Credits

Igor Cesko for the ATMega8 USB Stack.

Mindaugas Milasauskas for the MJoy Project.

Vojtech Pavlik for Sidewinder.c.

Mike "KoolBear" Sullivan for the layout and having the boards made.

Microsoft for Patent #5628686, Apparatus and Method for Bidirectional Data Communication in a Gameport.

Jackie "Nanook" Shaw for the Manual and so much more.

Though Grendel is unable to offer a warranty, technical assistance is available.



http://grendel.koolbear.com/3dpro.htm

DescentBB Discussion Thread

http://www.descentbb.net/viewtopic.php?t=7090

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3DP-Vert
M\$ SideWinder 3D Pro/USB
Converter

User Guide

Connecting Your 3DP-Vert

Though there is no necessary order for connecting the PV to your PC, it is recommended to proceed as follows:

- Connect the Microsoft SideWinder 3D Pro to the PV's DSUB-15 connector.
- Connect the B end of a USB A-B cable to the PV's USB connector.
- If you have not mounted your PV, place the PV in a spot on your desk where the other end of the USB cable will reach a USB port of your PC. Make sure there is no metal under the converter or even close to it!
- Ensure the 3D Pro is in the neutral position (don't touch it.)
- Connect the A end of the USB A-B cable to a USB port on your PC.

CAUTION: If you have still not mounted your PV...
While the PV is operating, do not touch it. Do no drop anything on it. Keep your pets away from it. Make sure nothing made out of metal comes into contact with any part of the PV while it is operating! Failure to follow these precautions could result in the destruction of the PV and/or damage to your computer! Again, it is strongly recommended to box the unit or safely mount it inside your PC.

The first time the PV is connected to both your PC and the 3D Pro, the "Found New Hardware" process will start and configure Windows for using the PV. This process will take about 10 seconds.

- Then, open the "Gaming Options" (2k) or "Game Controllers" (XP) panel found in the "Control Panel".
- You should see the entry "Microsoft SideWinder 3D Pro (USB)".
- Double click the entry and use the dialog to verify the PV operation.
- Your 3D Pro is now operational using the USB connection.

Installation Methods

Overview

For operation you will need 1) the PV, 2) a 3D Pro joystick and 3) a USB A-B Cable. When handling the unprotected PV, use caution to prevent electrostatic damage. If operated without protection, the PV should NOT EVER come in direct contact with metal while connected to a PC to prevent damage to the PV and/or your PC. Guard against liquids spilling on the PV. Keep your pets and your paws away from the PV, and don't even look at it when it's powered up.

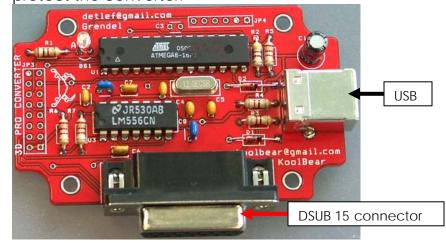
For proper installation, you have two mounting options:

The Port Mount - installation inside the PC

If simplicity is your goal, this is the installation method that is right for you. Using a slot bracket for a game port you will install the PV inside your PC.

The Box Mount - installation as an external device

If you are not set up with a PC that offers a free slot, have a laptop, or want to use the converter on multiple PCs, the PV can be mounted in an inexpensive box which helps protect the converter.



Introduction

The **3DP-Vert** allows you to connect a Microsoft® SideWinder™ 3D Pro joystick to your PC via a USB (Universal Serial Bus) connection while retaining full functionality (all buttons, 8-way hat, and slider). Over 250 hours of volunteer labor went into the engineering and manufacturing of this converter. We hope the **3DP-Vert** brings you many hours of enhanced gaming pleasure. Thank you for supporting the makers of **3DP-Vert**.

What's in the Box

When your package arrives in the mail you will find the following contents:



- One box containing the **3DP-Vert (PV)** converter board enclosed in a static shield bag.
- This User Guide.
- Bubble Wrap (Reuse, reduce, recycle)

Please read this user guide to ensure proper installation and handing of the PV converter.



Technical Notes: The PV can be disconnected from the USB port anytime, with or without the 3D Pro being connected. The PV can stay connected to your PC 24/7. You can power cycle or reboot the PC with the PV connected. Switching the little emulation select switch on the back of

the 3D Pro will cause the 3D Pro to reset. In that case the PV will restart and reinitialize the 3D Pro. You will loose the 3D Pro for about 2 seconds if that happens.

The LED on the PV lights up **bright** if there is no 3D Pro connected and will be **off** if the 3D Pro is connected but there is no USB transfer going on. The LED will be **dim** when the USB data transfer occurs.

ATTENTION Descent 3 players!

To eliminate the DirectInput default deadzone, proceed as follows:

- Open Notepad.
- Exactly copy the following four lines:

[controller settings]

name=Microsoft SideWinder 3D Pro (USB) deadzone=0.0

Save the file as Mssw3dpu.ctl into your Descent 3 root directory (usually c:\games\descent3.)

Technical Notes: This is independent from the -deadzone commandline parameter. The later is applied by D3 on the values delivered by DI.

The Box Mount

Purchase the *Project Enclosure*, Model #270-283, from RadioShack® (current price is \$3.99.) The PV is designed to fit into this box.



Remove the blank PC board that comes with the box. Mark and cut holes in the box for the USB and DSUB15 connectors, which will extend out of the box. Anchor the PV to the box (see orientation above) using the provided screws. Place and screw down the cover plate.



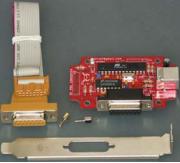


The photos above show the finished Box Mount with attached cables. Notice that the holes for connecters have been cut notch rather than window style, leaving open gaps at the base of the connecters.

The Port Mount



Some PC Main Boards come with a slot bracket for a game port (ASUS p/n 14-000012221.) You will be replacing the connector and ribbon cable with the PV.

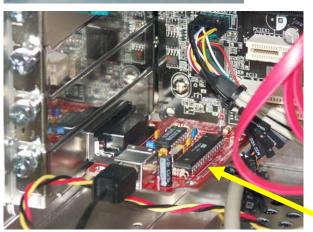


Remove the screws holding the connector to the slot bracket then remove connecter. Set the screws aside for later use. Place PVs DSUB15 connector in the slot bracket and screw the PV in place.



Next, install the slot bracket in your PC.

NOTE: The USB cable will need to be routed out of the PC.



This photo shows the PV installed on a slot bracket inside a PC.