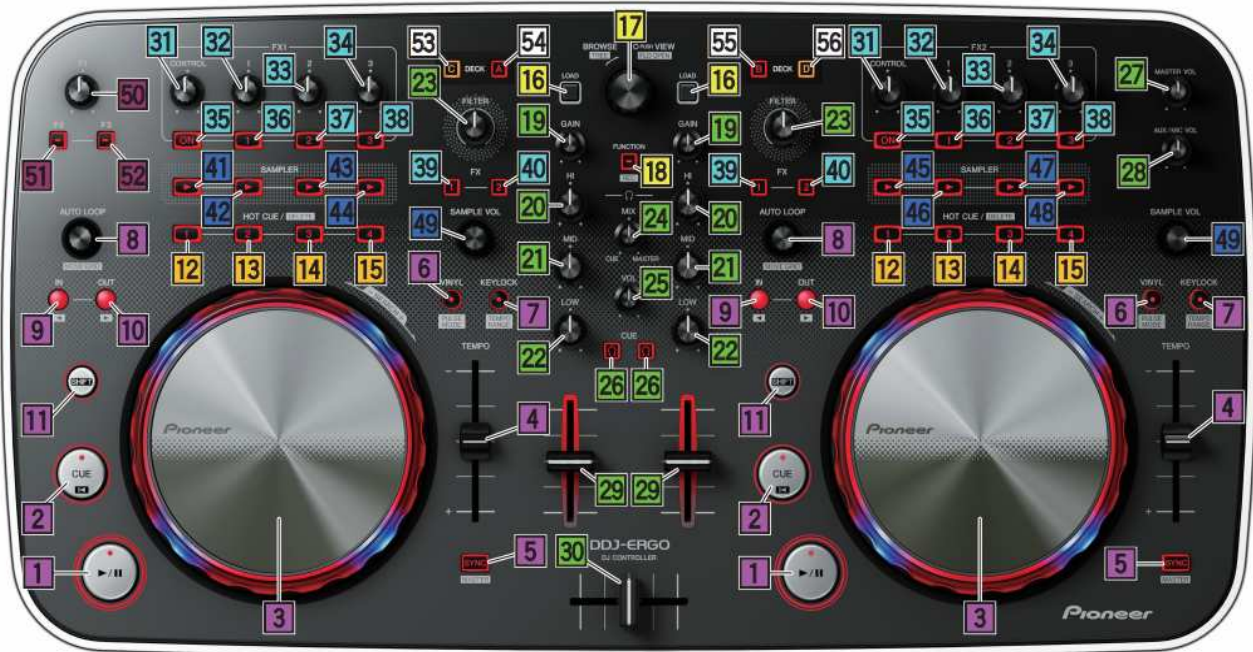


DDJ-ERGO

List of MIDI Messages



On this unit, the browser, deck, mixer and effect sections are connected with the MIDI channels shown below.

*"n" is the value of the channel number minus 1.

•Deck A is 0, Deck B is 1, Deck C is 2 and Deck D is 3.

• When operated while pressing the [SHIFT] button, the MIDI message for when the [SHIFT] button is on is sent.

•MIDI messages cannot be assigned to the [SHIFT] buttons

•We do not recommend using MIDI channels 12 and 13.

Deck A	MIDI Channel	1	n = 0
Deck B	MIDI Channel	2	n = 1
Deck C	MIDI Channel	3	n = 2
Deck D	MIDI Channel	4	n = 3
Effect A/C	MIDI Channel	5	n = 4
Effect B/D	MIDI Channel	6	n = 5
Browser,Mixer,Global Section	MIDI Channel	7	n = 6

0x9* :Note On

0xB* :Control Change(CC)

1 Browser

SW Name	Fig	MIDI message (this unit to computer)						Notes
		When SHIFT button is off			When SHIFT button is on			
Rotary selector (turn)	17	0xB6	64	dd	0xB6	100	dd	Difference count value from when previously operated •Turn clockwise: 1 - (max) 30 •Turn counterclockwise: 127 - (min) 98
Rotary selector (press)		0x96	65	dd	0x96	66	dd	OFF=0, ON=127
LOAD button(Deck A)		0x96	70	dd	0x96	88	dd	OFF=0, ON=127
LOAD button(Deck B)		0x96	71	dd	0x96	89	dd	OFF=0, ON=127
LOAD button(Deck C)		0x96	72	dd	0x96	90	dd	OFF=0, ON=127
LOAD button(Deck D)		0x96	73	dd	0x96	91	dd	OFF=0, ON=127

