

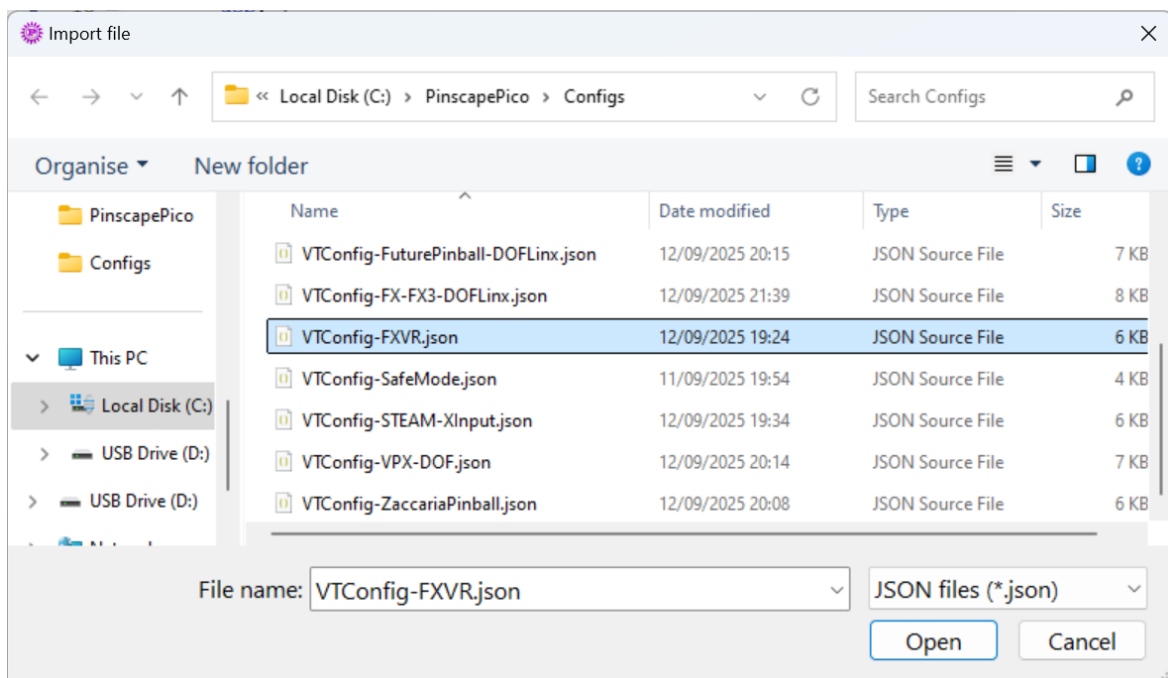
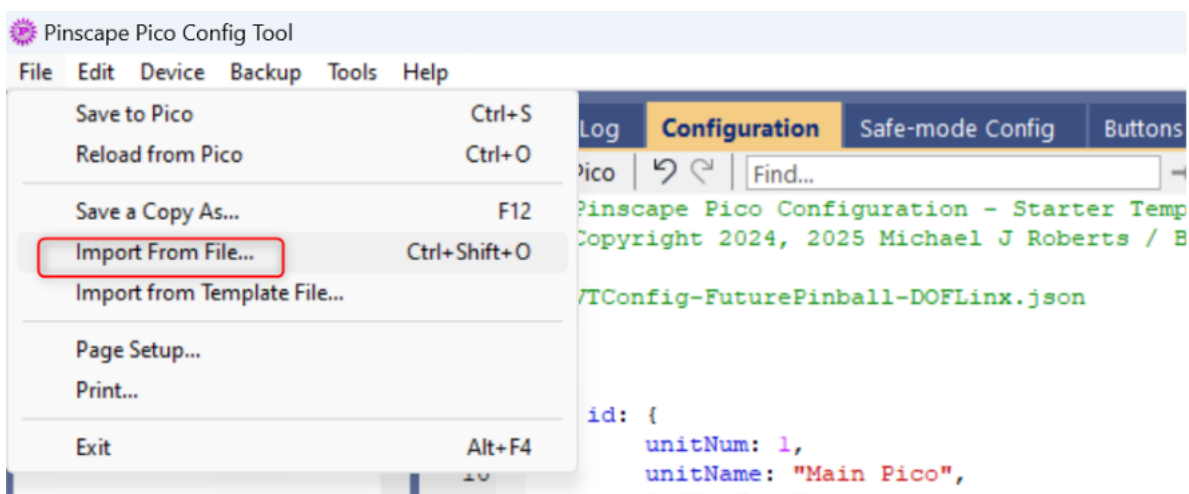
VIRTUATILT – PinballFX VR Setup

