

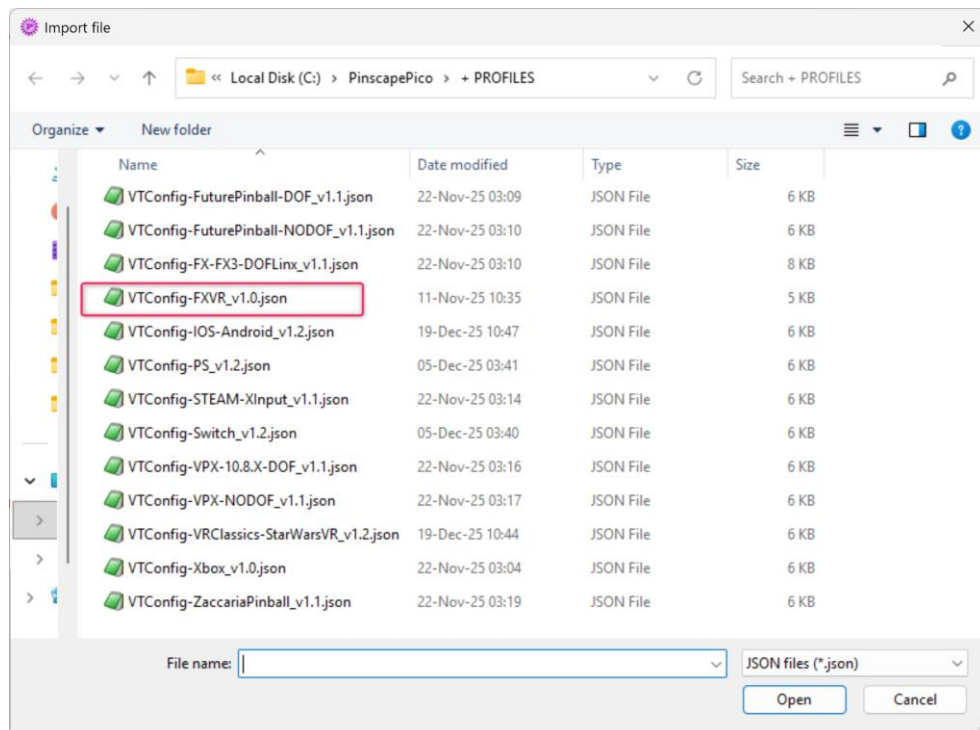
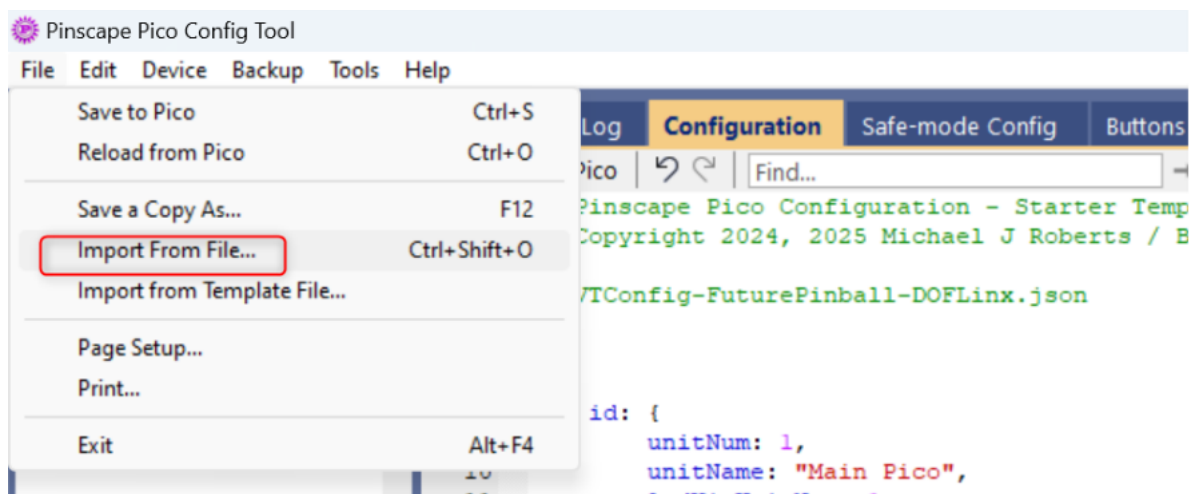
VIRTUATILT – PinballFX VR Setup

