

# **PRODUCT SPECIFICATIONS**

## **Audio**

### **Sampling rate**

16-bit / 44khz

### **THD + N (Total Harmonic Distorsion + Noise)**

Line outputs (1/8" stereo jack, RCA) >90dB (A-weighted)

Headphone Outputs (1/4" stereo jack) >82dB (A-weighted)

Aux Input (RCA) >85dB (A-weighted)

### **Maximum output level**

Line outputs = 7dBu into 1kΩ

Headphone Outputs 5dBu into 32Ω

## **Mechanical**

Weight 3.96 lbs = 1.8 kg

Dimensions (W x D x H) 15"8 x 8"7 x 1"8 = 40 x 22 x 4.5 cm

## **Controls**

Transport buttons = 17

Pads = 16 (x 4 modes) = 64 controls

Backlights = 43

Rotary potentiometers = 6

Encoders = 2

Push encoder = 1

Faders = 5

Jog wheels = 2 (capacitive touch detection)

# **APPENDIX – HERCULES UNIVERSAL DJ MIDI CONTROLS**

## **Midi Input**

<b>Midi Control</b>	<b>Midi Control Type</b>	<b>Midi Command (decimal)</b>	<b>Midi Channel</b>	<b>Command Type</b>	<b>Midi Value</b>
FX_KP1_DA	Note on / Note Off	1	1	Button-Toggling Output	"127" : Pressed – "00" : Released
FX_KP2_DA	Note on / Note Off	2	1	Button-Toggling Output	"127" : Pressed – "00" : Released
FX_KP3_DA	Note on / Note Off	3	1	Button-Toggling Output	"127" : Pressed – "00" : Released
FX_KP4_DA	Note on / Note Off	4	1	Button-Toggling Output	"127" : Pressed – "00" : Released

FX_KP5_DA	Note on / Note Off	5	1	Button-Toggling Output	"127" : Pressed – "00" : Released
FX_KP6_DA	Note on / Note Off	6	1	Button-Toggling Output	"127" : Pressed – "00" : Released
FX_KP7_DA	Note on / Note Off	7	1	Button-Toggling Output	"127" : Pressed – "00" : Released
FX_KP8_DA	Note on / Note Off	8	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_FX_KP1_DA	Note on / Note Off	9	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_FX_KP2_DA	Note on / Note Off	10	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_FX_KP3_DA	Note on / Note Off	11	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_FX_KP4_DA	Note on / Note Off	12	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_FX_KP5_DA	Note on / Note Off	13	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_FX_KP6_DA	Note on / Note Off	14	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_FX_KP7_DA	Note on / Note Off	15	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_FX_KP8_DA	Note on / Note Off	16	1	Button-Toggling Output	"127" : Pressed – "00" : Released
CUE_KP1_DA	Note on / Note Off	17	1	Button-Toggling Output	"127" : Pressed – "00" : Released
CUE_KP2_DA	Note on / Note Off	18	1	Button-Toggling Output	"127" : Pressed – "00" : Released
CUE_KP3_DA	Note on / Note Off	19	1	Button-Toggling Output	"127" : Pressed – "00" : Released
CUE_KP4_DA	Note on / Note Off	20	1	Button-Toggling Output	"127" : Pressed – "00" : Released
CUE_KP5_DA	Note on / Note Off	21	1	Button-Toggling Output	"127" : Pressed – "00" : Released
CUE_KP6_DA	Note on / Note Off	22	1	Button-Toggling Output	"127" : Pressed – "00" : Released
CUE_KP7_DA	Note on / Note Off	23	1	Button-Toggling Output	"127" : Pressed – "00" : Released
CUE_KP8_DA	Note on / Note Off	24	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_CUE_KP1_DA	Note on / Note Off	25	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_CUE_KP2_DA	Note on / Note Off	26	1	Button-Toggling Output	"127" : Pressed – "00" : Released

