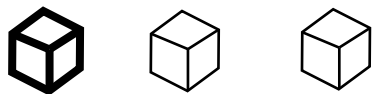
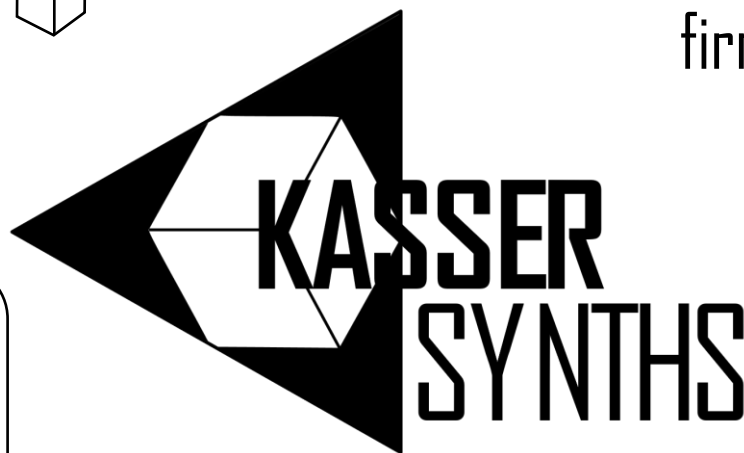


dafm synth genesis ym2612 and ym3438



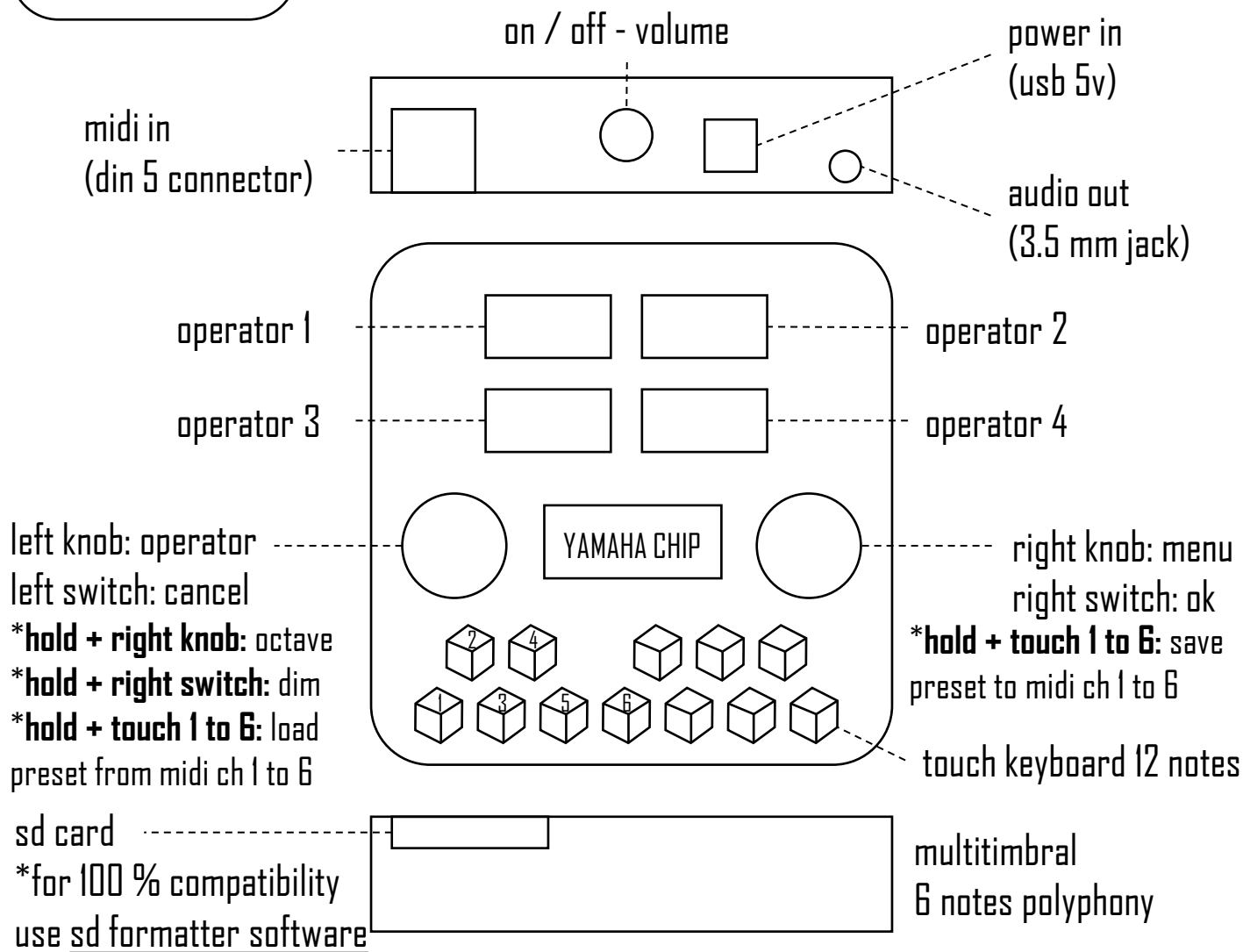
user quick guide
firmware v 1.98



THANKS for joining the **DAFM Synth WAVE**



check QR for full user manual



menu 1 feedback, algorithm & velocity control

1.1 feedback left knob

degree of modulation of operator 1 to itself

1.1 algorithm right knob

modulators are the operators that modulate the carriers carriers are the operators you can hear

