polydactyl versio

_travelers guide
_for fine tuning your hyperdrive

3 bands	2 knobs per band	7 knobs · 2 switches · fsu

[fsu] press [fsu] hold › then noon = 12 o'clock numbers = the numbered panel

three-band stereo dynamics + saturation · limiter + noise gate · a free firmware for any versio

← back to the versio starsystem

yellow = hold

01 what it is

pv_01

a dynamics box	stereo three-band dynamics and saturation · a limiter and a noise gate
use it on	one sound for big timbre changes, or a mix for gentle glue
in 1 in 2	stereo in · in 1 alone feeds both sides
out 1 out 2	stereo out
every knob	an offset added to its cv jack, 0 – 5 V
swap in	free on any versio · how to swap · video

02 three bands

pv_02 · abc · fig.01

low · mid · high	the sound is split three ways, each band processed alone, then summed
abc	sets where the splits fall · fig.01
each band	one ceiling knob and one room knob

03 ceiling

pv_03 · knobs 1 · 3 · 5

1 [low]	more level into the low band's dynamics
3 [mid]	the same for the mids
5 [high]	the same for the highs
turn it up	harder limiting · use ceiling to shift the balance of the bands

04 room

pv_04 · knobs 2 · 4 · 6 · fig.02

2 [low]	low band dynamics
4 [mid]	mid band dynamics
6 [high]	high band dynamics
left of noon	expand · bigger gaps between loud and quiet
right of noon	compress · loud and quiet pulled together

__fig.01 : the splits

abc picks one of three

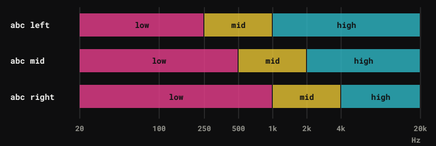


__fig.02 : room

knobs 2 · 4 · 6, one per band



05 saturation

pv_05 · knob 7

7 [saturation]	drive on each band and on the summed mix
fully left	off · start here
turning up	subtle warmth, then heavy distortion

__fig.06 : what the LEDs say

meters while running



__fig.05 : signal path

as the manual describes it



7 sat also drives each band · fsu maxes all dynamics

06 switches

pv_06 · abc · xyz · fig.04

abc left	[250/1k] low under 250 Hz · mid to 1 kHz · high above
abc mid	[500/2k] low under 500 Hz · mid to 2 kHz · high above
abc right	[1k/4k] low under 1 kHz · mid to 4 kHz · high above
xyz left	[none] noise gate off
xyz mid	[some] light gating
xyz right	[max] heavy gating

__fig.04 : the gate

xyz · none · some · max



the noise between hits, which heavy compression lifts

10 first flight

pv_10 · the manual's first patch

1. one sound into in 1 · out 1 out 2 to your mixer
2. all ceilings 1 3 5 and rooms 2 4 6 at noon · 7 [saturation] fully left
3. room for dynamics, ceiling for the balance between bands
4. raise saturation for colour
5. noise creeping up? xyz some or max
6. hold [fsu] to squish

08 five patches

pv_08 · from the manual · abc · xyz

one drum — any · none
kick or snare into in 1 · ceilings and rooms at noon, saturation fully left · then room for dynamics, ceiling for balance

end of chain — any · none
mix into in 1 + in 2 · start centred with no saturation, then season gently

moving accents
a sequencer or other cv into mid room for accents and shifting timbre

squish
hold fsu, or gate its jack, for everything at maximum

clean it up — · some / max
when heavy compression lifts the noise, bring in the gate

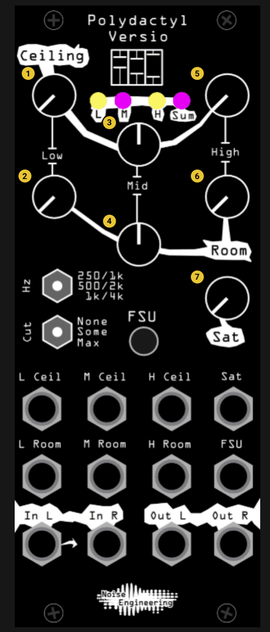
07 fsu · LEDs

pv_07 · fig.06

[fsu]	maxes every dynamics control
[fsu]	hold it to squish the sound hard
fsu jack	a high gate does the same · above 2 V
LEDs	l · m · h show each band's output, sum the whole output
boot	yellow · magenta · yellow · magenta = polydactyl is loaded

__fig.03 : the panel

numbers match the legend



1 low ceiling · level into low
2 low room · expand ← · → compress
3 mid ceiling · level into mid
4 mid room · expand ← · → compress
5 high ceiling · level into high
6 high room · expand ← · → compress
7 saturation · off ← · → heavy
abc crossovers · 250/1k · 500/2k · 1k/4k
xyz gate · none · some · max
fsu squish · max all · gate jack
in in 1 / 2 · in 1 feeds both if alone
out out 1 / 2 · stereo out

09 specs

pv_09

cv in	0 – 5 V
fsu gate	above 2 V
audio in	clips near 16 V peak to peak
size	10 hp · 1.5 in deep
power	version a 70 mA +12 V · 70 mA –12 V · version b 125 mA · 10 mA · no 5 V