SH_CUE_KP3_DA	Note on / Note Off	27	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_CUE_KP4_DA	Note on / Note Off	28	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_CUE_KP5_DA	Note on / Note Off	29	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_CUE_KP6_DA	Note on / Note Off	30	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_CUE_KP7_DA	Note on / Note Off	31	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_CUE_KP8_DA	Note on / Note Off	32	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SAM_KP1_DA	Note on / Note Off	33	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SAM_KP2_DA	Note on / Note Off	34	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SAM_KP3_DA	Note on / Note Off	35	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SAM_KP4_DA	Note on / Note Off	36	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SAM_KP5_DA	Note on / Note Off	37	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SAM_KP6_DA	Note on / Note Off	38	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SAM_KP7_DA	Note on / Note Off	39	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SAM_KP8_DA	Note on / Note Off	40	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_SAM_KP1_D A	Note on / Note Off	41	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_SAM_KP2_D A	Note on / Note Off	42	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_SAM_KP3_D A	Note on / Note Off	43	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_SAM_KP4_D A	Note on / Note Off	44	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_SAM_KP5_D A	Note on / Note Off	45	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_SAM_KP6_D A	Note on / Note Off	46	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_SAM_KP7_D A	Note on / Note Off	47	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_SAM_KP8_D A	Note on / Note Off	48	1	Button-Toggling Output	"127" : Pressed – "00" : Released

LOOP_KP1_DA	Note on / Note Off	49	1	Button-Toggling Output	"127" : Pressed – "00" : Released
LOOP_KP2_DA	Note on / Note Off	50	1	Button-Toggling Output	"127" : Pressed – "00" : Released
LOOP_KP3_DA	Note on / Note Off	51	1	Button-Toggling Output	"127" : Pressed – "00" : Released
LOOP_KP4_DA	Note on / Note Off	52	1	Button-Toggling Output	"127" : Pressed – "00" : Released
LOOP_KP5_DA	Note on / Note Off	53	1	Button-Toggling Output	"127" : Pressed – "00" : Released
LOOP_KP6_DA	Note on / Note Off	54	1	Button-Toggling Output	"127" : Pressed – "00" : Released
LOOP_KP7_DA	Note on / Note Off	55	1	Button-Toggling Output	"127" : Pressed – "00" : Released
LOOP_KP8_DA	Note on / Note Off	56	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_LOOP_KP1_DA	Note on / Note Off	57	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_LOOP_KP2_DA	Note on / Note Off	58	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_LOOP_KP3_DA	Note on / Note Off	59	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_LOOP_KP4_DA	Note on / Note Off	60	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_LOOP_KP5_DA	Note on / Note Off	61	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_LOOP_KP6_DA	Note on / Note Off	62	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_LOOP_KP7_DA	Note on / Note Off	63	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_LOOP_KP8_DA	Note on / Note Off	64	1	Button-Toggling Output	"127" : Pressed – "00" : Released
PLAY_DA	Note on / Note Off	65	1	Button-Toggling Output	"127" : Pressed – "00" : Released
CUE_DA	Note on / Note Off	66	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SYNC_DA	Note on / Note Off	67	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SHIFT_DA_BTN	Note on / Note Off	68	1	Button-Toggling Output	"127" : Pressed – "00" : Released
CUE_MODE_DA_BTN	Note on / Note Off	69	1	Button-Toggling Output	"127" : Pressed – "00" : Released
FX_DA_BTN	Note on / Note Off	70	1	Button-Toggling Output	"127" : Pressed – "00" : Released

SAM_DA_BTN	Note on / Note Off	71	1	Button-Toggling Output	"127" : Pressed – "00" : Released
LOOP_DA_BTN	Note on / Note Off	72	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_PLAY_DA	Note on / Note Off	73	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_CUE_DA	Note on / Note Off	74	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_SYNC_DA	Note on / Note Off	75	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_CUE_MODE_ DA_BTN	Note on / Note Off	77	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_FX_DA_BTN	Note on / Note Off	78	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_SAM_DA_BTN	Note on / Note Off	79	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_LOOP_DA_BTN	Note on / Note Off	80	1	Button-Toggling Output	"127" : Pressed – "00" : Released
LOAD_DA	Note on / Note Off	81	1	Button-Toggling Output	"127" : Pressed – "00" : Released
JOG_TOUCH_DA	Note on / Note Off	82	1	Button-Toggling Output	"127" : Pressed – "00" : Released
PFL_DA	Note on / Note Off	83	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_LOAD_DA	Note on / Note Off	84	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_JOG_TOUCH_ DA	Note on / Note Off	85	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_PFL_DA	Note on / Note Off	86	1	Button-Toggling Output	"127" : Pressed – "00" : Released
MAGIC	Note on / Note Off	87	1	Button-Toggling Output	"127" : Pressed – "00" : Released
RECORD	Note on / Note Off	88	1	Button-Toggling Output	"127" : Pressed – "00" : Released
SCRATCH	Note on / Note Off	89	1	Button-Toggling Output	"127" : Pressed – "00" : Released
VOL_UP	Note on / Note Off	90	1	Button-Toggling Output	"127" : Pressed – "00" : Released
VOL_DOWN	Note on / Note Off	91	1	Button-Toggling Output	"127" : Pressed – "00" : Released
BROWSE	Note on / Note Off	92	1	Button-Toggling Output	"127" : Pressed – "00" : Released
PAIRING	Note on / Note Off	93	1	Button-Toggling Output	"127" : Pressed – "00" : Released

