

## USB Directors (USB↔RS-422/485 & USB↔RS-422)



**Add two or four high-speed serial ports  
to your PC or server in seconds!**

## FEATURES

- Full compliance with USB specifications.
- No external power supply necessary; the hub derives its power from the USB port.
- Plug-and-play installation.
- No additional IRQs required.
- Externally attach new devices—no need to open the PC's chassis!
- Autodetect speeds and connections of devices.
- Include drivers for Windows 98, Windows 2000, Windows Me, and Windows XP.

## OVERVIEW

Attach a USB Director to a PC or server and give yourself two extra high-speed RS-422/485 ports or four RS-422 ports. These stackable expansion modules connect to the server or PC via a Type A Universal Serial Bus (USB) port, enabling you to add either two or four high-speed serial ports in seconds.

Offering 12-Mbps bandwidth, the USB Director can be used to consolidate low- and medium-speed PC desktop peripherals. It's also ideal for adding printers, video-editing equipment, and point-of-sale and industrial-control devices that use a standard serial interface.

You never need to open the chassis or power down your PC or server to install the USB Director. To get the extra 2 or 4 ports, just plug the hub in using the included USB cable. The cable's flat end goes into your PC's USB port or into an available USB port on a standard USB hub, and the D-shaped end plugs into the USB Director.

Both hub versions have a two-position DIP switch for connecting the signal ground to chassis ground. The IC160A hub, which supports both RS-422 and RS-485, also has two sets of eight-position DIP switches for setting echo, full- or half-duplex, and terminator options for its two serial ports.

The simple setup of the USB Director also includes installing the included configuration software, which walks you through the installation, and you're done—no card lots, IRQ addresses, DMA channels, or device addresses to deal with. The hub autodetects speeds and connections of devices while offering plug-and-play capability with peripherals. And power is derived from the USB port, so there are no batteries or power adapters to deal with, either.

The USB Director comes with drivers for use in Windows® 98, Windows 2000, Windows Me, and Windows XP environments. If you need to use the hub with a Windows NT® 4.0 system, call Black Box Tech Support.

You can manage various USB Director resources via the port manager utility.exe program file, found in the Windows System directory. Use the utility, for instance, to check the mapping of each physical communications port to the Windows COM-port numbers and give your USB Director a user-friendly name, which is particularly helpful if you want to install more than one USB Director hub.

LEDs alert you to the loss of USB communication with the host; signify serial-port activity; and indicate that the serial ports have been successfully set up and the USB Director Hub is operating normally.

## Technically Speaking

Universal Serial Bus is a royalty-free bus specification developed by leading manufacturers in the PC and telephony industries to support plug-and-play peripheral connections. USB offers increased bandwidth, isochronous and asynchronous data transfers, and lower costs than conventional I/O ports.

The USB bus is a daisychain consisting of USB hubs and peripherals less than 5 meters (16.4 ft.) apart. The USB daisychain can support up to 127 devices. Instead of opening up the CPU to insert new boards, make all connections outside the case to the USB ports.

Because USB connections are hot-swappable, you can attach or remove peripherals without shutting down your computer. Also, USB hubs have additional ports that enable you to daisychain multiple devices together. More than 450 leading manufacturers of PCs, peripherals, and software support USB.

## TECH SPECS

**Compliance** — EN 55022 Class B, EN 50082-1, EN 60950, CSA 22.2 No. 950, FCC Part 15, UL® 1950

**Distance (Maximum)** — 15 ft. (4.5 m)

**System Requirements** — Pentium® class CPU; 16 MB RAM; (1) unused USB port; Windows 98 or higher

**Connectors** — IC160A: (2) DB9 M, (1) Type B USB; IC161A: (4) DB9 M, (1) Type B USB

**Indicators** — (1) System Status LED

**Temperature Tolerance** — Operating: 32 to 104°F (0 to 40°C)

**Humidity Tolerance** — 5 to 95%

**Power** — Derived from the USB port

**Size** — 5.6"H x 3"W x 1"D (14.2 x 7.6 x 2.5 cm)

**Weight** — 2.5 lb. (1.1 kg)

## WHAT'S INCLUDED

- ◆ USB Director hub
- ◆ 3-ft. USB cable
- ◆ Software driver diskette for Windows 98, Windows 2000, Windows Me, and Windows XP.
- ◆ Users' manual

Item	Code
USB Director	
USB↔RS-422/485, 2-Port	IC160A
USB↔RS-422, 4-Port	IC161A
<b>You might also want to order...</b>	
USB Cable, 3-ft. (0.9-m)	USB01-0003
USB Data-Line Protectors	
Series A	40314
Series B	40315