2 Deck

SW Name	Fig	MIDI message (this unit to computer)						Notes
		When SHIFT button is off			When SHIFT button is on			
PLAY/PAUSE ▶/⏸ button	1	0x9n	11	dd	0x9n	71	dd	OFF=0, ON=127
CUE button	2	0x9n	12	dd	0x9n	72	dd	OFF=0, ON=127
IN button	9	0x9n	16	dd	0x9n	76	dd	OFF=0, ON=127
OUT button	10	0x9n	17	dd	0x9n	77	dd	OFF=0, ON=127
AUTO LOOP (MOVE GRID) control (turn)	8	0xBn	19	dd	0x9n	79	dd	Difference count value from when previousoperated •Turn clockwise: 1 - (max) 30 •Turn counterclockwise: 127 - (min) 98
AUTO LOOP (MOVE GRID) control (press)		0x9n	20	dd	0x9n	80	dd	OFF=0, ON=127
DECK button	54, 55, 53, 56	0x9n	114	dd	-	-	-	OFF=0, ON=127
HOT CUE/DELETE 1 button	12	0x9n	46	dd	0x9n	95	dd	OFF=0, ON=127
HOT CUE/DELETE 2 button	13	0x9n	47	dd	0x9n	96	dd	OFF=0, ON=127
HOT CUE/DELETE 3 button	14	0x9n	48	dd	0x9n	97	dd	OFF=0, ON=127
HOT CUE/DELETE 4 button	15	0x9n	49	dd	0x9n	98	dd	OFF=0, ON=127
KEYLOCK (TEMPO RANGE) button	7	0x9n	26	dd	0x9n	27	dd	OFF=0, ON=127
VINYL (PULSE MODE) button	6	-	-	-	-	-	-	
TEMPO slider	4	0xBn	0	MSB	0xBn	5	MSB	0~16383
		0xBn	32	LSB	0xBn	37	LSB	0 at - side, 16383 at + side
SYNC (MASTER) button	5	0x9n	88	dd	0x9n	92	dd	OFF=0, ON=127
Jog dial (when outer section turned)		0xBn	33	dd	0xBn	38	dd	Difference count value from when previousoperated •When turned clockwise: 0x0 .Increases from 0x0 •When turned counterclockwise: 0x7F.Decreases from 0x7F
Jog dial (when top section turned: VINYL mode on)	3	0xBn	34	dd	0xBn	39	dd	Difference count value from when previousoperated •When turned clockwise: 0x0 .Increases from 0x0 •When turned counterclockwise: 0x7F.Decreases from 0x7F
Jog dial (when top section turned: VINYL mode off)		0xBn	35	dd	0xBn	39	dd	Difference count value from when previousoperated •When turned clockwise: 0x0 .Increases from 0x0 •When turned counterclockwise: 0x7F.Decreases from 0x7F
Jog dial (when top section pressed: VINYL mode on)		0x9n	54	dd	0x9n	103	dd	OFF=0, ON=127
Jog dial (when top section pressed: VINYL mode off)		0x9n	55	dd	0x9n	103	dd	OFF=0, ON=127

Indicator name	Fig	MIDI message (computer to this unit)						Indicator color	Notes
		When SHIFT button is off			When SHIFT button is on				
PLAY/PAUSE ▶/⏸ button	1	0x9n	11	dd	0x9n	77	dd	Red	Off = 0, lit = 127
CUE button	2	0x9n	12	dd	0x9n	72	dd	Red	Off = 0, lit = 127
IN button	9	0x9n	16	dd	0x9n	76	dd	Red	Off = 0, lit = 127
OUT button	10	0x9n	17	dd	0x9n	77	dd	Red	Off = 0, lit = 127
DECK button	54, 55, 53, 56	0x9n	114	dd	-	-	-	A/B DECK Red , C/D DECK Orange	Off = 0, lit = 127
HOT CUE/DELETE 1 button	12	0x9n	46	dd	0x9n	95	dd	Red	Off = 0, lit = 127
HOT CUE/DELETE 2 button	13	0x9n	47	dd	0x9n	96	dd	Red	Off = 0, lit = 127
HOT CUE/DELETE 3 button	14	0x9n	48	dd	0x9n	97	dd	Red	Off = 0, lit = 127
HOT CUE/DELETE 4 button	15	0x9n	49	dd	0x9n	98	dd	Red	Off = 0, lit = 127
KEYLOCK (TEMPO RANGE) button	7	0x9n	26	dd	0x9n	27	dd	Red	Off = 0, lit = 127
VINYL (PULSE MODE) button	6	0x9n	-	-	-	-	-		
SYNC (MASTER) button	5	0x9n	88	dd	0x9n	92	dd	Red	Off = 0, lit = 127

