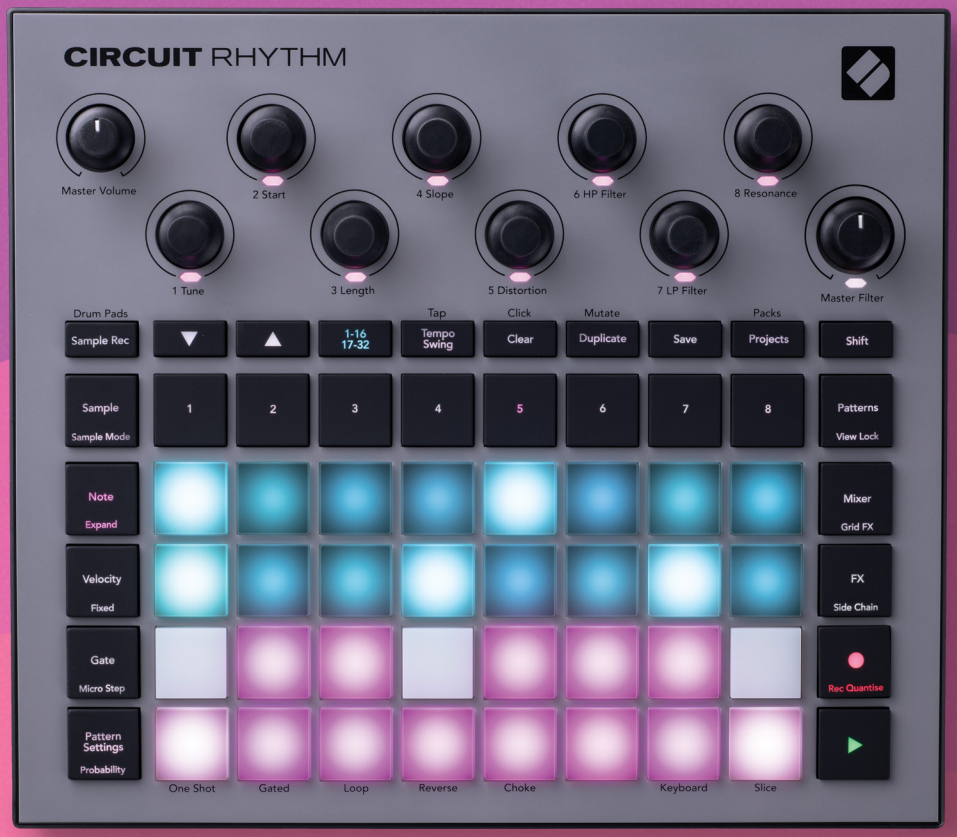

CIRCUIT RHYTHM

Programmer's Reference Guide

novation

Version 1.01

Contents
Circuit Rhythm MIDI Parameters-3

Circuit Rhythm MIDI Parameters

Macro Knobs

Section	Parameter	CC/NRPN	Control No.	Range	Default Value	
Macro Knobs						
	macro knob 1 position	CC	80	0 – 127	0	
	macro knob 1 destination A	NRPN	3:0	0 – 70	0	
	macro knob 1 start position A	NRPN	3:1	0 – 127	0	
	macro knob 1 end position A	NRPN	3:2	0 – 127	127	
	macro knob 1 depth A	NRPN	3:3	0 – 127 (-64 – 63)	64 (0)	
	macro knob 1 destination B	NRPN	3:4	0 – 70	0	
	macro knob 1 start position B	NRPN	3:5	0 – 127	0	
	macro knob 1 end position B	NRPN	3:6	0 – 127	127	
	macro knob 1 depth B	NRPN	3:7	0 – 127 (-64 – 63)	64 (0)	
	macro knob 1 destination C	NRPN	3:8	0 – 70	0	
	macro knob 1 start position C	NRPN	3:9	0 – 127	0	
	macro knob 1 end position C	NRPN	3:10	0 – 127	127	
	macro knob 1 depth C	NRPN	3:11	0 – 127 (-64 – 63)	64 (0)	
	macro knob 1 destination D	NRPN	3:12	0 – 70	0	
	macro knob 1 start position D	NRPN	3:13	0 – 127	0	
	macro knob 1 end position D	NRPN	3:14	0 – 127	127	
	macro knob 1 depth D	NRPN	3:15	0 – 127 (-64 – 63)	64 (0)	
	macro knob 2 position	CC	81	0 – 127	0	
	macro knob 2 destination A	NRPN	3:16	0 – 70	0	
