NI-DCPower Express

Configures and generates a signal using NI-DCPower with National Instruments power supplies and SMUs.

Channels

Select channel by highlighting. The channel configuration for selected channel is displayed.

Current Level

Specifies the current level for the output channel generation in amps. When the specified current level is reached, the power supply actively regulates the generated current.

Current Level Autorange

Specifies if the Current Level Range is to be discarded and determined based upon the Current Level provided instead.

Current Level Range

Specifies the range for the possible current levels on the output channel. Valid values depend on the device.

Current Limit

Specifies the maximum current limit achievable. Valid values for current limit are defined by the Current Limit Range and may be limited by the power source.

Current Limit Autorange

Specifies if the Current Limit Range is to be discarded and determined based upon the Current Limit provided instead.

Current Limit Range

Specifies the range for the possible current limits on the output channel. Valid values depend on the device.

Device

Contains the resource name of the device.

Enable/disable all outputs

Specifies whether all output channels are enabled or disabled.

Measurements

Displays the voltage and current measurements on a per channel basis.

Output Enabled

Specifies whether the output channel is enabled or disabled.

Output Function

Configures output function.

Post–execution delay (ms)

Specifies the amount of time to wait after the step executes.

Pre–execution delay (ms)

Specifies the amount of time to wait before the step executes. If you configure the step to start after another step, the delay represents the amount of time to wait after the step you specify in **Step to wait for** has started.

Start this step after

Makes the step wait until another step has started before executing. You can use this control to force an acquisition device to start after a generation device starts. You can make the step wait on any other hardware step in the project by selecting it in the ring control.
You can also use this control to ensure that a device generating a trigger signal starts after the device receiving the signal, which prevents sending the signal before the receiver is ready.

(default False)

Step to wait for

Lists the possible hardware steps for which this step can wait.
(default PreviousGenerationStep)

Voltage Level

Specifies the voltage level for the output channel generation in volts. When the specified voltage level is reached, the power supply actively regulates the generated voltage.

Voltage Level Autorange

Specifies if the Voltage Level Range is to be discarded and determined based upon the Voltage Level provided instead.

Voltage Level Range

Specifies the range for the possible voltage levels on the output channel. Valid values depend on the device.

Voltage Limit

Specifies the maximum voltage limit achievable. Valid values for voltage limit are defined by the Voltage Limit Range and may be limited by the power source.

Voltage Limit Autorange

Specifies if the Voltage Limit Range is to be discarded and determined based upon the Voltage Limit provided instead.

Voltage Limit Range

Specifies the range for the possible voltage limits on the output channel. Valid values depend on the device.