MODE_1_SW	Note on / Note Off	94	1	Button-Toggling Output	"127" : Pressed – "00" : Released
MODE_2_SW	Note on / Note Off	95	1	Button-Toggling Output	"127" : Pressed – "00" : Released
FX_KP1_DB	Note on / Note Off	1	2	Button-Toggling Output	"127" : Pressed – "00" : Released
FX_KP2_DB	Note on / Note Off	2	2	Button-Toggling Output	"127" : Pressed – "00" : Released
FX_KP3_DB	Note on / Note Off	3	2	Button-Toggling Output	"127" : Pressed – "00" : Released
FX_KP4_DB	Note on / Note Off	4	2	Button-Toggling Output	"127" : Pressed – "00" : Released
FX_KP5_DB	Note on / Note Off	5	2	Button-Toggling Output	"127" : Pressed – "00" : Released
FX_KP6_DB	Note on / Note Off	6	2	Button-Toggling Output	"127" : Pressed – "00" : Released
FX_KP7_DB	Note on / Note Off	7	2	Button-Toggling Output	"127" : Pressed – "00" : Released
FX_KP8_DB	Note on / Note Off	8	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_FX_KP1_DB	Note on / Note Off	9	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_FX_KP2_DB	Note on / Note Off	10	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_FX_KP3_DB	Note on / Note Off	11	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_FX_KP4_DB	Note on / Note Off	12	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_FX_KP5_DB	Note on / Note Off	13	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_FX_KP6_DB	Note on / Note Off	14	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_FX_KP7_DB	Note on / Note Off	15	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_FX_KP8_DB	Note on / Note Off	16	2	Button-Toggling Output	"127" : Pressed – "00" : Released
CUE_KP1_DB	Note on / Note Off	17	2	Button-Toggling Output	"127" : Pressed – "00" : Released
CUE_KP2_DB	Note on / Note Off	18	2	Button-Toggling Output	"127" : Pressed – "00" : Released
CUE_KP3_DB	Note on / Note Off	19	2	Button-Toggling Output	"127" : Pressed – "00" : Released
CUE_KP4_DB	Note on / Note Off	20	2	Button-Toggling Output	"127" : Pressed – "00" : Released

CUE_KP5_DB	Note on / Note Off	21	2	Button-Toggling Output	"127" : Pressed – "00" : Released
CUE_KP6_DB	Note on / Note Off	22	2	Button-Toggling Output	"127" : Pressed – "00" : Released
CUE_KP7_DB	Note on / Note Off	23	2	Button-Toggling Output	"127" : Pressed – "00" : Released
CUE_KP8_DB	Note on / Note Off	24	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_CUE_KP1_DB	Note on / Note Off	25	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_CUE_KP2_DB	Note on / Note Off	26	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_CUE_KP3_DB	Note on / Note Off	27	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_CUE_KP4_DB	Note on / Note Off	28	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_CUE_KP5_DB	Note on / Note Off	29	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_CUE_KP6_DB	Note on / Note Off	30	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_CUE_KP7_DB	Note on / Note Off	31	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_CUE_KP8_DB	Note on / Note Off	32	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SAM_KP1_DB	Note on / Note Off	33	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SAM_KP2_DB	Note on / Note Off	34	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SAM_KP3_DB	Note on / Note Off	35	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SAM_KP4_DB	Note on / Note Off	36	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SAM_KP5_DB	Note on / Note Off	37	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SAM_KP6_DB	Note on / Note Off	38	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SAM_KP7_DB	Note on / Note Off	39	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SAM_KP8_DB	Note on / Note Off	40	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_SAM_KP1_D B	Note on / Note Off	41	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_SAM_KP2_D B	Note on / Note Off	42	2	Button-Toggling Output	"127" : Pressed – "00" : Released

