



# transparentSea

1.0.2

**transparentSea** is a stereo multi-effects pedal built around two independent delay lines, chorus, tremolo, saturation, reverb, a dual-mode filter, and a stutter looper. All effects can be controlled in real time via MIDI — both over TRS (DIN) and USB — and the device can also operate as a standalone MIDI controller.

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## QUICKSTART

Set the following knobs to get a clean starting point before exploring the effects:

| Knob         | Position    | Notes                                   |
|--------------|-------------|-----------------------------------------|
| Filter       | Centre      | Dead zone — no filtering active         |
| Resonance    | Fully left  | Minimum resonance                       |
| Mix          | Fully right | 100% wet                                |
| Input level  | Fully right | transparentSea expects line level input |
| Output level | Fully right | transparentSea outputs at line level    |

No gain is added by the device at input or output, so input and output fully right is the default setup.

## USB POWER NOISE

When powered from a laptop or USB hub you may notice a faint high-frequency background noise. This is a common side effect of USB power and affects most devices in this class. For the cleanest results use a mains USB adapter (such as a phone charger). We have compared the noise floor of transparentSea to devices from Roland, Korg, and Teenage Engineering and found it to be comparable or better in most cases.

## DELAYS

transparentSea has two independent stereo delay lines, each with its own time, feedback, level, and pan controls.

### ACTIVATING A DELAY

- Press the delay button to activate a channel.
- Press the button again to stop recording into the delay.  
The LED dims but the delay tail continues playing out.
- To stop the delay and clear its buffer, hold **Shift + Bypass** and press the delay button.

### TIME

- Maximum delay time is switchable between **short (2 seconds)** and **long (4 seconds)**. Hold Shift and turn the time knob to switch — the LED turns **pink** in short mode and **green** in long mode.
- Once a delay is synced to tap tempo or MIDI clock, the time knob selects a musical subdivision instead (see Clock Sync).

### FEEDBACK

The feedback knob behaves as normal, except when turned fully right — at maximum, the delay loops perfectly forever with no gain or loss.

### LEVEL

Sets the output volume of each delay line independently.

### PANNING

Hold **Shift** and turn the **level knob** to pan the delay output left or right.

### SPECIAL INPUT MODE

Hold **Shift** when pressing a delay button to put that channel into **special input mode**. The LED turns **bright orange-red**.

In special input mode, all other active delay channels take this channel's output as their input, allowing you to chain or cascade delays in creative ways. Multiple channels can be in special input mode simultaneously.

## CHORUS

Press the chorus button to enable. LED turns **red** when active.

| KNOB  | FUNCTION                           |
|-------|------------------------------------|
| Rate  | Speed of the LFO modulation        |
| Depth | How much the delay time fluctuates |
| Time  | Base delay time before modulation  |

## TREMOLO

Press the tremolo button to enable. LED turns **red** when active.

| KNOB  | FUNCTION                                                                                                                                                     |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rate  | Speed of the volume modulation                                                                                                                               |
| Depth | Intensity of the tremolo effect                                                                                                                              |
| Shape | <b>LFO waveform:</b> fully left = pure sine wave; <b>turning right</b> morphs towards a square wave via a smooth tanh curve with no clicks at zero crossings |

Tremolo supports tap tempo and MIDI clock sync — see **CLOCK SYNC**.

## HEAT

Heat is enabled automatically when the heat knob is turned above its minimum position.

The heat knob controls the amount of harmonic distortion added to the signal.

At low settings it adds subtle warmth; at higher settings it clips the signal more aggressively.

## REVERB

Reverb is enabled automatically when the reverb knob is turned above its minimum position.

The reverb knob controls the wet amount. For reverb mix behaviour in Studio Mode see Mix.

## FILTER

The filter is always active. The filter knob controls a dual-mode filter from a single knob:

- **Centre position:** no filtering (dead zone)
- **Turn left:** high-cut filter (removes high frequencies, makes the sound darker)
- **Turn right:** low-cut filter (removes low frequencies, makes the sound brighter)

The resonance knob adds emphasis at the filter cutoff frequency.  
At high settings it produces a pronounced peak or self-oscillation.

