ふぁみみみっでぃ NES Edition をお買い上げ頂きましてありがとうございます。
使い方について注意点を簡単に説明いたします。

1．NESのリージョンチェックについて　Explanation about region check

・NES版は、電源ON時にリージョンチェックが行われます。
　A region check will be performed when the power of NES is turned on.

・リージョンチェックに成功した場合は、電源ランプが点灯します。
　When the region check is successful, the power lamp lights up.

・リージョンチェックでエラーが起きた場合は、電源ランプが点滅しますので、電源ランプが点灯するまで、リセットボタンを押して下さい。（4～8回程度）
　If the region check fails, the power lamp blinks,
　Please press the reset button (4 to 8 times) until the power lamp lights up.

・電源ランプ点灯後に、もう一度電源を入れ直すと、リージョンが設定された状態で正常に起動します。
　When the power lamp lights up, please turn the power off and then on again.
　It starts normally with the region set.

・2つの映像方式(NTSC/PAL)を自動判別し、どちらでも使用できます。
　The Famimimidi NES Edision is compatible with two video formats (NTSC / PAL) and can be used with either.

2．操作方法について　About operation

・DINコネクタに、市販のMIDIコントローラー（シーケンサー、キーボードなど）を接続してください。
　Connect a commercially available MIDI controller (sequencer, keyboard, etc.) to the DIN connector.

・MIDIコントローラーのチャンネルを1～5に設定するだけで動作確認できます。
　Basically, you can check the operation only by setting the channel of the MIDI controller. The channel number is 1 to 5.

・NES本体からはサウンドのみ出力します。映像出力は無効となっています。
　Only the sound is output from NES. Video output is disabled.

・本体のコントローラで、基本操作が行えます。
　The basic operation can be performed with the NES controller.（See page 4）

・EWI等のウィンドシンセ をお使いの方で、ブレスによる音量変化が敏感すぎる場合、Breath(CC#2)とVolume(CC#7)とExpression(CC#11)が同時に出力されていると思いますので、ブレス以外はOFFに設定して下さい。
　About the case where you are using wind synthesizer such as EWI, and the volume change by breath is too sensitive.
I think that Breath (CC#2), Volume (CC#7) and Expression (CC#11) are output at the same time, so please set to output only breath.

3．サポートについて　About support

本取説のpdf ダウンロード
http://famimimidi.dojin.com/Famimimidi_implement_chart_v10_NES.pdf

Detailed operation explanation
http://famimimidi.dojin.com

Note No.		Time	Loop	pulse noise
0		Velocity	no	Note No. 0
1		0.00200sec	no	Time specified by velocity
2		0.00195sec	no	vel = 0 Note Off
3		0.00190sec	no	vel = 1 0.0064sec
4		0.00185sec	no	vel = 63 0.0032sec
5		0.00180sec	no	vel = 127 0.0001sec
6		0.00175sec	no	
7		0.00170sec	no	Note No. 1〜29
8		0.00165sec	no	Specify time by note number
9		0.00160sec	no	vel = 0 Note Off
10		0.00155sec	no	vel = 1〜127 Note On
11		0.00150sec	no	
12		0.00145sec	no	
13		0.00140sec	no	
14		0.00135sec	no	
15		0.00130sec	no	
16		0.00125sec	no	
17		0.00120sec	no	
18		0.00115sec	no	
19		0.00110sec	no	
20		0.00105sec	no	
21		0.00100sec	no	
22		0.00095sec	no	
23		0.00090sec	no	
24		0.00085sec	no	
25		0.00080sec	no	
26		0.00075sec	no	
27		0.00070sec	no	
28		0.00065sec	no	
29		0.00060sec	no	
30				
31				