SH_SAM_KP3_D B	Note on / Note Off	43	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_SAM_KP4_D B	Note on / Note Off	44	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_SAM_KP5_D B	Note on / Note Off	45	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_SAM_KP6_D B	Note on / Note Off	46	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_SAM_KP7_D B	Note on / Note Off	47	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_SAM_KP8_D B	Note on / Note Off	48	2	Button-Toggling Output	"127" : Pressed – "00" : Released
LOOP_KP1_DB	Note on / Note Off	49	2	Button-Toggling Output	"127" : Pressed – "00" : Released
LOOP_KP2_DB	Note on / Note Off	50	2	Button-Toggling Output	"127" : Pressed – "00" : Released
LOOP_KP3_DB	Note on / Note Off	51	2	Button-Toggling Output	"127" : Pressed – "00" : Released
LOOP_KP4_DB	Note on / Note Off	52	2	Button-Toggling Output	"127" : Pressed – "00" : Released
LOOP_KP5_DB	Note on / Note Off	53	2	Button-Toggling Output	"127" : Pressed – "00" : Released
LOOP_KP6_DB	Note on / Note Off	54	2	Button-Toggling Output	"127" : Pressed – "00" : Released
LOOP_KP7_DB	Note on / Note Off	55	2	Button-Toggling Output	"127" : Pressed – "00" : Released
LOOP_KP8_DB	Note on / Note Off	56	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_LOOP_KP1_ DB	Note on / Note Off	57	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_LOOP_KP2_ DB	Note on / Note Off	58	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_LOOP_KP3_ DB	Note on / Note Off	59	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_LOOP_KP4_ DB	Note on / Note Off	60	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_LOOP_KP5_ DB	Note on / Note Off	61	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_LOOP_KP6_ DB	Note on / Note Off	62	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_LOOP_KP7_ DB	Note on / Note Off	63	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_LOOP_KP8_ DB	Note on / Note Off	64	2	Button-Toggling Output	"127" : Pressed – "00" : Released



PLAY_DB	Note on / Note Off	65	2	Button-Toggling Output	"127" : Pressed – "00" : Released
CUE_DB	Note on / Note Off	66	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SYNC_DB	Note on / Note Off	67	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SHIFT_DB_BTN	Note on / Note Off	68	2	Button-Toggling Output	"127" : Pressed – "00" : Released
CUE_MODE_DB_ BTN	Note on / Note Off	69	2	Button-Toggling Output	"127" : Pressed – "00" : Released
FX_DB_BTN	Note on / Note Off	70	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SAM_DB_BTN	Note on / Note Off	71	2	Button-Toggling Output	"127" : Pressed – "00" : Released
LOOP_DB_BTN	Note on / Note Off	72	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_PLAY_DB	Note on / Note Off	73	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_CUE_DB	Note on / Note Off	74	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_SYNC_DB	Note on / Note Off	75	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_CUE_MODE_ DB_BTN	Note on / Note Off	77	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_FX_DB_BTN	Note on / Note Off	78	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_SAM_DB_BT N	Note on / Note Off	79	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_LOOP_DB	Note on / Note Off	80	2	Button-Toggling Output	"127" : Pressed – "00" : Released
LOAD_DB	Note on / Note Off	81	2	Button-Toggling Output	"127" : Pressed – "00" : Released
JOG_TOUCH_DB	Note on / Note Off	82	2	Button-Toggling Output	"127" : Pressed – "00" : Released
PFL_DB	Note on / Note Off	83	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_LOAD_DB	Note on / Note Off	84	2	Button-Toggling Output	"127" : Pressed – "00" : Released
SH_PFL_DB	Note on / Note Off	86	2	Button-Toggling Output	"127" : Pressed – "00" : Released
JOG_DA	Control Change	48	1	Incremental – Coarse (128 values)	127 > 64 : CCW Slow>Fast – 01 > 63 : CW Slow>Fast
JOG_DB	Control Change	49	1	Incremental – Coarse (128 values)	128 > 64 : CCW Slow>Fast – 01 > 63 : CW Slow>Fast