	macro knob 2 start position A	NRPN	3:17	0 – 127	0	
	macro knob 2 end position A	NRPN	3:18	0 – 127	127	
	macro knob 2 depth A	NRPN	3:19	0 – 127 (-64 – 63)	64 (0)	
	macro knob 2 destination B	NRPN	3:20	0 – 70	0	
	macro knob 2 start position B	NRPN	3:21	0 – 127	0	
	macro knob 2 end position B	NRPN	3:22	0 – 127	127	
	macro knob 2 depth B	NRPN	3:23	0 – 127 (-64 – 63)	64 (0)	
	macro knob 2 destination C	NRPN	3:24	0 – 70	0	
	macro knob 2 start position C	NRPN	3:25	0 – 127	0	
	macro knob 2 end position C	NRPN	3:26	0 – 127	127	
	macro knob 2 depth C	NRPN	3:27	0 – 127 (-64 – 63)	64 (0)	
	macro knob 2 destination D	NRPN	3:28	0 – 70	0	
	macro knob 2 start position D	NRPN	3:29	0 – 127	0	
	macro knob 2 end position D	NRPN	3:30	0 – 127	127	
	macro knob 2 depth D	NRPN	3:31	0 – 127 (-64 – 63)	64 (0)	
	macro knob 3 position	CC	82	0 – 127	0	
	macro knob 3 destination A	NRPN	3:32	0 – 70	0	
	macro knob 3 start position A	NRPN	3:33	0 – 127	0	
	macro knob 3 end position A	NRPN	3:34	0 – 127	127	
	macro knob 3 depth A	NRPN	3:35	0 – 127 (–64 – 63)	64 (0)	
	macro knob 3 destination B	NRPN	3:36	0 – 70	0	
	macro knob 3 start position B	NRPN	3:37	0 – 127	0	
	macro knob 3 end position B	NRPN	3:38	0 – 127	127	
	macro knob 3 depth B	NRPN	3:39	0 – 127 (–64 – 63)	64 (0)	