SW Name	Fig	MIDI message (this unit to computer)						Notes
		When SHIFT button is off			When SHIFT button is on			
MASTER VOL control	27	0xB6	0	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	32	LSB	-	-	-	
AUX/MIC VOL control	28	0xB6	20	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	52	LSB	-	-	-	
GAIN control	Deck A	0xB6	3	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	35	LSB	-	-	-	
		0xB6	4	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	36	LSB	-	-	-	
Deck B	19	0xB6	5	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	37	LSB	-	-	-	
		0xB6	6	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	38	LSB	-	-	-	
FUNCTION (REC) button	18	0x96	101	dd	0x96	102	dd	OFF=0, ON=127
HEADPHONES MIX control	24	0xB6	1	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	33	LSB	-	-	-	
HEADPHONES VOL control	25	0xB6	2	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	34	LSB	-	-	-	
EQ [HI] control	Deck A	0xB6	7	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	39	LSB	-	-	-	
		0xB6	8	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	40	LSB	-	-	-	
Deck B	20	0xB6	9	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	41	LSB	-	-	-	
		0xB6	10	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	42	LSB	-	-	-	
Deck C	21	0xB6	11	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	43	LSB	-	-	-	
		0xB6	12	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	44	LSB	-	-	-	
Deck D	22	0xB6	13	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	45	LSB	-	-	-	
		0xB6	14	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	46	LSB	-	-	-	
EQ [MID] control	Deck A	0xB6	15	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	47	LSB	-	-	-	
		0xB6	16	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	48	LSB	-	-	-	
Deck B	23	0xB6	17	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	49	LSB	-	-	-	
		0xB6	18	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	50	LSB	-	-	-	
EQ [LOW] control	Deck C	0x96	84	dd	-	-	-	OFF=0, ON=127
		0x96	85	dd	-	-	-	OFF=0, ON=127
		0x96	86	dd	-	-	-	OFF=0, ON=127
		0x96	87	dd	-	-	-	OFF=0, ON=127
Headphones CUE button	Deck D	0xB6	19	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	51	LSB	-	-	-	
		0xB6	21	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	53	LSB	-	-	-	
Channel fader	Deck A	0xB6	23	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	55	LSB	-	-	-	
		0xB6	25	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		0xB6	57	LSB	-	-	-	
Crossfader	30	0xB6	31	MSB	-	-	-	0~16383
		0xB6	63	LSB	-	-	-	0 at left side, 16383 at right side

Indicator name	Fig	MIDI message (computer to this unit)						Indicator color	Notes
		When SHIFT button is off			When SHIFT button is on				
FUNCTION (REC) button	18	0x96	101	dd	0x96	102	dd	Red	Off = 0, lit = 127
Headphones CUE button	26	0x96	84	dd	-	-	-	Red	Off = 0, lit = 127
		0x96	85	dd	-	-	-	Red	Off = 0, lit = 127
		0x96	86	dd	-	-	-	Red	Off = 0, lit = 127
		0x96	87	dd	-	-	-	Red	Off = 0, lit = 127

