JiGGERY·POKERY

Miranda CV Delay Merger v1.3

Produced and Designed by Matt Black
Coding by Pitchblende & Jiggery-Pokery

AVAILABLE IN THE propellerhead shop

www.jiggery-pokery.com

Re Rack Extension

Miranda CV Delay Merger

As advanced upgrades for the standard Reason CV Splitter/Merger, super-spiders *Miranda* and her sister *Lolth* serve to provide exceptional management and front panel control of CV split/merge routing.

Channels

Miranda features four channels that can be used either as separate four-in, one-out cv mergers, or as a super-merger for 16-in to one-out.

Each channel has a red LED for each input CV, and a green LED to indicate a merged output. The lamps will only light where there is an appropriate jack or striped input connected, and where a splits' own gain control is not zero.

Turning the **Stripe** switch to "On" will send the outputs of all four Channels to **Ch.4 Out**. For example, if you have **Ch.1 In** and **Ch.3 In** connected, **Stripe** will mirror Ch.1 to Ch.2 and Ch.3 to Ch.4. *Disconnect* the **Ch.3 In**, and Ch.1 will then also be striped to Ch.3. An additional yellow LED to the right of Channel 4 Input LEDs will light where there is at least one striped signal into Channel 4, as can be seen in the image above. The separate outputs of Channels 1, 2 and 3 are still available with **Stripe** on.

Master Gain

The **Master Gain** knob is an "up to" x2 multiplier to enable you to both set and control a global maximum signal level for all channels simultaneously, and also to boost certain types of CV input signals. The default setting is 1.0. For standard 0–127 CV inputs, like those received from *SubTractor*, you can leave this at default. However you'd likely increase it to x2.0 to boost -64–+64 inputs, such as those sent from a *Thor* synthesizer. Reducing **Master Gain** can help reduce LFO peaks for smoother sine or triangle modulations where the min/max appears to be "held": try using a value of 0.5 for a *SubT/Malstrom* LFO, or 1.0 for a Thor.

Merge Gain

Each merge input has its own **Merge Gain** controller which you can use to adjust the CV level of each input. Turn the control to the *left* of centre for an *inverted* signal, and the knob LED will turn white. Rotate to the *right* of centre for the standard *non*-inverted split, and the knob LED will light up green. The centre position is zero output and the knob LED will be unlit. The gain knobs for Channel 1 all default to maximum for "plug in and go" operation; the remaining channels default to zero.

Delay

The channels all have a delay control to shift the CV output of its four Merges back relative to its input. The default position of "Off", and turning clockwise increases the delay time.

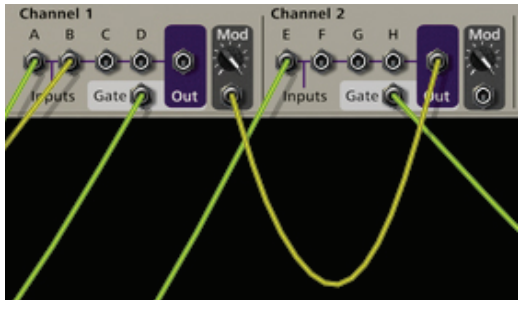
Those delay times range from a super-fast 1/128T (around 0.010 seconds at 135bpm and c.0.023 seconds at 60bpm) to 1/1 (one bar). To use millisecond delays instead of tempo synced delays, turn off the Tempo Sync switch on the back panel.

In terms of DSP use we've endeavoured to make *Miranda* as light as possible. Delay buffer sizes can be a major issue when working with Reason, and so to maintain that DSP efficiency, the delay has been set up to provide accurate delay lengths of up to a bar down to 30bpm, at a 96kHz sample rate. Below 30bpm the delay is still quite usable, but in some scenarios it be a tad unpredictable in terms of accurate syncing, especially at higher sample rates.

Modulation control

There are two different ways you can modulate each Channel. The first is via the grey **Mod CV In**. The **Merge Gain** level across all four merges in the Channel is modded by that Channel's **Mod CV In** amount. While each Mod input features a standard CV trimpot, a handy household hint is to connect the Mod input to a separate Channel first, and *then* into the required Mod input, and thus you can also adjust the amount of the modulation from the front of the device. In the example shown below, the Mod LFO CV is sent to Channel 2E first, then sent to modulate Channel 1 from **Channel 2 Out**. You can then use the **Merge E Gain** control to set or change the modulation amount. Take it even further and connect an LFO to **Ch.2 Mod CV In** to modulate the modulation amount!

Gate/Envelope control



The second useful way to control output and modulation is via the white **Gate CV In**. Here you can connect either a gate—or an envelope for gate+level control—to trigger the Channel output only when it receives an On event. Remember that if you are using a *Thor* envelope CV, you'll likely need to increase the **Master Gain** for best results. As with the Mod CV hint above, you can also use a separate Channel to adjust envelope-to-level amount. **Mod CV In** can be used at the same time as **Gate CV In**. In the example here, you can connect separate gates to Chs.1 and 2 to independently trigger the output and its' Mod.

