# **TECHNICAL SPECIFICATIONS**

## **Audio**

#### Sampling rate

16-bit / 44.1KHz

# Signal Noise Ratio (Full Signal Path)

Line Outputs (1/8", RCA) > 90 dB ( A-weighted ) Headphone Output (1/8") > 90 dB ( A-weighted )

#### THD + N (Total Harmonic Distortion + Noise)

 $\begin{array}{ll} \text{Line Outputs (1/8", RCA)} & > 82 \, \text{dB (A-weighted)} \\ \text{Headphone Output (1/8")} & > 82 \, \text{dB (A-weighted)} \end{array}$ 

# **Maximum Output level**

Channel 1-2 (1/8" stereo jack and RCA) + 7,17 dBu into > 1k $\Omega$  Channel 3-4 (Headphone 1/8" stereo jack) + 5,32 dBu into > 32 $\Omega$ 

## Mechanical

Weight 2 lbs = 0.9 Kg

Dimensions (W x D x H):  $10^{"}4 \times 7^{"}4 = 26.5 \times 18.7 \text{cm}$ 

### Controls

Transport buttons 34
Backlights 27
Rotary potentiometers 6
Faders 3
Pitch shift 2
Jog wheels 2

## MIDI commands

**MIDI input** (commands sent by to controller to the computer)

Control	Midi Control Type	Midi Command (decimal)	Command Type	Midi Values (decimal)
FX_KP1_DA	Note On/Note Off	1	Button-Toggling Output	"127": Pressed – "0": Released
FX_KP2_DA	Note On/Note Off	2	Button-Toggling Output	"127" : Pressed – "0" : Released
FX_KP3_DA	Note On/Note Off	3	Button-Toggling Output	"127" : Pressed – "0" : Released
FX_KP4_DA	Note On/Note Off	4	Button-Toggling Output	"127" : Pressed – "0" : Released

Control	Midi Control Type	Midi Command (decimal)	Command Type	Midi Values (decimal)
SAMPLE_KP1_ DA	Note On/Note Off	5	Button-Toggling Output	"127" : Pressed – "0" : Released
SAMPLE_KP2_ DA	Note On/Note Off	6	Button-Toggling Output	"127" : Pressed – "0" : Released
SAMPLE_KP3_ DA	Note On/Note Off	7	Button-Toggling Output	"127" : Pressed – "0" : Released
SAMPLE_KP4_ DA	Note On/Note Off	8	Button-Toggling Output	"127" : Pressed – "0" : Released
LOOP_KP1_DA	Note On/Note Off	9	Button-Toggling Output	"127" : Pressed – "0" : Released
LOOP_KP2_DA	Note On/Note Off	10	Button-Toggling Output	"127" : Pressed – "0" : Released
LOOP_KP3_DA	Note On/Note Off	11	Button-Toggling Output	"127" : Pressed – "0" : Released
LOOP_KP4_DA	Note On/Note Off	12	Button-Toggling Output	"127" : Pressed – "0" : Released
CUE_KP1_DA	Note On/Note Off	13	Button-Toggling Output	"127" : Pressed – "0" : Released
CUE_KP2_DA	Note On/Note Off	14	Button-Toggling Output	"127" : Pressed – "0" : Released
CUE_KP3_DA	Note On/Note Off	15	Button-Toggling Output	"127" : Pressed – "0" : Released
CUE_KP4_DA	Note On/Note Off	16	Button-Toggling Output	"127" : Pressed – "0" : Released
PBM_DA	Note On/Note Off	17	Button-Toggling Output	"127" : Pressed – "0" : Released
PBP_DA	Note On/Note Off	18	Button-Toggling Output	"127" : Pressed – "0" : Released
PREV_DA	Note On/Note Off	19	Button-Toggling Output	"127" : Pressed – "0" : Released
NEXT_DA	Note On/Note Off	20	Button-Toggling Output	"127" : Pressed – "0" : Released
CUE_DA	Note On/Note Off	21	Button-Toggling Output	"127" : Pressed – "0" : Released