4 Effect

SW Name	Fig	MIDI message (this unit to computer)						Notes	
		When SHIFT button is off			When SHIFT button is on				
Effect DRY/WET control	Group	31 (Left)	0xB4	0	MSB	0xB4	16	MSB	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		31 (Right)	0xB5	0	MSB	0xB5	16	MSB	
	Single *1	31 (Left)	0xB4	8	MSB	0xB4	24	MSB	
		31 (Right)	0xB5	8	MSB	0xB5	24	MSB	
Effect parameter control 1	Group	32 (Left)	0xB4	2	MSB	0xB4	18	MSB	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		32 (Right)	0xB5	2	MSB	0xB5	18	MSB	
	Single *1	32 (Left)	0xB4	10	MSB	0xB4	26	MSB	
		32 (Right)	0xB5	10	MSB	0xB5	26	MSB	
Effect parameter control 2	Group	33 (Left)	0xB4	4	MSB	0xB4	20	MSB	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		33 (Right)	0xB5	4	MSB	0xB5	20	MSB	
	Single *1	33 (Left)	0xB4	12	MSB	0xB4	28	MSB	
		33 (Right)	0xB5	12	MSB	0xB5	28	MSB	
Effect parameter control 3	Group	34 (Left)	0xB4	6	MSB	0xB4	22	MSB	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
		34 (Right)	0xB5	6	MSB	0xB5	22	MSB	
	Single *1	34 (Left)	0xB4	14	MSB	0xB4	30	MSB	
		34 (Right)	0xB5	14	MSB	0xB5	30	MSB	
FILTER control	Deck A	23	0xB6	27	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
			0xB6	59	LSB	-	-	-	
	Deck B	0xB6	28	MSB	-	-	-		
		0xB6	60	LSB	-	-	-		
	Deck C	23	0xB6	29	MSB	-	-	-	
			0xB6	61	LSB	-	-	-	
	Deck D	0xB6	30	MSB	-	-	-		
		0xB6	62	LSB	-	-	-		
FX ON button	Group	35 (Left)	0x94	67	dd	0x94	64	dd	OFF=0, ON=127
		35 (Right)	0x95	67	dd	0x95	64	dd	OFF=0, ON=127
	Single *1	35 (Left)	0x94	74	dd	0x94	102	dd	OFF=0, ON=127
		35 (Right)	0x95	74	dd	0x95	102	dd	OFF=0, ON=127
Effect parameter button 1	Group	36 (Left)	0x94	71	dd	0x94	99	dd	OFF=0, ON=127
		36 (Right)	0x95	71	dd	0x95	99	dd	OFF=0, ON=127
	Single *1	36 (Left)	0x94	75	dd	0x94	103	dd	OFF=0, ON=127
		36 (Right)	0x95	75	dd	0x95	103	dd	OFF=0, ON=127
Effect parameter button 2	Group	37 (Left)	0x94	72	dd	0x94	100	dd	OFF=0, ON=127
		37 (Right)	0x95	72	dd	0x95	100	dd	OFF=0, ON=127
	Single *1	37 (Left)	0x94	76	dd	0x94	104	dd	OFF=0, ON=127
		37 (Right)	0x95	76	dd	0x95	104	dd	OFF=0, ON=127
Effect parameter button 3	Group	38 (Left)	0x94	73	dd	0x94	101	dd	OFF=0, ON=127
		38 (Right)	0x95	73	dd	0x95	101	dd	OFF=0, ON=127
	Single *1	38 (Left)	0x94	77	dd	0x94	105	dd	OFF=0, ON=127
		38 (Right)	0x95	77	dd	0x95	105	dd	OFF=0, ON=127
FX1 button	Deck A	39	0x96	76	dd	-	-	-	OFF=0, ON=127
	Deck B		0x96	77	dd	-	-	-	OFF=0, ON=127
	Deck C		0x96	78	dd	-	-	-	OFF=0, ON=127
	Deck D		0x96	79	dd	-	-	-	OFF=0, ON=127
FX2 button	Deck A	40	0x96	80	dd	-	-	-	OFF=0, ON=127
	Deck B		0x96	81	dd	-	-	-	OFF=0, ON=127
	Deck C		0x96	82	dd	-	-	-	OFF=0, ON=127
	Deck D		0x96	83	dd	-	-	-	OFF=0, ON=127

