

# Nautilus

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## quickstart guide



# Description

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**We're gonna need a bigger boat.**

Nautilus is a complex delay network inspired by sub-nautical communications and their interaction with the environment. In essence, Nautilus is a stereo delay consisting of 8 unique delay lines which can be connected and synced in interesting ways.

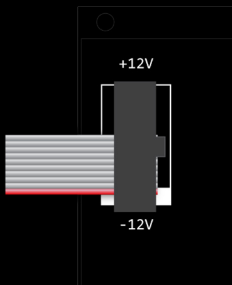
From the deep ocean trenches, to shimmering tropical reefs, Nautilus is the ultimate exploratory delay network.

- 8 codependent delay lines with up to 20 seconds of audio each.
- Ultra low noise floor.
- Fade, Doppler and Shimmer delay modes.
- Sonar configurable CV/Gate output.

## Module Installation

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1. Make sure there is appropriate space (14HP) and power (151mA) in your case.
2. Connect the ribbon cable to Nautilus (see right) and to your power supply, matching the red stripe indicators.
3. Power up your case and ensure your modules are properly powered and operating.

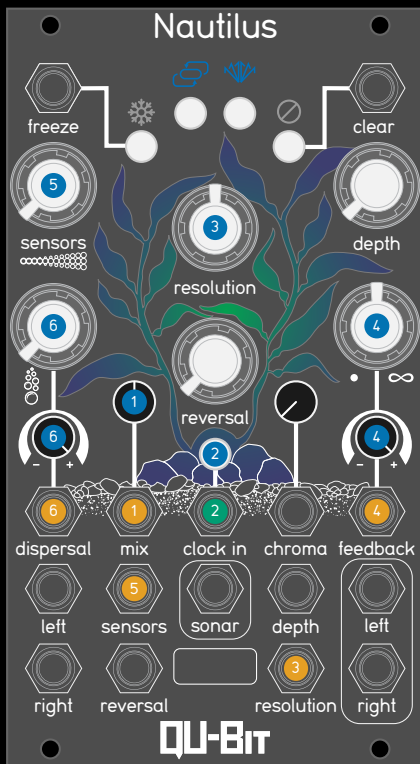


# Initial Knob Positions



\*These are the recommended initial knob positions, but who are we to pigeonhole you? It's your party, throw it how you want it!

# Front Panel



- Tactile Controls
- CV Inputs/Outputs
- Gate Inputs/Outputs
- Audio I/O

## 1 Mix

- Controls the balance between the dry and wet signal.
- Mix CV input. Range: -5V to +5V

## 2 Clock In Button

- Sets internal clock rate by using tap tempo. Use the gate input to sync Nautilus to an external clock.
- Clock In gate input. Threshold: 0.4V

## 3 Resolution

- Adjusts the delay line's div/mult of the internal or external clock. Range can go from multi-second delay times to comb territory.
- Resolution CV input. Range: -5V to +5V

## 4 Feedback

- Controls the feedback length of the delay line. Range is from 1 repeat to infinite repeats.
- Feedback Attenuverter. Can attenuate and invert the Feedback CV input, and is assignable to other CV inputs via the USB drive. Range: -5V to +5V
- Feedback CV input. Range: -5V to +5V

## 5 Sensors

- Adjusts the amount of delay lines used by Nautilus, with up to 4 total delay lines per channel (8 total).
- Sensors CV input. Range: -5V to +5V

## 6 Dispersal

- Adjusts the spacing between sensors. When one sensor is used, Dispersal fine tunes the spacing within the sensor's delay lines.
- Dispersal Attenuverter. Can attenuate and invert the Dispersal CV input, and is assignable to other CV inputs via the USB drive. Range: -5V to +5V
- Dispersal CV input. Range: -5V to +5V

# Front Panel



- Tactile Controls
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## 7 Reversal

- Adjusts the amount of delay lines that are reversed, from 0 lines to all lines.
- Reversal CV input. Range: -5V to +5V

## 8 Chroma

- Selects internal effects for each sensor's feedback path, emulating sound passing through various oceanic materials and digital interference via the Depth control.
- Chroma CV input. Range: -5V to +5V

## 9 Depth

- Controls the amount of the effect currently selected by Chroma. Knob range varies per effect.
- Depth CV input. Range: -5V to +5V

## 10 Freeze

- A Qu-Bit classic. Locks the delay lines based on the current clock rate.
- Freeze Gate input. Threshold: 0.4V

## 11 Delay Mode

- Cycles between 4 delay modes: Fade (**Blue**), Doppler (**Green**), Shimmer (**Orange**), and De-Shimmer (**Purple**). Additional details about each mode can be found in the manual.

## 12 Feedback Mode

- Changes the audio's signal path through the sensors to create textural, stereo effects. Cycles between: Single (**Blue**), Ping Pong (**Green**), Cascade (**Orange**), and Adrift (**Purple**). Additional details on each mode can be found in the manual.

## 13 Purge

- Clears all active audio in the delay lines.
- Purge Gate input. Threshold: 0.4V

# Front Panel



## 16 Audio Input Left

- Audio input for the left channel. Normals to both channels when no cable is present in Audio Input Right.  
Range: 10Vpp (AC-Coupled)

## 17 Audio Input Right

- Audio input for the right channel.  
Range: 10Vpp (AC-Coupled)

## 18 Audio Output Left

- Audio output for the left channel.  
Range: 10Vpp

## 19 Audio Output Right

- Audio output for the right channel.  
Range: 10Vpp



## 14 Sonar

- Configurable to be either a unique Gate or CV output generated by current Nautilus settings. Default output is Gate mode, and is configurable via the options.txt file on the USB drive.
- Gate Output: Gate signal generated by the delay lines. Gate length is configurable via the USB drive.
- CV Output: Modulation source generated via virtual topography scanned by Nautilus. CV mode is configurable via the USB drive.  
Range: 0V to +5V

## 15 USB Drive

- Used for firmware updates, alternate firmware, configurable settings, and more! See the manual for full details.

## Configurable Settings App

Gone is the text files of yore, Nautilus now takes advantage of a user-friendly web app to customize settings within the module. Assign new functions to the attenuverters, change shimmer pitch data, and much more. Once done, the app exports a file ready to be placed on the USB drive and update your module's settings.

Scan the QR code below to learn more:



Patch:







Patch:



Patch:



Patch:



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Being located in a small beach town, the ocean is a constant inspiration for us at Qu-Bit, and Nautilus is the modular personification of our love for the deep blue.

With every Nautilus purchase, we are donating a portion of the proceeds to the Surfrider Foundation, to help protect our coastal environment and its inhabitants. We hope you enjoy the mysteries uncovered by Nautilus just as we have, and that it continues to inspire your sonic journey.

Happy Patching,

The Qu-Fam

Learn More.



<https://qubitelectronix.com>