

MIDI Implementation

OVERVIEW

Input Channels Section	MIDI Ch.	Busses Section	MIDI Ch.	FX-Slots Section	MIDI Ch.	Global Control Section	MIDI Ch.
Input Ch. 1	1	MAIN BUS	8	FX 1	14	SNAPSHOTS - whole mixer	16
Input Ch. 2	2	MON1 BUS	9	FX 2	15	FX 1 / FX 2 - common ctrl.	"
Input Ch. 3	3	MON2 BUS	10			[MIDI-Ch. 13 = not used]	
Input Ch. 4	4	FX 1 BUS	11				
Input Ch. 5/6	5	FX 2 BUS	12				
Input Ch. 7/8	6						
Input Ch. USB/BT	7						

INPUT CHANNELS

Section	MIDI Ch.	Command	Min. Value	Max. Value	Parameter	Min. Value	Max. Value	Notes	Comment
Input Ch. 1	1	CC 7	0, 1	127	Channel LEVEL (to MAIN)	OFF, -70 dB	+10 dB		Value 0 = OFF, Value 1~127 = the actual level control from -70 to +10 dB
"	"	CC 10	0	127	Channel BALANCE (to MAIN)	1.0 LEFT	1.0 RIGHT		Value 64 = "0.0 CENTER"
"	"	CC 5	0	1-127	MUTE	NO MUTE	MUTE		Switch; value 0 = "MUTE OFF"; value 1-127 = "MUTE"
"	"	CC 6	0	1-127	SOLO	NO SOLO	SOLO		Switch; value 0 = "SOLO OFF"; value 1-127 = "SOLO"
"	"	CC 1	0	127	EQ LOW	-15 dB	+15 dB		Continuous control; value 64 = "0.0 dB" (center position)
"	"	CC 2	"	"	EQ LOW MID	"	"		"
"	"	CC 3	"	"	EQ HI MID	"	"		"
"	"	CC 4	"	"	EQ HI	"	"		"
"	"	CC 8	0	127	GAIN	-20 dB	+60 dB	NOT on Ch. USB/BT	Continuous control
"	"	CC 9	0	127	LOW CUT	20 Hz	600 Hz	NOT on Ch. USB/BT	Continuous control
"	"	CC 11	0	100-127	COMP	0%	100%	NOT on Ch. USB/BT	Continuous control; values 101-127 = identical to max. value = 100%
"	"	CC 12	0	1-127	48 V	OFF	ON	ONLY on Ch. 1 + 2	Switch; value 0 = "48V OFF"; value 1-127 = "48V ON"
"	"	CC 14	0, 1	127	SEND LEVEL to MON1	OFF, -70 dB	+10 dB		Value 0 = OFF, Value 1~127 = the actual level control from -70 to +10 dB
"	"	CC 15	0, 1	127	SEND LEVEL to MON2	OFF, -70 dB	+10 dB		"
"	"	CC 16	0, 1	127	SEND LEVEL to FX 1	OFF, -70 dB	+10 dB		"
"	"	CC 17	0, 1	127	SEND LEVEL to FX 2	OFF, -70 dB	+10 dB		"

>Each Input Channel is assigned to one specific MIDI-Channel.

BUSSES

Section	MIDI Ch.	Command	Min. Value	Max. Value	Parameter	Min. Value	Max. Value	Notes	Comment
MAIN BUS	8	CC 7	0, 1	127	BUS LEVEL	OFF, -70 dB	+10 dB		Value 0 = OFF, Value 1~127 = the actual level control from -70 to +10 dB
"	"	CC 10	0	127	BUS BALANCE	1.0 LEFT	1.0 RIGHT	ONLY on MAIN BUS	Value 64 = "0.0 CENTER"
"	"	CC 8	0	127	BUS LIMITER	-30 dB	0 dB	NOT on FX 1/2 BUS	Continuous control
"	"	CC 11	0	127	9-BAND EQ 62 Hz	-15 dB	+15 dB	NOT on FX 1/2 BUS	Continuous control; value 64 = "0.0 dB" (center position)
"	"	CC 12	"	"	9-BAND EQ 125 Hz	"	"	"	"
"	"	CC 13	"	"	9-BAND EQ 250 Hz	"	"	"	"
"	"	CC 14	"	"	9-BAND EQ 500 Hz	"	"	"	"
"	"	CC 15	"	"	9-BAND EQ 1 kHz	"	"	"	"
"	"	CC 16	"	"	9-BAND EQ 2 kHz	"	"	"	"
"	"	CC 17	"	"	9-BAND EQ 4 kHz	"	"	"	"
"	"	CC 18	"	"	9-BAND EQ 8 kHz	"	"	"	"
"	"	CC 19	"	"	9-BAND EQ 16 kHz	"	"	"	"

>Each BUS is assigned to one specific MIDI-Channel.

FX CONTROL

Section	MIDI Ch.	Command	Min. Value	Max. Value	Parameter	Min. Value	Max. Value	Notes	Comment
FX 1 / FX 2	14 / 15	Prog. Chg.	1	16	EFFECT PRESET	1	16		Program Change 0 & 17-127 = ignored
"	"	CC 1	0	100-127	PARAMETER 1	0%	100%		Continuous control; values 101-127 = identical to max. value = 100%
"	"	CC 2	0	1-127	PARAMETER 2	Value A	Value B		Switch; MIDI value 0 = "Value A"; MIDI value 1-127 = "Value B"

>Each FX slot is assigned to one specific MIDI-Channel.

GLOBAL CONTROL

Section	MIDI Ch.	Command	Min. Value	Max. Value	Parameter	Min. Value	Max. Value	Notes	Comment
SNAPSHOT	16	Prog. Chg.	1	16	Load MIXER SNAPSHOT	1	16	Loading #16 = RESET!	Program Change 0 & 17-127 = ignored; Presets = 1-15; RESET = Prog. Chg. #16
FX 1 / FX 2	"	CC 1	0	1-127	FX MUTE	NO MUTE	MUTE	Mutes BOTH FX Sends	Switch; value 0 = "MUTE OFF"; value 1-127 = "MUTE"
FX 1 / FX 2	"	Note 0 (C -1)	Velocity 1	Velo. 127	TAP TEMPO	50 BPM	250 BPM	See below!	Lowest MIDI note for tempo tapping; ignore Velocity 0, any velo. btw. 1-127 = OK

> ALL global controls operate on MIDI-Channel 16.

Notes to TAP TEMPO:

- 1.) Note On command will be used to control the FX tempo; Note Off will be ignored.
- 2.) Any Note Velocity from 1-127 is OK for triggering, Velocity 0 will be ignored.
- 3.) Tempo calculation will be done by measuring the time interval between repetitive hit of MIDI-Note 0 (same logic as for the hardware TAP button on the mixer).
- 4.) TAP TEMPO affects generally both FX slots, so it's a "global tempo".
- 5.) TAP TEMPO is only useable for delay/echo effects which offer this parameter (FX 2 > Presets No. 1-12).