JOG_Scratch_DA	Control Change	50	1	Incremental – Coarse (128 values)	129 > 64 : CCW Slow>Fast – 01 > 63 : CW Slow>Fast
JOG_Scratch_DB	Control Change	51	1	Incremental – Coarse (128 values)	130 > 64 : CCW Slow>Fast – 01 > 63 : CW Slow>Fast
FX_DA_ENC	Control Change	80	1	Incremental – Coarse (128 values)	131 > 64 : CCW Slow>Fast – 01 > 63 : CW Slow>Fast
SH_FX_DA_ENC	Control Change	81	1	Incremental – Coarse (128 values)	132 > 64 : CCW Slow>Fast – 01 > 63 : CW Slow>Fast
CUE_DA_ENC	Control Change	82	1	Incremental – Coarse (128 values)	133 > 64 : CCW Slow>Fast – 01 > 63 : CW Slow>Fast
SH_CUE_DA_ENC	Control Change	83	1	Incremental – Coarse (128 values)	134 > 64 : CCW Slow>Fast – 01 > 63 : CW Slow>Fast
SAM_DA_ENC	Control Change	84	1	Incremental – Coarse (128 values)	135 > 64 : CCW Slow>Fast – 01 > 63 : CW Slow>Fast
SH_SAM_DA_ENC	Control Change	85	1	Incremental – Coarse (128 values)	136 > 64 : CCW Slow>Fast – 01 > 63 : CW Slow>Fast
LOOP_DA_ENC	Control Change	86	1	Incremental – Coarse (128 values)	137 > 64 : CCW Slow>Fast – 01 > 63 : CW Slow>Fast
SH_LOOP_DA_ENC	Control Change	87	1	Incremental – Coarse (128 values)	138 > 64 : CCW Slow>Fast – 01 > 63 : CW Slow>Fast
FX_DB_ENC	Control Change	88	1	Incremental – Coarse (128 values)	139 > 64 : CCW Slow>Fast – 01 > 63 : CW Slow>Fast
SH_FX_DB_ENC	Control Change	89	1	Incremental – Coarse (128 values)	140 > 64 : CCW Slow>Fast – 01 > 63 : CW Slow>Fast
CUE_DB_ENC	Control Change	90	1	Incremental – Coarse (128 values)	141 > 64 : CCW Slow>Fast – 01 > 63 : CW Slow>Fast
SH_CUE_DB_ENC	Control Change	91	1	Incremental – Coarse (128 values)	142 > 64 : CCW Slow>Fast – 01 > 63 : CW Slow>Fast
SAM_DB_ENC	Control Change	92	1	Incremental – Coarse (128 values)	143 > 64 : CCW Slow>Fast – 01 > 63 : CW Slow>Fast
SH_SAM_DB_ENC	Control Change	93	1	Incremental – Coarse (128 values)	144 > 64 : CCW Slow>Fast – 01 > 63 : CW Slow>Fast

LOOP_DB_ENC	Control Change	94	1	Incremental – Coarse (128 values)	145 > 64 : CCW Slow>Fast – 01 > 63 : CW Slow>Fast
SH_LOOP_DB_ENC	Control Change	95	1	Incremental – Coarse (128 values)	146 > 64 : CCW Slow>Fast – 01 > 63 : CW Slow>Fast
Browse_DA	Control Change	54	1	Incremental – Coarse (128 values)	147 > 64 : CCW Slow>Fast – 01 > 63 : CW Slow>Fast
XFADER	Control Change	65	1	Analog – Coarse (128 values)	00 > 127 : Full Left > Full Right
PITCH_DA	Control Change	55	1	Analog – Coarse (128 values)	00 > 127 : Full Down > Full Up
PITCH_DB	Control Change	56	1	Analog – Coarse (128 values)	1 > 127 : Full Down > Full Up
VOL_DA	Control Change	57	1	Analog – Coarse (128 values)	2 > 127 : Full Down > Full Up
TREBLE_DA	Control Change	58	1	Analog – Coarse (128 values)	00 > 127 : Full CW : Full CCW
MEDIUM_DA	Control Change	59	1	Analog – Coarse (128 values)	1 > 127 : Full CW : Full CCW
BASS_DA	Control Change	60	1	Analog – Coarse (128 values)	2 > 127 : Full CW : Full CCW
VOL_DB	Control Change	61	1	Analog – Coarse (128 values)	1 > 127 : Full Down > Full Up
TREBLE_DB	Control Change	62	1	Analog – Coarse (128 values)	00 > 127 : Full CW : Full CCW
MEDIUM_DB	Control Change	63	1	Analog – Coarse (128 values)	00 > 127 : Full CW : Full CCW
BASS_DB	Control Change	64	1	Analog – Coarse (128 values)	00 > 127 : Full CW : Full CCW
PITCH_DA_LSB	Control Change	71	1	Analog – Coarse (128 values)	LSByte of associated data
PITCH_DB_LSB	Control Change	72	1	Analog – Coarse (128 values)	LSByte of associated data

