MB-1

AGGRESSIVE MONOPHONIC VIRTUAL ANALOG · M-VAVE FM-1

CHEAT SHEET · 0.20.0

CONTROLS

K1–K4	the four parameters on screen; turn fast for big steps
SECTION BUTTONS	HOME, SEL, ENV, LFO, EDIT, GLO, FX: a section of the patch, its first page; again, its next page; **held**, back to the first
SELECT	steps through every page
PRESET	the slot, A01–D32 (4 banks of 32); turning it loads the slot
ALGO	the mod wheel (CC 1); where it goes: EDIT › CONTROLS › WHEEL TO
OCT– / OCT+	the keyboard, –3 to +3 octaves (A0–C8 and more)
KEYS	velocity; press harder for aftertouch

SHORTCUTS

HOME HOME HOME	**RANDOM**: a new random patch (three presses within 0.4 s); SAVE keeps it
SAVE	the save screen: **K1** moves along the name, **K2** changes the letter, **PRESET** picks the slot
SAVE AGAIN	stores it there; any other button cancels
SAVE SAVE	stores the patch in its own slot
ARP	OFF → ON → HOLD; **held**: its pages ARP and ARP 2
SEQ	the sequencer's page
PLAY	the sequencer: start from step 1 / stop
SEQ HELD + PLAY	tap tempo, on the beat
REC (STOPPED)	step entry: a key writes a step; **FX** a rest; key held + **FX** a tie; REC ends
REC (PLAYING)	records in time, to the nearest step; REC ends
REC HELD	clears the pattern

THE SCREEN

A01 NAME *	the slot and name; * changed since saved
CPU / PEAK	audio load now / most since power-on
XRUN	missed blocks (clicks)
2C / 1C	effects on the second core / on the first

THE PAGES

	PAGE	K1	K2	K3	K4
HOME	**FILTER**	CUTOFF	RESO	BRUTE	LEVEL
	FILTER 2	MODE	ENV AMT	KBD TRK	
SEL	**SAW**	SAW	ULTRASAW	US RATE	
	SQUARE	SQUARE	PW	PW ENV	
	TRI	TRI	METAL	MTL ENV	
	SUB	SUB	SUB WAVE	SUB OCT	NOISE
ENV	**FILT ENV**	ATTACK	DECAY	SUSTAIN	RELEASE
	AMP ENV	ATTACK	DECAY	SUSTAIN	RELEASE
	VELOCITY	ENV VEL	AMP VEL		
LFO	**LFO**	RATE	WAVE	LFO RTRG	
	LFO AMT	PITCH	FILTER	PWM/MTL	AMP
	VIBRATO	VIB RATE	VIB TYPE		
EDIT	**PLAY**	PLAY	GLIDE	BEND	VINTAGE
	CONTROLS	WHEEL TO	WHL AMT	AT VIB	AT CUT
GLO	**GLOBAL**	TEMPO	HOLD ORD	LFO CLK	
FX	**DIST**	TYPE	DRIVE	TONE	MIX
	CHORUS	RATE	DEPTH	STEREO	MIX
	DELAY	TIME	FEEDBACK	TONE	MIX
	DELAY 2	DLY SYNC	DLY MODE		
	REVERB	DECAY	SIZE	DAMP	MIX
	REVERB 2	PRE-DLY	FX ORDER		
	COMP	THRESH	RATIO	ATTACK	RELEASE
ARP	**ARP**	MODE	OCTAVE	STEP	SWING
	ARP 2 HELD	ARP	TEMPO	HOLD ORD	
SEQ	**SEQ**	PATTERN	LENGTH	STEP	SWING

GLO holds the instrument's settings (one tempo for every patch); everything else is saved with the patch.

MB-1

MIDI · ARPEGGIATOR · SEQUENCER · PATCHES

CHEAT SHEET · 0.20.0

MIDI CC

FILTER	74 CUTOFF	71 RESO	20 BRUTE	7 LEVEL
FILTER 2	21 ENV AMT	22 MODE	23 KBD TRK	
SAW	26 SAW	31 ULTRASAW	96 US RATE	
SQUARE	27 SQUARE	75 PW	99 PW ENV	
TRI	28 TRI	76 METAL	100 MTL ENV	
SUB	29 SUB	30 NOISE	94 SUB OCT	95 SUB WAVE
FILT ENV	77 ATTACK	78 DECAY	79 SUSTAIN	80 RELEASE
AMP ENV	73 ATTACK	81 DECAY	82 SUSTAIN	72 RELEASE
VELOCITY	24 ENV VEL	25 AMP VEL		
LFO	83 RATE	84 WAVE	104 LFO RTRG	
LFO AMT	85 PITCH	86 FILTER	87 PWM/MTL	88 AMP
VIBRATO	89 VIB RATE	90 VIB TYPE		
PLAY	5 GLIDE	91 VINTAGE	102 PLAY	103 BEND
CONTROLS	92 WHEEL TO	93 WHL AMT	97 AT VIB	98 AT CUT
DIST	16 TYPE	17 DRIVE	18 TONE	19 MIX
CHORUS	52 RATE	53 DEPTH	54 STEREO	55 MIX
DELAY	110 TIME	111 FEEDBACK	112 TONE	113 MIX
DELAY 2	114 DLY SYNC	115 DLY MODE		
REVERB	116 DECAY	117 SIZE	118 DAMP	119 MIX
REVERB 2	14 PRE-DLY	15 FX ORDER		
COMP	56 THRESH	57 RATIO	58 ATTACK	59 RELEASE
ARP	106 MODE	107 OCTAVE	108 STEP	109 SWING
ARP 2	105 ARP			

