

ALRIGHT DEVICES
CHRONOBLOB2



USER MANUAL
VERSION 1.3



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DESCRIPTION

Chronoblob2 is a digital delay module!

Just like his little brother, Chronoblob2 can sync to a clock signal. Patch one into the SYNC input and choose a multiplier or divider for rhythmic delays. Or leave SYNC unpatched for access to continuously variable delay times!

Chronoblob2 offers four different delay modes! Dual delay mode provides two separate delays with shared controls. Ping-pong mode extends this intermingling even further by placing each delay in the feedback loop of the other.

Single delay is the classic Chronoblob mode with feedback SEND and RETURN. Patch in a lowpass filter for smooth, shadowy echoes, or get weird with a wavefolder or any other effect! Cascade delay mode expands on this archetype by also placing the second delay inside the feedback loop of the main delay, creating a wild multiplying echo effect.

Chronoblob2 provides control voltage inputs for TIME, FEEDBACK, and DRY/WET, and bipolar attenuators for each so you can dial in just the right amount of control.

In Dual and Ping-pong delay modes, although both delay times are controlled by the main TIME knob, you can voltage-control each independently with the two TIME CV inputs. The right TIME CV is normalled to the left one so you can easily control both with the same signal. Additionally, the left TIME CV is normalled to five volts, allowing you to use the attenuators as offsets from the position of the main TIME knob.

Also in these 'pink' modes, the right audio input is normalled to the left



input, and the right audio output is normally mixed into the left output (patching into the right jack breaks this connection).

Like the original Chronoblob, you can select the style of time modulation with the slide switch. Choose tape mode for sweeping pitchbend effects, or fade mode for smoother, cleaner changes.

Chronoblob2 offers an INFINITE LOOP button and gate input to shut off the delay inputs and lock the feedback at 100%.

SPECS

- Audio: 16-bit, 48 kHz
- Delay: 5ms to 2.73s
- Power: +12V: 80mA, -12V: 15mA
- Width: 12HP
- Depth: 30mm (including power connector)

QUICK REFERENCE

This reference card has been included with your Chronoblob2. If it becomes lost or damaged, you can print it again from this page.

CHRONOBLOB² QUICK REFERENCE



Dial in the dry/wet mix

Set the delay time or the SYNC multiplier/divider

Choose the delay mode:
 Dual delay ← Stereo!
 Ping-pong delay
 Single delay
 Cascade delay
 Mono with external feedback loop (P/S)

