

MIDX Boss Katana™ MKII Bridge - MIDI Implementation

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Text in **RED** indicate features not available with BOSS Tone Studio

EFFECTS SW ON/OFF (BYPASS) CC's

ALL FX (16-20) BYPASS SW = CC# 15 (0-63 OFF, 64-127 ON)

BOOSTER SW = CC# 16 (0-63 OFF, 64-127 ON)

MOD SW = CC# 17 (0-63 OFF, 64-127 ON)

FX SW = CC# 18 (0-63 OFF, 64-127 ON)

DELAY SW = CC# 19 (0-63 OFF, 64-127 ON)

REVERB SW = CC# 20 (0-63 OFF, 64-127 ON)

DELAY2 ON/OFF CC# 58 (0-63 OFF, 64-127 ON)

EFFECT LOOP SW = CC# 21 (0-63 OFF, 64-127 ON)

PEDAL FX SW = CC#22 (0-63 OFF, 64-127 ON)

Miscellaneous CC's

GLOBAL VOLUME = CC# 7 (0-127)

STORE TO CURRENT PRESET = CC# 8 (value=127)

STORE TO PRESET = CC# 9 (1-8)

TAP TEMPO = CC# 14 (Measures ms. between each CC.)

TAP TEMPO2 = CC# 42 (Measures ms. between each CC.)

BOTH TAP TEMPO & TAP TEMPO2 = CC# 43

EFFECT CHAIN ORDER = CC# 25 (0-3)

LINE OUT AIR FEEL = CC #44 (0=REC, 1=LIVE, 2=BLEND)
CAB. RESON. = CC#45 (0=VINTAGE, 1=MODERN, 2=DEEP)

PEDAL FX CC's

PEDAL FX POS = CC# 23 (0-127)

PEDAL FX TYPE = CC# 24

0=Cry Wah, 1=VO Wah, 2=Fat Wah, 3=Light Wah, 4=Pedal Bend, 5=Wah 95E

AMPLIFIER CC's								
Amp Variation = CC# 38 (0-63=OFF, 64-127=ON)								
Noise Gate Threshold = CC# 39 (0-127)								
Noise Gate Release = CC# 40 (0-127)								
Noise Gate On/Off = CC# 41 (0-63=On, 64-127=Off)								
CC# 30 Amp Type	CC# 31 0-127	CC# 32 0-127	CC# 33 0-127	CC# 34 0-127	CC# 35 0-127	CC# 36 0-127	CC# 37 0-63 Off >64 On	
Acoustic = 0	Gain	Volume	Bass	Mid	Treble	Presence	-	
Clean = 1	Gain	Volume	Bass	Mid	Treble	Presence	Bright	
Crunch = 2	Gain	Volume	Bass	Mid	Treble	Presence	Bright	
Lead = 3	Gain	Volume	Bass	Mid	Treble	Presence	-	
Brown = 4	Gain	Volume	Bass	Mid	Treble	Presence	-	
AMP LED	'Sneaky Amps', not present in Boss Tone Studio & Amp knob							
Clean	Natural Clean = 5	Gain	Volume	Bass	Mid	Treble	Presence	-
Clean	Clean Twin = 6	Gain	Volume	Bass	Mid	Treble	Presence	Bright
Crunch	Combo Crunch = 7	Gain	Volume	Bass	Mid	Treble	Presence	Bright
Crunch	Stack Crunch = 8	Gain	Volume	Bass	Mid	Treble	Presence	-
Crunch	Pro Crunch = 9	Gain	Volume	Bass	Mid	Treble	Presence	Bright
Crunch	Deluxe Crunch = 10	Gain	Volume	Bass	Mid	Treble	Presence	-
Crunch	VO Drive = 11	Gain	Volume	Bass	Mid	Treble	Presence	-
Crunch	VO Lead = 12	Gain	Volume	Bass	Mid	Treble	Presence	-
Crunch	Match Drive = 13	Gain	Volume	Bass	Mid	Treble	Presence	-
Lead	Hi gain Stack = 14	Gain	Volume	Bass	Mid	Treble	Presence	-
Lead	Extreme Lead = 15	Gain	Volume	Bass	Mid	Treble	Presence	-
Lead	Core Metal = 16	Gain	Volume	Bass	Mid	Treble	Presence	-
Lead	BG Lead = 17	Gain	Volume	Bass	Mid	Treble	Presence	Bright
Lead	BG Drive = 18	Gain	Volume	Bass	Mid	Treble	Presence	Bright
Lead	MS1959 I = 19	Gain	Volume	Bass	Mid	Treble	Presence	-
Lead	MS1959 I+II = 20	Gain	Volume	Bass	Mid	Treble	Presence	-
Lead	R-Fire Vintage = 21	Gain	Volume	Bass	Mid	Treble	Presence	-
Lead	R-Fire Modern = 22	Gain	Volume	Bass	Mid	Treble	Presence	-
Lead	T-Amp Lead = 23	Gain	Volume	Bass	Mid	Treble	Presence	-
Lead	BGNR UB = 24	Gain	Volume	Bass	Mid	Treble	Presence	-
Brown	Power Drive = 25	Gain	Volume	Bass	Mid	Treble	Presence	-