	macro knob 3 destination C	NRPN	3:40	0 – 70	0	
	macro knob 3 start position C	NRPN	3:41	0 – 127	0	
	macro knob 3 end position C	NRPN	3:42	0 – 127	127	
	macro knob 3 depth C	NRPN	3:43	0 – 127 (–64 – 63)	64 (0)	
	macro knob 3 destination D	NRPN	3:44	0 – 70	0	
	macro knob 3 start position D	NRPN	3:45	0 – 127	0	
	macro knob 3 end position D	NRPN	3:46	0 – 127	127	
	macro knob 3 depth D	NRPN	3:47	0 – 127 (–64 – 63)	64 (0)	
	macro knob 4 position	CC	83	0 – 127	0	
	macro knob 4 destination A	NRPN	3:48	0 – 70	0	
	macro knob 4 start position A	NRPN	3:49	0 – 127	0	
	macro knob 4 end position A	NRPN	3:50	0 – 127	127	
	macro knob 4 depth A	NRPN	3:51	0 – 127 (–64 – 63)	64 (0)	
	macro knob 4 destination B	NRPN	3:52	0 – 70	0	
	macro knob 4 start position B	NRPN	3:53	0 – 127	0	
	macro knob 4 end position B	NRPN	3:54	0 – 127	127	
	macro knob 4 depth B	NRPN	3:55	0 – 127 (–64 – 63)	64 (0)	
	macro knob 4 destination C	NRPN	3:56	0 – 70	0	
	macro knob 4 start position C	NRPN	3:57	0 – 127	0	
	macro knob 4 end position C	NRPN	3:58	0 – 127	127	
	macro knob 4 depth C	NRPN	3:59	0 – 127 (–64 – 63)	64 (0)	
	macro knob 4 destination D	NRPN	3:60	0 – 70	0	
	macro knob 4 start position D	NRPN	3:61	0 – 127	0	
	macro knob 4 end position D	NRPN	3:62	0 – 127	127	
	macro knob 4 depth D	NRPN	3:63	0 – 127 (–64 – 63)	64 (0)	
	macro knob 5 position	CC	84	0 – 127	0	
	macro knob 5 destination A	NRPN	3:64	0 – 70	0	
	macro knob 5 start position A	NRPN	3:65	0 – 127	0	
	macro knob 5 end position A	NRPN	3:66	0 – 127	127	
	macro knob 5 depth A	NRPN	3:67	0 – 127 (–64 – 63)	64 (0)	
	macro knob 5 destination B	NRPN	3:68	0 – 70	0	
	macro knob 5 start position B	NRPN	3:69	0 – 127	0	
	macro knob 5 end position B	NRPN	3:70	0 – 127	127	
	macro knob 5 depth B	NRPN	3:71	0 – 127 (–64 – 63)	64 (0)	
	macro knob 5 destination C	NRPN	3:72	0 – 70	0	
	macro knob 5 start position C	NRPN	3:73	0 – 127	0	
	macro knob 5 end position C	NRPN	3:74	0 – 127	127	
	macro knob 5 depth C	NRPN	3:75	0 – 127 (–64 – 63)	64 (0)	
	macro knob 5 destination D	NRPN	3:76	0 – 70	0	
	macro knob 5 start position D	NRPN	3:77	0 – 127	0	
	macro knob 5 end position D	NRPN	3:78	0 – 127	127	
	macro knob 5 depth D	NRPN	3:79	0 – 127 (–64 – 63)	64 (0)	
	macro knob 6 position	CC	85	0 – 127	0	
	macro knob 6 destination A	NRPN	3:80	0 – 70	0	
	macro knob 6 start position A	NRPN	3:81	0 – 127	0	
	macro knob 6 end position A	NRPN	3:82	0 – 127	127	
	macro knob 6 depth A	NRPN	3:83	0 – 127 (–64 – 63)	64 (0)	
	macro knob 6 destination B	NRPN	3:84	0 – 70	0	
	macro knob 6 start position B	NRPN	3:85	0 – 127	0	
	macro knob 6 end position B	NRPN	3:86	0 – 127	127	