Note No.		Freq.	Loop	DPCM
32				
33	A			
34				
35	B	14	no	Bass Drum1
36	C	15	no	Bass Drum2
37		15	no	Side Stick1
38	D	14	no	Snare1
39		13	no	Side Stick2
40	E	15	no	Snare2
41	F	14	no	Low Floor Tom
42		15	no	Closed Hi-Hat1
43	G	15	no	Hight Floor Tom
44		14	no	Closed Hi-Hat2
45	A	14	no	Low Tom
46		15	no	Open Hi-Hat
47	B	14	no	Low Middle Tom
48	C	15	no	High Middle Tom
49		15	no	Crash Cymbal
50	D	15	no	High Tom
51		15	no	Ride Cymbal
52	E			
53	F			
54				
55	G			
56				
57	A			
58				
59	B			
60	C			
61				
62	D			
63				
～				
～				
127				

Long period Noise				Short period Noise		
Note No.		Noise No.		Note No.		Noise No.
0	C	L0		64	E	S0
1		L1		65	F	S1
2	D	L2		66		S2
3		L3		67	G	S3
4	E	L4		68		S4
5	F	L5		69	A	S5
6		L6		70		S6
7	G	L7		71	B	S7
8		L8		72	C	S8
9	A	L9		73		S9
10		L10		74	D	S10
11	B	L11		75		S11
12	C	L12		76	E	S12
13		L13		77	F	S13
14	D	L14		78		S14
15		L15		79	G	S15
16	E	L0		80		S0
17	F	L1		81	A	S1
18		L2		82		S2
19	G	L3		83	B	S3
20		L4		84	C	S4
21	A	L5		85		S5
22		L6		86	D	S6
23	B	L7		87		S7
24	C	L8		88	E	S8
25		L9		89	F	S9
26	D	L10		90		S10
27		L11		91	G	S11
28	E	L12		92		S12
29	F	L13		93	A	S13
30		L14		94		S14
31	G	L15		95	B	S15
32		L0		96	C	S0
33	A	L1		97		S1
34		L2		98	D	S2
35	B	L3		99		S3
36	C	L4		100	E	S4
37		L5		101	F	S5
38	D	L6		102		S6
39		L7		103	G	S7
40	E	L8		104		S8
41	F	L9		105	A	S9
42		L10		106		S10
43	G	L11		107	B	S11
44		L12		108	C	S12
45	A	L13		109		S13
46		L14		110	D	S14
47	B	L15		111		S15
48	C	L0		112	E	S0
49		L1		113	F	S1
50	D	L2		114		S2
51		L3		115	G	S3
52	E	L4		116		S4
53	F	L5		117	A	S5
54		L6		118		S6
55	G	L7		119	B	S7
56		L8		120	C	S8
57	A	L9		121		S9
58		L10		122	D	S10
59	B	L11		123		S11
60	C	L12		124	E	S12
61		L13		125	F	S13
62	D	L14		126		S14
63		L15		127	G	S15

The list conforms to MIDINES(Can switch order with CC#17)