## STUTTER

Hold the stutter button to engage. The LED flashes **yellow** on each loop cycle.

The stutter knob controls the loop length. When synced to tap tempo or MIDI clock, the loop length snaps to musical subdivisions of a quarter note (see Clock Sync).

### REVERSE STUTTER

Hold **Shift** while holding the stutter button to play the loop in reverse.

## MIX

The mix knob has two modes, switchable on the fly.

### PERFORMANCE MODE (DEFAULT)

The mix knob controls the dry/wet ratio. When no effects are enabled, or only delays are active, the dry signal is preserved at full level so there are no unexpected silences when toggling effects on and off during performance.

### STUDIO MODE

Hold **Shift** while turning the mix knob to switch to Studio mode. In Studio mode, fully right is 100% wet signal with no dry bleed. If no effects are enabled, no signal passes through. This is useful when transparentSea is inserted into a parallel effects loop or when the dry/wet blend is handled by a mixer.

### REVERB IN STUDIO MODE

Even in Studio mode, the reverb defaults to a wet/dry blend to preserve naturalness. To get a true wet-only reverb tail in Studio mode, hold **Shift** and turn the reverb knob.

## BYPASS

Press the bypass button to bypass all effects and pass the dry signal directly.  
The LED turns **cyan** when bypass is engaged.

This is not a true analog bypass, all signal coming into the device is outputted digitally.

## CLOCK SYNC

Delays, tremolo, and stutter all support the same two tempo sync modes: tap tempo and MIDI clock sync. Both are set per-channel using the **Clock** button.

### MIDI CLOCK SYNC

Hold **Clock** and press an effect button to sync that channel to incoming MIDI clock. The clock LED flashes **purple** in time with the received clock.

To deactivate, hold **Clock** and press the same button again.

Holding **Clock** while a channel already has tap tempo active will deactivate tap tempo rather than immediately enabling MIDI sync — press again to enable sync.

### TAP TEMPO

Hold **Shift + Clock** and press an effect button to enable tap tempo on that channel. The first press arms it; each subsequent press taps in the beat. The clock LED flashes **pink** to confirm each tap.

To deactivate tap tempo, hold **Clock** (without Shift) and press the same button.

Tap tempo cannot be controlled via MIDI CC.

### SUBDIVISIONS

Once a channel is synced to tap tempo or MIDI clock, the time (or loop length) knob selects the musical subdivision: from whole notes down to 16th notes with dotted values in between.

## MIDI

### PORTS

transparentSea has both a **TRS MIDI port** (Type A) and a **USB MIDI port**.

- The TRS port functions as both MIDI input and MIDI thru/output. Any MIDI received on the input is forwarded to the output.
- The USB port connects directly to a computer or tablet as a class-compliant USB MIDI device — no drivers required on macOS, Windows, or iOS. The device appears as **transparentSea**.
- Both ports are active simultaneously. MIDI received on USB is forwarded to the TRS output so downstream hardware receives it.

[Learn about MIDI TRS connectors](#)

### CC CONTROL

All knobs and most buttons can be controlled via MIDI CC messages on **channel 5**. Tap tempo is a manual-only feature and has no CC assignment. For the full CC mapping see [midiCCMapping.txt](#).

## BOOT MODES

### MONO INPUT MODE

If you are using a mono input source and want stereo output, hold the **Shift** button while powering on. The bypass LED will glow **dim pink** (instead of dim white) to remind you that mono mode is active. This setting is saved and persists across power cycles.

To toggle it off, hold Shift at power-on again.

### MIDI CONTROLLER MODE

transparentSea can operate as a USB and TRS MIDI controller, sending CC messages for every knob and button.

To enter controller mode, hold the **Clock** button while powering on. The clock LED will pulse **blue** to confirm. Audio passes through dry. Power cycle to exit.

All knob positions are transmitted immediately on boot, then updates are sent whenever a value changes. See [midiCCMapping.txt](#) for the full outgoing CC map.

### FIRMWARE UPDATE MODE

Firmware updates are installed via USB using the daisy web updater — no drivers or software installation required.

Go to [gintronic.io/update](https://gintronic.io/update) for more details