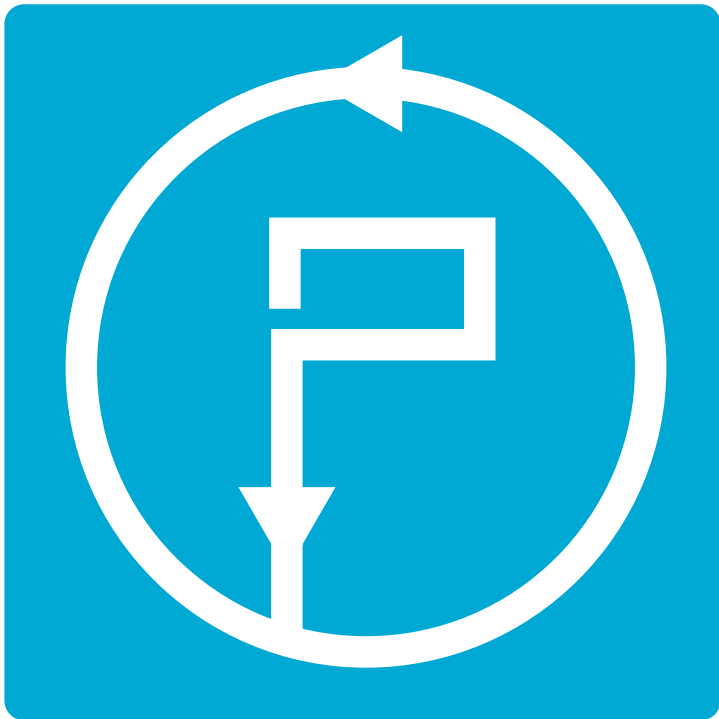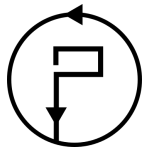# Picoloop Manual

# Picoloop Tutorial (PC version)

Welcome to **Picoloop**!

**Picoloop** is a synth and a step sequencer made by Yoyz. In this tutorial, we'll make a tour of the basic functionalities of **Picoloop**. The commands described here are adapted for the usage on PC.



# Contents

## Starting

First, get **Picoloop** at https://github.com/yoyz/audio/

Run the **Picoloop** binary. You will be presented to a setting panel. Navigate with ←, →, ↑ and ↓ and choose the color theme (palette) you prefer.

Then make sure the AudioInput matches your soundcard. Eventually make it select "default".

```
   Current palette : 4
   Current Bank    : 0
 > AudioOutput     : 1/1 : default
   MidiOutput      : 0/1 : Midi Through 14:0
   MidiInput       : 0/2 : Midi Through 14:0
   MidiClockMode   : Internal
```

To exit this panel and start making music, validate with (Ctrl). In the case it crashes, it might be because the soundcard configuration was not correct. Restart the binary and select another card setting.

You will be presented to the **Picoloop** main window.
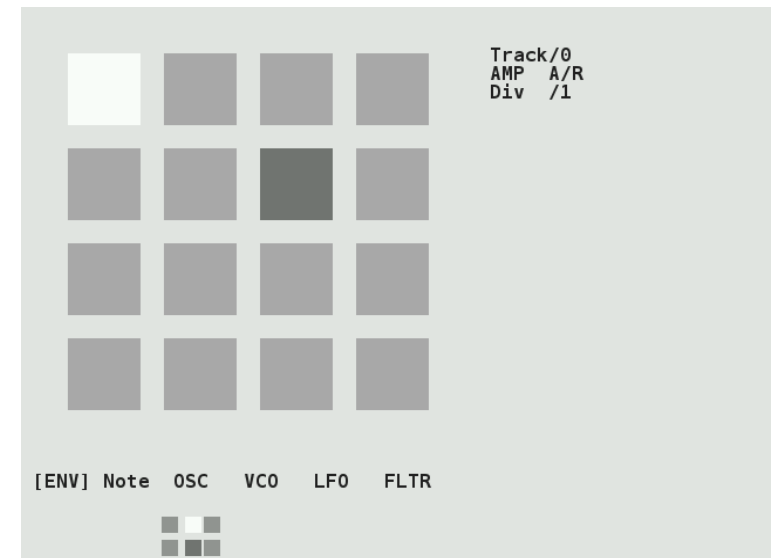


With this color scheme, the 16 steps are in light grey. The moving dark grey cursor is the current sounding note. The cursor for edition is in white and you cannot move it right now

(you're in *Menu mode*). Below the 16 steps is the menu. It displays:

```
[ ENV ]  Note  OSC  VCO  LFO  FLTR
```

Move left or right to select the parameter you want to use.

# Entering notes

At the moment, select Note with the (Alt) key. Now you are in *Edit mode*, and you can navigate within the 16 steps with the ←, →, ↑ and ↓ arrows. Insert your first note with the (Ctrl) key. It will be a C2.