S=Short Period
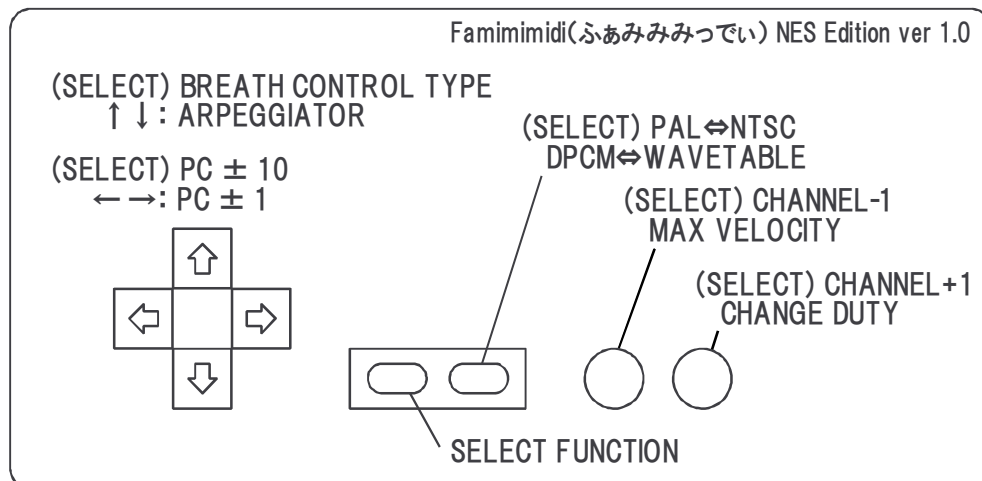
L=Long Period

0〜15 16steps   The smaller the number, the higher the sound

※Nothing to send

Function		Recv	Remarks	Default
Basic channel	Default	1-15	ch1＝Puls1　ch2＝Puls2　ch3＝Triangle　ch4=Noise　ch5=DPCM or Wabetable	ch1 - 5
	Changed	○	Normal → ch1 - ch5　　※Original start up SE Hold down the B button and turn on the power　→ ch6 - ch10　　※SE 1times Hold down the A,B button and turn on the power → ch11 - ch15　※SE 2times	
Mode	Default	Mode4	NoChange Omni Off/Mono/Multimode	
	Message	×		
Note Number		0 - 127		
	ch1、ch2	33 - 108	It does not react below 32. Frequency error in high frequency range	
	ch3	21 - 96	It does not react below 20. Frequency error in high frequency range	
	ch4、ch5	0 - 127	Check other sheet.	
Velocity	Note On	○	ch1、ch2、ch4 16steps　　ch3、ch5(DPCM) is ON/OFF only.　ch5(wavetable) 32steps	
	Note Off	×	Note off is always 0 velocity	
Aftertouch	Key	ch 1234	※Polyphonic key pressure works as channel key pressure	
	Channel	ch 1234		
Pitch Bend		ch 1234	Bend width can be set by CC#82	
Control Change	1（70）	ch 1234	Modulation　Default：5Hz Halftones：±2 NoDelay Inactive zone：20　※ch4：switch cycle	0
	2	ch 12345	Breath control	0
	3	ch 1234	Breath control Type　　0 - 8（or Allocated from 9 to 127） OFF/Modulation/PitchUp/Down/Tremolo/VolumeUp/VolDown/HalfDown/Expression	8 (Expression)
	5	ch 123	Portamento Time　0 - 127　※Time increases exponentially.（about 5sec at 127）	12 (100ms)
	7	ch 12345	Volume	127 (Max)
	9	ch 12 45	Constant Velocity　0 - 7：OFF／8 - 127：Constant velocity value	0 (OFF)
	11	ch 12345	Expression	127 (Max)
	12	ch 12 45	Attack Level　　　　16steps（Allocated from 0 to 127）	0
	13	ch 12	Sweep　　　　0 - 63：OFF／64 - 127：ON　　　　※Hardware function	0 (OFF)
	14	ch 12	Sweep Direction　　0 - 63：Down／64 - 127：Up　　　※Hardware function	127 (Up)
	15	ch 12	Sweep Time　　　　8steps（Allocated from 0 to 127）　　※Hardware function	16 (1)
	16	ch 12	Sweep Frequency　8steps（Allocated from 0 to 127）　　※Hardware function	48 (3)
	17	ch 4	Note order　　　　0 - 63：Reverse／64 - 127：Order	0 (Rev.)
※Test function	18	ch 5	Wavetable Mode　　　0〜63：OFF／64〜127：ON	0 (OFF)
※Test function	19	ch 5	Wavetable Resolution　Auto／Div2／Div4（0,1,2 or Allocated from 3 to 127）	0 (Auto)
	20	ch 12	※SQ1,2 CC#1⇔CC#70　SwapFunction　0 - 63：OFF／64 - 127：ON	0
	21	ch 12345	Auto Hold　　　　　　0 - 63：OFF／64 - 127：ON　※OFF with CC#83 change	0 (OFF)
	22	ch 12345	Note Remember Mode　0 - 63：OFF／64 - 127：ON　※Valid when arpeggiator is off	127 (ON)
	23	ch 12345	Arpeggiator Type　OFF／1note／Two notes or more　（0,1,2 or Allocated from 3 to 127）	0 (OFF)
	24	ch 12345	Arpeggiator Time　　　0 - 127（7.9ms - about 1sec）	10 (79ms)
	25	ch 12345	Arpeggiator Noteoff time　0 - Arpeggiator Time	7 (55.3ms)
	26	ch 12345	Arpeggiator Play order　　0 - 7（or Allocated from 8 to 127） UpDown/UpDownB/DownUp/DownUpB/Up/Down/Random/Order	4 (Up)
	27	ch 1234	Arpeggiator Octave range　0 - 5：0 - +5octave　（or Allocated from 6 to 127）	0 (1octave)
	30	ch 1234	Aftertouch Type　　　0 - 8（or Allocated from 9 to 127） OFF/Modulation/PitchUp/Down/Tremolo/VolumeUp/VolDown/HalfDown/Expression	1 (Mod)
