

## PULSE 1-1

filter frequency	resonance	filter envelope	keytracking	env1 keytrack	env2 keytrack	Ifo1 speed	Ifo2 speed
50	56	52	51	28	30	24	26
osc1 shape	osc1 octave	osc 2 shape	osc2 octave	osc 3 shape	osc3 octave	Ifo1 type	Ifo2 delay
34	32	38	36	44	42	25	27
osc1 volume	osc 1 finetune	osc2 volume	osc2 finetune	osc3 volume	osc3 finetune	osc1 Pulsewidth	osc2 Pulsewidth
45	33	46	37	47	43	35	39
osc1 semitone		osc2 semitone	osc2 sync	osc 3 semitone	noise level 10	noise level 5	
32		36	41	42	48	48	
amp attack	amp decay	amp sustain	amp release	filter attack	filter decay	filter sustain	filter release
14	15	16	17	18	19	20	21
env1 trigger	env2 trigger						
29	31						

## PULSE 1-2

filter cutoff	filter resonance	filter envelope	noise level	pitchmode amount	cutoff amount	main volume	portamento time
50	56	52	48	61	55	57	5
Mod1 source	Mod2 source	Mod3 source	Mod4 source	pitchmod source	cutoffmod source		portamento type
108	111	114	117	60	54		62
Mod1 amount	Mod2 amount	Mod3 amount	Mod4 amount	arp tempo	arp clock	arp range	pitchbend scale
109	112	115	118	105	104	103	63
Mod1 destination	Mod2 destination	Mod3 destination	Mod4 destination	arp aan/uit	arp mode		
110	113	116	119	102	106		

amp attack	amp decay	amp sustain	amp release	filter attack	filter decay	filter sustain	filter release
18	19	20	21	14	15	16	17
env1 trigger	env2 trigger					all notes off	reset all controls
29	31					123	121