## Midi Output

Midi Control	Midi Control Type	Midi Command (decimal)	Midi Channel	Midi Value
FX_KP1_DA	Note on / Note Off	1	1	00 : OFF - 64 : HALF ON - 128: FULL ON
FX_KP2_DA	Note on / Note Off	2	1	00 : OFF - 64 : HALF ON - 128: FULL ON
FX_KP3_DA	Note on / Note Off	3	1	0 : OFF - 64 : HALF ON - 128: FULL ON
FX_KP4_DA	Note on / Note Off	4	1	0 : OFF - 64 : HALF ON - 128: FULL ON
FX_KP5_DA	Note on / Note Off	5	1	0 : OFF - 64 : HALF ON - 128: FULL ON
FX_KP6_DA	Note on / Note Off	6	1	0 : OFF - 64 : HALF ON - 128: FULL ON
FX_KP7_DA	Note on / Note Off	7	1	0 : OFF - 64 : HALF ON - 128: FULL ON
FX_KP8_DA	Note on / Note Off	8	1	0 : OFF - 64 : HALF ON - 128: FULL ON
SH_FX_KP1_DA	Note on / Note Off	9	1	0 : OFF - 64 : HALF ON - 128: FULL ON
SH_FX_KP2_DA	Note on / Note Off	10	1	0 : OFF - 64 : HALF ON - 128: FULL ON
SH_FX_KP3_DA	Note on / Note Off	11	1	0 : OFF - 64 : HALF ON - 128: FULL ON
SH_FX_KP4_DA	Note on / Note Off	12	1	0 : OFF - 64 : HALF ON - 128: FULL ON
SH_FX_KP5_DA	Note on / Note Off	13	1	0 : OFF - 64 : HALF ON - 128: FULL ON
SH_FX_KP6_DA	Note on / Note Off	14	1	0 : OFF - 64 : HALF ON - 128: FULL ON
SH_FX_KP7_DA	Note on / Note Off	15	1	0 : OFF - 64 : HALF ON - 128: FULL ON
SH_FX_KP8_DA	Note on / Note Off	16	1	0 : OFF - 64 : HALF ON - 128: FULL ON
CUE_KP1_DA	Note on / Note Off	17	1	0 : OFF - 64 : HALF ON - 128: FULL ON
CUE_KP2_DA	Note on / Note Off	18	1	0 : OFF - 64 : HALF ON - 128: FULL ON
CUE_KP3_DA	Note on / Note Off	19	1	0 : OFF - 64 : HALF ON - 128: FULL ON
CUE_KP4_DA	Note on / Note Off	20	1	0 : OFF - 64 : HALF ON - 128: FULL ON

CUE_KP5_DA	Note on / Note Off	21	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
CUE_KP6_DA	Note on / Note Off	22	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
CUE_KP7_DA	Note on / Note Off	23	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
CUE_KP8_DA	Note on / Note Off	24	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_CUE_KP1_DA	Note on / Note Off	25	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_CUE_KP2_DA	Note on / Note Off	26	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_CUE_KP3_DA	Note on / Note Off	27	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_CUE_KP4_DA	Note on / Note Off	28	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_CUE_KP5_DA	Note on / Note Off	29	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_CUE_KP6_DA	Note on / Note Off	30	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_CUE_KP7_DA	Note on / Note Off	31	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_CUE_KP8_DA	Note on / Note Off	32	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SAM_KP1_DA	Note on / Note Off	33	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SAM_KP2_DA	Note on / Note Off	34	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SAM_KP3_DA	Note on / Note Off	35	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SAM_KP4_DA	Note on / Note Off	36	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SAM_KP5_DA	Note on / Note Off	37	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SAM_KP6_DA	Note on / Note Off	38	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SAM_KP7_DA	Note on / Note Off	39	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SAM_KP8_DA	Note on / Note Off	40	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_SAM_KP1_DA	Note on / Note Off	41	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_SAM_KP2_DA	Note on / Note Off	42	1	0 : OFF - 64 : HALF ON - 128 : FULL ON

SH_SAM_KP3_DA	Note on / Note Off	43	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_SAM_KP4_DA	Note on / Note Off	44	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_SAM_KP5_DA	Note on / Note Off	45	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_SAM_KP6_DA	Note on / Note Off	46	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_SAM_KP7_DA	Note on / Note Off	47	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_SAM_KP8_DA	Note on / Note Off	48	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
LOOP_KP1_DA	Note on / Note Off	49	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
LOOP_KP2_DA	Note on / Note Off	50	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
LOOP_KP3_DA	Note on / Note Off	51	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
LOOP_KP4_DA	Note on / Note Off	52	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
LOOP_KP5_DA	Note on / Note Off	53	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
LOOP_KP6_DA	Note on / Note Off	54	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
LOOP_KP7_DA	Note on / Note Off	55	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
LOOP_KP8_DA	Note on / Note Off	56	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_LOOP_KP1_DA	Note on / Note Off	57	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_LOOP_KP2_DA	Note on / Note Off	58	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_LOOP_KP3_DA	Note on / Note Off	59	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_LOOP_KP4_DA	Note on / Note Off	60	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_LOOP_KP5_DA	Note on / Note Off	61	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_LOOP_KP6_DA	Note on / Note Off	62	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_LOOP_KP7_DA	Note on / Note Off	63	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_LOOP_KP8_DA	Note on / Note Off	64	1	0 : OFF - 64 : HALF ON - 128 : FULL ON