	45	ch 12345	Macro　User Record/Stop　0：Stop recording/1-40：Start recording user macros ※saved	0
	46	ch 12345	Macro　Execute (Basic)　1 - 127：Execute basic macro number	0
	47	ch 12345	Macro　Execute (User)　1 - 40 ：Execute user macro number	0
	48	ch 12345	Macro　Execute (Example)　1 - 127：Execute ex. macro number	0
	49	ch 1234	Macro　Switch　46：Basic/47：User/48：Ex ※Return to 46 with macro setting #52 to #59	46 (Basic)
	50	ch 12345	Macro　StartUp　1 - 5ch　Set the last execution macro to the power ON macro.※saved	0 (None)
	51	ch 12345	Macro　PC　　　88 - 127（PC89 - PC128）Set the last execution macro to PC. ※saved	0 (None)
	52	ch 1234	Macro Attack　　　　Setting the macro number of Attack start	0 (None)
	53	ch 1234	Macro Decay　　　　Setting the macro number of Decay start	0 (None)
	54	ch 1234	Macro Sastain　　　Setting the macro number of Reached Sustain level (Decay end)	0 (None)
	55	ch 1234	Macro Release　　　Setting the macro number of Release start	0 (None)
	56	ch 1234	Macro Modulation　　Setting the macro number of Modulation　(execute every cycle)	0 (None)
	57	ch 12 4	Macro Tremolo　　　Setting the macro number of Tremolo　　(execute every cycle)	0 (None)
	58	ch 123	Macro Portamento S　Setting the macro number of Portamento start	0 (None)
	59	ch 123	Macro Portamento E　Setting the macro number of Portamento end	0 (None)
	64	ch 12345	Hold 1 (Sustain pedal)　0 - 63：OFF／64 - 127：ON	0 (OFF)
	65	ch 123	Portamento(Glide)　0 - 63：OFF／64 - 127：ON (Reset Portamento LastNote)	0 (OFF)
	70（1）	ch 12	※SQ1,2 Duty ratio 4steps（Allocated from 0 to 127）	64 (50%)
	72	ch 12345	Release Time　0 - 127　※Time increases exponentially.（about 10sec at 127）	0
	73	ch 12345	Attack Time　0 - 127　※Time increases exponentially.（about 10sec at 127）	0
	75	ch 12345	Decay Time　0 - 127　※Time increases exponentially.（about 10sec at 127）	0
	76	ch 1234	Modulation Rate　0 - 127Hz　　　　　　※ch4 is macro only	5
	77	ch 123	Modulation Depth　0 - 127　(x 100cent)	2 (200cent)
	78	ch 123	Modulation Delay　0 - 127　※Time increases exponentially.（about 10sec at 127）	0
	79	ch 12 45	Sustain Level　　　　16steps（Allocated from 0 to 127）	127 (Max)
	80	ch 123	Modulation Waveform　8shapes（0 - 7 or Allocated from 8 to 127） SineWave/Saw/RevSaw/Pulse25%/Pulse50%/Triangle/Random/SineWave	0 (Sine)
	81	ch 123	Modulation Inactive zone　0 - 64　※Invalid section of CC#1	20
	82	ch 123	Pitch Bend Sensitivity	2
	83	ch 12345	Hold Time　0 - 127　※Time increases exponentially.（about 10sec at 127）	0
	84	ch 123	Portamento Control　0：from LastNote／1 - 63：PitchDown／64 - 127：PitchUp	0 (LastNote)
	85	ch 123	Detune　　　0 - 64 - 127（-64cent 〜 ±0 〜 +63cent）	64 (±0)
	86	ch 12 4	Tremolo Rate　　　0 - 31.75Hz（0.25Hz per 1）	20 (5Hz)
	87	ch 12 4	Tremolo Depth　　16steps（Allocated from 0 to 127）	40 (5)
	88	ch 12 4	Tremolo Waveform　10shapes（0 - 9 or Allocated from 10 to 127） SineWave1-4/Sawtooth/ReverseSawtooth/Pulse25%/Pulse50%/Triangle1-2	0 (Sine)
	89	ch 12 4	Tremolo Inactive zone　0 - 64　※Invalid section of CC#92	20
	92	ch 12 4	Tremolo　　　0 - 127（0 - 100% of Tremolo Depth）※Use it like a modulation wheel	0

