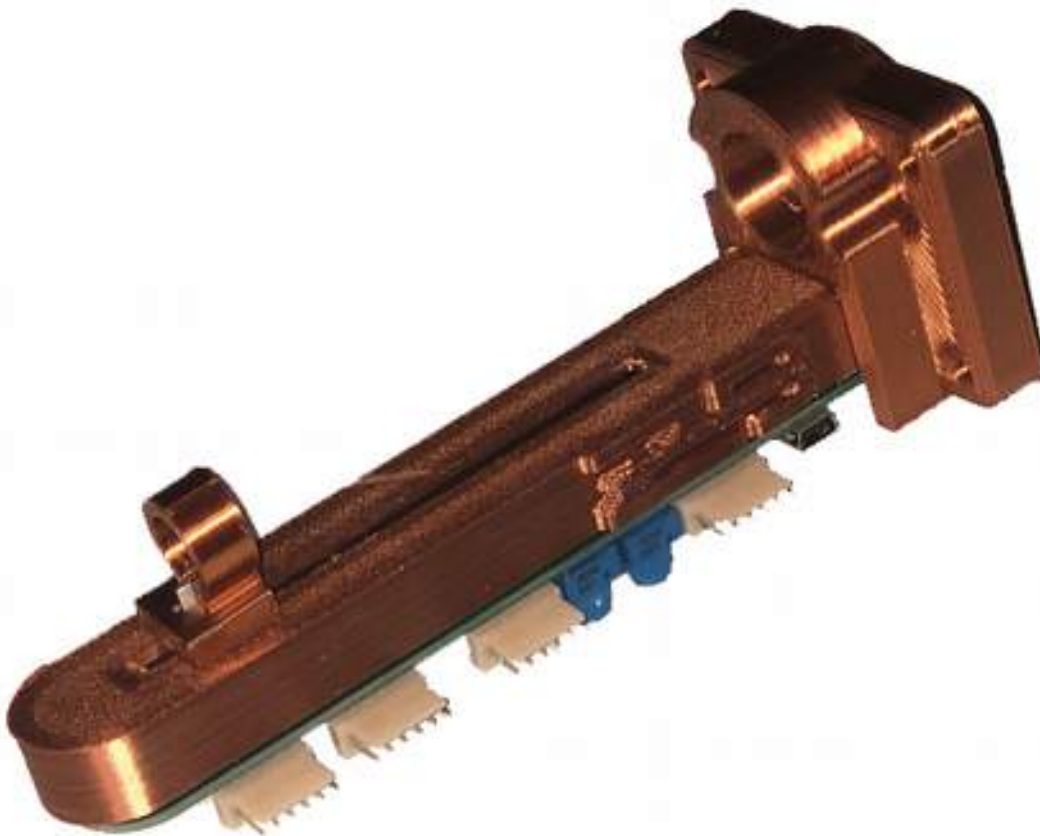




V3 Digital/Analog Plunger Installation



1. Ensure all parts are present

1pc Plunger Assembly

1pc Plunger Slider Block

1 pc USB A to mini-B Cable

4pcs 6pin Wire Harness Assembly

3pcs #10 x 1/2" machine screw and star washer

1pc #10 flat washer

2pcs #6 x 1" panhead screw

2. Assemble screws and star washers



3. Suggested opening for Plunger



4. Mount ball shooter in opening



5. Mount plunger using supplied machine screws and star washers (washers not really necessary).



Make sure not to overtighten and damage the plunger housing plate. Screws should be tight enough to hold the ball shooter in place but not so tight as to split mounting plate. If the angle of the plunger is too high toward the front, put the supplied panhead wood screws into the bottom holes of the plunger and tighten to bring down the nose of the plunger.

Note that slider block is mounted between the c-clip and shooter rod spring.

