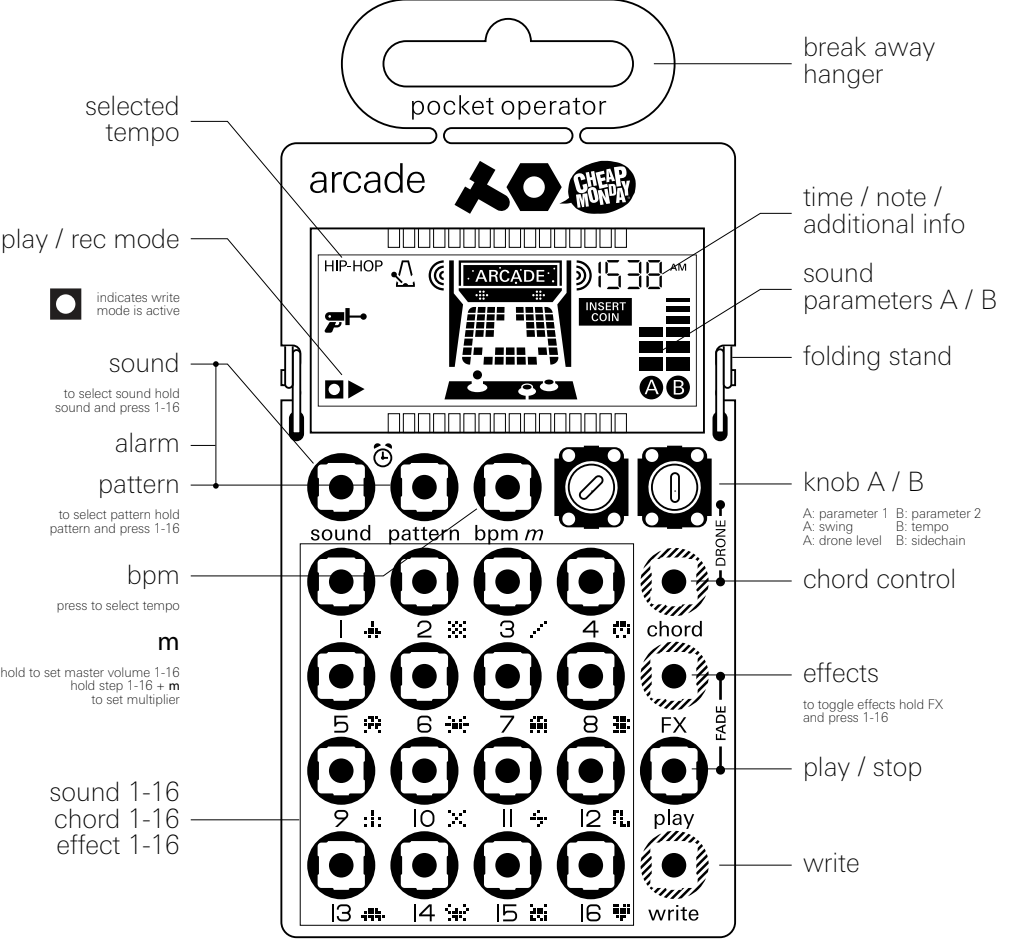


PO-20 arcade  
manual  
ユーザーズマニュアル



auto power off (a.p.o.)  
the unit auto powers off when no buttons are pressed for a while, only powering the display to show time.  
press sound + bpm to show battery status. press sound + write to manually power off. this ensures that recent modifications to pattern data will survive a loss of power.

sound 1-16

- |               |                 |
|---------------|-----------------|
| 1. bass       | 9. arpeggio     |
| 2. bass drum  | 10. melodic arp |
| 3. snare drum | 11. falling arp |
| 4. hi-hat     | 12. octave arp  |
| 5. tom        | 13. lead        |
| 6. blip       | 14. vibrato     |
| 7. hardsync   | 15. portamento  |
| 8. noise fx   | 16. echo        |

chord 1-16

- |         |          |
|---------|----------|
| 1. dm   | 9. am    |
| 2. em   | 10. C/A  |
| 3. Esus | 11. dm/A |
| 4. E    | 12. D/A  |
| 5. F    | 13. A    |
| 6. G    | 14. B/A  |
| 7. C/G  | 15. C    |
| 8. E/G# | 16. D    |

effect 1-16

- |                       |                      |
|-----------------------|----------------------|
| 1. solo chords        | 9. fill-in           |
| 2. solo chords + lead | 10. fill-in (fast)   |
| 3. solo drums         | 11. retrigger        |
| 4. solo drums + bass  | 12. retrigger (fast) |
| 5. lowpass slow sweep | 13. glitch           |
| 6. lowpass fast sweep | 14. glitch (fast)    |
| 7. highpass filter    | 15. blinds           |
| 8. highpass sweep     | 16. rising arpeggio  |

## 1. getting started

### power-up

insert two fresh AAA batteries.  
pay attention to plus and minus terminals.

