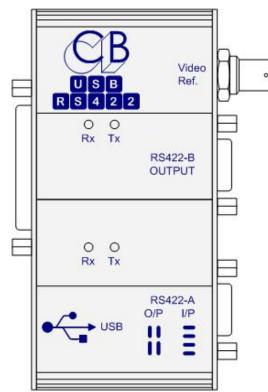


# **USB-422V**

# Dual RS-422 USB Interface Bi & Tri Level Video Sync Reference & GPIO



# **Main Features**

- Two RS422 ports, Connections to Standard Sony RS-422 pin-out
- Bi & Tri Level Video Sync Reference Input
- GPIO 6 Buffered ttl Inputs and 4 Open Collector outputs
- Port A may be configured as a Controller (O/P) or Device (I/P) using internal links
- Port B is configured as a Controller (O/P)
- Windows 98, ME, 2000 and XP Drivers
- MAC OS-X Driver
- Linux Driver
- Tx and Rx LED's on both ports
- Slew Rate Limited RS422 drivers to minimise EMI and reduce reflections
- Sample Windows Program on website
- Rugged extruded aluminum box
- WEEE/RoHS Compliant



# **Design**

### **RS422 Interface:**

Slew Rate Limited RS422 drivers to minimise EMI and reduce reflections on incorrectly terminated connections. Pin-out and termination as per standard Sony connection. Port A may be configured as a Device (I/P) or as a Controller (O/P). Port B is configured as a Controller (O/P), to use as a Device a Tx/Rx invert lead must be used.

#### **USB Interface:**

CB Electronics have for a number of years used USB-RS232 interfaces both with and without RS232-RS422 converters. In designing the USB422 we used the experience with many different manufactures to choose the best combination of hardware and drivers.

#### **Drivers:**

Drivers for Windows 98, ME, 2000 and XP with MAC OS-X and Linux are all available from the USB-422 product page on our web site (<a href="www.colinbroad.com/cbsoft/usb422/usb422.html">www.colinbroad.com/cbsoft/usb422/usb422.html</a> ). The USB422 windows drivers are optimised for minimum latency. When installed on Windows the port numbers are set to the last two free port numbers, this may be changed using the driver parameters.

# **Test Program:**

A test programme that provides both machine control and a virtual machine is available from our web site. The program locks both the virtual machine (Port-A) and machine control (Port-B) to video syncs. The program is written in Delphi (Object Pascal).

# **Video Input:**

The video sync input accepts both Bi-Level and Tri-Level syncs that are converted to a frame rate square wave and is connected to Port A and Port B CTS Interrupt input. The CTS input level after change indicates the video field.

#### **GPIO:**

A 25 way 'D' connector allows access to the 6 Buffered TTL level inputs and 4 Open Collector Outputs. The six inputs are connected to DSR, DCD and RI on both ports. The four outputs are connected to RTS and DSR outputs on both ports.

**Size:** 4.4 x 2.1 x 1.2 (112 x 55 x 31) excluding connectors

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