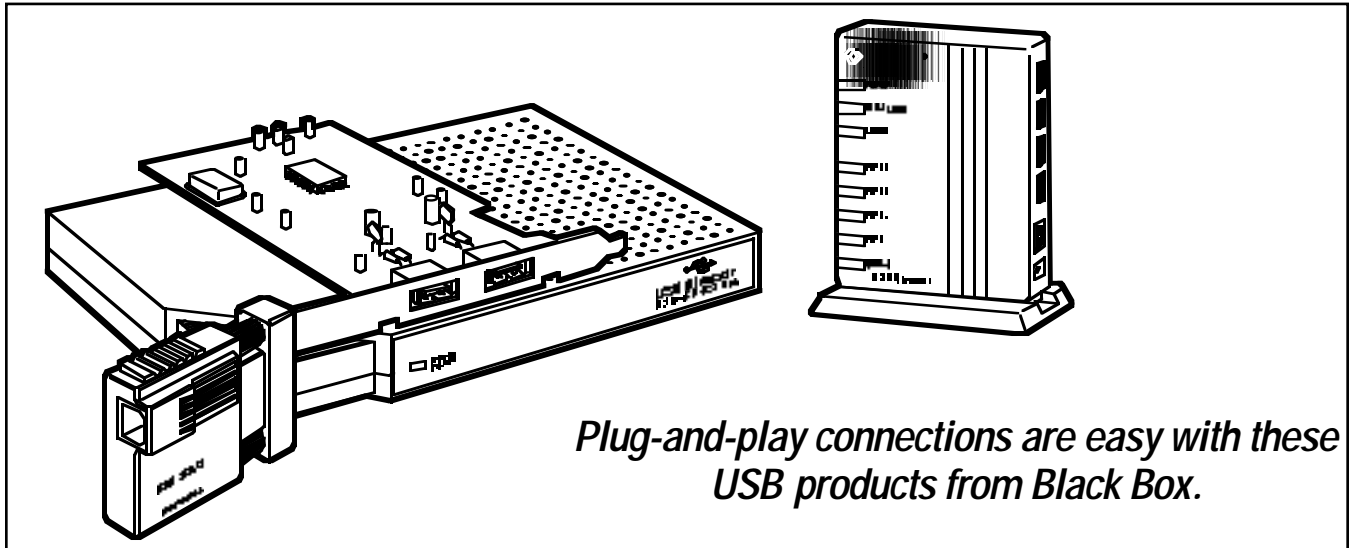




BLACK BOX[®]

NETWORK SERVICES

USB DIRECTOR/4-PORT HUB, USB CARD, USB SOLO



Key Features

- ▶ **IC135A gives your PC up to four high-speed serial COM ports for multiple peripherals.**
- ▶ **IC165A or IC165AE provides four USB outputs from one USB port on your PC.**
- ▶ **The IC136C gives your PC two USB "A" ports and can be used in conjunction with the IC135A or IC165A.**
- ▶ **IC138A lets you connect a single serial peripheral to the USB port on your PC.**

Universal Serial Bus (USB) makes adding peripheral devices to your PC easy. It replaces all the different serial and parallel connectors with one standardized port. With USB-compliant PCs and peripherals, you just plug them in and turn them on.

USB devices can have "A" type ports or "B" type ports. Typically, the "A" ports are used at the host and the "B" ports are used at the peripheral device.

If your PC does not have a USB port, consider the USB Card (IC136C), which provides two "A" ports.

Other available USB products include:

- The USB Director (USB→RS-232 Hub [IC135A]) converts a USB "B" port to four high-speed serial ports, so you can attach up to four RS-232 devices to your PC.

- The IC165A gives you one USB input and four USB outputs, so you can connect up to four USB devices to your PC.

- The IC138A lets you connect a single old-style RS-232 serial peripheral to the USB port on your PC.

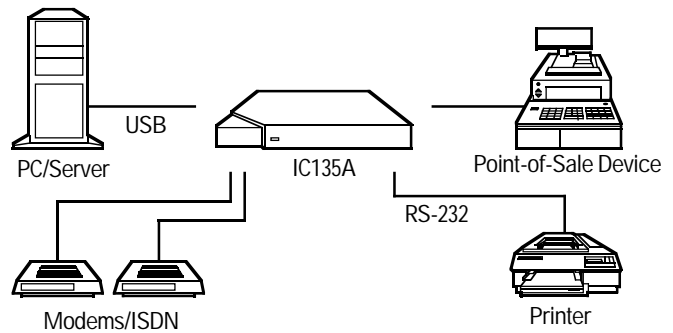
To take advantage of USB's plug-and-play capability, your PC must be running Windows[®] 95 Rev. B or better. USB devices won't work with Windows 95 Rev. A. (Windows 98 and Windows NT software has USB drivers built in.) If you're using Windows 2000, call for tech support.

If you're not sure if your PC supports USB, diagnostic software is included to help you find out whether you'll need to upgrade your software.

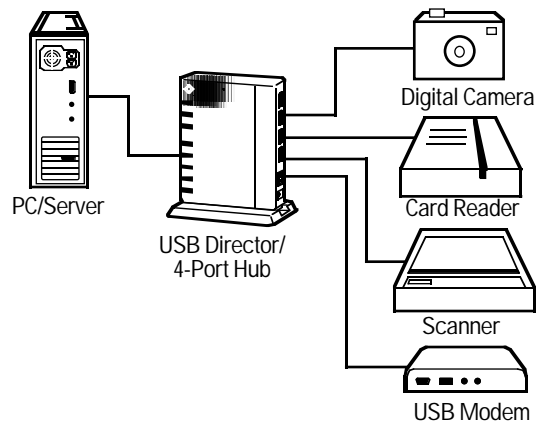
Typical Application

- Attach up to four USB-compliant devices to your PC with the IC165A.
- If your PC does not have a USB port, install the IC136C and use it with the IC165A or IC135A to gain additional USB peripheral ports.