BOOSTER CC's
BOOSTER ON/OFF = CC# 16 (0-63 OFF, 64-127 ON)
BOOST KNOB = CC# 46 (0-127)
BOOST COLOR ASSIGN = CC# 47 (see CC# 50 in Booster table)
BOOST DIRECT COLOR SELECT = CC# 48 (0=Green, 1=Red, 2=Yellow)
BOOST CYCLE COLOR (i.e. press button) = CC# 49 (0)

Booster CC's								
CC# 50 Booster Effects	CC# 51 0-127	CC# 52 0-127 (63=Mid)	CC# 53 0-127	CC# 54 0-127 (63=Mid)	CC# 55 0-127	CC# 56 0-127	CC# 57 0-63 Off 64-127 On	Un-impl. params
Clean boost = 0	Effect Level	Drive	Dir.mix	Tone	Bottom	Solo Lvl	Solo SW	-
Treble boost = 1	Effect Level	Drive	Dir.mix	Tone	Bottom	Solo Lvl	Solo SW	-
Mid boost = 2	Effect Level	Drive	Dir.mix	Tone	Bottom	Solo Lvl	Solo SW	-
Crunch OD = 3	Effect Level	Drive	Dir.mix	Tone	Bottom	Solo Lvl	Solo SW	-
Blues drive = 4	Effect Level	Drive	Dir.mix	Tone	Bottom	Solo Lvl	Solo SW	-
Overdrive = 5	Effect Level	Drive	Dir.mix	Tone	Bottom	Solo Lvl	Solo SW	-
Natural OD = 6	Effect Level	Drive	Dir.mix	Tone	Bottom	Solo Lvl	Solo SW	-
Warm OD = 7	Effect Level	Drive	Dir.mix	Tone	Bottom	Solo Lvl	Solo SW	-
Turbo OD = 8	Effect Level	Drive	Dir.mix	Tone	Bottom	Solo Lvl	Solo SW	-
T-Scream = 9	Effect Level	Drive	Dir.mix	Tone	Bottom	Solo Lvl	Solo SW	-
Distortion = 10	Effect Level	Drive	Dir.mix	Tone	Bottom	Solo Lvl	Solo SW	-
Fat DS = 11	Effect Level	Drive	Dir.mix	Tone	Bottom	Solo Lvl	Solo SW	-
DST+ = 12	Effect Level	Drive	Dir.mix	Tone	Bottom	Solo Lvl	Solo SW	-
GUV DS = 13	Effect Level	Drive	Dir.mix	Tone	Bottom	Solo Lvl	Solo SW	-
RAT = 14	Effect Level	Drive	Dir.mix	Tone	Bottom	Solo Lvl	Solo SW	-
Metal Zone = 15	Effect Level	Drive	Dir.mix	Tone	Bottom	Solo Lvl	Solo SW	-
Metal DS = 16	Effect Level	Drive	Dir.mix	Tone	Bottom	Solo Lvl	Solo SW	-
'60s Fuzz = 17	Effect Level	Drive	Dir.mix	Tone	Bottom	Solo Lvl	Solo SW	-
MUFF Fuzz = 18	Effect Level	Drive	Dir.mix	Tone	Bottom	Solo Lvl	Solo SW	-
OCT Fuzz = 19	Effect Level	Drive	Dir.mix	Tone	Bottom	Solo Lvl	Solo SW	-
Lead DS = 20	Effect Level	Drive	Dir.mix	Tone	Bottom	Solo Lvl	Solo SW	-
Custom = 22	Effect Level	Drive	Dir.mix	Tone	Bottom	Solo Lvl	Solo SW	Yes