1.2 velocity right knob

on/off midi velocity controlled operators

menu 3 adsr envelope

3.1 attack rate left knob

3.1 total level right knob

3.2 decay rate left knob

3.2 secondary total level right knob

3.3 secondary decay rate left knob

3.3 release rate right knob

3.4 rate or key scaling right knob

menu 5 ssg envelope generator

5.1 ssg eg mode on/off left knob

5.2 ssg eg type right knob

*ssg eg mode will loop the adsr envelope in the corresponding operator from attack rate to secondary decay rate (both included)

menu 2 frequency ratio

2.1 frequency multiplier left knob

operator's frequency multiplier

2.1 frequency fine detune right knob

fine detune of selected frequency multiplier

*different frequency ratios between carrier and its modulator will produce different overtones

menu 4 low frequency oscillator (lfo)

4.1 lfo on/off left knob

global for 4 operators

4.1 lfo frequency right knob

global for 4 operators

4.2 frequency modulation sensitivity right knob

global for 4 operators

4.3 amplitude modulation on/off left knob

for every individual operator

4.3 amplitude modulation sensitivity right knob

global for 4 operators

menu 6 fm patches and midi channels

6.1 edit midi ch/bank 0 preset selection left knob

6.2 save preset in midi ch selection left knob

*number: midi channel **number**: midi bank 0 preset

*number on top shows the preset that is being edited

6.3 load six presets from sd card to midi channels

*presets need to be named as patch0x.dmp (x from 1 to 6)

6.4 save all six presets from midi ch to sd card

*presets need to be renamed from patch0x.DMP to patch0x.dmp (x from 1 to 6) to load correctly on Deflemask software



midi cc implementation chart

global control

parameter	cc	data range
lfo on/off	74	2
lfo frequency	1	8



channel voice control

parameter	cc	data range
pitch bend amount	81	12
fm algorithm	14	8
fm feedback	15	8
stereo configuration	77	4
amplitude modulation sensitivity	76	4
frequency modulation sensitivity	75	8

operator control

parameter	cc	data range
total level op1	16	128
total level op2	17	128
total level op3	18	128
total level op4	19	128
freq multiplier op1	20	16
freq multiplier op2	21	16
freq multiplier op3	22	16
freq multiplier op4	23	16
detune op1	24	7
detune op2	25	7
detune op3	26	7
detune op4	27	7
rate or key scaling op1	39	4
rate or key scaling op2	40	4
rate or key scaling op3	41	4
rate or key scaling op4	42	4

operator control

parameter	cc	data range
attack rate op1	43	32
attack rate op2	44	32
attack rate op3	45	32
attack rate op4	46	32
decay rate op1	47	32
decay rate op2	48	32
decay rate op3	49	32
decay rate op4	50	32
secondary decay rate op1	51	16
secondary decay rate op2	52	16
secondary decay rate op3	53	16
secondary decay rate op4	54	16
secondary total level op1	55	16
secondary total level op2	56	16
secondary total level op3	57	16
secondary total level op4	58	16

midi cc implementation chart

operator control

parameter	cc	data range
release rate op1	59	16
release rate op2	60	16
release rate op3	61	16
release rate op4	62	16
amplitude modulation on/off op1	70	2
amplitude modulation on/off op2	71	2
amplitude modulation on/off op3	72	2
amplitude modulation on/off op4	73	2

operator control

parameter	cc	data range
ssg eg mode on/off op1	106	2
ssg eg mode on/off op2	107	2
ssg eg mode on/off op3	108	2
ssg eg mode on/off op4	109	2
ssg eg type op1	110	8
ssg eg type op2	111	8
ssg eg type op3	112	8
ssg eg type op4	113	8

midi bank 0 presets

videogame

preset

sonic the hedgehog - green hill zone
0 : bass
1 : melody (CCACBCBG)

sonic the hedgehog 2 - chemical plant zone
2 : horn
3 : guitar

sonic the hedgehog 3 - ice cap city
4 : percussive ice pipe
5 : bass; **6** : synth

streets of rage - keep the groovin'
7 : piano
8 : brass

streets of rage 2 - go straight
9 : bass
10 : organ; **11** : horn

streets of rage 2 - dreamer
12 : bass; **13** : hihat;
14 : piano; **15** : dist piano

toe jam & earl, panic on funkotron - theme song
16 : funk bass
17 : pluck bass

toe jam & earl, panic on funkotron - mellow groove
18 : overdrive guitar
19 : wow

videogame

preset

ecco the dolphin - opening theme
20 : pad
21 : percussion

time trax - title screen, credits
22 : pad; **23** : bass
24 : dist guitar; **25** : tom
26 : snare; **27** : hihat

thunderforce iv - lighting strikes again
28 : overdrive guitar
29 : tom

thunderforce iv - metal squad
30 : piano

chakan: the forever man - intro theme
31 : pad 1; **32** : pad 2;
33 : pad 3

dafm synth - original presets
34 : bass; **35** : organ pad;
36 : guitar; **37** : brass
38 : snare; **39** : tom

midi bank 1 presets

- bank 1 corresponds to the sd card
- presets have to be saved in the sd card as instrxxx.dmp where xxx goes from 000 to 127
- program change midi messages can load these presets in the midi channel selected
- presets value range is from 0 to 127