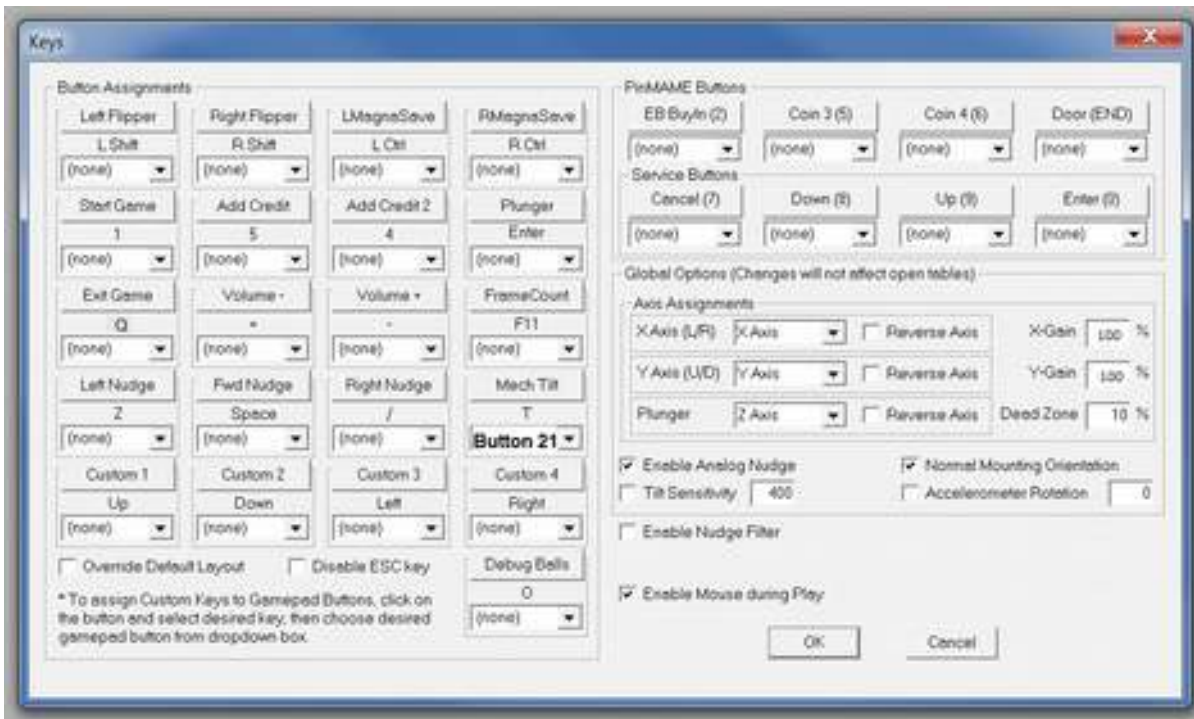


To use the ZB launch feature connect the ZB Launch input wire to an open negative output on your controller (Led Wiz, PacLED64, etc.) and assign the output used to ZB Launch in your DOF configuration. Tables requiring a button press for launching the ball can be operated by pushing in on the plunger. The plunger sends an ENTER keystroke repeatedly for as long as the plunger is pressed in.