Indicator name	Fig	MIDI message (computer to this unit)						Indicator color	Notes	
		When SHIFT button is off			When SHIFT button is on					
FX ON button	Group	35 (Left)	0x94	67	dd	0x94	64	dd	Red	Off = 0, lit = 127
		35 (Right)	0x95	67	dd	0x95	64	dd	Red	Off = 0, lit = 127
	Single *1	35 (Left)	0x94	74	dd	0x94	102	dd	Red	Off = 0, lit = 127
		35 (Right)	0x95	74	dd	0x95	102	dd	Red	Off = 0, lit = 127
Effect parameter button 1	Group	36 (Left)	0x94	71	dd	0x94	99	dd	Red	Off = 0, lit = 127
		36 (Right)	0x95	71	dd	0x95	99	dd	Red	Off = 0, lit = 127
	Single *1	36 (Left)	0x94	75	dd	0x94	103	dd	Red	Off = 0, lit = 127
		36 (Right)	0x95	75	dd	0x95	103	dd	Red	Off = 0, lit = 127
Effect parameter button 2	Group	37 (Left)	0x94	72	dd	0x94	100	dd	Red	Off = 0, lit = 127
		37 (Right)	0x95	72	dd	0x95	100	dd	Red	Off = 0, lit = 127
	Single *1	37 (Left)	0x94	76	dd	0x94	104	dd	Red	Off = 0, lit = 127
		37 (Right)	0x95	76	dd	0x95	104	dd	Red	Off = 0, lit = 127
Effect parameter button 3	Group	38 (Left)	0x94	73	dd	0x94	101	dd	Red	Off = 0, lit = 127
		38 (Right)	0x95	73	dd	0x95	101	dd	Red	Off = 0, lit = 127
	Single *1	38 (Left)	0x94	77	dd	0x94	105	dd	Red	Off = 0, lit = 127
		38 (Right)	0x95	77	dd	0x95	105	dd	Red	Off = 0, lit = 127
FX1 button	Aデッキ	39	0x96	76	dd	-	-	-	Red	Off = 0, lit = 127
	Bデッキ		0x96	77	dd	-	-	-	Red	Off = 0, lit = 127
	Cデッキ		0x96	78	dd	-	-	-	Red	Off = 0, lit = 127
	Dデッキ		0x96	79	dd	-	-	-	Red	Off = 0, lit = 127
FX2 button	Aデッキ	40	0x96	80	dd	-	-	-	Red	Off = 0, lit = 127
	Bデッキ		0x96	81	dd	-	-	-	Red	Off = 0, lit = 127
	Cデッキ		0x96	82	dd	-	-	-	Red	Off = 0, lit = 127
	Dデッキ		0x96	83	dd	-	-	-	Red	Off = 0, lit = 127

5 Sampler

SW Name	Fig	MIDI message (this unit to computer)						Notes
		When SHIFT button is off			When SHIFT button is on			
SAMPLER button	41, 45	0x9n	60	dd	0x9n	61	dd	OFF=0, ON=127
SAMPLER button	42, 46	0x9n	62	dd	0x9n	63	dd	OFF=0, ON=127
SAMPLER button	43, 47	0x9n	64	dd	0x9n	65	dd	OFF=0, ON=127
SAMPLER button	44, 48	0x9n	66	dd	0x9n	67	dd	OFF=0, ON=127
SAMPLE VOL control (turn)	49	0xBn	68	dd	0xBn	73	dd	Difference count value from when previous operated *Turn clockwise: 1 - (max) 30 *Turn counterclockwise: 127 - (min) 98
SAMPLE VOL control (press)		0x9n	69	dd	0x9n	74	dd	OFF=0, ON=127

Indicator name	Fig	MIDI message (computer to this unit)						Indicator color	Notes
		When SHIFT button is off			When SHIFT button is on				
SAMPLER button	41, 45	0x9n	60	dd	0x9n	61	dd	Red	Off = 0, lit = 127
SAMPLER button	42, 46	0x9n	62	dd	0x9n	63	dd	Red	Off = 0, lit = 127
SAMPLER button	43, 47	0x9n	64	dd	0x9n	65	dd	Red	Off = 0, lit = 127
SAMPLER button	44, 48	0x9n	66	dd	0x9n	67	dd	Red	Off = 0, lit = 127

