MIDX Boss GT-1 - MIDI Implementation

Version: Oct 10 2023 – FW V3.00

PC# 00 - PC# 98 - Change Patch Number (U01-U99)

PRESET CC's
RECALL/SELECT PATCH = CC# 4 (0-98)
STORE TO PATCH = CC# 5 (0-98)
STORE TO CURRENT PATCH = CC# 6 (value=127)

MASTER CC's
PATCH VOLUME = CC#7 (0-127)
MASTER EQ: LOW GAIN = CC# 8 (0..40) 0=-20dB, 20=0dB, 40=+20dB
MASTER EQ: MID GAIN = CC# 9 (0..40) 0=-20dB, 20=0dB, 40=+20dB
MASTER EQ: HIGH GAIN = CC# 10 (0..40) 0=-20dB, 20=0dB, 40=+20dB
MASTER EQ: MID FREQ = CC# 11 (0..27) 20Hz-10kHz
MASTER EQ: MID Q= CC# 12 (0..5) 0.5,1,2,4,8,16
MASTER KEY = CC# 13 (0-11) C,Db,D,Eb,E,F,F#,G,Ab,A,Bb,B
TAP TEMPO DELAY = CC# 14 (Measures ms. between each CC, Sets DELAY Time only)
TUNER ON/OFF = CC# 17 (0-63 OFF, 64-127 ON)

BPM (Beats Per Minute)

TAP TEMPO MASTER BPM = **CC# 15**
(Measures ms. between each CC, Sets MASTER BPM)
MASTER BPM = CC# 16 (0-127, 0=40BPM, 127=250 BPM)
The BPM value may control the Rate or Delay Time of the following effects:
(Tip: 'Quarter Note' is a good initial setting)

DELAY TIME CC# 78	
REVERB DELAY (TYPE 7) CC# 108	
FX1 PITCH SHIFTER PRE-DELAY CC# 69	FX2 PITCH SHIFTER PRE-DELAY CC# 99
FX1 HARMONIST PRE-DELAY CC# 69	FX2 HARMONIST PRE-DELAY CC# 99
FX1 PHASER RATE CC#69	FX2 PHASER RATE CC#99
FX1 FLANGER RATE CC#69	FX2 FLANGER RATE CC#99
FX1 TREMOLO RATE CC#69	FX2 TREMOLO RATE CC#99
FX1 ROTARY SLOW TIME CC#69 AND FAST TIME CC# 100	FX2 ROTARY SLOW TIME CC#99 AND FAST TIME CC#100
FX1 UNI-V RATE CC#69	FX2 UNI-V RATE CC#99
FX1 VIBRATO RATE CC#69	FX2 VIBRATO RATE CC#99
FX1 SUB DELAY TIME CC#69	FX2 SUB DELAY TIME CC#99

FOOT VOL & PEDAL (PDL) CC's

FOOT VOL LEVEL = CC#28 (0-127)
FOOT VOL MIN = CC#29 (0-127)
FOOT VOL MAX = CC#30 (0-127)

PEDAL EFFECT ON/OFF = CC#19 (0-63 OFF, 64-127 ON)

CC# 20 Pedal Effects	CC# 21 0-127	CC# 22 0-127	CC# 23 0-127	CC# 24 0-127	CC# 25 0-48 (-24 - +24)
Cry Wah = 0	Effect Level	Pedal pos	Pedal min	Pedal max	-
VO Wah = 1	Effect Level	Pedal pos	Pedal min	Pedal max	-
Fat Wah =2	Effect Level	Pedal pos	Pedal min	Pedal max	-
Light Wah = 3	Effect Level	Pedal pos	Pedal min	Pedal max	-
7String Wah = 4	Effect Level	Pedal pos	Pedal min	Pedal max	-
Reso Wah = 5	Effect Level	Pedal pos	Pedal min	Pedal max	-
Pedal bend = 6	Effect Level	Pedal pos	-	-	Pitch

Pre-Amp (PrA) CC's

PRE-AMP ON/OFF = CC#34 (0-63 OFF, 64-127 ON)
PRE-AMP SOLO SW = CC# 47 (0-63 OFF, 64-127 ON)
PRE-AMP SOLO LEVEL= CC# 48 (0-127)

NOISE GATE THRESHOLD = CC# 44 (0-127)
NOISE GATE RELEASE = CC# 45 (0-127)
NOISE GATE DETECT = CC# 46 (0-2) 0=Input, 1=NS Input, 2=FV Out