Delay and Delay2 CC's

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

DELAY2 ON/OFF CC# 58 (0-63 OFF, 64-127 ON)

DELAY KNOB = CC# 76 (0-127)

DELAY COLOR ASSIGN = CC#77 (see CC# 80 in Delay table)

DELAY COLOR SELECT = CC# 78 (0=Green, 1=Red, 2=Yellow)

CYCLE DELAY (i.e. press button) = CC# 79 (0)

The DELAY effects are identical with DELAY2 effects. Hence the shared table.

DLY: CC# 80 DLY2: CC# 119 Delay Effects	CC# 81 CC# 120 0-127	CC# 82 CC# 121 0-127	CC# 83 CC# 122 0-127	CC# 84 CC# 123 0-127 (127=flat)	CC# 85 CC# 124 0-127	CC# 86 CC# 125 0-127	CC# 87 CC# 126 0-127	CC# 88 CC# 127 0-127	Un-impl. params
Digital = 0	Level	Dly Time	Dir. Mix	High cut	Feedback	-	-		-
Pan = 1	Level	Dly Time	Dir. Mix	High cut	Feedback	-	-		Yes
Stereo = 2	Level	Dly Time	Dir. Mix	High cut	Feedback	-	-		Yes
Analog = 3	Level	Dly Time	Dir. Mix	High cut	Feedback	-	-		-
Tape Echo =4	Level	Dly Time	Dir. Mix	High cut	Feedback	-	-		-
Reverse = 5	Level	Dly Time	Dir. Mix	High cut	Feedback	-	-		-
Modulate = 6	Level	Dly Time	Dir. Mix	High cut	Feedback	Mod. rate	Mod. depth		-
SDE-3000 = 7	Level	Dly Time	Dir. Mix	-	Feedback	Mod. rate	Mod. depth	Mod. Sw.	Yes
Dual-S = 8	Level	Dly Time	Dir. Mix	High cut	Feedback	-	-		Yes
Dual-P = 9	Level	Dly Time	Dir. Mix	High cut	Feedback	-	-		Yes
Dual L/R = 10	Level	Dly Time	Dir. Mix	High cut	Feedback	-	-		Yes

SDE-3000: Filter, Range, Delay phase, Feedback phase not implemented.

Reverb CC's (FX3)

REVERB KNOB = CC# 106 (0-127)

REVERB COLOR ASSIGN = CC# 107 (0-4 see cc# 110)

DIRECT COLOR SELECT = CC# 108 (0=Green, 1=Red, 2=Yellow)

CYCLE COLOR (i.e. press button) = CC# 109 (0)

CC# 110 Reverb	CC# 111 0-127	CC# 112 0-127= 0-10s	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	CC#118 0-127
Plate = 0	Level	Time	Dir.mix	Pre delay	Low cut	Hi cut	Density	-
Room = 1	Level	Time	Dir.mix	Pre delay	Low cut	Hi cut	Density	-
Hall (2) = 2	Level	Time	Dir.mix	Pre delay	Low cut	Hi cut	Density	-
Spring = 3	Level	Time	Dir.mix	Pre delay	Low cut	Hi cut	Density	Spring dens
Modulate = 4	Level	Time	Dir.mix	Pre delay	Low cut	Hi cut	Density	-
Ambience = 5	Level	Time	Dir.mix	Pre delay	Low cut	Hi cut	Density	-
Hall 1 = 6	Level	Time	Dir.mix	Pre delay	Low cut	Hi cut	Density	-

MOD and FX CC's

MOD ON/OFF = CC# 17 (0-63 OFF, 64-127 ON)
 MOD KNOB = CC# 59 (0-127)
 MOD COLOR ASSIGN = CC# 73 (see CC#60 in Mod table)

MOD DIRECT COLOR SELECT = CC# 74 (0=Green, 1=Red, 2=Yellow)
 MOD CYCLE COLOR (i.e. press button) = CC# 75 (0)

FX ON/OFF = CC# 18 (0-63 OFF, 64-127 ON)
 FX KNOB = CC# 89 (0-127)

FX COLOR ASSIGN = CC#103 (see CC# 80 in Delay or CC#90 in FX table)
 FX DIRECT COLOR SELECT = CC# 104 (0=Green, 1=Red, 2=Yellow)
 FX CYCLE COLOR (i.e. press button) = CC# 107 (0)

The MOD effects are identical with FX effects. Hence the shared table.