	macro knob 6 depth B	NRPN	3:87	0 – 127 (–64 – 63)	64 (0)	
	macro knob 6 destination C	NRPN	3:88	0 – 70	0	
	macro knob 6 start position C	NRPN	3:89	0 – 127	0	
	macro knob 6 end position C	NRPN	3:90	0 – 127	127	
	macro knob 6 depth C	NRPN	3:91	0 – 127 (–64 – 63)	64 (0)	
	macro knob 6 destination D	NRPN	3:92	0 – 70	0	
	macro knob 6 start position D	NRPN	3:93	0 – 127	0	
	macro knob 6 end position D	NRPN	3:94	0 – 127	127	
	macro knob 6 depth D	NRPN	3:95	0 – 127 (–64 – 63)	64 (0)	
	macro knob 7 position	CC	86	0 – 127	0	
	macro knob 7 destination A	NRPN	3:96	0 – 70	0	
	macro knob 7 start position A	NRPN	3:97	0 – 127	0	
	macro knob 7 end position A	NRPN	3:98	0 – 127	127	
	macro knob 7 depth A	NRPN	3:99	0 – 127 (–64 – 63)	64 (0)	
	macro knob 7 destination B	NRPN	3:100	0 – 70	0	
	macro knob 7 start position B	NRPN	3:101	0 – 127	0	
	macro knob 7 end position B	NRPN	3:102	0 – 127	127	
	macro knob 7 depth B	NRPN	3:103	0 – 127 (–64 – 63)	64 (0)	
	macro knob 7 destination C	NRPN	3:104	0 – 70	0	
	macro knob 7 start position C	NRPN	3:105	0 – 127	0	
	macro knob 7 end position C	NRPN	3:106	0 – 127	127	
	macro knob 7 depth C	NRPN	3:107	0 – 127 (–64 – 63)	64 (0)	
	macro knob 7 destination D	NRPN	3:108	0 – 70	0	
	macro knob 7 start position D	NRPN	3:109	0 – 127	0	
	macro knob 7 end position D	NRPN	3:110	0 – 127	127	
	macro knob 7 depth D	NRPN	3:111	0 – 127 (–64 – 63)	64 (0)	
	macro knob 8 position	CC	87	0 – 127	0	
	macro knob 8 destination A	NRPN	3:112	0 – 70	0	
	macro knob 8 start position A	NRPN	3:113	0 – 127	0	
	macro knob 8 end position A	NRPN	3:114	0 – 127	127	
	macro knob 8 depth A	NRPN	3:115	0 – 127 (–64 – 63)	64 (0)	
	macro knob 8 destination B	NRPN	3:116	0 – 70	0	
	macro knob 8 start position B	NRPN	3:117	0 – 127	0	
	macro knob 8 end position B	NRPN	3:118	0 – 127	127	
	macro knob 8 depth B	NRPN	3:119	0 – 127 (–64 – 63)	64 (0)	
	macro knob 8 destination C	NRPN	3:120	0 – 70	0	
	macro knob 8 start position C	NRPN	3:121	0 – 127	0	
	macro knob 8 end position C	NRPN	3:122	0 – 127	127	
	macro knob 8 depth C	NRPN	3:123	0 – 127 (–64 – 63)	64 (0)	
	macro knob 8 destination D	NRPN	3:124	0 – 70	0	
	macro knob 8 start position D	NRPN	3:125	0 – 127	0	
	macro knob 8 end position D	NRPN	3:126	0 – 127	127	
	macro knob 8 depth D	NRPN	3:127	0 – 127 (–64 – 63)	64 (0)	

Sampler Parts 1–8

Section	Parameter	CC / NRPN	Control No.	Range	Default Value	Notes
Voice						
	SampleChoice	CC	8	0 – 127	0	
	PlaybackMode	CC	12	0 – 2	0	
	Reverse	CC	14	0 – 1	0	
	Choke	CC	15	0 – 1	0	
	Slice	CC	16	0 – 1	0	
	Number of Slices	CC	17	0 – 16	16	
Sampler						
	Pitch	CC	21	–64 – 63	0	Controllable/Automatable using Macro Knobs
	StartCoarse	CC	22	0 – 127	0	Controllable/Automatable using Macro Knobs
	LengthCoarse	CC	23	0 – 127	127	Controllable/Automatable using Macro Knobs
	Slope	CC	24	–64 – 63	0	Controllable/Automatable using Macro Knobs
	Distortion	CC	25	0 – 127	0	Controllable/Automatable using Macro Knobs
	HPF	CC	26	0 – 127	0	Controllable/Automatable using Macro Knobs
	LPF	CC	27	0 – 127	127	Controllable/Automatable using Macro Knobs
	Resonance	CC	28	0 – 127	0	Controllable/Automatable using Macro Knobs
	StartFine	CC	86	0 – 127	0	Controllable/Automatable using Macro Knobs
	LengthFine	CC	87	0 – 127	127	Controllable/Automatable using Macro Knobs
Mixer						
	Level	CC	29	0 – 127	100	
	Pan	CC	30	–64 – 63	0	
	ReverbSend	CC	31	0 – 127	0	
	DelaySend	CC	32	0 – 127	0	
Dipper						
	Source	NRPN	1:0	0 – 7	0	
	Attack	NRPN	1:1	0 – 127	0	
	Hold	NRPN	1:2	0 – 127	0	
	Decay	NRPN	1:3	0 – 127	0	
	Depth	NRPN	1:4	0 – 127	0	