### set clock

set time by turning knob A for hours and knob B for minutes.  
press any key to confirm and exit.

### alarm clock

press sound + pattern. set alarm clock by turning A for hours and B for minutes. (disable by turning knob A all the way down.) press any key 1-16 to set pattern for the alarm. to stop alarm press any key.

### reset clock

reset the clock by removing the batteries and start over.

## 2. play

### select pattern

hold pattern and press any key from 1-16 to select pattern.  
blinking led indicates active pattern.

### play

press play to start playing.  
press play again to stop.

### sequencer

a pattern consists of 16 steps.

## 3. creating a pattern

### select sound

hold sound and press any key from 1-16 to select sound.

### create

press write. rec symbol is lit on screen. enter sound/notes in grid. active steps will be lit. press play to listen to your pattern.

### parameter locking

during play, hold write while turning knobs to write sound parameter changes over time.  
hold any key 1-16 and turn knobs to edit sound parameters on that particular step. for most sounds, parameter 1 controls the pitch and parameter 2 controls the waveform.

## 4. chords

hold chord and press any key 1-16 to select chord. see reference on opposite page. during play, the change takes effect at the next pattern boundary.

hold chord and press a sequence of keys 1-16 to create a chain of up to 128 chords. one chord can

be selected multiple times.  
example: 9, 9, 9, 16 plays chord 9 for a duration of three patterns, then moves on to chord 16. the entire sequence then repeats.

## 5. live effects

hold fx and press any key 1-16 to toggle effects. see reference on opposite page. some effects are mutually exclusive. fill-in, retrigger and glitch effects last until the next pattern boundary. the solo effects can be pre-activated while the sequencer is stopped.

### drone

hold chord while turning knobs to control drone playback of the current chord.

### fade out

during playback, press fx + play to fade out and stop the sequencer.

## 6. tempo and swing

press bpm to switch tempo. the bpm will be displayed in the upper right corner of the screen.  
HIP HOP (80 bpm)  
DISCO (120 bpm)  
TECHNO (140 bpm)  
hold bpm and turn A to adjust the swing. hold bpm and turn B to fine-tune tempo from 60 to 240 bpm.

## 7. volume

hold bpm and press any key 1-16 to adjust master volume. at volume levels 9-16, the filters can be driven into distortion.

## 8. live record

while playing, except in write mode, hold write and press any key 1-16 to punch in notes. notes will be quantized according to the current swing setting.

## 9. step multiplier

in write mode, press and hold any key 1-16 to select step, and press bpm to insert a re-trig on that step. press bpm multiple times to switch between 2, 3, 4, 6 or 8 multiplier.

## 10. making a song

(pattern chaining)

### copy pattern

while holding pattern, press write followed by any key 1-16 to paste the active pattern to the corresponding new slot.

### clear pattern

hold chord and press pattern to clear the active pattern.

### chain pattern

hold pattern and press a sequence of keys 1-16 to create a chain of up to 128 patterns. one pattern can be selected multiple times.  
example: 1, 1, 1, 4 plays pattern 1 three times then moves on to pattern 4. the entire sequence then repeats.

## 11. sync multiple units

connect a standard stereo audio cable between the units. the master unit will control the tempo of the slave unit. hold chord and press bpm on master unit to toggle sync modes. press repeatedly to toggle between different modes displayed in the upper right corner of the screen. press play on slave unit to wait for master clock sync. press play on master to start.

### sync modes

there are 5 sync modes. default mode is SY0.  
when sync is used the signal will be split between audio (right) and sync (left).

### sync scenarios

#### example A

chain: PO-20 → PO-12 → PO-14  
setting: SY1 SY5 SY4

#### example B

chain: external → PO-20  
setting: volca SY2  
iphone  
computer  
synckontrol

#### example C

chain: ext. → PO-20 → PO-16  
setting: SY3 SY4

#### example D

chain: PO-20 → ext. (split cable)  
setting: SY1

### disclaimer

although teenage engineering will use all reasonable endeavours to ensure the accuracy and reliability of this product, neither teenage engineering nor any third party supplier will be liable for any loss or damage in connection with the sale or use of the product except for: a) personal injury caused by our negligence or that of our employees or agents when acting in the course of their employment with ourselves and; b) any other direct loss or damage caused by our gross negligence or willful misconduct.

ALL EXPRESS OR IMPLIED CONDITIONS, WARRANTIES OR UNDERTAKINGS (OTHER THAN CONDITIONS, WARRANTIES OR UNDERTAKINGS EXPRESSLY STATED, OR IMPLIED BY STATUTE AND WHICH CANNOT BE EXCLUDED), WHETHER ORAL OR IN WRITING, INCLUDING WARRANTIES AS TO SATISFACTORY QUALITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE EXCLUDED.

©2016 teenage engineering ab.  
all rights reserved.