PLAY_DA	Note on / Note Off	65	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
CUE_DA	Note on / Note Off	66	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SYNC_DA	Note on / Note Off	67	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_PLAY_DA	Note on / Note Off	73	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_CUE_DA	Note on / Note Off	74	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_SYNC_DA	Note on / Note Off	75	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
PFL_DA	Note on / Note Off	83	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_PFL_DA	Note on / Note Off	86	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
MAGIC	Note on / Note Off	87	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
RECORD	Note on / Note Off	88	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
SCRATCH	Note on / Note Off	89	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
VMETER_1_DA	Note on / Note Off	90	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
VMETER_2_DA	Note on / Note Off	91	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
VMETER_3_DA	Note on / Note Off	92	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
VMETER_4_DA	Note on / Note Off	93	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
VMETER_5_DA	Note on / Note Off	94	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
VMETER_6_DA	Note on / Note Off	95	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
VMETER_7_DA	Note on / Note Off	96	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
VMETER_8_DA	Note on / Note Off	97	1	0 : OFF - 64 : HALF ON - 128 : FULL ON
VMETER_DA_LEVEL_H ALF	Note on / Note Off	98	1	01 : VMeter OFF
	Note on / Note Off			xx : VMeter Lev (xx – 1),
	Note on / Note Off			09 : VMeter all ON (Half Intensity)

VMETER_DA_LEVEL_F ULL	Note on / Note Off	99	1	01 : VMeter OFF
	Note on / Note Off		1	xx : VMeter Lev (xx - 1),
	Note on / Note Off		1	09 : VMeter all ON (Full Intensity) <sup>1</sup>
FX_KP1_DB	Note on / Note Off	1	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
FX_KP2_DB	Note on / Note Off	2	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
FX_KP3_DB	Note on / Note Off	3	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
FX_KP4_DB	Note on / Note Off	4	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
FX_KP5_DB	Note on / Note Off	5	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
FX_KP6_DB	Note on / Note Off	6	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
FX_KP7_DB	Note on / Note Off	7	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
FX_KP8_DB	Note on / Note Off	8	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_FX_KP1_DB	Note on / Note Off	9	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_FX_KP2_DB	Note on / Note Off	10	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_FX_KP3_DB	Note on / Note Off	11	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_FX_KP4_DB	Note on / Note Off	12	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_FX_KP5_DB	Note on / Note Off	13	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_FX_KP6_DB	Note on / Note Off	14	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_FX_KP7_DB	Note on / Note Off	15	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_FX_KP8_DB	Note on / Note Off	16	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
CUE_KP1_DB	Note on / Note Off	17	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
CUE_KP2_DB	Note on / Note Off	18	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
CUE_KP3_DB	Note on / Note Off	19	2	0 : OFF - 64 : HALF ON - 128 : FULL ON



CUE_KP4_DB	Note on / Note Off	20	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
CUE_KP5_DB	Note on / Note Off	21	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
CUE_KP6_DB	Note on / Note Off	22	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
CUE_KP7_DB	Note on / Note Off	23	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
CUE_KP8_DB	Note on / Note Off	24	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_CUE_KP1_DB	Note on / Note Off	25	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_CUE_KP2_DB	Note on / Note Off	26	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_CUE_KP3_DB	Note on / Note Off	27	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_CUE_KP4_DB	Note on / Note Off	28	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_CUE_KP5_DB	Note on / Note Off	29	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_CUE_KP6_DB	Note on / Note Off	30	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_CUE_KP7_DB	Note on / Note Off	31	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_CUE_KP8_DB	Note on / Note Off	32	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SAM_KP1_DB	Note on / Note Off	33	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SAM_KP2_DB	Note on / Note Off	34	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SAM_KP3_DB	Note on / Note Off	35	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SAM_KP4_DB	Note on / Note Off	36	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SAM_KP5_DB	Note on / Note Off	37	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SAM_KP6_DB	Note on / Note Off	38	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SAM_KP7_DB	Note on / Note Off	39	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SAM_KP8_DB	Note on / Note Off	40	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_SAM_KP1_DB	Note on / Note Off	41	2	0 : OFF - 64 : HALF ON - 128 : FULL ON

