

# ALLEN & HEATH®



# **Xone:96**

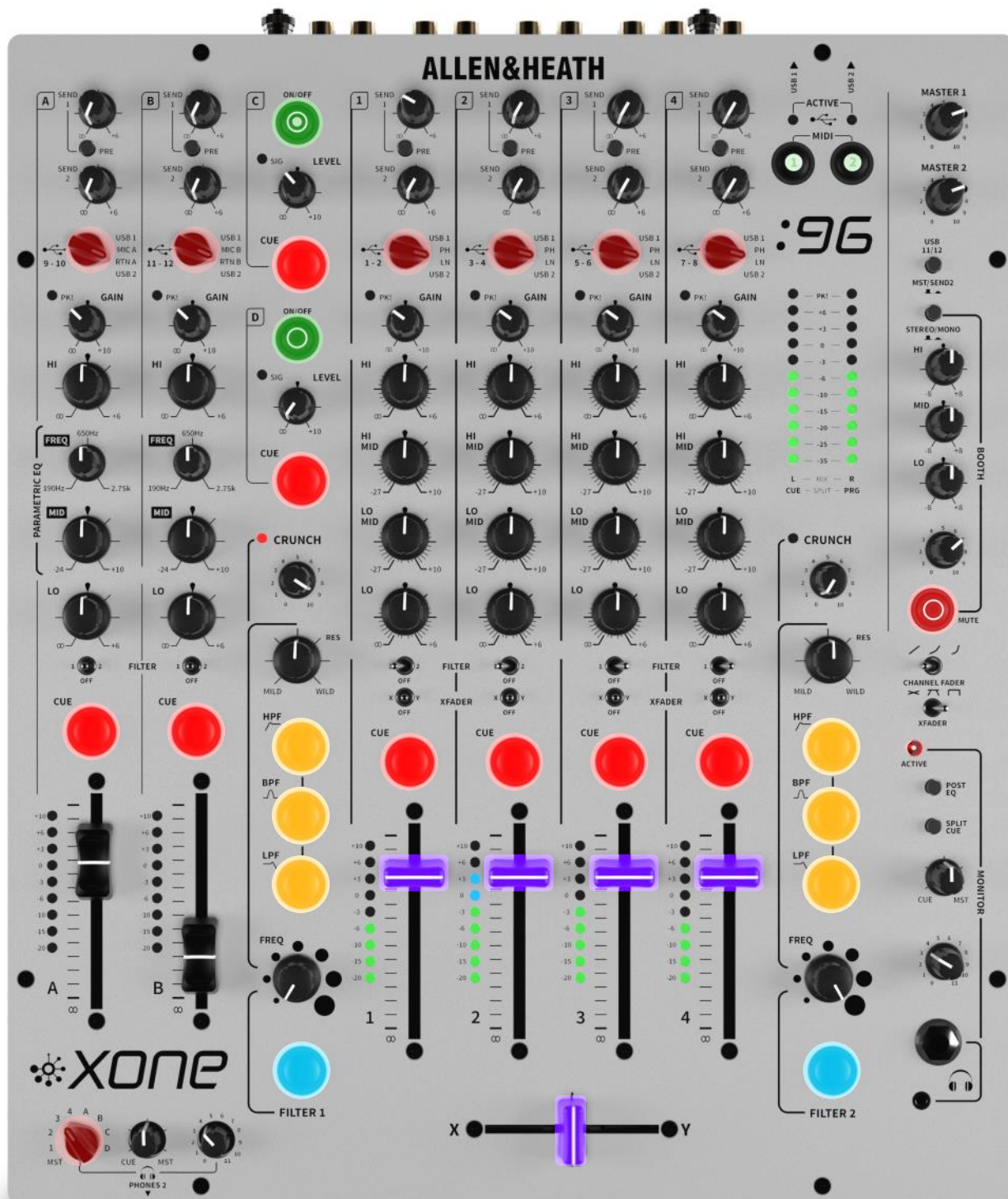
## MIDI CONTROL OVERVIEW

# MIDI CONTROL

**MIDI** stands for **M**usical **I**nstrument **D**igital **I**nterface; a protocol established in the 1980s to enable different keyboards, sequencers, drum machines, etc. to communicate with each other. MIDI remains a common and popular means to enable remote control of functions within DJ performance, or DAW (Digital Audio Workstation) software.

XONE:96 has the ability to send and receive MIDI data, with a total of 31 MIDI enabled controls; 19 buttons, 5 faders and 7 rotary switches that can be assigned as controls for most Digital DJ and DAW applications.

Refer to the following colour coded image and tables for details of the MIDI controls, assignment values, and to convert between equivalent hexadecimal, decimal and chromatic scale values.