Program Change	ch 12345	※SQ1,2 Duty ratio　PC1=12.5% PC2=25% PC3=50% PC4=75%　Other：Various sounds	PC3 (ch1,2)
	Range 1 to 128	PC61 to PC76 are User Programmable （SysEx）　　※ch5 Wavetable only	PC1 (ch3,4)
		PC89 to PC128 are User Programmable （CC#51）　※Common for all channels	PC8 (ch5)
System Exclusive	○	Set ch5 user wavetable data	
		DataFormat: F0h 00h 70h 7Fh 0Xh 0Xh … [Write 0Xh 16 times] F7h	
		F0h　　　Start SysEx.	
		00h　　　Any ID（00h − 7Dh）　Normally 00h	
		70h 7Fh　Fixed (be sure to attach)	
		0Xh　　　4bit x 16 Wavetable data　00h − 0Fh (means 0 − 15)	
		ex. 00h 01h 02h 03h 04h 05h 06h 07h 08h 09h 0Ah 0Bh 0Ch 0Dh 0Eh 0Fh （Sawtooth)	
	○	Assign user wavetable data to CH5 ProgramChange 61 − 76　　※saved	
		DataFormat: F0h 00h 71h 7Fh NN F7h	
		F0h　　　Start SysEx.	
		00h　　　Any ID（00h − 7Dh）　Normally 00h	
		71h 7Fh　Fixed (be sure to attach)	
		NN　　　60 − 75 (or 3Ch − 4Bh)　means PC No. 61 − 76 (Be aware of −1)	
Universal system exclusive	×		
Common　　　　Song Position	×		
Song Select	×		
Tune	×		
Realtime　　　　Timing Clock	×		
Active Sensing	×		
Other　　　　All Sound Off	○CC#120		
Reset All Controller	○CC#121	Stop all notes. All CC, PC, PB values are set to default.	
Local On/Off	×		
All Note Off	○CC#123	※ch3 will stop immediately	
Active Sensing	×		
System Reset	×	※Please push the NES reset button or turn on the power again.	

Controller operation

↑↓	Arpeggiator	CC#23〜27	OFF/ON （7type）
SELECT＋↑↓	Breath control type	CC#3	OFF/ON （8type）
←→	Program change ±1	PC	
SELECT＋←→	Program change ±10	PC	
A	Change duty	PC1〜4	Ch1,2 Only
SELECT＋A	Assign other channels to ch 1	Channel +1	※You can play ch 1-5 with ch 1 note.
SELECT＋B	Same to above	Channel −1	
B	Maximum Velocity	CC#9	OFF/ON with velocity 127
START	DPCM⇔WAVETABLE	CC#18	Switch the function of Ch5.
SELECT＋START	PAL⇔NTSC		Switch pitch adjustment by difference between PAL and NTSC.
			Normally it is judged automatically.