

## Matrix Ctrlr Sysex / Control change chart

24.04.2017

Name	Parameter Rank	EditBuffer BYTE	Control Chnge nbr	bits	Value min	Value max
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>0</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>1</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>2</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>3</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>4</b>	<b>255</b>	<b>255</b>	<b>255</b>
SX_PORTAMENTO_RATE	44	32	5	6	0	63
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>6</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>7</b>	<b>255</b>	<b>255</b>	<b>255</b>
SX_MIX	20	20	8	6	0	63
SX_OSC1_FREQ	0	9	9	6	0	63
SX_OSC1_WAVESHAP	5	10	10	6	0	63
SX_OSC1_PULSEWIDTH	3	11	11	6	0	63
SX_OSC1_LEVERMOD	7	12	12	2	0	3
SX_OSC1_WAVEFORM	6	13	13	2	0	3
SX_OSC2_FREQ	10	14	14	6	0	63
SX_OSC2_WAVESHAP	15	15	15	6	0	63
SX_OSC2_PULSEWIDTH	13	16	16	6	0	63
SX_OSC2_LEVERMOD	17	17	17	2	0	3
SX_OSC2_WAVEFORM	16	18	18	3	0	3
SX_OSC2_DETUNE	12	19	19	6	0	63
SX_ENV1_TRIGGERMODE	57	49	20	3	0	7
SX_ENV1_DELAY	50	50	21	6	0	63
SX_ENV1_ATTACK	51	51	22	6	0	63
SX_ENV1_DECAY	52	52	23	6	0	63
SX_ENV1_SUSTAIN	53	53	24	6	0	63
SX_ENV1_RELEASE	54	54	25	6	0	63
SX_ENV1_AMPLITUDE	55	55	26	6	0	63
SX_ENV1_LFOTRIGGERMODE	59	56	27	2	0	3
SX_ENV1_RELEASEMODE	58	57	28	2	0	3
SX_ENV2_TRIGGERMODE	67	58	29	3	0	7
SX_ENV2_DELAY	60	59	30	6	0	63
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>31</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>32</b>	<b>255</b>	<b>255</b>	<b>255</b>

SX_LFO2_WAVESHAPE	92	45	33	3	0	7
SX_LFO2_RETRIGGERPOINT	93	46	34	5	0	31
SX_LFO2_SAMPLEDSOURCE	98	47	35	5	0	31
SX_LFO2_AMPLITUDE	94	48	36	6	0	63
SX_PORTAMENTO_MODE	46	33	37	2	0	3
SX_RAMP1_MODE	41	83	38	2	0	3
SX_RAMP2_RATE	42	84	39	6	0	63
SX_RAMP2_MODE	43	85	40	2	0	3
SX_ENV2_ATTACK	61	60	41	6	0	63
SX_ENV2_DECAY	62	61	42	6	0	63
SX_ENV2_SUSTAIN	63	62	43	6	0	63
SX_ENV2_RELEASE	64	63	44	6	0	63
SX_ENV2_AMPLITUDE	65	64	45	6	0	63
SX_ENV2_LFOTRIGGERMODE	69	65	46	2	0	3
SX_ENV2_RELEASEMODE	68	66	47	2	0	3
SX_ENV3_TRIGGERMODE	77	67	48	3	0	7
SX_ENV3_DELAY	70	68	49	6	0	63
SX_ENV3_ATTACK	71	69	50	6	0	63
SX_ENV3_DECAY	72	70	51	6	0	63
SX_ENV3_SUSTAIN	73	71	52	6	0	63
SX_ENV3_RELEASE	74	72	53	6	0	63
SX_ENV3_AMPLITUDE	75	73	54	6	0	63
SX_ENV3_LFOTRIGGERMODE	79	74	55	2	0	3
SX_ENV3_RELEASEMODE	78	75	56	2	0	3
SX_TRACK_INPUT	33	76	57	5	0	31
SX_TRACK_POINT1	34	77	58	6	0	63
SX_TRACK_POINT2	35	78	59	6	0	63
SX_TRACK_POINT3	36	79	60	6	0	63
SX_TRACK_POINT4	37	80	61	6	0	63
SX_TRACK_POINT5	38	81	62	6	0	63
SX_RAMP1_RATE	40	82	63	6	0	63
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>64</b>	<b>255</b>	<b>255</b>	<b>255</b>
SX_PORTAMENTO_LEGATOENABLE	47	34	65	1	0	1
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>66</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>67</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>68</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>69</b>	<b>255</b>	<b>255</b>	<b>255</b>