You can change the value of this note by holding (Alt) and typing on the arrows. ← or → for decreasing or increasing 1/2 tone, ↑ or ↓ for increasing or decreasing 1 octave. Make it for example G2. Now select other empty cases and type (Ctrl) for adding more notes and (Alt) for changing their values. Delete an existing note with (Ctrl). The next note entered with (Ctrl) will be the previous value which was

deleted (delete an A3, next one with be A3 then).
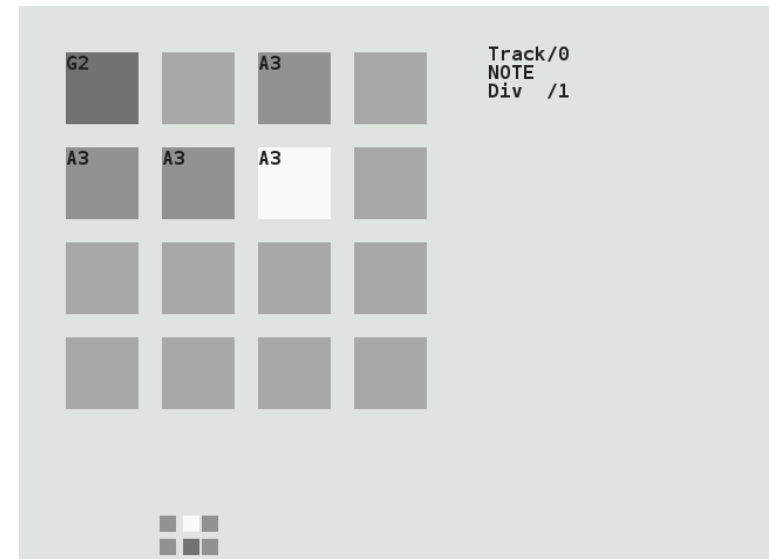


There are 4 tracks which can play together. To change the current working track, go back to the menu with the (ESC) key. Use the ↑ and ↓ arrows to select the track. It will display Track/0, Track/1 etc. Now you can enter more notes in this other track.

To change the sound of the current notes, select ENV in the menu, and validate with (Alt), the menu will disappear, meaning you can enter notes or change values. In the ENV

parameters, you can alter the sound with (Alt) + arrows. Try to play with the two parameters. You end up with something like that:

```
                        Track/1
                        AMP  A/R
                        Div  /1
```
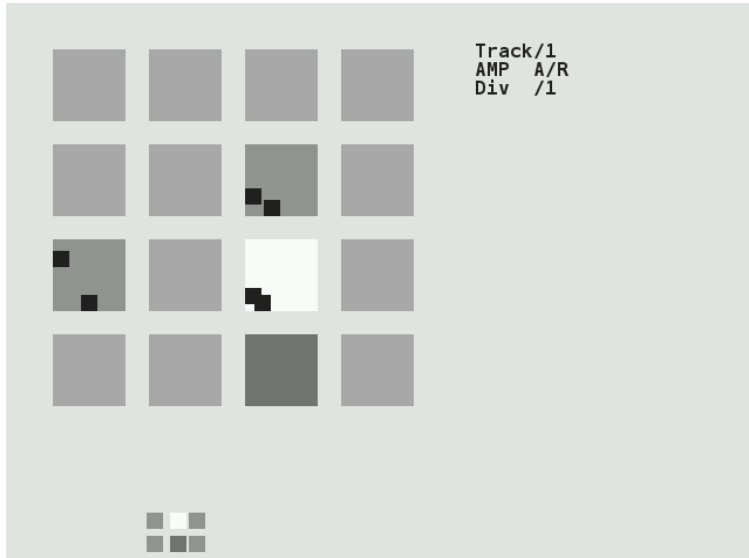
Now if you type the (Enter) key, you'll access more parameters, which you can change in a similar way. In this mode, you alter parameters for individual notes, if you want to change all the inserted notes for the current track, exit the *edit mode* with the (ESC) key, and use (Ctrl) + arrows to change all the steps together.
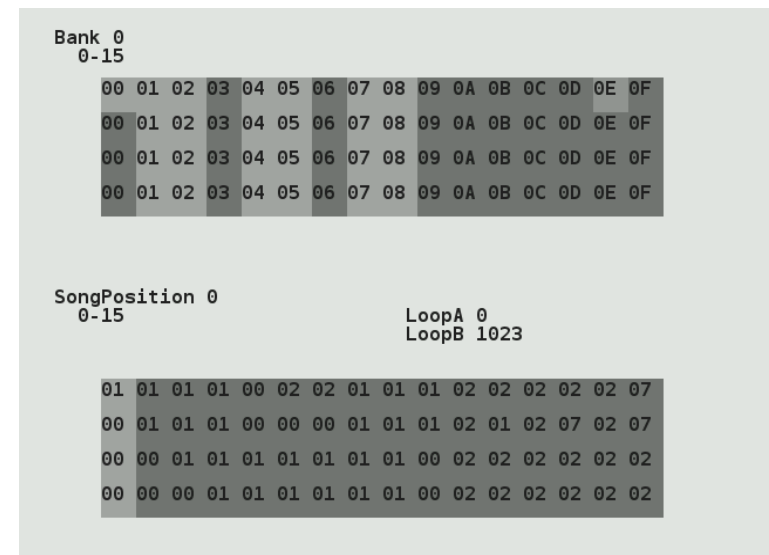
# Saving and loading music

Now it's time to save your work!

