input and the constant is wired to the bottom.

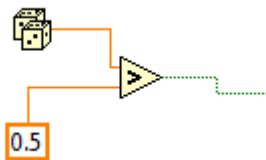


Figure 1

This configuration will output True if the random number $R > .5$. If we swapped the inputs, then we would get the comparison $.5 > R$.