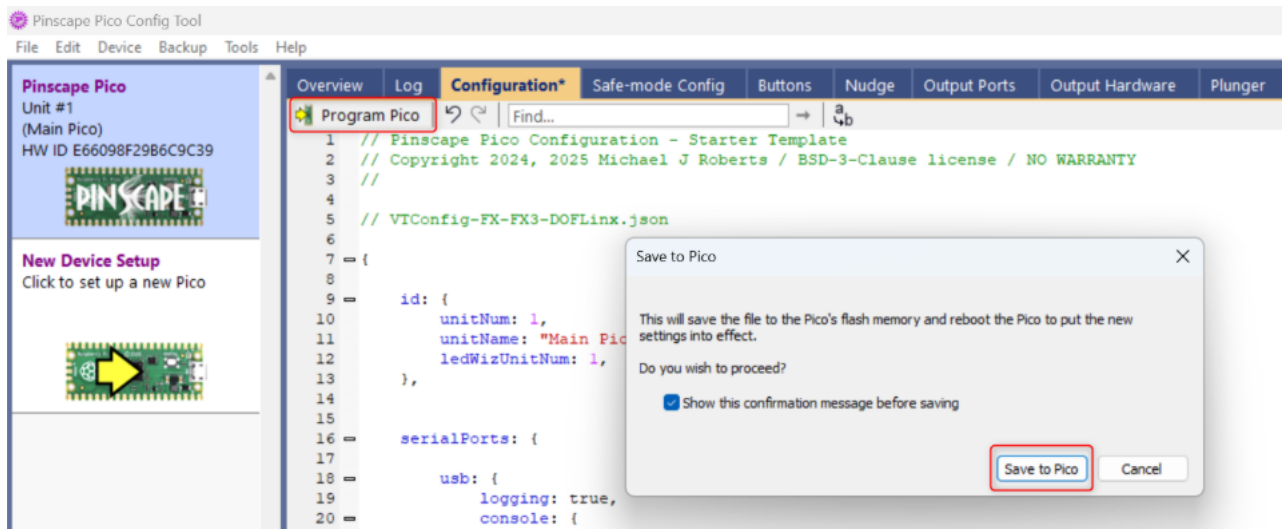
Following some basic instructions to have your new VirtuaTilt up and running with PinballFX VR.

NOTE: You need an OTG adapter to directly connect your VirtuaTilt to Meta Quest (USB-A to USB-C)

PREREQUISITES:

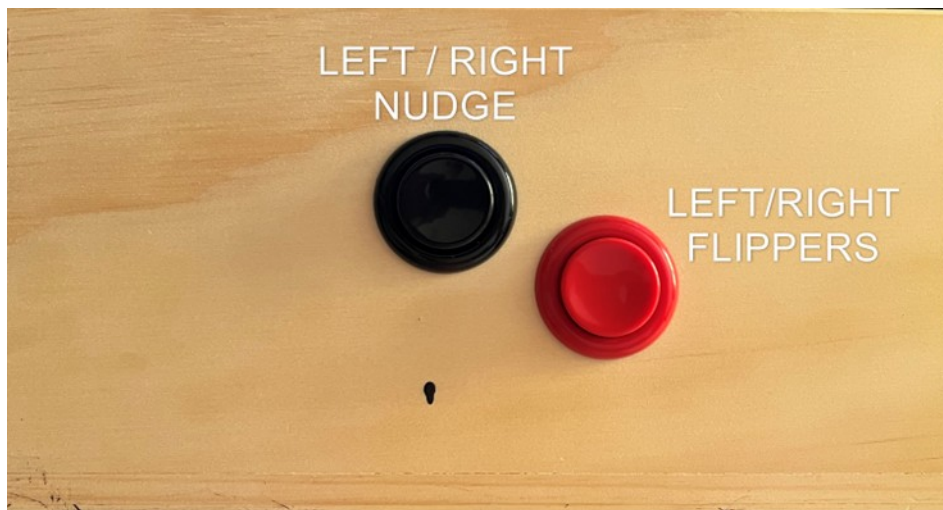
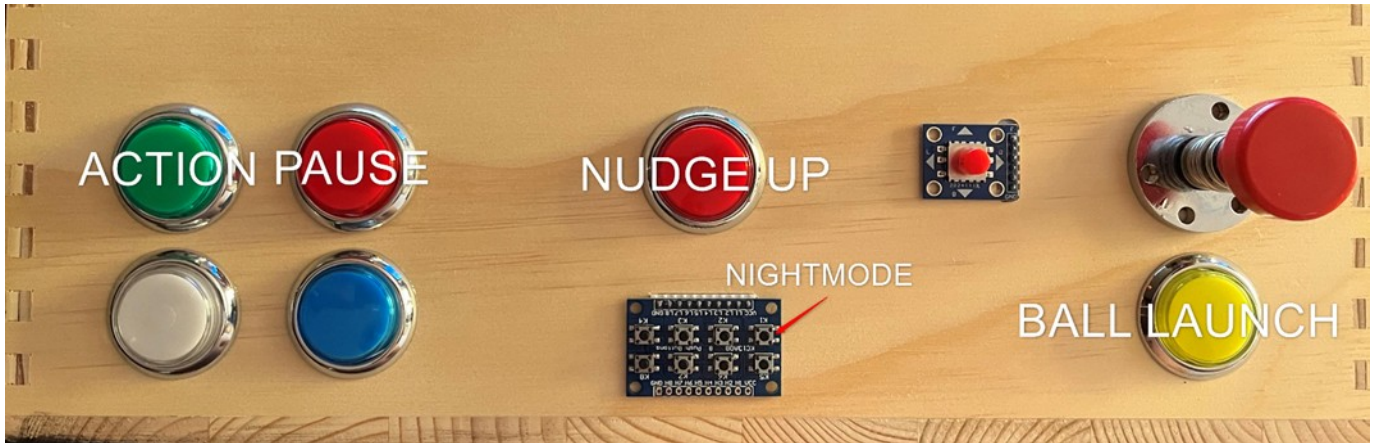
- **VTConfig-FXVR.json** profile loaded in **Pinscape Pico Config Tool**