6 Others

SW Name	Fig	MIDI message (this unit to computer)						Notes
		When SHIFT button is off			When SHIFT button is on			
F1 control	50	0xB6	22	MSB	-	-	-	0~16383 When turned fully counterclockwise: 0 / When turned fully clockwise: 16383
F2 button	51	0x96	105	dd	0x96	106	dd	OFF=0, ON=127
F3 button	52	0x96	107	dd	0x96	108	dd	OFF=0, ON=127

Indicator name	Fig	MIDI message (computer to this unit)						Indicator color	Notes
		When SHIFT button is off			When SHIFT button is on				
F2 button	51	0x96	105	dd	0x96	106	dd	Red	Off = 0, lit = 127
F3 button	52	0x96	107	dd	0x96	108	dd	Red	Off = 0, lit = 127

Note)

*1 This mode is useful when MIDI-OUT (9n 124 dd:n=11)(9n 125 dd:n=11) is NoteOn.

<Appendix>

The table below shows MIDI Notes On in decimal numbers from 0 to 127.
Please refer to the "Table of MIDI note name and number" listed below, when necessary.

Note symbol chart

Note	Dec	Hex	Note	Dec	Hex	Note	Dec	Hex	Note	Dec	Hex
C-1	0	0x00	G#1	32	0x20	E4	64	0x40	C7	96	0x60
C#-1	1	0x01	A1	33	0x21	F4	65	0x41	C#7	97	0x61
D-1	2	0x02	A#1	34	0x22	F#4	66	0x42	D7	98	0x62
D#-1	3	0x03	B1	35	0x23	G4	67	0x43	D#7	99	0x63
E-1	4	0x04	C2	36	0x24	G#4	68	0x44	E7	100	0x64
F-1	5	0x05	C#2	37	0x25	A4	69	0x45	F7	101	0x65
F#-1	6	0x06	D2	38	0x26	A#4	70	0x46	F#7	102	0x66
G-1	7	0x07	D#2	39	0x27	B4	71	0x47	G7	103	0x67
G#-1	8	0x08	E2	40	0x28	C5	72	0x48	G#7	104	0x68
A-1	9	0x09	F2	41	0x29	C#5	73	0x49	A7	105	0x69
A#-1	10	0x0A	F#2	42	0x2A	D5	74	0x4A	A#7	106	0x6A
B-1	11	0x0B	G2	43	0x2B	D#5	75	0x4B	B7	107	0x6B
C0	12	0x0C	G#2	44	0x2C	E5	76	0x4C	C8	108	0x6C
C#0	13	0x0D	A2	45	0x2D	F5	77	0x4D	C#8	109	0x6D
D0	14	0x0E	A#2	46	0x2E	F#5	78	0x4E	D8	110	0x6E
D#0	15	0x0F	B2	47	0x2F	G5	79	0x4F	D#8	111	0x6F
E0	16	0x10	C3	48	0x30	G#5	80	0x50	E8	112	0x70
F0	17	0x11	C#3	49	0x31	A5	81	0x51	F8	113	0x71
F#0	18	0x12	D3	50	0x32	A#5	82	0x52	F#8	114	0x72
G0	19	0x13	D#3	51	0x33	B5	83	0x53	G8	115	0x73
G#0	20	0x14	E3	52	0x34	C6	84	0x54	G#8	116	0x74
A0	21	0x15	F3	53	0x35	C#6	85	0x55	A8	117	0x75
A#0	22	0x16	F#3	54	0x36	D6	86	0x56	A#8	118	0x76
B0	23	0x17	G3	55	0x37	D#6	87	0x57	B8	119	0x77
C1	24	0x18	G#3	56	0x38	E6	88	0x58	C9	120	0x78
C#1	25	0x19	A3	57	0x39	F6	89	0x59	C#9	121	0x79
D1	26	0x1A	A#3	58	0x3A	F#6	90	0x5A	D9	122	0x7A
D#1	27	0x1B	B3	59	0x3B	G6	91	0x5B	D#9	123	0x7B
E1	28	0x1C	C4	60	0x3C	G#6	92	0x5C	E9	124	0x7C
F1	29	0x1D	C#4	61	0x3D	A6	93	0x5D	F9	125	0x7D
F#1	30	0x1E	D4	62	0x3E	A#6	94	0x5E	F#9	126	0x7E
G1	31	0x1F	D#4	63	0x3F	B6	95	0x5F	G9	127	0x7F