

## PPG Wave 2.2 and Wave 2.3 – Shortcuts:

### Bank Display:

CP	00-19	Combi program (n.a. in 2.2)
BK	00-86	Bank (00-99 in Wave 2.2)
GR		Group A or B (n.a. in 2.2)
DET		Entire detune
KBM		Keyboard mode
SPL	1-7	Split point
KEY	1-59	Split area

### Digital Display:

UW	0-1	Upper Wavetable (Bank 0)
SW	0-3	Control of the Suboscillator 0 – Parallel Osc; Knob = Offset 1 – Subosc. controlled by Knob 2 – Env. 3 controls Suboscillator 3 – Suboscillator disabled
KW	0-7	Keyfollow Wavetable 0 – no influence 4 – lower C = adjusted waveform 7 – maximum influence
KF	0-7	Keyfollow Filter 0 – no influence 3 – 1:1 7 – 1:2
KL	0-7	Keyfollow Loudness 0 – highest key = loud 4 – no influence 7 – highest key = silence
MW	0-1	Mod Wheel to Waveform
MF	0-1	Mod Wheel to Filter
ML	0-1	Mod Wheel to Loudness
BD	0-7	Bender to Destination 0 – disabled 1 – Pitch 2 – Filter 3 – Waves 4 – Pitch Suboscillator 5 – Pitch + Filter 6 – Pitch + Waves 7 – Filter + Waves
BI	0-3	Bender Interval 0 – (+/- 2) 1 – (+/- 4) 2 – (+/- 7) 3 – (+/- 12)
TW	0-1	Touch controls Wave
TF	0-1	Touch controls Filter
TL	0-1	Touch controls Loudness
TM	0-1	Touch controls Modulation
VF	0-1	Velocity controls Filter
VL	0-1	Velocity controls Loudness

### Tuning Display:

DETU	0-7	Oscillator Detune: 0 – no detune 1 – min. detune 2 – little detune 3 – more detune 4 – maximum detune 5 – (+7) 6 – (+12) 7 – (+24)
MO	0-1	Modulation oscillator pitch
MS	0-1	Modulation suboscillator pitch
EO	0-1	Envelope 3 to oscillator
ES	0-1	Envelope 3 to suboscillator
BI	0-3	Bender Interval 0 – (+/- 2) 1 – (+/- 4) 2 – (+/- 7) 3 – (+/- 12)

### Sequencer Display:

PROG	00-86	Current Bank
SEQ		Sequence/Arpeggiator Mode 10,11 – ARP up 12 – ARP down 13 – ARP up/down 14, 24 – ARP Random 15, 25 – ARP moving 21 – down with koop
LOOPS	1- 99	Loops / Arpeggiator limit 1-98 – Loops 99 – Infinite Loops
RECM	0-8	Record Mode 0 – normal operation 1 – new sequence 2 – save sequence 4 – start a new sequence 8 – delete all memory (88)
TMC	0-8	Time Correction 0 – disabled 1 – metronome 2 – ½ metronome 4 – ¼ metronome 8 – 1/8 metronome
SP		Speed
RUN	0-3	Start / Stop 0 – Stop 1 – Start with reset 2 – Start without reset 3 – Single step
CH	0-9	Channel 0 – Normal Playback 1 – Record 2 – Edit 3 – New track 4 – Update Pitch 5 – Update Pitch 6 – Update Loudness 7 – Update Filter 8 – Update Waves 9 – Update Filter-Envelope

## PPG Wave 2.2 and Wave 2.3 – Wavetables:

00. Harmonics 1-8 very strong, simulation of a resonant filter, wave number 00 is a sine.
01. Similar to wavetable 00, but with additional higher harmonics, dual VCF simulation
02. Similar to two previous wavetables, but also good for vibes, bells, tubular bells.
03. Sine-to-rectangular sweep, low-resonance VCF simulation, like for clarinette and flute.
04. Waves 00-47 feature very high harmonics in progressively greater amplitudes. Waves 48-59 continue to add high harmonics but at a faster rate. Also useful for delay effects and church bells.
05. Very high harmonics are emphasized, effects similar to wavetable 15, but more mixture like.
06. Sine-to-ramp sweep, low-resonance-VCF effects, also good for woodwinds.
07. VCF sweep without resonance, also useful for woodwind sounds.
08. Highpass VCF simulation, no resonance. Wave 00 has no fundamental. Wave 25 has fundamental at maximum amplitude. Useful for dark percussive strings, bass with click-like attack.
09. Formants are strong middle-range harmonics, useful for ring-modulation and vocal sounds.
10. Similar to wavetable 09.
11. Low formants. Wave 00 is dark, 32 is bright, 59 is dark.
12. High formants that sweep.
13. Very strong high-order harmonics, the fundamental is weak. Useful for bright percussive stringed keyboard instrument sounds like clavichord. When swept, you get an amplitude modulation effect. Wave 00 is maximum amplitude, 24 is minimum amplitude, 59 is maximum. Use great detuning, upper waves and dissonant low chords for noise effects.
14. Several organ registers.
15. Harmonics 2 + 3 to sawtooth sweep. Useful for harmonium or accordion.
16. Wild amplitude modulation effects when swept. Some peaks and dips in amplitude.
17. Wave 00 features the fundamental and second harmonic. Wave 14 is the fundamental alone. Wave 40 has high harmonics. Wave 59 is the fundamental.
18. When swept produces high-low-high harmonic sweep effect.
19. Waves 00-32 are stationary waveforms with string upper harmonics and a few lower harmonics. Wave 59 has no fundamental.
20. Fast discrete changes of low and high harmonics for sample and hold effects. Wave 00 is a sine wave.
21. Sine wave to high frequency formants.
22. This wavetable is particularly suited for echoing effects. Waveforms vary from original attack plus one delay, to two coloured delays. Wave 00 is a sine wave.
23. Strong high harmonics.
24. Stationary organs. If swept produces ascending high harmonic sweeps.
25. Waves 59 to 49 go from bright to sine wave. 48 to 33 have a coloured delay. 33 to 18 are sine waves. 17 to 00 have a coloured delay echo.
26. Variations on sawtooth waves in strong, bright formants. Good for brass sounds.
27. Formant sweeps. When keyboard is used to control the waves, for vocals and choirs.
28. Phasing sawtooth waves. Useful for ensemble string sounds.
29. Square to rectangular to narrow pulse waves. Sweeps produce pulse width modulation effects.
30. Used on older wave 2.2's to hold sampled waveforms loaded in via the Waveterm.
31. Held samples of piano and saxophone in pre-MIDI models