SX_OSC1_FREQBYLFO1AMOUNT	1	86	70	SIGNED7	0	127
SX_OSC1_PWBYLFO2AMOUNT	4	87	71	SIGNED7	0	127
SX_OSC2_FREQBYLFO1AMOUNT	11	88	72	SIGNED7	0	127
SX_OSC2_PWBYLFO2AMOUNT	14	89	73	SIGNED7	0	127
SX_FILTER_FREQBYENV1AMOUNT	22	90	74	SIGNED7	0	127
SX_FILTER_FREQBYPRESSURE	23	91	75	SIGNED7	0	127
SX_VCA1_AMPBYVELOCITY	28	92	76	SIGNED7	0	127
SX_VCA2_AMPBYENV2	29	93	77	SIGNED7	0	127
SX_ENV1_AMPBYVELO	56	94	78	SIGNED7	0	127
SX_ENV2_AMPBYVELO	66	95	79	SIGNED7	0	127
SX_OSC1_CLICK	9	22	80	1	0	1
SX_OSC2_CLICK	19	24	81	1	0	1
SX_LFO1_LAGENABLE	87	37	82	1	0	1
SX_LFO2_LAGENABLE	97	44	83	1	0	1
SX_ENV3_AMPBYVELO	76	96	84	SIGNED7	0	127
SX_LFO1_AMPMODULATION	85	97	85	SIGNED7	0	127
SX_LFO2_AMPMODULATION	95	98	86	SIGNED7	0	127
SX_PORTAMENTO_SPEEDBYVELOC	45	99	87	SIGNED7	0	127
SX_FILTER_FMBYENV3	31	100	88	SIGNED7	0	127
SX_FILTER_FMBYPRESSURE	32	101	89	SIGNED7	0	127
SX_LFO1_SPEEDMODULATION	81	102	90	SIGNED7	0	127
SX_LFO2_SPEEDMODULATION	91	103	91	SIGNED7	0	127
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>92</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>93</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_UNISON_DETUNE</b>	96	104	94	7	0	127
SX_KEYBOARD_MODE	48	8	95	2	0	3
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>96</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>97</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>98</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>99</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>100</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>101</b>	<b>255</b>	<b>255</b>	<b>255</b>
SX_OSC1_KEYBOARDMOD	8	21	102	2	0	3
SX_OSC2_KEYBOARDMOD	18	23	103	2	0	3
SX_OSC_SYNCMODE	2	25	104	2	0	3
SX_FILTER_FREQ	21	26	105	7	0	127
SX_FILTER_RESONANCE	24	27	106	6	0	63

SX_FILTER_LEVERMOD	25	28	107	2	0	3
SX_FILTER_KEYBOARDMOD	26	29	108	2	0	3
SX_FILTER_FM_AMOUNT	30	30	109	6	0	63
SX_VCA1_AMOUNT	27	31	110	6	0	63
SX_LFO1_SPEED	80	35	111	6	0	63
SX_LFO1_TRIGGERMODE	86	36	112	2	0	3
SX_LFO1_WAVESHAPE	82	38	113	3	0	7
SX_LFO1_RETRIGGERPOINT	83	39	114	5	0	31
SX_LFO1_SAMPLEDSOURCE	88	40	115	5	0	31
SX_LFO1_AMPLITUDE	84	41	116	6	0	63
SX_LFO2_SPEED	90	42	117	6	0	63
SX_LFO2_TRIGGERMODE	96	43	118	2	0	3
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>119</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>120</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>121</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>122</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>123</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>124</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>125</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>126</b>	<b>255</b>	<b>255</b>	<b>255</b>
<b>SX_NULL</b>	<b>255</b>	<b>255</b>	<b>127</b>	<b>255</b>	<b>255</b>	<b>255</b>