CC# 35 Amp Type	CC# 36 0-127	CC# 37 0-127	CC# 38 0-127	CC# 39 0-127	CC# 40 0-127	CC# 41 0-127	CC# 42 0-63 OFF, 64-127 ON	CC# 43 0-8 (*)
Natural clean = 0	Gain	Level	Bass	Middle	Treble	Presence	Bright	SP Type
Full range = 1	Gain	Level	Bass	Middle	Treble	Presence	-	SP Type
Combo crunch = 2	Gain	Level	Bass	Middle	Treble	Presence	Bright	SP Type
Stack crunch = 3	Gain	Level	Bass	Middle	Treble	Presence	-	SP Type
Higain stack = 4	Gain	Level	Bass	Middle	Treble	Presence	-	SP Type
Power drive = 5	Gain	Level	Bass	Middle	Treble	Presence	-	SP Type
Extreme load =6	Gain	Level	Bass	Middle	Treble	Presence	-	SP Type
Core metal = 7	Gain	Level	Bass	Middle	Treble	Presence	-	SP Type
JC-120 = 8	Gain	Level	Bass	Middle	Treble	Presence	Bright	SP Type
Clean twin = 9	Gain	Level	Bass	Middle	Treble	Presence	Bright	SP Type
Pro crunch = 10	Gain	Level	Bass	Middle	Treble	Presence	Bright	SP Type
Tweed = 11	Gain	Level	Bass	Middle	Treble	Presence	Bright	SP Type
Deluxe crunch = 12	Gain	Level	Bass	Middle	Treble	Presence	-	SP Type
VO drive = 13	Gain	Level	Bass	Middle	Treble	Presence	-	SP Type
VO lead = 14	Gain	Level	Bass	Middle	Treble	Presence	-	SP Type
Match drive = 15	Gain	Level	Bass	Middle	Treble	Presence	-	SP Type
BG lead = 16	Gain	Level	Bass	Middle	Treble	Presence	Bright	SP Type
BG Drive = 17	Gain	Level	Bass	Middle	Treble	Presence	Bright	SP Type
MS1959 I = 18	Gain	Level	Bass	Middle	Treble	Presence	-	SP Type
MS1959 I+II = 19	Gain	Level	Bass	Middle	Treble	Presence	-	SP Type
R-fier vintage = 20	Gain	Level	Bass	Middle	Treble	Presence	-	SP Type
R-fier modern = 21	Gain	Level	Bass	Middle	Treble	Presence	-	SP Type
T-amp lead = 22	Gain	Level	Bass	Middle	Treble	Presence	-	SP Type
SDLN = 23	Gain	Level	Bass	Middle	Treble	Presence	-	SP Type
5150 drive = 24	Gain	Level	Bass	Middle	Treble	Presence	-	SP Type
Bgnr ub metal = 25	Gain	Level	Bass	Middle	Treble	Presence	-	SP Type
Orng rock reverb = 26	Gain	Level	Bass	Middle	Treble	Presence	-	SP Type

(*) SP Type: 0=Off, 1=Origin, 2=1x8", 3= 1x10", 4=1x12", 5=2x12" 6= 4x10", 7=4x12" 8=8x12"

Delay CC's

DELAY ON/OFF = CC# 79 (0-63 OFF, 64-127 ON)
DELAY TIME BY BPM = CC#78
(0=16'th Note, 1=Triplet of 8th Note, 2=Dotted 16th Note, 3=8th Note, 4=Triplet of Quarter Note, 5=Dotted 8th Note, 6=Quarter Note, 7=Triplet of Half Note, 8=Dotted Quarter Note, 9=Half Note, 10=Triplet of Whole Note, 11=Dotted Half Note, 12=Whole Note)

CC# 80 Delay Effects	CC# 81 0-127	CC# 82 0-127 (1-2000ms)	CC# 83 0-127	CC# 84 0-127 (127=flat)	CC# 85 0-127	CC# 86 0-127	CC# 87 0-127	CC# 88 0-127
Standard = 0	Level	D. Time	-	High cut	Feedback	-	-	-
Pan = 1	Level	D. Time	Dir. Mix	High cut	Feedback	-	-	Tap time
Reverse =2	Level	D. Time	-	High cut	Feedback	-	-	-
Analog = 3	Level	D. Time	-	High cut	Feedback	-	-	-
Tape = 4	Level	D. Time	-	High cut	Feedback	-	-	-
Modulate = 5	Level	D. Time	Dir. Mix	High cut	Feedback	Mod. rate	Mod. depth	-
Tera Echo = 6	Level	Time	Dir. Mix	Tone	Feedback	-	-	Hold

OD CC's

OD ON/OFF = CC#49 (0-63 OFF, 64-127 ON)

SOLO LEVEL = CC# 56 (0-127)
SOLO SWITCH = CC# 57 (0-63 OFF, 64-127 ON)

