marimba legio

_travelers guide
_for playing the asteroid belt

2	3	6
switches · 3 ways	cv inputs	hp

[pitch] press [pitch] hold › then noon = 12 o'clock tags = the panel drawing

physical modelling · a resonant bar as a bank of tuned modal resonators · struck, bowed or played

← back to the legio starsystem

= hold

01 what it is

ma_01

modal	tuned resonators that ring like a bar
materials	tube, metal, wood
excite	strike or bow it with outside audio
in L R	excite · audio in · L feeds R if alone
out L R	stereo out, up to 16 V peak to peak
platform	a legio firmware · other firmwares

02 pitch

ma_02 · enc

[enc] turn	fine tune
[enc] press + turn	coarse tune
enc jack	pitch jack · –2 to +5 V

10 first flight

ma_10 · the manual's tutorial

1. a pitch sequence into enc
2. triggers into trig
3. 1 + 2 at noon
4. try each s1 across octaves
5. unpatch · audio into excite · ext vs bow

03 decay · tone

ma_03 · knobs 1 + 2

1 [decay]	how long it rings
2 [tone]	strike · soft and round → hard and bright

04 type · mode

ma_04 · s1 · s2 · top → bottom

s1 type	tube · metal · wood · each likes a different register
s2 ext	audio strikes the resonator
s2 bow	audio bows the resonator
s2 hit	outside audio passes by · the trigger plays the voice

__fig.01 : signal path

in → out



as the manual describes it

05 jacks

ma_05 · trig · cv · audio

trig hit	trigger for the internal voice · near +1.6 V
in excite L R	audio in · L feeds R
out L R	up to 16 V peak to peak
cv	pitch –2 to +5 V · decay + tone 0 – 5 V

__fig.02 : ring out

decay knob



08 patch ideas

ma_08 · the manual

mallets — any · hit
pitch + triggers, decay and tone at noon

bowed drone — bow
a sustained sound into excite

struck loop — ext
a drum loop into excite strikes the bar

__fig.03 : the panel

numbers match the legend



- enc **pitch** · fine tune
- 1 **decay** · how long it rings
- 2 **tone** · strike
- s1 **type** · tube · metal · wood
- s2 **mode** · ext · bow · hit
- trig **hit** · trigger for the internal voice
- cv **pitch** · **1** · **2** · pitch –2…+5 V · others …
- in **excite L / R** · L feeds R if alone
- out **out L / R** · stereo out

09 specs

ma_09

size	6 hp · 1.5 in deep
power	140 mA +12 V · 22 mA –12 V
cv in	0 – 5 V · pitch –2 to +5 V
trig	rising edge near +1.6 V
boot LEDs	magenta / green

design homage to the house of x / powers of x data pages — designed by tom muller with jonathan hickman · panel drawing after the noise engineering legio overlay template
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