Exit the *edit mode* with (ESC) if you're still in it, and type again (ESC) to enter the second menu (*Menu2*).

It will display:

```
L/S  [ BANK ]  PSH  MAC  FX  BPM
```

Select L/S (*Load/Save*) and enter the menu with (Alt).

It will look like this:

```
Bank 0
  0-15

    00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F
    00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F
    00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F
    00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F


SongPosition 0
  0-15                        LoopA 0
                              LoopB 1023

    01 01 01 01 00 02 02 01 01 01 02 02 02 02 02 07
    00 01 01 01 00 00 00 01 01 01 02 01 02 07 02 07
    00 00 01 01 01 01 01 01 01 00 02 02 02 02 02 02
    00 00 00 01 01 01 01 01 01 00 02 02 02 02 02 02
```

The menu on top represents your tracks. The cursor on this screenshot is on the top 0E column. To save an individual track, select an empty slot and type (Alt) + ↓. Now the slot will be lighter (with this grey theme). To save all the 4 tracks (one pattern), type (Ctrl) + ↓, the whole column will be lighter.

To reload you tracks later, select a column and type (Ctrl) + ↑. To load an individual slot, type (Alt) + ↑. Beware, there is no warning so it might erase your current work.

Now you can assemble your tracks with the order list (under the Song Position label). Go into this list with the (Enter) key.

You can define Loop start position with (Ctrl) + ↑. As soon as you define this, the song with start to play. And you can define Loop end position with (Ctrl) + ↓. Change the values of the list with (Alt) + ↑/↓

## Exploring new horizons

As we've seen earlier, we can change the pitch value (note) of a step, but also some parameters such as A/R (enveloppe), OSC (oscillator), VCO (a kind of mixer), LFO and FLTR (filter).

But we can also change the whole engine, using the "MAC" menu in *menu2*. The different engines are (from up to down):

- Psynth (default) : PicoSynth, soustractive synth with 2 oscillators (lightweight).

- Mdrum : MDA Drumsynth

- Mdiout : midi out

- Tsynth : Twytch/Helm. Needs high ressources.

- 0303 : based on Open303, a free, open source emulation of the Roland TB-303 synthesizer. Needs high ressources.

- Csynth : Cursynth, a soustractive synth with 2 oscillators. Needs high ressources.

- PBS : PBSynth, another soustractive synth with 2 oscillators (lightweight).

- Pdrum : Picodrum, for making rythms (kicks, hats, snares...)

- OPL2 : FM synthesis

  On some less powerful machines, the high ressources engines are not enabled.

# Picoloop Memo (PC version)
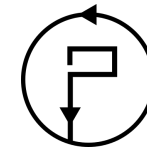
| Menu mode | |
|---|---|
| ← / → | move backward/forward in the menu |
| ↑ / ↓ | select the track from 0 to track 3 |
| Alt | do nothing |
| Ctrl + ←/→/↑/↓ | edit all step at once |
| Ctrl | enter the edit mode |
| TAB | go to the next 16 step on the same track |

| | |
|---|---|
| Backspace | go to the previous 16 step on the same track |
| ESC | call menu2 or menu1 |

| Edit mode | |
|---|---|
| ← / → | select next step |
| ↑ / ↓ | select step+4, step-4 |
| Alt | enter a note in a step, it works as a cut/paste |
| Ctrl + ←/→/↑/↓ | edit the current step |
| Ctrl | do nothing |
| TAB | go to the next 16 step on the same track |
| Backspace | go to the previous 16 step on the same track |
| ESC | call menu2 or menu1 |
| Enter | cycle between the different parameters |

## L/S menu

| Bank | |
|---|---|
| Alt + ↓ | Save the current track on the selected slot |
| Ctrl + ↓ | Save your current pattern (group of 4 tracks) |
| Alt + ↑ | Load a track (replace current) |
| Ctrl + ↑ | Load a 4 tracks pattern |

| Song position (order list) | |
|---|---|
| Ctrl + ↑ | Define Loop start position |
| Ctrl + ↓ | Define Loop end position |
| Alt + ↑/↓ | Change the values |
| Alt + ←/→ | copy value left or right |

| | |
|---|---|
| [Ctrl] + ←/→ | insert or delete value (shift patterns) |

| PSH menu | |
|---|---|
| [Ctrl]+↑ | Increase the track size (16 steps block) |
| [Ctrl]+↓ | Decrease the track size (16 steps block) |
| [Ctrl]+→ | Increase the track size (1 step) |
| [Ctrl]+← | Decrease the track size (1 step) |
| [TAB] and [Backspace] | Navigate into the new steps (-16 or +16) |

## Other commands

| Volume | |
|---|---|
| [ESC]+↑ | Increase volume |
| [ESC]+↓ | Decrease volume |

Get picoloop at https://github.com/yoyz/audio/

---

Made by Garvalf (http://garvalf.online.fr) with the textallion word processor and the txt2tags syntax.