USB, Bluetooth and TRS, any channel. Also: notes, pitch bend (PLAY › BEND), CC 1 mod wheel, aftertouch, CC 120/123 all notes off, MIDI clock (arpeggiator, sequencer, synced LFO and delay). Choices take the CC range in equal parts.

ARPEGGIATOR

ARP	OFF → ON (while keys are held) → HOLD (keeps the last chord)
MODE	UP, DOWN, UP/DOWN, RANDOM · 1–4 octaves · 1/4–1/16T · swing 50–75 %
HOLD ORD	PLAYED: in the order pressed, up to 16 · PITCH: low to high
TEMPO	30–260 BPM, tap (SEQ held + PLAY), or MIDI clock

SEQUENCER

SIZE	64 steps × 8 patterns: note + velocity, rest or tie
PLAY	PLAY starts / stops; the keys play over it; the arpeggiator rests
RECORD	REC stopped: step by step · REC playing: in time · REC held: cleared

FACTORY BANK A

A01 HALCYON	A09 CHORALE	A17 SCALPEL	A25 DARKEY
A02 TRENCH	A10 NIGHTFOG	A18 RAIDER	A26 CLAV8B
A03 NEBULA	A11 UNISUB	A19 TINKEYS	A27 HARDSI
A04 SKYDRIFT	A12 LOWRIDER	A20 ORIGIN	A28 SMPELHLD
A05 SMUDGE	A13 GRITHARM	A21 PLUCKY	A29 LINKLD
A06 RAWSAW	A14 MORPHER	A22 SHOCKWAV	A30 SCELLO
A07 STABBER	A15 QUINTAIR	A23 STARSHIP	A31 MOODKEYS
A08 BITBASS	A16 GLASSY	A24 SKWEESH	A32 VIBROPAD

Banks B–D start as INIT. The patch editor's **Factory bank A** puts these back (B–D stay).

PATCH EDITOR READS, EDITS AND STORES ALL 128 SLOTS · KEEPS BANKS AS .SYX · READS PATCH SHEETS

SOURCE GITHUB.COM/LEONARDOLOPEZCHAVIRA/MINIBRUTE-FM1

MB-1 ON THE SMK-37 PRO · THE PANEL · THE PIANO ROLL

THE PANEL (KNOB BANK LIT)

	K1	K2	K3	K4
KNOBS	ULTRASAW	METALIZER	BRUTE	CUTOFF
	K5 RESO	**K6** ENV AMT	**K7** DEC/REL	**K8** LFO RATE
FADER A	SAW	SQUARE	TRIANGLE	SUB
B	F ATTACK	F DECAY	F SUSTAIN	F RELEASE
C	A ATTACK	A DECAY	A SUSTAIN	A RELEASE
D	NOISE	DIST	DELAY	REVERB

DEC/REL: the amp's and the filter's decay and release together. A fader takes over once it reaches the value (UP TO / DOWN TO until then).

CONTROLS

KNOB BANK	the knobs as on the FM-1: K1 volume, K2 SELECT, K3 ALGO, K4 PRESET, K5–K8 the page's four
FADER BANK	the faders' bank, A–D (lit past A)
< >	the patch before, the next
KEYS	37 with velocity, C3–C6; OCTAVE −/+ three octaves either way
WHEELS · PEDAL	pitch bend · mod wheel · sustain
BUTTONS	PATCH = HOME (×3: RANDOM) · SCALE = SEL · CHORD = ENV · NOTE REPEAT = LFO · PARA = EDIT · GLOBE = GLO · BT = SAVE · SEQ PLAY = PLAY · SEQ REC = REC
VOLUME	VOL at the foot; 50 % at power-on; MB-1 starts on A01

SEQUENCER ON THE PADS

PLAYING	the pads show its steps, 16 at a time: playing orange, notes white, ties dim orange
SEQ AGAIN	the piano roll: the pattern by pitch, rows as a keyboard's, each C named
PADS	pick a step (REC armed, stopped: the next key, FX or FX + key goes there)
< >	steps 1–16, 17–32, 33–48, 49–64
K5 · K6	the step's note (a rest becomes a note) · its velocity
K7 · K8	which step · NOTE / TIE / REST
FX	deletes the step
HOME	back