Buttons Mapping

This is default button mapping for PinballFX VR:



Nudge Adjustments

Nudge is already configured and ready to use. You can nudge with left/right buttons **OR / AND** internal accelerometer. You can adjust parameters for accelerometer-based nudging in **Pinscape Pico Config Tool** under **Configuration** tab:

```
// Nudge Right
{
  onTime: "200", resetTime: "300", threshold: "22000" },
},
// Nudge Left
{
  onTime: "200", resetTime: "300", threshold: "22000" },
},
// Nudge Up
{
  onTime: "200", resetTime: "300", threshold: "18000" },
},
```

onTime

The amount of time to pulse the imaginary button, in milliseconds (1000 milliseconds equals one second). When the nudge axis reading goes over the threshold, the button reads as pressed for this interval.

ResetTime

The reset time for the nudge event, in milliseconds (1000 milliseconds equals one second). Each time the button is triggered, it performs its action and then ignores the nudge input for this amount of time. This prevents the button from getting triggered repeatedly during a strong jolt to the cabinet.

Threshold

The minimum reading on the nudge axis to trigger the event, 0 to 32767.

VERY IMPORTANT NOTE: You need to find your right settings (according to your personal preferences) for nudging. You can adjust both Pinscape Pico accelerometer settings and your VP game settings until you find your perfect spot:

Overview
Log
Configuration*
Safe-mode Config
Buttons
Nudge
Output Ports
Output Hardware
Plunger
IR & TV ON

+

0

x: -24

y: 1424

+

0

z: 16337

+

0

x: -11

y: 18

+

0

z: 8222

+

0

x: 22

y: 75

+

0

z: -100

All axis ranges are -32768 to +32767
Last auto-centered: N/A (disabled)

☐ Enable auto-centering

Auto-centering interval:

Quiet threshold: X: Y: Z:

Capture readings to file

Noise Calibration

This measures the random background vibrations that the accelerometer reads when the device is at rest. Run the calibration for more accurate detection of stillness for auto-centering. During calibration, don't move the accelerometer, and avoid any large vibrations in the surrounding area that could be picked up. Calibration runs for about 15 seconds and goes into effect automatically at the end of the period.

DC Blocker time constant:

X axis jitter window:

Y axis jitter window:

Z axis jitter window:

Velocity decay time (ms):

Velocity scaling factor:

Physics Tester

Current auto-centering noise thresholds:

X: +/- 328
Y: +/- 328
Z: +/- 984

You can also increase accelerometer sensitivity by changing gRange value to 2 in any profile:

Overview
Log
Configuration*
Safe-mode Config
Buttons

Program Pico
Find...

260

261

262 =

263

264

265

266

267

268

i2c: 0,

gRange: 2,

},

Please refer to the official Pinscape Pico reference for additional information about accelerometer parameters: <http://mjrnet.org/pinscape/PinscapePico/Help/NudgeWin.htm>

Plunger Adjustments

Plunger is already configured and ready to use. You can launch ball with button **OR / AND** mechanical plunger. You can adjust parameters for mechanical plunger in **Pinscape Pico Config Tool** under **Configuration** tab:

```
//Mechanical Plunger  
{  
    threshold: 58000 },
```

Threshold

Sets the analog reading at which the button will trigger, using the "normalized" range of 0 to 65535. The Pinscape software internally maps every device's native range to the same 0..65535 scale, where 0 corresponds the minimum voltage that the device can register, and 65535 corresponds to the maximum voltage.