Project

Section	Parameter	CC / NRPN	Control No.	Range	Default Value	Notes
Reverb						
	Type	NRPN	1:18	0 – 5	2	
	Decay	NRPN	1:19	0 – 127	64	
	Damping	NRPN	1:20	0 – 127	64	
Delay						
	Time	NRPN	1:6	0 – 127	64	
	TimeSync	NRPN	1:7	0 –35	20	
	Feedback	NRPN	1:8	0 – 127	64	
	Wdith	NRPN	1:9	0 – 127	127	
	LRRatio	NRPN	1:10	0 – 12	4	
	SlewRate	NRPN	1:11	0 – 127	5	
Effects						
	Bypass	NRPN	1:21	0 – 1	0	
BeatRepeat						
	OnOff	CC	39	0 – 1	0	
	Rate	CC	40	0 – 10	4	
	DryWet	CC	41	0 – 127	0	
Reverser						
	OnOff	CC	42	0 – 1	0	
	Rate	CC	43	0 – 3	1	
Gator						
	OnOff	CC	44	0 – 1	0	
	Rate	CC	45	0 – 11	4	

Autofilter						
	OnOff	CC	46	0 – 1	0	
	FilterType	CC	47	0 – 3	0	
	Frequency	CC	48	0 – 127	0	
	LFOamount	CC	49	0 – 127	64	
	LFOshape	CC	50	0 – 2	0	
	LFOrate	CC	51	0 –13	2	
	Resonance	CC	52	0 – 127	2	
DigitalLofi						
	OnOff	CC	53	0 – 1	0	
	Bits	CC	54	0 – 127	127	
	SampleRate	CC	55	0 – 127	127	
Phaser						
	OnOff	CC	56	0 – 1	0	
	Rate	CC	57	0 – 13	2	
	Depth	CC	58	0 – 127	64	
	Feedback	CC	59	0 – 127	0	
	Centre	CC	64	0 – 127	8	
Vinyl						
	ONOff	CC	60	0 – 1	0	
	Filter	CC	61	0 – 127	127	
	Wobble	CC	62	0 – 127	0	
	Crackle	CC	63	0 – 127	0	
	Hiss	CC	65	0 – 127	0	

Pack

Section	Parameter	CC/NRPN	Control No.	Range	Default Value	Notes
GridFX						
1	FxSelect	NRPN	1:30	0 – 6	0	
1	FXparam1	NRPN	1:31	0 – 127	0	
1	FXparam2	NRPN	1:32	0 – 127	0	
1	FXparam3	NRPN	1:33	0 – 127	0	
1	FXparam4	NRPN	1:34	0 – 127	0	
1	FXparam5	NRPN	1:35	0 – 127	0	
1	FXparam6	NRPN	1:36	0 – 127	0	
2	FxSelect	NRPN	2:30	0 – 6	0	
2	FXparam1	NRPN	2:31	0 – 127	0	
2	FXparam2	NRPN	2:32	0 – 127	0	
2	FXparam3	NRPN	2:33	0 – 127	0	
2	FXparam4	NRPN	2:34	0 – 127	0	
2	FXparam5	NRPN	2:35	0 – 127	0	
2	FXparam6	NRPN	2:36	0 – 127	0	
3	FxSelect	NRPN	2:30	0 – 6	0	
3	FXparam1	NRPN	2:31	0 – 127	0	
3	FXparam2	NRPN	3:32	0 – 127	0	
3	FXparam3	NRPN	3:33	0 – 127	0	
3	FXparam4	NRPN	3:34	0 – 127	0	
3	FXparam5	NRPN	3:35	0 – 127	0	
3	FXparam6	NRPN	3:36	0 – 127	0	
4	FxSelect	NRPN	4:30	0 – 6	0	
4	FXparam1	NRPN	4:31	0 – 127	0	
4	FXparam2	NRPN	4:32	0 – 127	0	
4	FXparam3	NRPN	4:33	0 – 127	0	
4	FXparam4	NRPN	4:34	0 – 127	0	
4	FXparam5	NRPN	4:35	0 – 127	0	
4	FXparam6	NRPN	4:36	0 – 127	0	
5	FxSelect	NRPN	5:30	0 – 6	0	