7. Calibration

Calibration in Windows is not generally required for the V3 Plunger

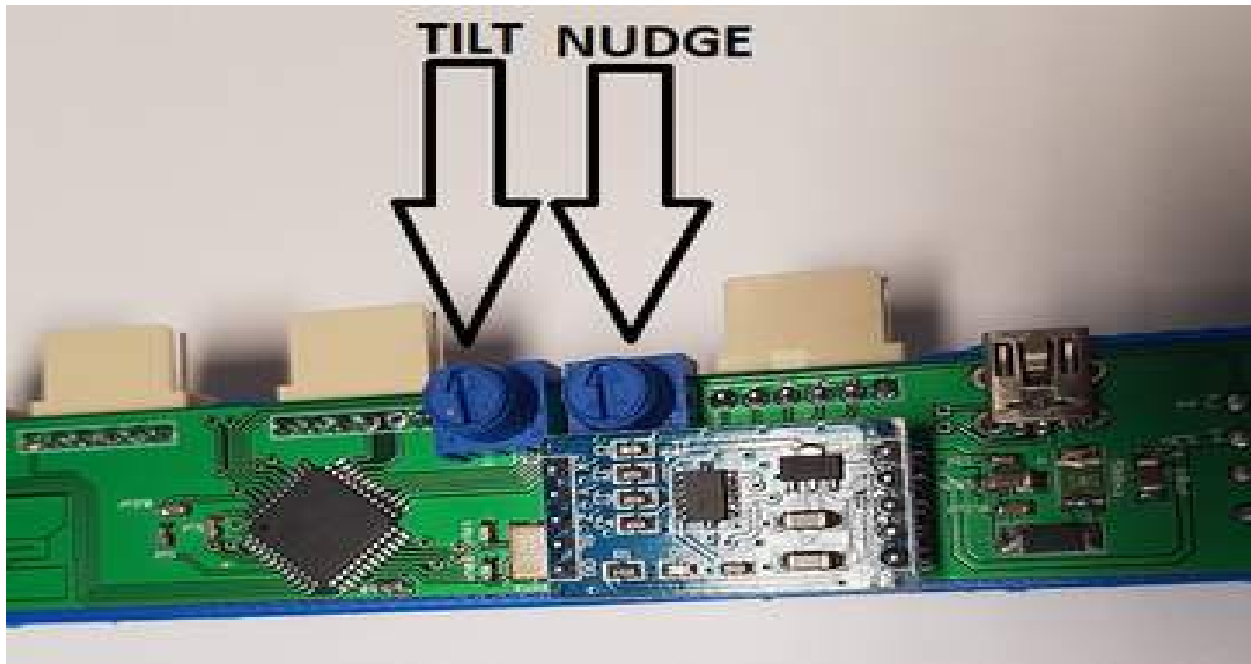
8. VP Settings



9. Layout

The plunger is hardcoded for the Standard button layout for Visual Pinball. Additionally, there are 2 gamepad buttons available to be assigned to any function not covered by the hardcoded keystrokes.

10. Nudge and TILT adjustment



Nudge Adjustment

The gain on the nudge signal from the accelerometer can be adjusted from 0% - 100% by turning the indicated knob as seen in the picture above. Best practice for adjusting is to open a table in Visual Pinball and adjust the knob until the desired response is found. Turning the knob clockwise increases the sensitivity and counter clockwise decreases the sensitivity.

If the adjustment cannot be made to your satisfaction, open the preferences\keys tab of the settings in Visual Pinball and increase or decrease the gain settings as required. Repeat the above procedure.

Adjusting the nudge sensitivity with the knob can create an offset in the centering of the x and y axis of the plunger. If you notice a considerable pull in any direction after adjustment, simply unplug the USB cable from the plunger and reconnect it. This will force a reset of the plunger and will calculate a new center position for both axis.

It is recommended to set the nudge gains to the desired level before setting the TILT level as reversing the order will likely disrupt your TILT setting.

TILT Adjustment

After setting the nudge gain to the desired level, close Visual Pinball and open the gamepad controller applet.

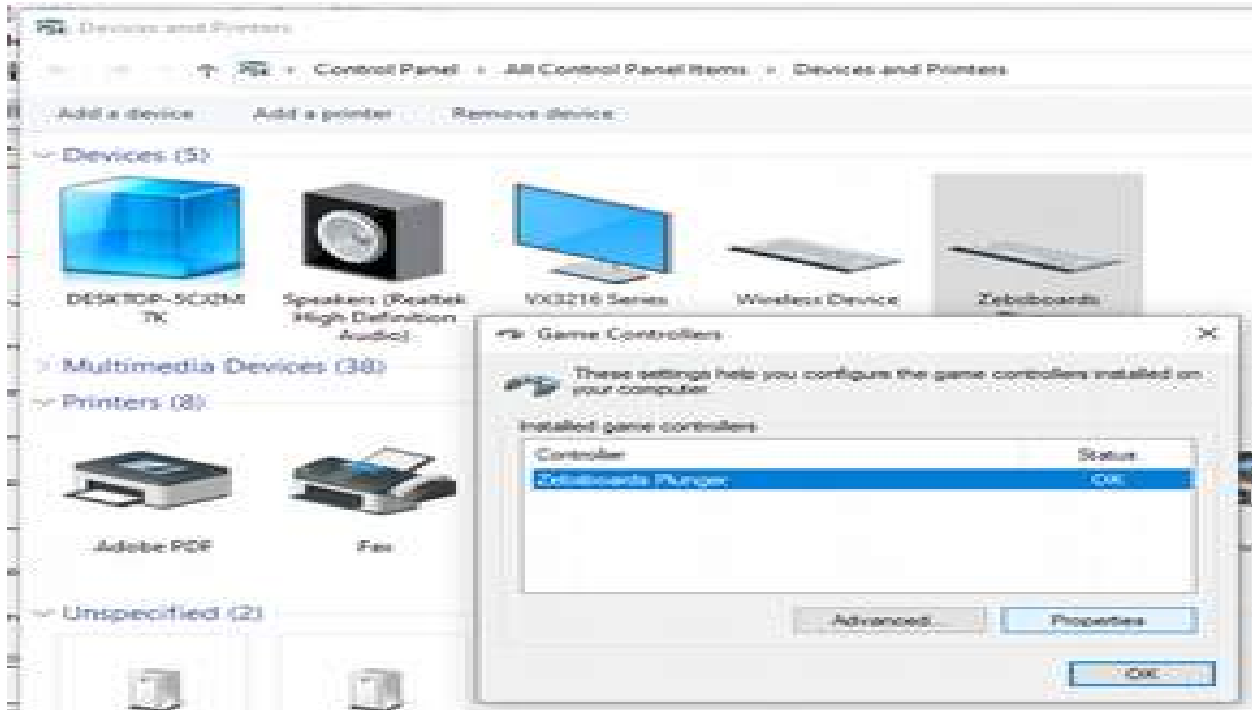
Open Devices and Printers ...