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Control	Midi Control Type	Midi Command (decimal)	Command Type	Midi Values (decimal)
PLAY_DA	Note On/Note Off	22	Button-Toggling Output	"127" : Pressed – "0" : Released
SYNC_DA	Note On/Note Off	23	Button-Toggling Output	"127" : Pressed – "0" : Released
LISTEN_DA	Note On/Note Off	24	Button-Toggling Output	"127" : Pressed – "0" : Released
LOAD_DA	Note On/Note Off	25	Button-Toggling Output	"127" : Pressed – "0" : Released
TOUCH_DA	Note On/Note Off	26	Button-Toggling Output	"127" : Pressed – "0" : Released
FX_KP1_DB	Note On/Note Off	27	Button-Toggling Output	"127" : Pressed – "0" : Released
FX_KP2_DB	Note On/Note Off	28	Button-Toggling Output	"127" : Pressed – "0" : Released
FX_KP3_DB	Note On/Note Off	29	Button-Toggling Output	"127" : Pressed – "0" : Released
FX_KP4_DB	Note On/Note Off	30	Button-Toggling Output	"127" : Pressed – "0" : Released
SAMPLE_KP1_ DB	Note On/Note Off	31	Button-Toggling Output	"127" : Pressed – "0" : Released
SAMPLE_KP2_ DB	Note On/Note Off	32	Button-Toggling Output	"127" : Pressed – "0" : Released
SAMPLE_KP3_ DB	Note On/Note Off	33	Button-Toggling Output	"127" : Pressed – "0" : Released
SAMPLE_KP4_ DB	Note On/Note Off	34	Button-Toggling Output	"127" : Pressed – "0" : Released
LOOP_KP1_DB	Note On/Note Off	35	Button-Toggling Output	"127" : Pressed – "0" : Released
LOOP_KP2_DB	Note On/Note Off	36	Button-Toggling Output	"127" : Pressed – "0" : Released
LOOP_KP3_DB	Note On/Note Off	37	Button-Toggling Output	"127" : Pressed – "0" : Released
CUE_KP4_DB	Note On/Note Off	38	Button-Toggling Output	"127" : Pressed – "0" : Released

Control	Midi Control Type	Midi Command (decimal)	Command Type	Midi Values (decimal)
CUE_KP1_DB	Note On/Note Off	39	Button-Toggling Output	"127" : Pressed – "0" : Released
CUE_KP2_DB	Note On/Note Off	40	Button-Toggling Output	"127" : Pressed – "0" : Released
CUE_KP3_DB	Note On/Note Off	41	Button-Toggling Output	"127" : Pressed – "0" : Released
CUE_KP4_DB	Note On/Note Off	42	Button-Toggling Output	"127" : Pressed – "0" : Released
PBM_DB	Note On/Note Off	43	Button-Toggling Output	"127" : Pressed – "0" : Released
PBP_DB	Note On/Note Off	44	Button-Toggling Output	"127" : Pressed – "0" : Released
PREV_DB	Note On/Note Off	45	Button-Toggling Output	"127" : Pressed – "0" : Released
NEXT_DB	Note On/Note Off	46	Button-Toggling Output	"127" : Pressed – "0" : Released
CUE_DB	Note On/Note Off	47	Button-Toggling Output	"127" : Pressed – "0" : Released
PLAY_DB	Note On/Note Off	48	Button-Toggling Output	"127" : Pressed – "0" : Released
SYNC_DB	Note On/Note Off	49	Button-Toggling Output	"127" : Pressed – "0" : Released
LISTEN_DB	Note On/Note Off	50	Button-Toggling Output	"127" : Pressed – "0" : Released
LOAD_DB	Note On/Note Off	51	Button-Toggling Output	"127" : Pressed – "0" : Released
TOUCH_DB	Note On/Note Off	52	Button-Toggling Output	"127" : Pressed – "0" : Released
SCRATCH	Note On/Note Off	53	Button-Toggling Output	"127" : Pressed – "0" : Released
UP	Note On/Note Off	54	Button-Toggling Output	"127" : Pressed – "0" : Released
DOWN	Note On/Note Off	55	Button-Toggling Output	"127" : Pressed – "0" : Released

Control	Midi Control Type	Midi Command (decimal)	Command Type	Midi Values (decimal)
FILES	Note On/Note Off	56	Button-Toggling Output	"127" : Pressed – "0" : Released
FOLDERS	Note On/Note Off	57	Button-Toggling Output	"127" : Pressed – "0" : Released
HP_VOL_M	Note On/Note Off	64	Button-Toggling Output	"127" : Pressed – "0" : Released
HP_VOL_P	Note On/Note Off	65	Button-Toggling Output	"127" : Pressed – "0" : Released
JOG_DA	Control Change	48	Incremental – Coarse (128 values)	127 > 64 : CCW Slow > Fast 1 > 63 : CW Slow > Fast
JOG_DB	Control Change	49	Incremental – Coarse (128 values)	127 > 64 : CCW Slow > Fast 1 > 63 : CW Slow > Fast
PITCH_DA	Control Change	52	Incremental – Coarse (128 values)	127: Pitch Down 01 : Pitch Up
PITCH_DB	Control Change	53	Incremental – Coarse (128 values)	127: Pitch Down 01 : Pitch Up
VOL_DA	Control Change	54	Analog – Coarse (128 values)	0 > 127 : Full Down > Full Up
TREBLE_DA	Control Change	55	Analog – Coarse (128 values)	0 > 127 : Full CW : Full CCW
MEDIUM_DA	Control Change	56	Analog – Coarse (128 values)	0 > 127 : Full CW : Full CCW
BASS_DA	Control Change	57	Analog – Coarse (128 values)	0 > 127 : Full CW : Full CCW
XFADER	Control Change	58	Analog – Coarse (128 values)	0 > 127 : Full Left > Full Right
VOL_DB	Control Change	59	Analog – Coarse (128 values)	0 > 127 : Full Down > Full Up
TREBLE_DB	Control Change	60	Analog – Coarse (128 values)	0 > 127 : Full CW : Full CCW
MEDIUM_DB	Control Change	61	Analog – Coarse (128 values)	0 > 127 : Full CW : Full CCW
BASS_DB	Control Change	62	Analog – Coarse (128 values)	0 > 127 : Full CW : Full CCW