Everything Automation™!

All parameters can be automated and Remote over-ridden. Note that automating **Delays** or changing Reasons' master tempo may cause undesirable stutters. Turn the **Master Gain**, for all merges, or the appropriate **Merge Gain** to zero during such events.

Final point

Even using both **Mod** and **Gate** modulation inputs together you should easily achieve predictable and consistent results, but again bare in mind sometimes you will need to increase the Master Gain to improve that output level: this may however mean you will need to manually reduce any *non-modding* **Merge Gain** controls to compensate.

New in v1.3: Type-able channel labels

The printed Channel labels have been removed and you can now click the text to write in a new label to help with organising your splits. The text labels will be the same on the front and the back, so typing into either view will change both, although note that the label display widths of Channels 3 and 4 on the back panel are truncated. The displayed font in Windows and OSX is slightly different: depending on your anti-alias settings, ALL CAPS labels are recommended.

Text display in Windows 7

Text display in OS X 10.7

Version history

1.3.0

- **Added user-type channel labels**
- **Added millisecond delay option**

1.0.0

- **Initial release**

From the maker of ...

Rack Extensions

- **Ammo 400R Modulation Oscillators** - 4-channel LFO generator with audio output, featuring 136 waveforms and advanced modulation mixing
- **Ammo 1200BR Modulation Synthesizer** - Advanced 4-channel LFO generator and audio synthesizer adds S&H, Comparator and Electro-Switch
- **Anansi Mid/Side Mastering Router** - Mid/side audio router with mono compatibility check, 3-in merger and 3-out splitter
- **Charlotte Envelope Generator** - 9-stage EG with time, level, curve and velocity control per stage, and a priority-selectable MIDI-to-cv-pitch splitter
- **Itsy Stereo/Phase Inverter** - L/R channel flip, cv-controllable 180˚ stereo inverting width adjust, stereo phase inverters and phase correlation metering
- **Lolth CV Delay Splitter** - 4x4 channel cv splitter with independently adjustable gain and inversion controls, channel delay, and mirroring
- **Miranda CV Delay Merger** - 4x4 channel cv merger with independently adjustable gain and inversion controls, channel delay, and mirroring
- **Mordred Audio Bypass Merger** - 4 x 5 channel stereo audio merger with independently switchable outputs and autofade control
- **Shelob Audio Bypass Splitter** - 4 x 5 channel stereo audio splitter with independently switchable outputs, mirroring, and autofade control

ReFills

- **Guitars vol.1+2: Stratocaster & Telecaster** - Multi-sampled guitars with slides, mutes, signature L6 effects and keyswitching
- **Elements²: Vector Synthesis Workstation** - Korg Wavestation/MS2000, Waldorf Blofeld and Roland SC-8850
- **Additions: Vintage Additive Synthesizers** - DK Synergy + Kawai K5m + Thor FM.
- **Blue Meanie: Virtually an ARP2600** - Thor and Kong-based analogue synth machine
- **Kings of Kong Classic Drum Machines*** - the premier ReFill for Reason 5+, with over 50 classic beatboxes for Kong Drum Designer
- **Retro Organs v2**- Hammond B3 + Farfisa Combo Compact + Vox Continental in one brilliant ReFill. Also available for Reason Essentials
- **B3 Tonewheels v1.5** - the original 24-bit non-Leslie samples ReFill with advanced rotary speaker emulation
- **Farfisa Combo Compact Deluxe v1.5** - the complete set of original 24-bit Farfisa samples covering, both standard and Deluxe models
- **Vox Continental v1.5** - a complete set of original samples from the classic C300 organ, featuring original and extended Continental footages
- **Hammond Novachord*** - the near-antique pre-WW2 monster polyphonic valve synthesizer
- **Retrospective: 40 years of Synthesizer History*** - Over 1Gb of vintage samples from synths and electronic keyboards from the Hollow Sun archive

FreeFills

- **Additives** - demo version of Additions: the fantastic Additives tracks from PUF Challenge #2 can be found at **http://soundcloud.com/groups/additives**
- **8-BIT Magic**: The ZX Spectrum ReFill
- **Classic Drum Machine Collection v1.1**
- **Eminent 310 Strings** v3** - the classic Jarre string sound, with stereo samples plus the Oxygene II / Equinoxe 4 pizzicato lead
- **Harpe Laser**** - the famous Laser Harp sound, the Elka Synthex preset 46 "Ring Mod"
- **Moog Taurus Bass Synthesizer** v1.1**

For more information on these products and for direct downloads of these latest versions, plus a wide range of great Combinator skins, please visit **www.jiggery-pokery.com**

* Includes samples licensed from HollowSun.com
** demo ReFills for Retrospective