

IN LIMBO III - MULTI TAP MANUAL

80TAPE FX

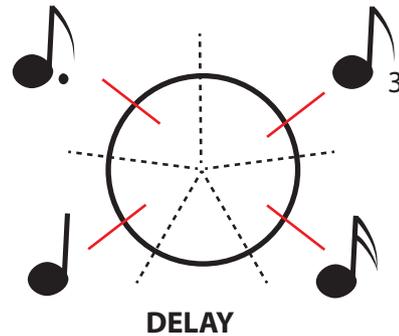
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POWER SUPPLY NOTES:

Voltage: 9V DC (negative tip - standard Boss style 2.1mm connector)
Typical current draw: 150mA (recommended 200mA and above rated power supply)
CV Input range: 0 to +5V
EXT tap: Active LOW (Expects to be pulled to GND)
Where possible avoid daisy chaining this unit to avoid interference.

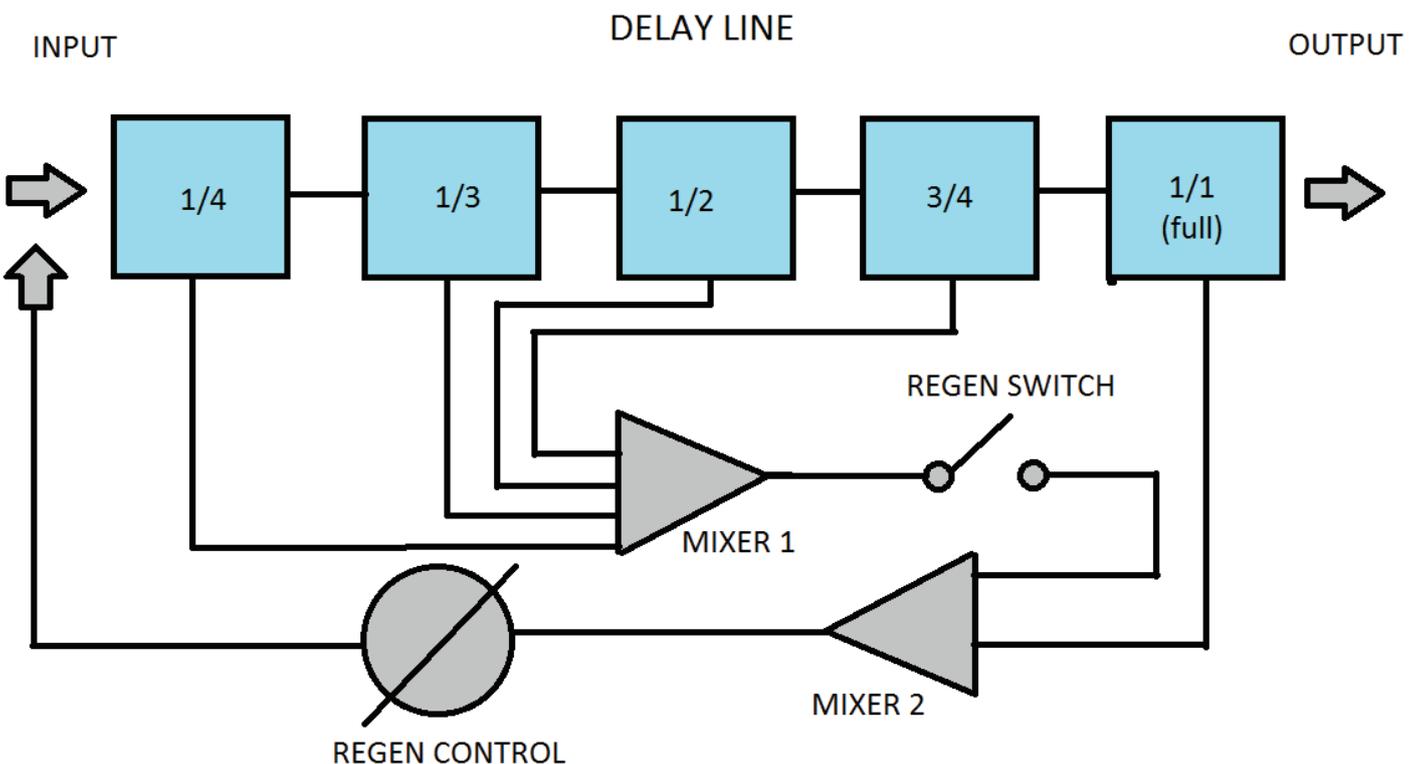
Changing subdivision:

Hold the tap tempo switch for one second then turn the DELAY control a quarter turn in any direction. Next, move the dial to the desired subdivision as shown on the right release the tap tempo button when in place to set. The setting will be saved and recalled for next use.