CC# 50 OD Type	CC# 51 0-127	CC# 52 0-127 (63=Mid)	CC# 53 0-127	CC# 54 0-127 (63=Mid)	CC# 55 0-127
Mid boost = 0	Effect Level	Drive	Dir. level	Tone	Bottom
Clean boost = 1	Effect Level	Drive	Dir. level	Tone	Bottom
Treble boost =2	Effect Level	Drive	Dir. level	Tone	Bottom
Crunch = 3	Effect Level	Drive	Dir. level	Tone	Bottom
Natural OD = 4	Effect Level	Drive	Dir. level	Tone	Bottom
Warm OD = 5	Effect Level	Drive	Dir. level	Tone	Bottom
Fat DS = 6	Effect Level	Drive	Dir. level	Tone	Bottom
Lead DS = 7	Effect Level	Drive	Dir. level	Tone	Bottom
Metal DS = 8	Effect Level	Drive	Dir. level	Tone	Bottom
OCT Fuzz = 9	Effect Level	Drive	Dir. level	Tone	Bottom
A-Dist = 10	Effect Level	Drive	Dir. level	Tone	Bottom
Blues OD = 11	Effect Level	Drive	Dir. level	Tone	Bottom
OD-1 = 12	Effect Level	Drive	Dir. level	Tone	Bottom
T-Scream = 13	Effect Level	Drive	Dir. level	Tone	Bottom
Turbo OD = 14	Effect Level	Drive	Dir. level	Tone	Bottom
Distortion = 15	Effect Level	Drive	Dir. level	Tone	Bottom
RAT = 16	Effect Level	Drive	Dir. level	Tone	Bottom
GUV DS = 17	Effect Level	Drive	Dir. level	Tone	Bottom
DST+ = 18	Effect Level	Drive	Dir. level	Tone	Bottom
Metal Zone = 19	Effect Level	Drive	Dir. level	Tone	Bottom
'60s Fuzz = 20	Effect Level	Drive	Dir. level	Tone	Bottom
MUFF Fuzz = 21	Effect Level	Drive	Dir. level	Tone	Bottom

Reverb CC's

REVERB ON/OFF = CC# 109 (0-63 OFF, 64-127 ON)
DELAY (REVERB TYPE 7) TIME BY RPM = CC#108
(0=16'th Note,1=Triplet of 8th Note, 2=Dotted 16th Note, 3=8th Note, 4=Triplet of Quarter Note, 5=Dotted 8th Note, 6=Quarter Note)

CC# 110 Reverb Type	CC# 111 0-127	CC# 112 0-127 (0.1-10s)	CC# 113 0-127	CC# 114 0-127= 0-500ms	CC# 115 0-127= 0-800Hz	CC# 116 0-127= 630-12.5kHz	CC#117 0-127
Ambience = 0	Level	Time	-	-	Low cut	Hi cut	-
Room = 1	Level	Time	-	-	Low cut	Hi cut	-
Hall1 = 2	Level	Time	-	-	Low cut	Hi cut	-
Hall2 = 3	Level	Time	-	-	Low cut	Hi cut	-
Plate = 4	Level	Time	-	-	Low cut	Hi cut	-
Spring = 5	Level	Time	-	-	Low cut	Hi cut	Spring
Modulate = 6	Level	Time	-	-	Low cut	Hi cut	-
Delay = 7	Level	D. Time (*)	Dir. Mix	Feedback	-	Hi cut	-

(*) 0-170=1ms-650ms

FX1 and FX2

FX1 ON/OFF = CC# 59 (0-63 OFF, 64-127 ON)
FX2 ON/OFF = CC# 89 (0-63 OFF, 64-127 ON)

The FX1 effects are identical with FX2 effects. Hence the shared table.