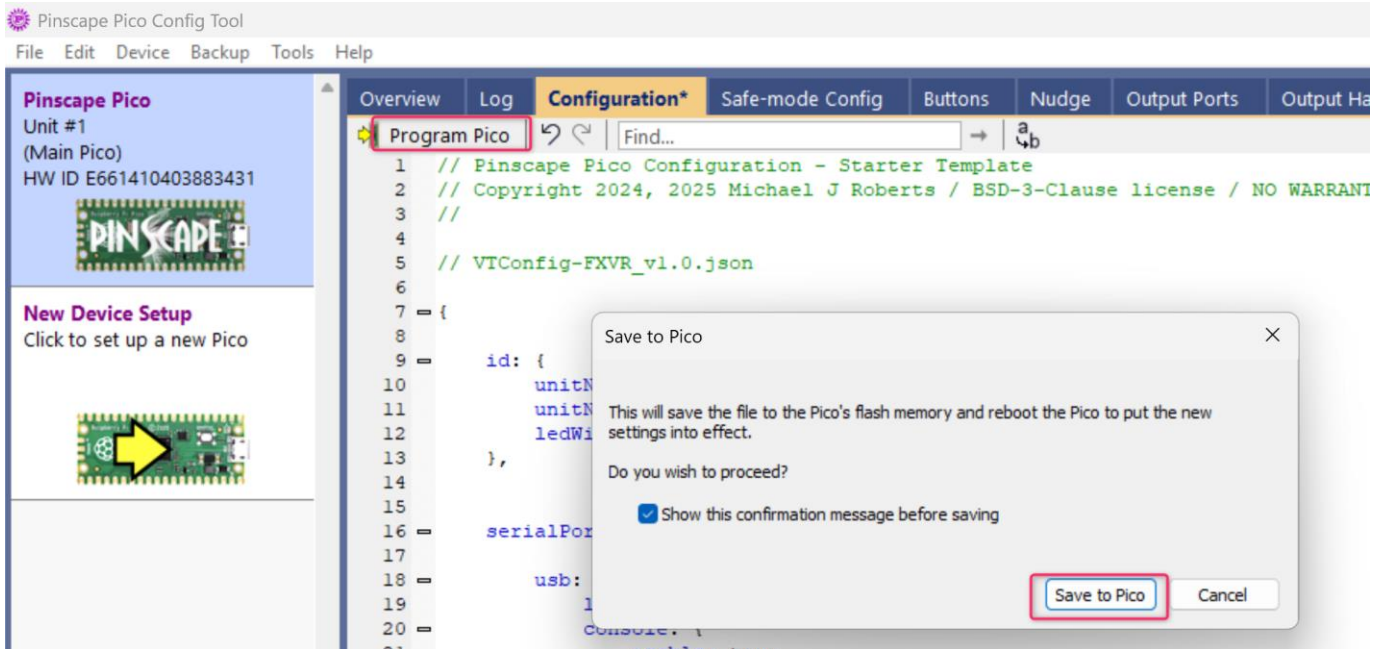
Following some basic instructions to have your new VirtuaTilt up and running with PinballFX VR.

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

PREREQUISITES:

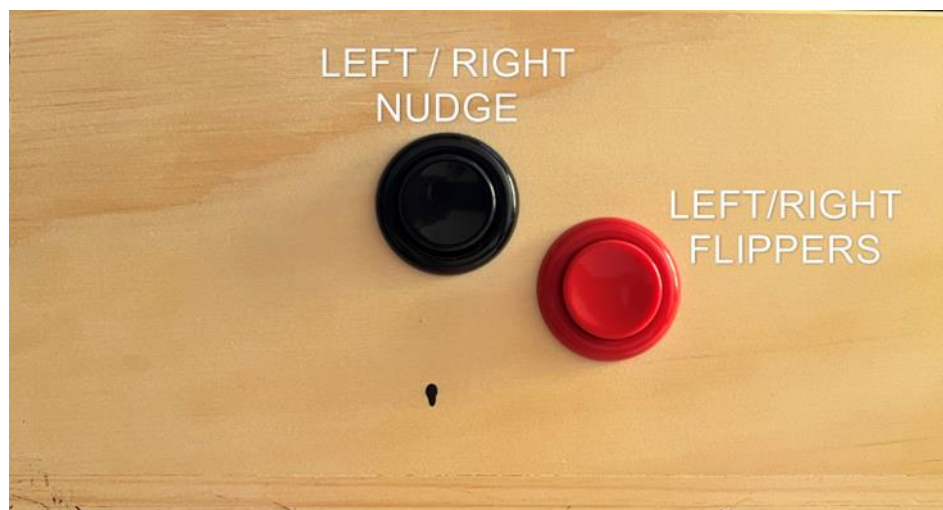
- **VTConfig-FXVR_v1.X.json** profile loaded in **Pinscape Pico Config Tool**





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.

IMPORTANT NOTE: PinballFX VR does not support analog nudge natively. However VirtuaTilt is able to translate digital inputs into accelerometer movements!

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

x: -24 y: 1424 z: 16337 x: -11 y: 18 z: 8222 x: 22 y: 75 z: -100

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

☐ Enable auto-centering
Auto-centering interval: 4000
Quiet threshold: X: 328 Y: 328 Z: 984
Center Now

Capture readings to file
Start Capture

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.
Calibrate
Save Settings Restore Settings

DC Blocker time constant: 150
X axis jitter window: 0
Y axis jitter window: 0
Z axis jitter window: 0

Velocity decay time (ms): 500
Velocity scaling factor: 100

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 i2c: 0,
264
265
266 gRange: 2,
267 },
268

```

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

Plunger Adjustments

IMPORTANT NOTE: PinballFX VR does not support analog plunger natively; only ball launch button.

VirtuaTilt is able to translate a digital key press (ball launch button) into plunger movements, however it will never behave like a real analog plunger as in Pinball VR Classics or StarWars Pinball VR for example.

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.