![BiBaJa logo] **www.bibaja.com** **IOPoint-USB**

16 Isolated High-Current Digital Outputs

Features

- 16 High Current Output Drivers
- Safety Isolation for USB from Outputs
- Sturdy Quick Disconnect Terminals
- Open Source Example Software
- 16 Output Status LEDs
- USB Power Status LED
- Support for Windows and Linux

Applications

High current drive capability and isolation from the USB make the versatile IOPoint-USB ideal for a variety of applications including automotive, laboratory, and industrial automation.

The high current drivers may be used to drive any 12V DC device up to 9 amps. Some example devices include:

- DC Motors
- Solenoid Valves
- Low Voltage DC Lights
  - o Fog Lamps
  - o Running Lights
  - o Indicator/Warning Lights
  - o LED Accent Lighting
- Seat Heaters
- Fuel Door Solenoids
- Accessory Power
- Fans and Blowers
- Relays and Contactors

Virtually any 12V device that draws less than 9 amps may be controlled from your computer using the IOPoint-USB.
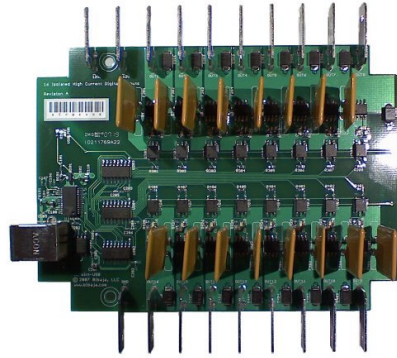
Multi Unit Support

Each IOPoint-USB has a unique serial number allowing multiple units to be individually controlled from the same PC.

This feature allows many outputs to be controlled from a single PC.

Open Source Software

Open source example software is provided for Windows and Linux:

- Visual Basic
- TCL/TK
- C

Example code is available for download at http://www.bibaja.com.

Specifications

Operating Temperature	-20C to 85C
12V DC Supply Voltage	5V to 18V DC
Maximum USB Current Consumption	90ma
Maximum Output Current (One Output)	9 Amps at 12V, 7A at 5V
Maximum Output Surge Current (One Output)	55 Amp pulse < 300us, Duty Cycle < 2%
Dimensions: (Of PCB Assembly)	Width: 127mm (5.0 inches)
	Length: 91.44mm (3.6 inches)
	Height: 31.75mm (1.25 inches)
Storage Temperature	-50C to 95C

Installation

To install on Windows:

1) Download driver package for Windows from http://www.bibaja.com/products/?page=iopoint_usb
2) Extract driver package
3) Plug in IOPoint-USB
4) Point driver installer at extracted driver package
5) Restart computer

To install on Linux:

1) Download and install libusb version >= 0.1.7 (http://libusb.sourceforge.net/)
2) Download and install libftdi version >= 0.9
   (http://www.intra2net.com/de/produkte/opensource/ftdi/)
3) Download Linux example from http://www.bibaja.com/products/?page=iopoint_usb
4) Extract and build package and run example scripts

To use IOPoint-USB:

1) Connect GND to ground
2) Connect 12V to a 5-18V power source capable of supply the require current for your device
3) Connect one of the outputs OUT1 – OUT16 to the device's positive terminal, install fuse if necessary
4) Connect the device's ground terminal to ground common with the IOPoint-USB
5) Turn on the output and enjoy your new computer controlled gadget

WARNING! You must use a power supply capable of delivering enough current to power the load. If the supply voltage drops below 2V and you are still drawing current through the mosfets, they will get very very hot possibly damaging the outputs.   Your power supply should be capable of providing enough current for all outputs on drawing the maximum current of each attached device. Fuses must be installed on outputs that could exceed the 55A 300uS maximum current pulse rating. Internal PTC fuses limit the sustained current drive for each output to 10 amps.

Ordering Information

IOPoint-USB-16IHCDO	16 Isolated High Current Digital Output PCB Assembly with USB Cable
Enclosure-16IHCDO	Enclosure for IOPoint-USB

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