FX1: CC# 60 **FX2:** CC# 90 Effects	CC# 61 CC# 91 0-127	CC#62 CC#92 0-127	CC# 63 CC# 93 0-127	CC# 64 CC# 94 0-127	CC# 65 CC# 95 0-127	CC# 66 CC# 96 0-127	CC# 67 CC# 97 0-127	CC# 68 CC# 98 (*)	CC# 69 CC# 99 (*)	CC#70 CC#100 (*)	CC#71 CC#101 (*)
Compressor = 0	Level	Sustain	-	Attack	Tone	-	-	Type (f)	-	-	-
Limiter = 1	Level	Ratio	-	Attack	Threshold	Release	-	Type (g)	-	-	-
T.Wha = 2	Level	Sens	-	Freq	Peak		-	Mode (h)	Polar (i)	-	-
Graphic EQ = 3	Level	800Hz	-	100Hz	200Hz	400Hz	1.6kHz	3.2kHz	6.4kHz	-	-
Param EQ = 4	Level	Lo mid gain	-	Lo gain	Hi mid gain	Hi gain	-	Lo mid f. (k)	Lo md Q (l)	Hi mid f. (k)	Hi mid Q (l)
Tone Modify = 5	Level	-	-	Low	High	-	-	Type(tm)			
Guitar Sim = 6	Level	Type	-	Low	High	Body	-	Type (n)	-	-	-
AC. Guitar Sim = 7	Level	Body	-	Low	High	-	-	-		-	-
Slow gear = 8	Level	Rise time	-	Sens	-	-	-	-	-	-	-
Octave = 9	D.Level	-1oct	-	-2oct	-	-	-	-	-	-	-
Pitch shifter = 10	E. Level	-	Dir. mix	Fine	Pre delay	Feedback	-	-	Time by BPM (t1)	Ps1:ptch (s)	-
Harmonist = 11	E. Level	-	Dir. mix	-	Pre delay	Feedback	-	-	Time by BPM (t1)	Harmony (u)	Master Key (v)
Overtone = 12	Upr Level	Lwr Level	Dir. mix	Detune	Tone	-	-	-	-	-	-
Feedbacker = 13	Depth	-	-	-	-	-	-	Trigger(0,1)	-	-	-
AC. Processor = 14	Level	Presence	-	Bass	Mid	Treb	-	Type (o)	-	-	-
Phaser = 15	Level	Rate	-	Depth	Reso	Manual	-	Type (d)	Rate by BPM (r1)	-	-
Flanger = 16	Level	Rate	-	Depth	Reso	Manual	-	Lo cut I	Rate by BPM (r1)	-	-
Tremolo = 17	Level	Rate	-	Depth	Shape	-	-	-	Rate by BPM (r1)	-	-
Rotary = 18	Level	Rate slow	-	Rate fast	Balance	Transition	Speed sel	-	Rate Slow by BPM (r1)	Rate Fast by BPM (r1)	-
Uni-V = 19	Level	Rate	-	Depth	-	-	-	-	Rate by BPM (r1)	-	-
Vibrato = 20	Level	Rate	-	Depth	Raise time	Trigger	-	-	Rate by BPM (r1)	-	-
Chorus = 21	E. Level	Rate	-	Depth	Low cut	Hi cut	-	Type(e)	-	-	-
Sub Delay = 22	E. Level	Time	Dir level	High cut	Feedback	Tap time	-	Type(q)	Time by BPM (t1)	-	-

(*) Range of special parameters			
Code	Description	CC Value Range	Representation
c	Low cut	0-10	Flat – 800Hz
d	Phaser Type	0-3	SMALL / MID / BRIGHT / POWER
e	Chorus	0-2	MONO/STEREO1/STEREO2
f	Compressor Type	0-7	Boss/HiBand/Light/D-comp/Orange/Fat/Mild/Stereo
g	Limiter Type	0-2	Boss/Rack 160D/VTG Rack U
h	Wah Mode	0-1	LPF/BBP
i	Wah Polarity	0-1	DOWN/UP
k	Lo-Mid Freq	0-27	20Hz-10kHz
l	Q	0-5	0.5/1/2/4/8/16
n	Guitar Sim Type	0-7	S->H/H->S/H->HF/S->HOLLOW/H->HOLLOW/S->AC/H->AC/P->AC
o	AC Processor Type	0-3	SMALL/MEDIUM/BRIGHT/POWER
q	Sub delay	0-1	MONO/PAN
r1	Rate by BPM	0-12	0=Whole Note, 1=Dotted Half Note, 2=Triplet of Whole Note, 3=Half Note, 4=Dotted Quarter Note, 5=Triplet of Half Note, 6=Quarter Note, 7=Dotted 8th Note, 8=Triplet of Quarter Note, 9=8th Note, 10=Dotted 16th Note, 11=Triplet of 8th Note, 12=16th Note
t1	Time by BPM		0=16th Note, 1=Triplet of 8th Note, 2=Dotted 16th Note, 3=8th Note, 4= Triplet of Quarter Note, 5=Dotted 8th Note, 6=Quarter Note
s	Pitch Shifter Pitch	0-48	-24 -> 0 -> +24
u	Harmony	0-29	-2oct, -14th, -13th, -12th, -11th, -10th, -9th, -1oct, -7th, -6th, -5th, -4th, -3rd, -2nd, Unison, +2nd, +3rd, +4th, +5th, +6th, +7th, +1oct, +9th, +10th, +11th, +12th +13th, +14th, +2oct, User
v	Master Key	0-11	C(Am), Db(Bbm), D(Bm), Eb(Cm), E(C#m), F(Dm), F#(D#m), G(Em), Ab(Fm), A(F#m), Bb(Gm), B(G#m)
tm	Modify Type	0-7	FAT/PRESENCE/MILD/TIGHT/ENHANCE/RESONATOR1/RESONATOR2/RESONATOR3