## MIDI CONTROL continued

MIDI CONTROL VALUE [HEX]	XONE:96 CHANNEL												MIDI VALUES			
	1	2	3	4	A	B	C	D	VCF 1	VCF 2	LR MIX	MUTE	NOTE/CC	CH#	OUT	IN
CH SOURCE*	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗	NOTE*	16	✓	✗
CH FADER	00	01	02	03	✗	✗	✗	✗	✗	✗	✗	✗	CC	16	✓	✗
CH CUE	00	01	02	03	04	05	06	07	✗	✗	✗	✗	NOTE	16	✓	✓
HPF	✗	✗	✗	✗	✗	✗	✗	✗	0A	0E	✗	✗	NOTE	16	✓	✓
BPF	✗	✗	✗	✗	✗	✗	✗	✗	0B	0F	✗	✗	NOTE	16	✓	✓
LPF	✗	✗	✗	✗	✗	✗	✗	✗	0C	10	✗	✗	NOTE	16	✓	✓
ON / OFF	✗	✗	✗	✗	✗	✗	08	09	0D	11	✗	12	NOTE	16	✓	✓
PHONES 2	2B	2C	2D	2E	2F	30	31	32	✗	✗	33	✗	NOTE	16	✓	✗
XFADER													05 CC	16	✓	✗
<b>* CH IP SOURCE MIDI VALUES [HEX]</b>																
USB 1	13	17	1B	1F	23	27							NOTE	16	✓	✗
PHONO	14	18	1C	20	✗	✗							NOTE	16	✓	✗
LINE	15	19	1D	21	✗	✗							NOTE	16	✓	✗
MIC A	✗	✗	✗	✗	24	✗							NOTE	16	✓	✗
MIC B	✗	✗	✗	✗	✗	28							NOTE	16	✓	✗
RTN A	✗	✗	✗	✗	25	✗							NOTE	16	✓	✗
RTN B	✗	✗	✗	✗	✗	29							NOTE	16	✓	✗
USB 2	16	1A	1E	22	26	2A							NOTE	16	✓	✗

### MIDI Channel Setup

The default XONE:96 MIDI Channel is 16, but can be changed to any channel between 1 and 16 when powering the mixer ON. To change the channel number:

- Press and hold down both MIDI 1 and MIDI 2 switches
- Power the XONE:96 mixer ON  
CH A/ B /1-4 CUE, and FILTER 1/ FILTER 2 HPF Filter Type Select switches blink slowly
- Press the corresponding CUE or HPF switch to select the required MIDI channel between 1 and 8\*

**NOTE:** To access MIDI CH 9 - 16:

- Push the FILTER 1 or FILTER 2 ON/OFF switch once.  
CH A/ B /1-4 CUE, and FILTER 1/FILTER 2 HPF Filter Type Select switches blink rapidly
- Press the corresponding CUE or HPF switch to select the required MIDI channel between 9 and 16\*



CUE A = MIDI CH 1 or 9 | CUE B = MIDI CH 2 or 10 | F1 HPF = MIDI CH 3 or 11 | CUE 1 = MIDI CH 4 or 12  
CUE 2 = MIDI CH 5 or 13 | CUE 3 = MIDI CH 6 or 14 | CUE 4 = MIDI CH 7 or 15 | F2 HPF = MIDI CH 8 or 16

- After the CUE or HPF switch is pressed, the switches stop blinking and Filter Type Select switch LEDs cascade to indicate the MIDI channel change is implemented.

**NOTE:** The new MIDI channel remains stored when the mixer is powered OFF and is recalled on subsequent power-cycles until any further change is made.

# MIDI IMPLEMENTATION TABLES

OCTAVE	MIDI NOTE VALUES [NOTE OFF = 00 / NOTE ON = 7F]																							
	C	C# /Db	D	D# /Eb	E	F	F# /Gb	G	G# /Ab	A	A# /Bb	B												
-1	0	00	1	01	2	02	3	03	4	04	5	05	6	06	7	07	8	08	9	09	10	0A	11	0B
0	12	0C	13	0D	14	0E	15	0F	16	10	17	11	18	12	19	13	20	14	21	15	22	16	23	17
1	24	18	25	19	26	1A	27	1B	28	1C	29	1D	30	1E	31	1F	32	20	33	21	34	22	35	23
2	36	24	37	25	38	26	39	27	40	28	41	29	42	2A	43	2B	44	2C	45	2D	46	2E	47	2F
3	48	30	49	31	50	32	51	33	52	34	53	35	54	36	55	37	56	38	57	39	58	3A	59	3B
4	60	3C	61	3D	62	3E	63	3F	64	40	65	41	66	42	67	43	68	44	69	45	70	46	71	47
5	72	48	73	49	74	4A	75	4B	76	4C	77	4D	78	4E	79	4F	80	50	81	51	82	52	83	53
6	84	54	85	55	86	56	87	57	88	58	89	59	90	5A	91	5B	92	5C	93	5D	94	5E	95	5F
7	96	60	97	61	98	62	99	63	100	64	101	65	102	66	103	67	104	68	105	69	106	6A	107	6B
8	108	6C	109	6D	110	6E	111	6F	112	70	113	71	114	72	115	73	116	74	117	75	118	76	119	77
9	120	78	121	79	122	7A	123	7B	124	7C	125	7D	126	7E	127	7F								
	DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX

MIDI CONTROL CHANGE VALUES [min = 00 / max = 7F]																					
CC	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HEX	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	10	11	12	13	14
NOTE	C-1	C#-1	D-1	D#-1	E-1	F-1	F#-1	G-1	G#-1	A-1	A#-1	B-1	C0	C#0	D0	D#0	E0	F0	F#0	G0	G#0
CC	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HEX	15	16	17	18	19	1A	1B	1C	1D	1E	1F	20	21	22	23	24	25	26	27	28	29
NOTE	F0	F#0	G0	G#0	A0	A#0	B0	B#0	C1	C#1	D1	D#1	E1	F1	F#1	G-1	G#1	A1	A#1	B1	B#1