MOD: CC# 60	CC# 61	CC# 62	CC# 63	CC# 64	CC# 65	CC# 66	CC# 67	CC# 68	CC# 69	CC# 70	CC# 71	CC# 72
FX: CC# 90	CC# 91	CC# 92	CC# 93	CC# 94	CC# 95	CC# 96	CC# 97	CC# 98	CC# 99	CC# 100	CC# 101	CC# 102
Effects	0-127	0-127	0-127	0-127	0-127	0-127	0-127	(*)	(*)	(*)	(*)	(*)
Chorus = 0	Lo level	Lo Rate	Dir mix	Lo depth	Hi lev	Hi rate	Hi depth	Lo pre del (a)	Hi pre del (a)	XO Freq (b)	-	-
Flanger = 1	Level	Rate	Dir Mix	Depth	Reso	Manual	-	Lo cut (c)	-	-	-	-
Phaser = 2	Level	Rate	Dir Mix	Depth	Reso	Manual	-	Type (d)	Step rate (e)	-	-	-
Uni-V = 3	Level	Rate	-	Depth	-	-	-	-	-	-	-	-
Tremolo = 4	Level	Rate	-	Depth	Shape	-	-	-	-	-	-	-
Vibrato = 5	Level	Rate	-	Depth	-	-	-	-	-	-	-	-
Rotary = 6	Level	Rate	-	Depth	-	-	-	-	-	-	-	-
Ring mod = 7	Level	Freq	Dir Mix	-	-	-	-	Type(aa)	-	-	-	-
Slow gear = 8	Level	Rise time	-	Sens	-	-	-	-	-	-	-	-
Slicer = 9	Level	Rate	Dir Mix	-	Trig sens	-	-	Pattern(z)	-	-	-	-
Comp = 10	Level	Sustain	-	Attack	Tone	-	-	Type (f)	-	-	-	-
Limiter = 11	Level	Ratio	-	Attack	Threshold	Release	-	Type (g)	-	-	-	-
T.Wha = 12	Level	Sens	Dir Mix	-	Freq	Peak	-	Mode (h)	Polar (i)	-	-	-
Auto Wha = 13	Level	Rate	Dir mix	Depth	Freq	Peak	-	Mode (h)	-	-	-	-
Pedal Wha = 14	Level	Ped. pos	Dir Mix	Ped. min	Ped. Max	-	-	Type (j)	-	-	-	-
Graphic EQ = 15	Level	1kHz	-	31Hz	62Hz	125Hz	250Hz	500Hz	2kHz	4kHz	8kHz	16kHz
Param EQ = 16	Level	Lo mid gain	-	Lo gain	Hi mid gain	Hi gain	-	Lo mid f. (k)	Lo md Q (l)	Hi mid f. (m)	Hi mid Q (l)	-
Guitar Sim = 17	Level	Type (0-127)	-	Low	High	Body	-	Type (n)	-	-	-	-
AC. Guitar Sim = 18	Level	Body	-	Low	High	-	-	-	-	-	-	-
AC. Processor = 19	Level	Presence	-	Bass	Mid	Treb	-	Type (o)	Mid Freq (m)	-	-	-
Wave Synth = 20	Level	Reso	Dir Mix	Cutoff	Flt sens	Flt decay	Flt depth	Type(p)	-	-	-	-
Octave = 21	Level	-	Dir mix	-	-	-	-	Range (q)	-	-	-	-
Heavy Octave = 22	Oct1 lev	Oct2 level	Dir Mix	-	-	-	-	-	-	-	-	-
Pitch shifter = 23	Ps1:Lvl	Ps2:Lvl	Dir mix	Ps1:Fine	Ps1:Pre Dly	Ps2:Fine	Ps2:PreDly	Type (r)	Ps1:ptch (s)	Ps2:ptch (s)	Ps1:mode(p)	Ps2:mode(p)
Harmonist = 24	Hr1:Lvl	Hr2:Lvl	Dir mix	Hr1:F-back	Hr1:Pre Dly	-	Hr2:PreDly	Type (t)	Hr1:Harm (u)	Hr2:Harm (u)	Mast.key (v)	-
Humanizer = 25	Level	Rate	-	Depth	Sens	Manual	-	Type (x)	Vowel1 (y)	Vowel2 (y)	-	-
Phase 90E = 26	-	Speed	-	Script	-	-	-	-	-	-	-	-
Flanger 117E = 27	-	Speed	-	Manual	Width	Regen.	-	-	-	-	-	-
Wah 95E = 28	Level	Ped. pos	Dir Mix	Ped. min	Ped. max	-	-	-	-	-	-	-
DC-30 = 29	Input vol	Chorus intens.	-	Tone	Output	-	-	Type(dc)	Echo rate	Echo intensity.	Echo volume	-

