POWER TAP

Programation.io Power Tap

Status

OFF ● State ▭ ON ◉

System is ON

by Programation.io v1.0.0

Sequence Control

Sequence Lockout Durations

Off Duration (s) [60]   On Duration (s) [60]

Press and Hold Buttons

[OFF]   [ON]

Press and Hold Time (s) [3]

Trigger Buttons

[OFF]   [ON]

Reverse Off Sequence Direction ▭

Taps

	OFF		State	ON	
	Bypass	Delay		Bypass	Delay
Tap 1	▭	1.00	▭	▭	2.50
Tap 2	▭	1.00	▭	▭	2.50

Programation.io Power Tap

- Change Reset
- Change Set
- Change Trigger
- Tap 1 State
- Tap 2 State
- Tap 3 Off Reset
- Tap 3 On Set
- Trigger Off
- Trigger On

Programation.io

POWER TAP

aims to be a flexible sequencing utility; making it easy to recall control states, trigger events, and set power statuses for amplifiers, peripherals, and external devices.

The plugin features a configurable number of outputs, or "taps", that can be individually time sequenced. Each tap offers a trigger, a set boolean, and a reset boolean for both "On" and "Off" directions as well as a state boolean that sets or follows the state of the tap. A convenient bypass button allows that tap to be skipped during the sequence for the purpose of maintenance override.

The plugin's press-and-hold ON and OFF buttons offer a configurable press and hold time and are ideal for being placed directly on a UCI. The status readout provides clear indication on how long the button must remain pressed for and when the power sequence will be finished. The trigger ON and OFF buttons are ideal for chaining together other events that should happen without delay or activating Power Tap from GPIO inputs.

Last but not least, Power Tap features an option to reverse the Off sequence direction. When enabled, the sequence will begin at the last tap and work backwards. This allows systems that require a "mirrored" power up and down procedure to effortlessly make use of Power Tap.

Properties

Tap Count

an `integer` between 2 and `100` that defines the number of available taps

Status Off

indicates when the OFF sequence is active, or the plugin is in the OFF state

Status State

indicates whether the current state is ON (green) or OFF (blue)

Status On

indicates when the ON sequence is active, or the plugin is in the ON state

Status Message

a text display that shows user-friendly messages indicating the status of the action sequence or the system state. When a sequence button is being pressed, the message will indicate how many seconds the button should continue to be pressed before the action sequence will begin. The cycle time will also count down.

Off Duration

an integer knob that sets the number of seconds that the sequence buttons will remain locked after a power off event. This is useful for a "cool down" period for projectors to prevent them being turned back on too quickly.

On Duration

an integer knob that sets the number of seconds that the sequence buttons will remain locked after a power on event. This is used to prevent the system being turned off too soon to save wear on system components.

Press and Hold OFF

the main Off button of the plugin, this momentary button should be used with UCIs to start the power off sequence

Press and Hold ON

the main On button of the plugin, this momentary button should be used with UCIs to start the power on sequence

Controls

Press and Hold Time

an integer knob that sets the number of seconds that the Press and Hold ON and OFF buttons must be held in order to start their respective sequences

Trigger Off

a trigger button that immediately begins the power off sequence

Trigger On

a trigger button that immediately begins the power on sequence

Reverse Off Sequence

a boolean button that sets whether the power off sequence should start at the highest numbered tap and work backwards. Useful for shutting down a system in opposite direction than the power on sequence.

Change Trigger (Pin Only)

this pin sends a trigger pulse to connected controls any time the ON or OFF sequences are activated

Change Set (Pin Only)

this pin sets any connected boolean control to true any time the ON or OFF sequences are activated. Useful for setting mutes whenever the system power changes states.

Change Reset (Pin Only)

this pin resets any connected boolean control to false any time the ON or OFF sequences are activated. Useful for clearing bypass states whenever the system changes states.

Tap Off Bypass

toggles whether the Off actions of the tap should be activated. Bypass will have no effect on the delay of the tap or of the overall sequence timing.

Tap Off Delay

sets the time in seconds the plugin should wait before activating the Off actions for the given tap.

Tap Off Trigger (Pin Only)

> this pin sends a trigger pulse to connected controls

Tap Off Set (Pin Only)

> this pin sets any connected boolean control to true

Tap Off Reset (Pin Only)

> this pin resets any connected boolean control to false

Tap State

> a toggle button that shows whether the specific tap is On (green) or Off (blue). The state button can be manually changed at any time to test programming logic, regardless of the overall state. The State button can also be used to directly manipulate boolean power controls such as amplifier power buttons.

Tap On Bypass

> toggles whether the On actions of the tap should be activated. Bypass will have no effect on the delay of the tap or of the overall sequence timing.

Tap On Delay

> sets the time in seconds the plugin should wait before activating the On actions for the given tap.

Tap On Trigger (Pin Only)

> this pin sends a trigger pulse to connected controls

Tap On Set (Pin Only)

> this pin sets any connected boolean controls to true

Tap On Reset (Pin Only)

> this pin sets any connected boolean controls to false

CYCLE TIME

Once an action sequence is started, the Status Message will display whether the system is powering ON or OFF with a number in parentheses.   This indicates the number of seconds remaining in the "sequence lockout duration" or "cycle time". The cycle time begins after the last tap in the sequence has been activated. Therefore, the displayed number is a sum of the configured On or Off Sequence Lockout Duration plus the sum of all the tap delays.

Notes

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Original release