Bipolar attenuators for the CV inputs

Infinite loop gate input

AUDIO OUTPUTS.
 is the SEND output.
 is normally mixed into

Width: 12HP
 Depth: 30mm/1.18in
 Power: +12V: 80mA, -12V: 15mA

FULL MANUAL AT: alrightdevices.com 

Push the feedback up to and even past 100%

Shut off the input and lock the delay into an infinite loop

Choose the time modulation mode: tape-style pitch shifting or smooth fades

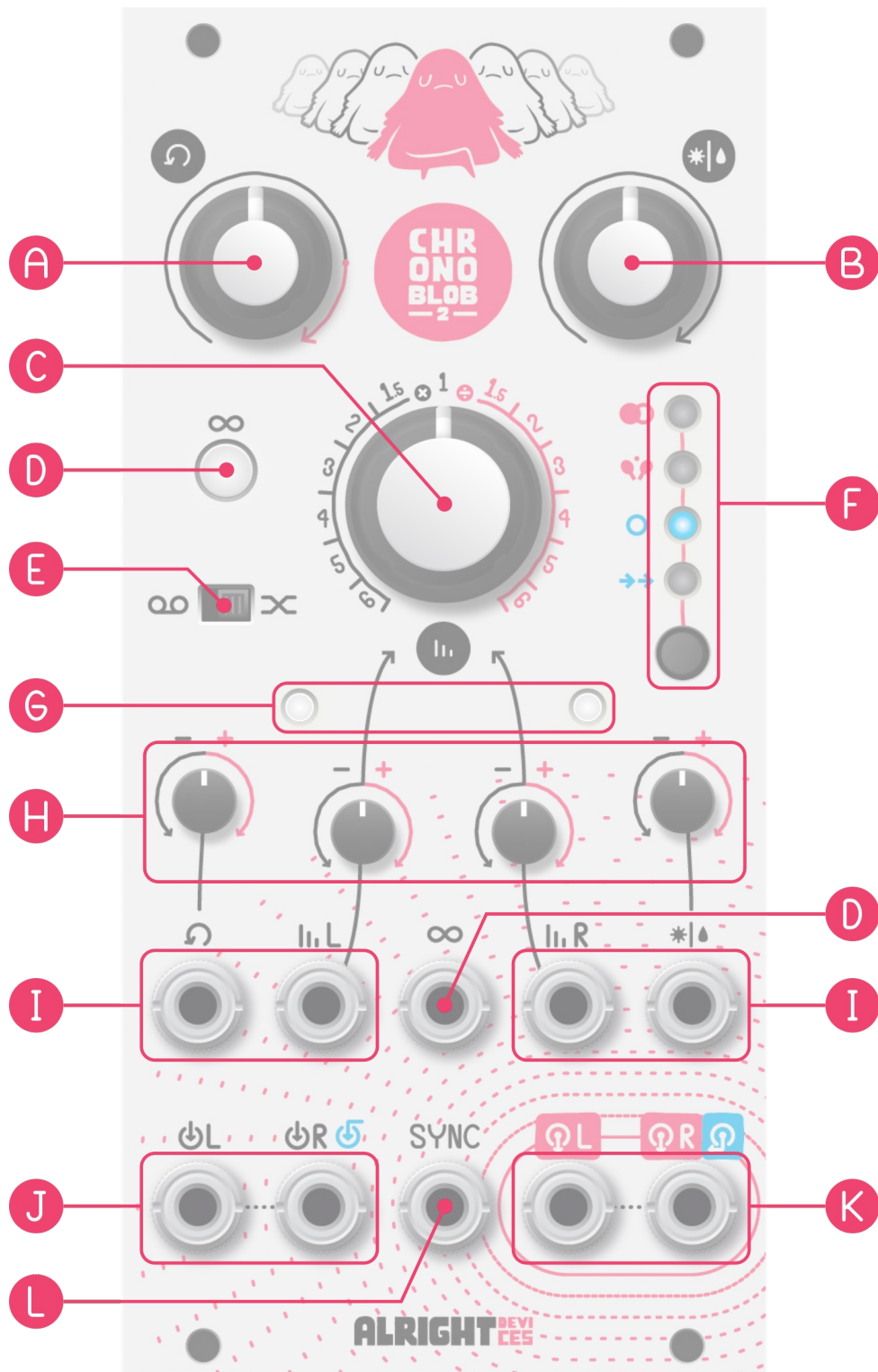
Flashes white in time with the delay and red when the input is overloaded

CV control of feedback, delay time, and dry/wet

AUDIO INPUTS:
 is the RETURN input.
 is normalled to

Sync the delay time to a clock

USER INTERFACE



A. FEEDBACK knob

This knob sets the level of the feedback signal sent back to the delay input. The pink section of the arc indicates levels above 100%. The maximum is 125%. Where the black and pink sections of the arc meet, there is a small range where the feedback level snaps to exactly 100%.

B. DRY/WET knob

This knob controls the output mix between the original (dry) and delayed (wet) signals for each delay. When it is turned fully to the left, only the dry signal is present. When it is turned fully to the right, only the wet signal is present. Otherwise, the dry and wet signals are mixed according to an equal-power curve.

C. TIME knob

If a clock signal is present at the SYNC input, this knob sets the delay time to a multiplication or division of the clock. Otherwise, this knob sweeps the delay time from 5 milliseconds up to 2.73 seconds.

D. INFINITE LOOP button and CV input

Press the button to activate the INFINITE LOOP. This shuts off the audio inputs and internally connects each delay's input directly to its output (or the other delay's output in PING-PONG mode), resulting in an infinitely repeating loop. The button lights up when INFINITE LOOP is activated. You can use the CV input to control INFINITE LOOP with a CV signal. When the signal is above 0.7 volts, INFINITE LOOP is activated.

Note: If a clock signal is present at the SYNC input, the module will wait for the next multiplied or actual edge from the clock before it activates INFINITE LOOP. The button lights up dimly while it is waiting.

Note: By default the button behaves like a toggle (press to turn on, press

again to turn off), but you can change it to a momentary button (press to turn on, release to turn off) in settings (see the SETTINGS section).

E. MODULATION MODE switch

This switch selects the style of delay time modulation. In TAPE mode, a change in delay time creates a pitch-shift effect as though the read head is physically moving along the tape. In FADE mode, the module quickly fades into the new delay time.

F. DELAY MODE button and indicators

Use this button to cycle through the four delay modes: DUAL, PING-PONG, SINGLE, and CASCADE. The current mode is indicated by a pink or blue LED. The audio inputs and outputs behave differently depending on the selected delay mode.