PATCH EQ and GLOBAL EQ													
SELECT EQ FOR EDIT: CC# 1	CC# 2 0-63 off 64-127 on	CC# 3 0-127	CC# 4 0-127	CC# 5 0-127	CC# 6 0-127	CC# 10 0-127	CC# 11 0-127	CC# 12 0-127	CC# 13 0-127	CC# 26 0-127	CC# 27 0-127	CC# 28 0-127	CC# 29 0-63 = Amp In 64-127 = Amp out
Global PEQ = 0	On/Off	Level	Lo gain	Lo-mid gain	Hi-mid gain	Hi gain	Low-mid freq	Lo-mid Q	High-mid freq	Hi mid Q	Low cut	High cut	Position
Patch PEQ = 1	On/Off	Level	Lo gain	Lo-mid gain	Hi-mid gain	Hi gain	Low-mid freq	Lo-mid Q	High-mid freq	Hi mid Q	Low cut	High cut	Position
Global GEQ = 2	On/Off	Level	31Hz	62Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	16kHz	Position
Patch GEQ = 3	On/Off	Level	31Hz	62Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	16kHz	Position

(*) Range of special parameters			
Code	Description	CC Value Range	Representation
a	Pre Delay	0-80	0-40ms
b	XOver Frequency	0-16	100Hz-4kHz
c	Low cut	0-10	Flat – 800Hz
d	Phaser Type	0-3	4Stage/8Stage/12Stage/BiPhase
e	Phaser Step Rate	0-101	Off/0-100
f	Compressor Type	0-6	Boss/HiBand/Light/D-comp/Orange/Fat/Mild
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
j	Wah Type	0-5	Cry/Vox/Fat/Light/7String/Reso
k	Lo-Mid Freq	0-27	20Hz-10kHz
l	Q	0-5	0.5/1/2/4/8/16
m	High-Mid-Freq	0-27	10kHz – 20kHz
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
p	Wave Synth Type	0-1	SAW/SQUARE
q	Octave Range	0-3	RANGE1/RANGE2/RANGE3/RANGE4
r	Pitch Shifter Type	0-1	1VOICE/2VOICE
s	Pitch Shifter Pitch	0-49	-24 -> 0 -> +24
t	Harmonist Type	0-1	1VOICE/2VOICE
u	Harmony	0-29	-2oct, -14 th , -13 th , -12 th , -11 th , -10 th , -9 th , -1oct, -7 th , -6 th , -5 th , -4 th , -3 rd , -2 nd , Unison, +2 nd , +3 rd , +4 th , +5 th , +6 th , +7 th , +1oct, +9 th , +10 th , +11 th , +12 th , +13 th , +14 th , +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)
x	Humanizer Type	0-1	PICKING/AUTO
y	Vowel	0-4	A/E/I/O/U
z	Pattern	0-19	P1-P20
aa	Ring mod type	0-1	NORMAL/INTELLIGENT
od	OD/DS Type	0-15	MID BOOST/CLEAN BOOST/TREBLE BOOST/CRUNCH/NATURAL OD WARM OD/ FAT DS/LEAD DS/METAL DS/OCT FUZZ/ BLUES OD OD-1/T-SCREAM/TURBO OD/DIST/RAT/GUV DS/DST+/METAL ZONE '60S FUZZ/MUFF FUZZ/A-DIST * FX only(not MOD)
tm	Modify Type	0-7	FAT/PRESENCE/MILD/TIGHT/ENHANCE/RESONATOR1/RESONATOR2/RESONATOR3
te	Tera echo	0-2	MONO/STEREO1/STEREO2
dc	DC-30	0-1	CHORUS/ECHO