SH_SAM_KP2_DB	Note on / Note Off	42	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_SAM_KP3_DB	Note on / Note Off	43	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_SAM_KP4_DB	Note on / Note Off	44	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_SAM_KP5_DB	Note on / Note Off	45	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_SAM_KP6_DB	Note on / Note Off	46	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_SAM_KP7_DB	Note on / Note Off	47	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_SAM_KP8_DB	Note on / Note Off	48	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
LOOP_KP1_DB	Note on / Note Off	49	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
LOOP_KP2_DB	Note on / Note Off	50	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
LOOP_KP3_DB	Note on / Note Off	51	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
LOOP_KP4_DB	Note on / Note Off	52	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
LOOP_KP5_DB	Note on / Note Off	53	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
LOOP_KP6_DB	Note on / Note Off	54	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
LOOP_KP7_DB	Note on / Note Off	55	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
LOOP_KP8_DB	Note on / Note Off	56	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_LOOP_KP1_DB	Note on / Note Off	57	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_LOOP_KP2_DB	Note on / Note Off	58	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_LOOP_KP3_DB	Note on / Note Off	59	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_LOOP_KP4_DB	Note on / Note Off	60	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_LOOP_KP5_DB	Note on / Note Off	61	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_LOOP_KP6_DB	Note on / Note Off	62	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_LOOP_KP7_DB	Note on / Note Off	63	2	0 : OFF - 64 : HALF ON - 128 : FULL ON

SH_LOOP_KP8_DB	Note on / Note Off	64	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
PLAY_DB	Note on / Note Off	65	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
CUE_DB	Note on / Note Off	66	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SYNC_DB	Note on / Note Off	67	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SHIFT_DB_BTN	Note on / Note Off	68	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
CUE_MODE_DB_BTN	Note on / Note Off	69	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
FX_DB_BTN	Note on / Note Off	70	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SAM_DB_BTN	Note on / Note Off	71	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
LOOP_DB_BTN	Note on / Note Off	72	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_PLAY_DB	Note on / Note Off	73	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_CUE_DB	Note on / Note Off	74	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_SYNC_DB	Note on / Note Off	75	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_CUE_MODE_DB_BTN	Note on / Note Off	77	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_FX_DB_BTN	Note on / Note Off	78	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_SAM_DB_BTN	Note on / Note Off	79	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_LOOP_DB	Note on / Note Off	80	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
LOAD_DB	Note on / Note Off	81	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
PFL_DB	Note on / Note Off	83	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_LOAD_DB	Note on / Note Off	84	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
SH_PFL_DB	Note on / Note Off	86	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
VMETER_1_DB	Note on / Note Off	96	2	0 : OFF - 64 : HALF ON - 128 : FULL ON
VMETER_2_DB	Note on / Note Off	97	2	0 : OFF - 64 : HALF ON - 128 : FULL ON

VMETER_3_DB	Note on / Note Off	98	2	0 : OFF - 64 : HALF ON - 128: FULL ON
VMETER_4_DB	Note on / Note Off	99	2	0 : OFF - 64 : HALF ON - 128: FULL ON
VMETER_5_DB	Note on / Note Off	100	2	0 : OFF - 64 : HALF ON - 128: FULL ON
VMETER_6_DB	Note on / Note Off	101	2	0 : OFF - 64 : HALF ON - 128: FULL ON
VMETER_7_DB	Note on / Note Off	102	2	0 : OFF - 64 : HALF ON - 128: FULL ON
VMETER_8_DB	Note on / Note Off	103	2	0 : OFF - 64 : HALF ON - 128: FULL ON
VMETER_DB_LEVEL_H ALF	Note on / Note Off	104	2	01 : VMeter OFF
	Note on / Note Off		2	xx : VMeter Lev (xx - 1),
	Note on / Note Off		2	09 : VMeter all ON (Half Intensity)
VMETER_DB_LEVEL_F ULL	Note on / Note Off	105	2	01 : VMeter OFF
	Note on / Note Off		2	xx : VMeter Lev (xx - 1),
	Note on / Note Off		2	09 : VMeter all ON (Full Intensity) <sup>1</sup>
Update All Controls	Control Change	127	1	00 : OFF - 127: ON <sup>2</sup>

1. Intensity values are exclusive, if a half intensity is sent after a full intensity, these setting will overwrite the previous values.

2. All analogs without a rest position will be reported.