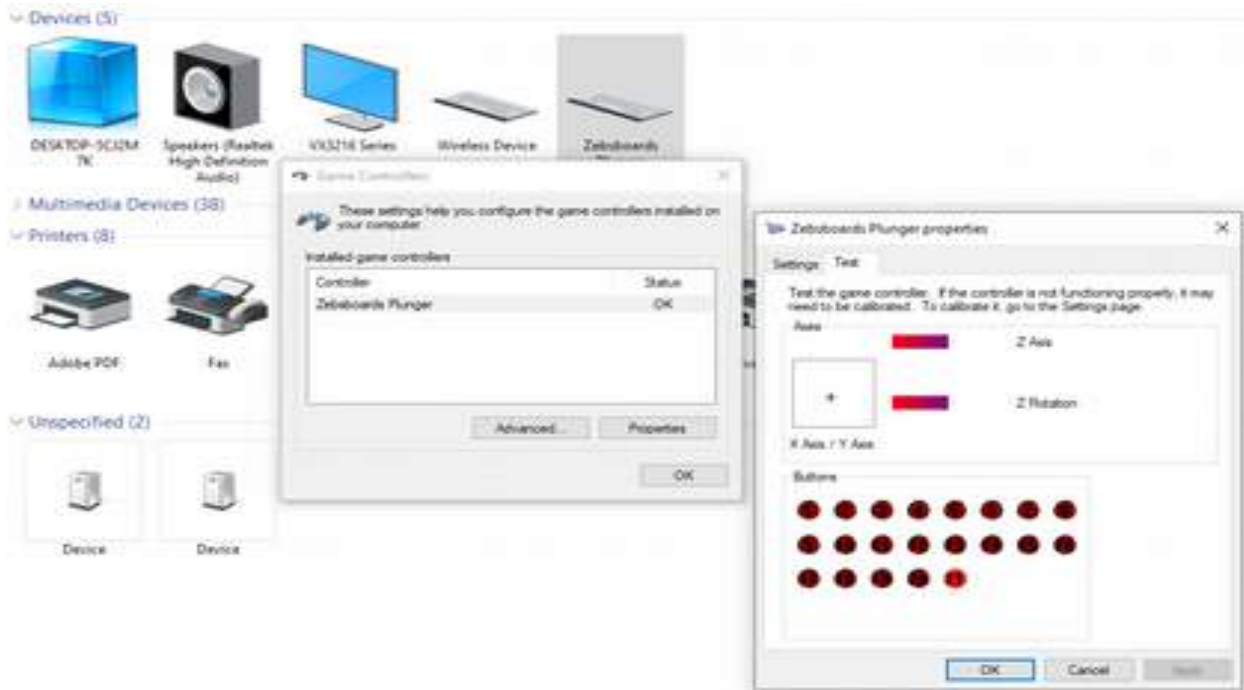
Right Click on the Zebboards Plunger icon and select Game Controller Settings in the drop down menu that appears ...



Select Properties and click on 'OK' ...



Which will bring you to the Test screen ...



Button 21 is the last button in the list (shown in red) and is the TILT button

To check the level of gain for tilting the machine, nudge the cabinet at a level that you feel is appropriate for tilting and adjust the TILT knob until Gamepad Button 21 flashes.

Set the button number to 21 in the VP keys and preferences Screen to use the tilt function.

The use of the letter 'T' for tilt in the firmware has been discontinued to eliminate the hang-up that could occur with windows due to a misadjusted tilt level.

Turning the knob clockwise increases the sensitivity and counter clockwise decreases the sensitivity.

The TILT routine has a limiting timer in it that will debounce the TILT command by prohibiting the T keypress from occurring more than once every 2 seconds. When adjusting the TILT level be sure to allow for the delay timer to complete before trying to tilt the machine again.

Plunger Opening Template