# **MIDI Output** (commands sent by the computer to activate the LEDs)

Control	Midi Control Type	Midi Command (Decimal)	Midi Values (decimal)
FX_KP1_DA	Note On/Note Off	1	"127" : OFF – "0" : ON
FX_KP2_DA	Note On/Note Off	2	"127" : OFF – "0" : ON
FX_KP3_DA	Note On/Note Off	3	"127" : OFF – "0" : ON
FX_KP4_DA	Note On/Note Off	4	"127" : OFF – "0" : ON
SAMPLE_KP1_DA	Note On/Note Off	5	"127" : OFF – "0" : ON
SAMPLE_KP2_DA	Note On/Note Off	6	"127" : OFF – "0" : ON
SAMPLE_KP3_DA	Note On/Note Off	7	"127" : OFF – "0" : ON
SAMPLE_KP4_DA	Note On/Note Off	8	"127" : OFF – "0" : ON
LOOP_KP1_DA	Note On/Note Off	9	"127" : OFF – "0" : ON
LOOP_KP2_DA	Note On/Note Off	10	"127" : OFF – "0" : ON
LOOP_KP3_DA	Note On/Note Off	11	"127" : OFF – "0" : ON
LOOP_KP4_DA	Note On/Note Off	12	"127" : OFF – "0" : ON
CUE_KP1_DA	Note On/Note Off	13	"127" : OFF – "0" : ON
CUE_KP2_DA	Note On/Note Off	14	"127" : OFF – "0" : ON
CUE_KP3_DA	Note On/Note Off	15	"127" : OFF – "0" : ON
CUE_KP4_DA	Note On/Note Off	16	"127" : OFF – "0" : ON
CUE_DA	Note On/Note Off	21	"127" : OFF – "0" : ON
PLAY_DA	Note On/Note Off	22	"127" : OFF – "0" : ON
SYNC_DA	Note On/Note Off	23	"127" : OFF – "0" : ON
PREVIEW_DA	Note On/Note Off	24	"127" : OFF – "0" : ON
FX_KP1_DB	Note On/Note Off	27	"127" : OFF – "0" : ON
FX_KP2_DB	Note On/Note Off	28	"127" : OFF – "0" : ON

Control	Midi Control Type	Midi Command (Decimal)	Midi Values (decimal)
FX_KP3_DB	Note On/Note Off	29	"127" : OFF – "0" : ON
FX_KP4_DB	Note On/Note Off	30	"127" : OFF – "0" : ON
SAMPLE_KP1_DB	Note On/Note Off	31	"127" : OFF – "0" : ON
SAMPLE_KP2_DB	Note On/Note Off	32	"127" : OFF – "0" : ON
SAMPLE_KP3_DB	Note On/Note Off	33	"127" : OFF – "0" : ON
SAMPLE_KP4_DB	Note On/Note Off	34	"127" : OFF – "0" : ON
LOOP_KP1_DB	Note On/Note Off	35	"127" : OFF – "0" : ON
LOOP_KP2_DB	Note On/Note Off	36	"127" : OFF – "0" : ON
LOOP_KP3_DB	Note On/Note Off	37	"127" : OFF – "0" : ON
CUE_KP4_DB	Note On/Note Off	38	"127" : OFF – "0" : ON
CUE_KP1_DB	Note On/Note Off	39	"127" : OFF – "0" : ON
CUE_KP2_DB	Note On/Note Off	40	"127" : OFF – "0" : ON
CUE_KP3_DB	Note On/Note Off	41	"127" : OFF – "0" : ON
CUE_KP4_DB	Note On/Note Off	42	"127" : OFF – "0" : ON
CUE_DB	Note On/Note Off	47	"127" : OFF – "0" : ON
PLAY_DB	Note On/Note Off	48	"127" : OFF – "0" : ON
SYNC_DB	Note On/Note Off	49	"127" : OFF – "0" : ON
PREVIEW_DB	Note On/Note Off	50	"127" : OFF – "0" : ON
SCRATCH MODE	Note On/Note Off	53	"127" : OFF – "0" : ON
FILES	Note On/Note Off	56	"127" : OFF – "0" : ON
FOLDERS	Note On/Note Off	57	"127" : OFF – "0" : ON

Constant