ROLAND JP08

solo	DUAL + [- 6]	
unison	DUAL + [- 7]	
poly	DUAL + [- 8]	
octave +/-0	DUAL + [8 -]	
octave - 4...1	DUAL + [4 -]...[7 -]	
octave +1...5	DUAL + [- 1]...[- 5]	
portamento off/on	DUAL + RIBBON LEFT	
portamento time	DUAL + RIBBON RIGHT	
bend range off	MANUAL + [- 5] -> [- 8]	
bend range 1...8	MANUAL + [- 5] -> [1 -]...[8 -]	
bend range 9...12	MANUAL + [- 5] -> [- 1]...[- 4]	
bend range 2oct	MANUAL + [- 5] -> [- 5]	
delay level	MANUAL + [- 6] -> [1 -]...[- 8]	
delay time	MANUAL + [- 7] -> [1 -]...[- 8]	20ms...700ms
delay feedback	MANUAL + [- 8] -> [1 -]...[- 8]	
velocity touch	MANUAL + [5 -] -> [1 -]	
velocity fixed 64	MANUAL + [5 -] -> [2 -]	
velocity fixed 128	MANUAL + [5 -] -> [3 -]	
velocity light	MANUAL + [6 -] -> [1 -]	
velocity medium	MANUAL + [6 -] -> [2 -]	
velocity heavy	MANUAL + [6 -] -> [3 -]	
master tune	MANUAL + [1 -] -> [1 -]...[- 8]	[8 -] = 440Hz
midi channel 1...16	MANUAL + [2 -] -> [1 -]...[- 8]	
midi clock auto	MANUAL + [3 -] -> [1 -]	
midi clock internal	MANUAL + [3 -] -> [2 -]	
midi chain mode off / on	MANUAL + [- 1] -> [1 -] / [2 -]	
midi cc-out	DUAL + [1 -] -> [1 -] / [2 -] / [3 -] / [4 -]	off/usb/midi/all
modulation hold off	MANUAL + [- 3] -> [1 -]	
modulation hold on	MANUAL + [- 3] -> [2 -]	
auto off / disable	MANUAL + [7 -] -> [1 -]	
auto off / 30min	MANUAL + [7 -] -> [2 -]	
transpose -6...+5	MANUAL + [4 -] -> [2 -]...[- 5]	[8 -] = +/- 0
led demo	MANUAL + [8 -] -> [1 -]...[4 -]	off..1min..3min..10min
sequencer mode	DUAL + MANUAL	
sequencer tempo	DUAL + RIBBON LEFT	in sequencer mode
seq note input	[step button] + Keyboard	or RIBBON LEFT
seq note gate time	[step button] + RIBBON RIGHT	
seq all gate time	DUAL + RIBBON RIGHT	
seq select pattern	DUAL + [1 -]...[- 8]	
seq write pattern	DUAL + [1 -]...[- 8] long press	
seq number of steps	MANUAL + [1 -] -> [1 -]...[- 8]	1...16
seq shuffle	MANUAL + [2 -] -> [4 -]...[- 4]	[8 -] = default
seq scale	MANUAL + [3 -] -> [1 -]...[4 -]	32th..16th..16/3..8/3
seq step order type	MANUAL + [- 7] -> [1 -]...[7 -]	[1 -] = normal
factory reset	[1-] while power on -> manual -> all buttons blink -> power off	
USB drive for backup	[2-] while power on / to restore -> eject -> MANUAL -1min -> OK	
no USB bus-power	[-1] while power on	