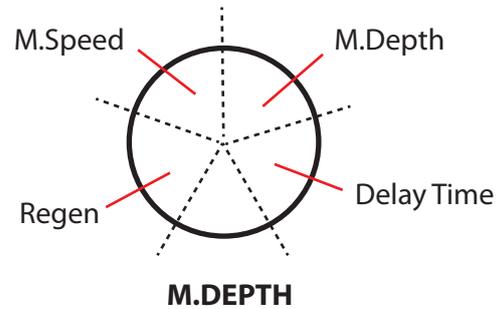
Multi Tap Switches:

This unit has two multi tap toggle switches with 1/3, 2/3, 3/4 and 1/2 settings. Both of these switches have a centre off position to enable a standard delay setup. The full output (1/1) tap can also be switched on or off, to allow shorter delay times. Multi taps have their own separate regeneration path which can be switched on or off. Take care when using this at high regeneration settings as the more you add in to the regeneration path the sooner it will self oscillate. See the below simplified signal path.



Setting the expression mode:

Hold the tap tempo switch for one second then turn the M.Depth control a quarter turn in any direction. Next, move the dial to the desired mode as shown on the right release the tap tempo button when in place to set. Hint: As there are no guides it can be easy to select the wrong mode, sometimes it may take a couple of attempts. Aim for the centre solid line to ensure the correct setting is selected.

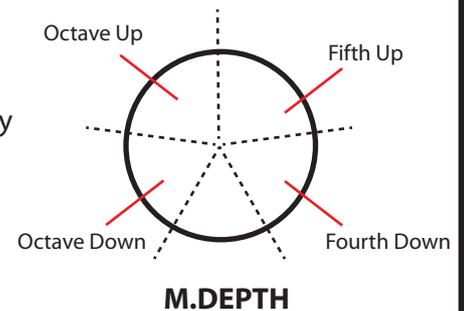


ARP Mode:

Arp mode is an experimental modulation mode where repeats are pitch shifted by an LFO. In this mode the delay time automates to get the desired pitch shift. For example, say you set the delay time to 500ms, if the octave up mode is selected then the delay time will alter between 500ms and 250ms. What happens is when the delay time shifts to 250ms all audio that was recorded while set at 500ms gets played back twice as fast and so comes out an octave up. After a period of time the delay will shift back to 500ms and so when this happens all audio will come out as an octave down. Adjusting the modulation depth control will select the pitch shift (shown below), while setting the modulation speed adjust the frequency of the shifts (how often they occur) - this is all synced to the tap tempo, adjusting the delay set the base delay time.

ARP Mode Settings:

The M.DEPTH selects which pitch shift setting is used as shown to the right. ARP mode is synced to the tempo, so either the tap tempo or manual delay time control can be used to control it's frequency. To give further tweakability the M.SPEED control acts as a tempo multiplier to give 4x, 3x, 2x and 1x the tempo speed (in clockwise direction, quarter turns).



Setting the regen swell amount:

Hold the tap tempo and then turn the Regen control to the desired position (hint - play a note to see how it currently sounds). Once at the desired position release the tap tempo and the setting will be saved.

To test, Dial the Regen control back a little and then hold the tap tempo button again. Automatically the Regen control is transitioned to the saved setting, once the tap is released it will return to normal. The transition takes about 500ms to ramp up.

Low Noise:

All analog delays exhibit noise at longer delay times. Here's some hints to reduce it:

- Avoid setting the tone control higher than 12 O'Clock. The lower the tone control is set the better the S/N.
- Use as much of the headroom as possible. Avoid sending signals less than unity gain (unless you have very hot pickups).
- Brighter input signals will have a better S/N. (You can always filter on the amp side.)