5	FXparam1	NRPN	5;31	0 – 127	0	
5	FXparam2	NRPN	5:32	0 – 127	0	
5	FXparam3	NRPN	5:33	0 – 127	0	
5	FXparam4	NRPN	5:34	0 – 127	0	
5	FXparam5	NRPN	5:35	0 – 127	0	
5	FXparam6	NRPN	5:36	0 – 127	0	
6	FxSelect	NRPN	6:30	0 – 6	0	
6	FXparam1	NRPN	6:31	0 – 127	0	
6	FXparam2	NRPN	6:32	0 – 127	0	
6	FXparam3	NRPN	6:33	0 – 127	0	
6	FXparam4	NRPN	6:34	0 – 127	0	
6	FXparam5	NRPN	6:35	0 – 127	0	
6	FXparam6	NRPN	6:36	0 – 127	0	
7	FxSelect	NRPN	7:30	0 – 6	0	
7	FXparam1	NRPN	7:31	0 – 127	0	
7	FXparam2	NRPN	7:32	0 – 127	0	
7	FXparam3	NRPN	7:33	0 – 127	0	
7	FXparam4	NRPN	7:34	0 – 127	0	
7	FXparam5	NRPN	7:35	0 – 127	0	
7	FXparam6	NRPN	7:36	0 – 127	0	
8	FxSelect	NRPN	8:30		0	
8	FXparam1	NRPN	8:31	0 – 127	0	
8	FXparam2	NRPN	8:32	0 – 127	0	
8	FXparam3	NRPN	8:33	0 – 127	0	
8	FXparam4	NRPN	8:34	0 – 127	0	
8	FXparam5	NRPN	8:35	0 – 127	0	
8	FXparam6	NRPN	8:36	0 – 127	0	
9	FxSelect	NRPN	9:30	0 – 6	0	
9	FXparam1	NRPN	9:31	0 – 127	0	
9	FXparam2	NRPN	9:32	0 – 127	0	
9	FXparam3	NRPN	9:33	0 – 127	0	
9	FXparam4	NRPN	9:34	0 – 127	0	
9	FXparam5	NRPN	9:35	0 – 127	0	
9	FXparam6	NRPN	9:36	0 – 127	0	
10	FxSelect	NRPN	10:30	0 – 6	0	
10	FXparam1	NRPN	10:31	0 – 127	0	
10	FXparam2	NRPN	10:32	0 – 127	0	
10	FXparam3	NRPN	10:33	0 – 127	0	
10	FXparam4	NRPN	10:34	0 – 127	0	
10	FXparam5	NRPN	10:35	0 – 127	0	
10	FXparam6	NRPN	10:36	0 – 127	0	
11	FxSelect	NRPN	11:30	0 – 6	0	
11	FXparam1	NRPN	11:31	0 – 127	0	
11	FXparam2	NRPN	11:32	0 – 127	0	
11	FXparam3	NRPN	11:33	0 – 127	0	
11	FXparam4	NRPN	11:34	0 – 127	0	
11	FXparam5	NRPN	11:35	0 – 127	0	
11	FXparam6	NRPN	11:36	0 – 127	0	
12	FxSelect	NRPN	12:30		0	
12	FXparam1	NRPN	12:31	0 – 127	0	
12	FXparam2	NRPN	12:32	0 – 127	0	
12	FXparam3	NRPN	12:33	0 – 127	0	
12	FXparam4	NRPN	12:34	0 – 127	0	
12	FXparam5	NRPN	12:35	0 – 127	0	

