Bodnar 12-Bit Joystick Board

Suitable for converting gameport devices to USB, retrofitting existing gaming devices or building your own.

Rating: Not Rated Yet
Price
Variant price modifier:

Base price with tax

Price with discount $81.94

Salesprice with discount

Sales price $81.94

Sales price without tax $81.94

Discount

Tax amount

Ask a question about this product

ManufacturerBodnar

Description

Product Information

Suitable for converting gameport devices to USB, retrofitting existing gaming devices or building your own.

Specifications

- 8 analog inputs with 12-bit (4096 steps) resolution each
- 32 buttons
- 8-way "point-of-view" hat switch
- Dimensions Compact outline of 4.84"x1.95" - (123mm x 49.5mm) With 93 wire terminals onboard it is only 50% bigger than a credit card

- Recommended Wire Size - 24AWG to 20AWG

- Mounting Screw Hole Size - M2.5 or #3-56 - DO NOT ENLARGE THE MOUNTING HOLES

Features

- Fully self-contained interface
- Natively supported by Windows 8/ 7/Vista/XP/2000 32/64 bit and Mac OS X
  Forget drivers - just plug it in and it's ready to go
- Unique serial number helps Windows remember each device
  Ever unplugged a joystick and had Windows lose calibration settings? This controller retains settings even if plugged in a different USB port or if you use two and swap them over.
  Also allows you to connect and use more than one at a time.
- Analog inputs filtering
  Digital processing removes noise from axes position reports while preserving extremely fast response.
- Powered from USB bus (+5V - 500mA)
  Light LEDs between the button input and +5V connector to illuminate your panel or switches when input is switched on. See downloads section for diagram.
- Full-speed 12Mb USB connection
- Compatible with any game that uses joystick - MS Flight Simulator, X-Plane, Driving Sim Games, etc
- Custom versions for OEMs
- Proudly designed and made in the UK

How to use

Push-in terminals for all connections
No more soldering or screwdriving. Push in to connect. Press tab and pull out to disconnect.

32 truly independent digital inputs for buttons and switches
No matrix, no diodes, no daisy-chaining. And yes, each input has its own two terminals (GND can also be shared between inputs if necessary.)

Support for up to 16 rotary encoders
A pair of digital inputs can be connected to rotary encoder. All main types supported (1, 2 and 4 pulses per detent)

8 analog inputs with true 12-bit resolution and independent wiring
4096 steps of resolution. Even 1/4 of this range is still 1024 steps!
To support true 12-bit performance each analog inputs has independent set of +5v and GND terminals, oversampling and sophisticated signal filtering

Check data sheet of component you wish to connect for the correct pin out

8-direction POV hat switch

Construction tips

What to do with unused inputs?
Unconnected buttons will appear as not pressed - just ignore them
Unused analog inputs are automatically disabled. They will appear as soon pots are connected and BU0836X is powered up. In other words, if they are not connected - you will not see them

Which pots are the best?
Any value from 1kOhm to 100kOhm will work fine. If you don't know where to start, get 10kOhm ones
Use linear pots (taper B.) Avoid non-linear, log pots with tapers A, D or Y used in audio level controls
Any pot would work but the best ones are industrial quality Spectrol (Vishay) and Bourns. They have life expectancy of few million shaft
revolutions.

Good wiring helps. For ultimately clean signal use shielded wires and ground the pot's case if it's metal
Try to use as much of pot travel range as possible

Product Downloads

DIView.exe:
http://www.leobodnar.com/products/BU0836/DIView.zip

Encoder Configuration Software:
http://www.leobodnar.com/products/BU0836/BU0836_encoders.exe

LED on Button Press Wiring Diagram:
http://www.leobodnar.com/files/basicLEDswitch.pdf

PCB Template in .dxf Format:
http://www.leobodnar.com/files/basicLEDswitch.pdf