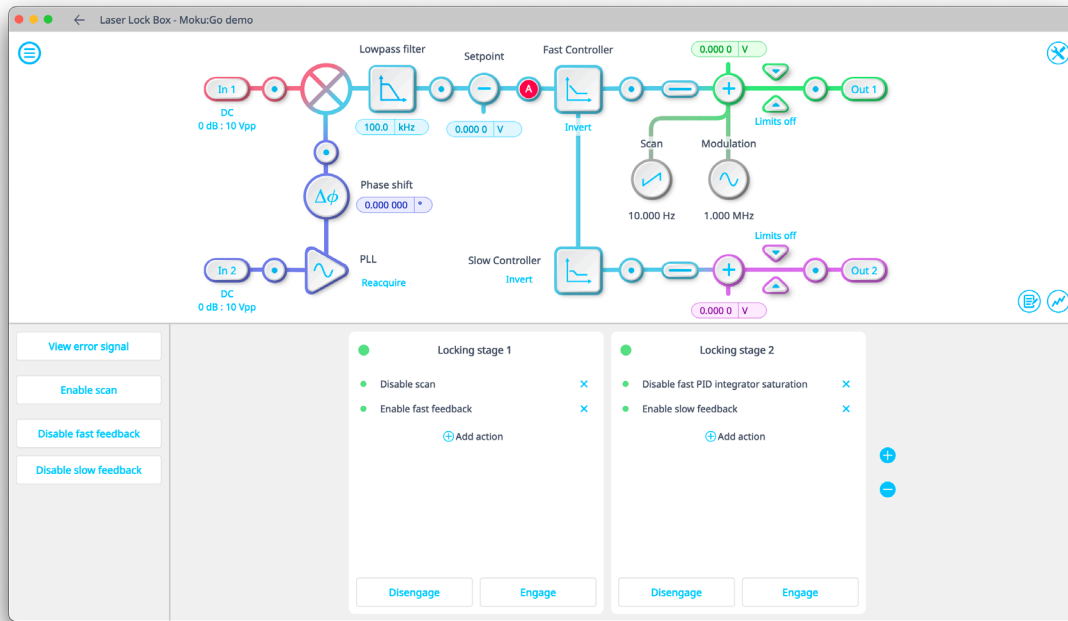




Laser Lock Box

The Moku:Go Laser Lock Box enables you to lock a laser's frequency to a reference cavity or atomic transition using high-performance modulation locking techniques. Use the "Lock Assist" feature to quickly lock to any zero-crossing on the demodulated error signal. Configure up to three locking stages to customize the lock procedure.



Demod. Frequency 1 mHz to 30 MHz	Scan Frequency Up to 10 MHz	Adjustable Filter 260.1 Hz to 3.516 MHz	DAC Resolution 12 bits	Built-in Controllers Dual PID	Integrated Oscilloscope 125 MSa/s
--	---------------------------------------	---	----------------------------------	---	---

Features

- Stabilize a laser's frequency to a reference cavity or atomic transition
- Virtually probe within signal processing chain with an integrated oscilloscope
- Quickly lock to any zero-crossing in the error signal with "Lock Assist"
- Individually configure high- and low-bandwidth PID Controllers for fast and slow feedback
- Implement custom filtering with the built-in IIR filter
- Quickly access the controls you need with a customizable control palette view

Specifications

- Local oscillator frequency: 1 mHz to 20 MHz
- Scan waveforms: positive ramp, negative ramp, triangle
- Scan frequency: 1 mHz to 10 MHz
- Infinite impulse response low-pass filter corner frequency: 260.1 Hz to 3.516 MHz (second or fourth order)
- Integrator crossover frequency: 312.5 mHz to 31.25 kHz, 988.2 mHz to 9.882 MHz (double integrator)
- External PLL frequency multiplier: 0.125x to 250x
- Ultrafast data acquisition: snapshot mode up to 125 MSa/s, continuous mode up to 1 MS/s

Applications

- Custom phase-locked loop
- Closed-loop control systems
- Pound-Drever-Hall technique
- Precision spectroscopy