12	FXparam6	NRPN	12:36	0 – 127	0	
13	FxSelect	NRPN	13:30	0 – 6	0	
13	FXparam1	NRPN	13:31	0 – 127	0	
13	FXparam2	NRPN	13:32	0 – 127	0	
13	FXparam3	NRPN	13:33	0 – 127	0	
13	FXparam4	NRPN	13:34	0 – 127	0	
13	FXparam5	NRPN	13:35	0 – 127	0	
13	FXparam6	NRPN	13:36	0 – 127	0	
14	FxSelect	NRPN	14:30	0 – 6	0	
14	FXparam1	NRPN	14:31	0 – 127	0	
14	FXparam2	NRPN	14:32	0 – 127	0	
14	FXparam3	NRPN	14:33	0 – 127	0	
14	FXparam4	NRPN	14:34	0 – 127	0	
14	FXparam5	NRPN	14:35	0 – 127	0	
14	FXparam6	NRPN	14:36	0 – 127	0	
15	FxSelect	NRPN	15:30	0 – 6	0	
15	FXparam1	NRPN	15:31	0 – 127	0	
15	FXparam2	NRPN	15:32	0 – 127	0	
15	FXparam3	NRPN	15:33	0 – 127	0	
15	FXparam4	NRPN	15:34	0 – 127	0	
15	FXparam5	NRPN	15:35	0 – 127	0	
15	FXparam6	NRPN	15:36	0 – 127	0	
16	FxSelect	NRPN	16:30	0 – 6	0	
16	FXparam1	NRPN	16:31	0 – 127	0	
16	FXparam2	NRPN	16:32	0 – 127	0	
16	FXparam3	NRPN	16:33	0 – 127	0	
16	FXparam4	NRPN	16:34	0 – 127	0	
16	FXparam5	NRPN	16:35	0 – 127	0	
16	FXparam6	NRPN	16:36	0 – 127	0	

Global

Section	Parameter	CC/NRPN	Control No.	Range	Default Value	Notes
	Frequency	CC	79	64 – –63	0	
	Resonance	CC	71	0 – 127	30	
	OnOff	NRPN	1:22	0 – 1	1	
	Attack	NRPN	1:23	0 – 127	0	
	Release	NRPN	1:24	0 – 127	0	
	EnvelopFollow	NRPN	1:25	0 – 127	0	
	SoftClip	NRPN	1:26	0 – 1	1	
	GainPadding	NRPN	1:27	0 – 1	0	
	Routing	NRPN	1:28	0 – 1	0	
	Threshold	NRPN	1:29	0 – 1	1	
	Monitor	NRPN	1:30	0 – 1	1	
	Level	CC	90	0 – 127	100	

Filter Table

	Value	Type
Drive Type		
	0	diode
	1	valve
	2	clipper
	3	cross–over
	4	rectifier
	5	bit reducer
	6	rate reducer
Type		
	0	low pass 12dB
	1	low pass 24dB
	2	band pass 6/\6 dB
	3	band pass 12/\12 dB
	4	high pass 12dB
	5	high pass 24dB

Distortion Table

Value	Type
0	diode
1	valve
2	clipper
3	cross–over
4	rectify
5	bit reducer
6	rate reducer

Mod Matrix Table

	Value	Type
Source		
	0	direct
	1	modulation wheel
	2	after touch
	3	expression
	4	velocity
	5	keyboard
	6	LFO 1 +
	7	LFO 1 +/–
	8	LFO 2 +
	9	LFO 2 +/–
	10	env amp
	11	env filter
	12	env 3
Destination		
	0	osc 1 & 2 pitch
	1	osc 1 pitch
	2	osc 2 pitch
	3	osc 1 v–sync
	4	osc 2 v–sync
	5	osc 1 pulse width / index
	6	osc 2 pulse width / index
	7	osc 1 level
	8	osc 2 level
	9	noise level
	10	ring modulation 1*2 level
	11	filter drive amount
	12	filter frequency
	13	filter resonance
	14	LFO 1 rate
	15	LFO 2 rate
	16	amp envelope decay
	17	filter envelope decay

Osc Waveform Table

	Value	Type
Waveforms		
	0	sine
	1	triangle
	2	sawtooth
	3	saw 9:1 PW
	4	saw 8:2 PW
	5	saw 7:3 PW
	6	saw 6:4 PW
	7	saw 5:5 PW
	8	saw 4:6 PW
	9	saw 3:7 PW
	10	saw 2:8 PW
	11	saw 1:9 PW
	12	pulse width
	13	square
Wavetables		
	14	sine table
	15	analogue pulse
	16	analogue sync
	17	triangle–saw blend
	18	digital nasty 1
	19	digital nasty 2
	20	digital saw–square
	21	digital vocal 1
	22	digital vocal 2
	23	digital vocal 3
	24	digital vocal 4
	25	digital vocal 5
	26	digital vocal 6
	27	random collection 1
	28	random collection 2
	29	random collection 3