In the pink modes (DUAL and PING-PONG), the LEFT input and LEFT output correspond to the LEFT delay, and the RIGHT input and output correspond to the RIGHT delay. If nothing is connected to the RIGHT input, it is normally connected to whatever is connected to the LEFT input. If nothing is connected to the RIGHT output, then the LEFT output becomes a 50/50 mix of the LEFT and RIGHT outputs.

In the blue modes (SINGLE and CASCADE), the LEFT input is the main delay input and the LEFT output is the delay output. The RIGHT output and input act as SEND and RETURN in these modes, allowing you to patch an external effect into the delay's feedback loop. If nothing is connected to the RETURN input, it is normally connected directly to the SEND output.

G. Status Indicators

Each delay has a corresponding status LED, which blinks white at the delay rate and glows red when the input is overloaded (over 20Vpp). In DUAL and PING-PONG modes, they correspond to the left and right delays. In CASCADE mode, the left indicator corresponds to the outer delay; the right to the inner. In SINGLE mode, the indicators behave identically.

H. CV attenuverters

These knobs control how strongly the CV inputs affect the feedback amount, delay time, and dry/wet mix. If an attenuverter is in its center position, the corresponding CV will have no effect. As it is turned to the left, the CV has an increasing inverted effect (positive voltage reduces feedback, shortens delay time, or makes the mix more dry). Turned to the right, the CV has a noninverted effect (positive voltage increases feedback, lengthens delay time, or makes the mix more wet).

I. CV inputs

Connect CV signals to these inputs to modulate feedback amount, delay time, and dry/wet mix. You can scale the incoming CV signals by using the corresponding attenuverter.

Note: When nothing is connected to the left TIME CV input, it is normally connected to +5V. Similarly, when nothing is connected to the right TIME CV input, it is normally connected to the same source as the left (either an external CV signal or the aforementioned +5V). This allows you to use the attenuverters as offsets controlling the lengths of two delays separately without using external CV. In SINGLE delay mode, the right CV input has no effect.

J. Audio inputs

K. Audio outputs

These are the audio inputs and outputs. They behave differently depending on the selected delay mode. See (F) for details.

L. SYNC input

If a clock signal is present at this input, Chronoblob2 enters SYNC mode and the delay time will snap to multiplications/divisions of the clock according to the TIME controls. Chronoblob2 detects when something is connected to this input, so even if the clock stops, it will remain in SYNC mode until the patch cable is removed.

SETTINGS

You can access Chronoblob2's settings editor by holding the DELAY MODE button for a few seconds. The available settings are listed below. When you've finished, hold the DELAY MODE button again to save your settings and exit the editor.

INFINITE LOOP button behavior

You can select whether the INFINITE LOOP button acts like a toggle (press to turn on, press again to turn off) or a momentary button (press to turn on, release to turn off). The button displays the current selection. If it is illuminated, toggle is selected. Press the button to switch between the two options.

SYNC prescaler

You can select the factor by which the SYNC signal is divided/multiplied before it is again divided/multiplied by the TIME control. Simply turn the TIME knob to your desired divider or multiplier. The status and delay mode LEDs indicate (somewhat abstractly) the selected prescaler.

FIRMWARE UPDATE PROCEDURE

Firmware updates are provided in the form of a WAV format audio file. Here is the update procedure:

- Power up the module while holding both the LOOP button and the DELAY MODE button. The LOOP button should be lit dimly and all four DELAY MODE LEDs should be illuminated, which means the bootloader is ready. If the LOOP button is blinking, just give it a press to get back to the ready state.



- Connect the LEFT INPUT to whatever device you want to play the firmware audio file from. **WARNING:** the audio file is very loud and piercing so turn down or disconnect any headphones or speakers.
- Play the file. If you are playing it from a line-level output like a computer or phone, you will probably need to crank the volume up all the way. While the firmware is loading, all the LEDs will blink in a pattern. If they don't blink at all, turn the volume up and start over. If at any time during the process the two STATUS LEDs turn red and the LOOP button starts blinking, then there was an error. Press the LOOP button and start over. If that keeps happening, try turning the volume up.
- When the process is complete, the module will reboot itself.

FIRMWARE CHANGELOG

Version 2.0.3 - 01 July 2020 - [Download](#)

- Fix a bug causing audio glitches in SYNC mode.

Version 2.0.2

- Fix a bug causing the unit to get stuck in the settings UI display.
- Improve input compressor curve.

Version 2.0.1 - 28 July 2019 - [Download](#)

- Fix a bug causing audio glitches when an input is overloaded while in SYNC mode.

Version 2.0.0 - 26 November 2018

- Initial release.



SUPPORT

For news and info, visit alrightdevices.com and follow us on [Twitter](#), [Facebook](#), and [Instagram](#) For technical support or other questions, contact tyler@alrightdevices.com.