Drum Sample Modes

Drum Sample Modes	
0	One Shot
1	Gated
2	Looped

Number of Slices

No. of Slices	
0	4
1	8
2	16

Click Rate

Click Rate	
0	"1/2"
1	"1/4"
2	"1/8"
3	"1/16"

LFO Waveform Table

Value	Type
0	sine
1	triangle
2	sawtooth
3	square
4	random S/H
5	time S/H
6	piano envelope
7	sequence 1
8	sequence 2
9	sequence 3
10	sequence 4
11	sequence 5
12	sequence 6
13	sequence 7
14	alternative 1
15	alternative 2
16	alternative 3
17	alternative 4
18	alternative 5
19	alternative 6
20	alternative 7
21	alternative 8
22	chromatic
23	chromatic 16
24	major
25	major 7
26	minor 7
27	min arp 1
28	min arp 2
29	diminished
30	dec minor
31	minor 3rd
32	pedal
33	4ths
34	4ths x12
35	1625 maj
36	1625 Min
37	2511

Patch and Project Select

MIDI Channel	Parameter	Value	Notes
16	PGM	0 – 63	select project (instant)
16	PGM	64 – 127	select project (queued)

*PGM = Program Change
Note, for drum patch selection see Drum Control table

Supported Realtime Messages

Message
start
stop
continue
timing clock

Supported System Common Messages

Message
song position pointer
song select

FX Parameters

FX Select	FX Name	Param1	Param2	Param3	Param4	Param5	Param6
0	Beat Repeat	Rate	wet/dry	x	x	x	x
1	Reverse	Rate	x	x	x	x	x
2	Gator	Rate	x	x	x	x	x
3	Autofilter	Rate	FiltType	Freq	Shape	Amount	Resonance
4	Digital_Lofi	Bits	Sample	x	x	x	x
5	Phaser	Rate	Depth	FB	x	x	x
6	Vinyl	Filter	Wobble	Crackle	Hiss	x	x

Project Control

Send messages on MIDI Channel 16.

Section	Parameter	CC / NRPN	Control No.	Range	Default Value	Notes
Reverb						
	Track 1 send level	CC	88	0 – 127	0	
	Track 2 send level	CC	89	0 – 127	0	
	Track 3 send level	CC	90	0 – 127	0	
	Track 4 send level	CC	106	0 – 127	0	
	Track 5 send level	CC	109	0 – 127	0	
	Track 6 send level	CC	110	0 – 127	0	
	type	NRPN	1:18	0 – 5	2	0=Chamber, 1=Small Room, 2=Large Room 3=Small Hall, 4=Large Hall, 5=Great Hall
	decay	NRPN	1:19	0 – 127	64	
	damping	NRPN	1:20	0 – 127	64	
Delay						
	Track 1 send level	CC	111	0 – 127	0	
	Track 2 send level	CC	112	0 – 127	0	
	Track 3 send level	CC	113	0 – 127	0	
	Track 4 send level	CC	114	0 – 127	0	
	Track 5 send level	CC	115	0 – 127	0	
	Track 6 send level	CC	116	0 – 127	0	
	time	NRPN	1:6	0 – 127	64	
	time sync	NRPN	1:7	0 – 35	20	
	feedback	NRPN	1:8	0 – 127	64	
	width	NRPN	1:9	0 – 127	127	
	left–right ratio	NRPN	1:10	0 – 12	4	0=1:1, 1=4:3, 2=3:4, 3=3:2, 4=2:3, 5=2:1, 6=1:2 7=3:1, 8=1:3, 9=4:1, 10=1:4, 11=1:OFF, 12=OFF:1
	slew rate	NRPN	1:11	0 – 127	5	
Master Filter						
	frequency	CC	74	0 – 127 (–64 – 63)	64 (0)	0–63=Low Pass, 64=OFF, 65–127=High Pass
	resonance	CC	71	0 – 127	30	
Additional Controls						
	FX Bypass	NRPN	1:21	0 – 1	0	0=Off (FX enabled), 1=On (FX disabled)

Setup View

You can enter setup view by holding down Shift and Pressing save. For a full description of setup view please see the full Circuit Rhythm user guide on the Novation Downloads page.