USB Director (USB→RS-232 Hub)
 gives your PC up to four high-speed serial COM ports for multiple peripherals.



USB Director/4-Port Hub gives your PC one USB input and four USB outputs, so you can connect up to four USB devices to your PC.



Why Buy From Black Box? Exceptional Value. Exceptional Tech Support.

Recognise any of these situations?

- You wait more than 30 minutes to get through to a vendor's tech support.
- The so-called "tech" can't help you or gives you the wrong answer.

- You don't have a purchase order number and the tech refuses to help you.

According to a recent survey by Data Communications magazine, 90% of network managers surveyed say that getting the technical support they need is extremely important when choosing a vendor. But even though network managers

pay anywhere from 10 to 20% of their overall purchase price for a basic service and support contract, the technical support and service they receive falls far short of their expectations—and certainly isn't worth what they paid.

At Black Box, we guarantee the best value and the best support. You can even consult our

Technical Support Experts before you buy if you need help selecting just the right component for your application.

Don't waste time and money—call Black Box today.

Specifications

IC165A, IC165AE:

Software Requirements: USB-enabled operating system such as Windows® 95 OSR2.1 or later, Windows 98, or Windows NT® 5.0 (If you're using Windows 2000, call for technical support.)

Cable Wiring: 90 Ω ±15% unshielded or shielded for low-speed devices; 90 Ω ±15% shielded for full-speed devices

Maximum Individual Cable Length: Full-speed device: 5 metres (16.4 ft.) shielded cable; Low-speed device: 3 metres (9.8 ft.) unshielded/shielded cable

Wiring Topology: Tiered star, point-to-point connection

Access Method: Differential and bi-directional per USB spec 1.0; 12 Mbps full speed and 1.5 Mbps low speed; The hub supports both full and low speeds. The hub is considered a full-speed device.

Maximum Hubs in Daisychain: Five (six cables, end-to-end maximum)

Maximum Devices: 127

Indicators: LEDs: (1) Power, (1) Bus/Local Power, (1) Reset, (1) each Ports 1 through 4, (1) Up Link

Connectors: (4) USB Type A connectors for device ports; (1) USB Type B connector for uplink port

Standards Conformance: USB specification 1.0

Certifications: CE, FCC Class B, VCCI Class B, EN 55022 Class B (CISPR 22)

Safety: UL®, cUL, TUV/GS

Temperature Tolerance: Operating: 0 to 40°C (32 to 104°F); Storage: -20 to +75°C (-4 to +167°F)

Humidity Tolerance: 5 to 95% noncondensing

Hub Power Requirements: Bus-powered: 2.5 watts, 5 V @ ½ amp via USB cable; Self-powered: 11 watts, 5.25 V @ 2.1 amps via optional power supply; Hub power usage: 0.5 watt, 5 V @ ½ amp

Optional External 14-Watt Power Supply: +5.25 VDC @ 2.5 amp, 90 to 140 VAC or 90 to 240 VAC, 60/50 Hz

Size: 11.9H x 9.7W x 2.8D cm (4.7"H x 3.8"W x 1.1"D)

Weight: 0.2 kg (0.5 lb.)

IC135A:

System Requirements: Pentium® class CPU, 16-MB RAM, (1) available USB type A (downstream) port, PC that supports USB with Windows 95 Rev. B or Windows 98 or higher

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

Humidity Tolerance: Up to 95%, non-condensing

Speed: 110 to 230 kbps

Interface: EIA RS-232

Connectors: (4) DB9 M

Power: USB bus-powered, consumes less than 200 mA at full operating speed

Size: 3.8H x 22.9W x 12.7D cm (1.5"H x 9"W x 5"D)

Weight: 0.5 kg (1 lb.)

IC136C:

System Requirements: Hardware: IBM® PC or compatible, PCI slot; Software: Windows 95 Rev. B or Windows 98 or higher

Interface: PCI

Connectors: (2) USB "A" type

Power: From the PCI bus

Size: 2.5H x 10.2W x 10.2D cm (1"H x 4"W x 4"D)

Weight: 0.2 kg (0.5 lb.)

IC138A:

System Requirements: PC that supports USB with Windows 95 Rev. B, or Windows 98 or higher

Connectors: (1) USB Type B, (1) RS-232 DB25 M

Power: Self-powered: 0.5 W, 5 VDC, 100 mA maximum; Bus: Powered from USB host controller or hub

Size: 7.1H x 6.1W x 3.3D cm (2.8"H x 2.4"W x 1.3"D)

Weight: 0.2 kg (0.4 lb.)

What do you need to use USB?

Universal Serial Bus (USB) is an instant, no-hassle way to connect peripheral devices to your PC. It replaces serial- and parallel-port connections with one standard plug-and-port combination.

A significant advantage of adopting this technology is that USB architecture is supported by Intel®, Microsoft®, and most major PC manufacturers.

Many PCs come with two USB ports for connecting peripherals.

If you want to attach up to four peripherals through one port on the PC, choose a USB Hub. To use the USB Hubs, you must either have a USB port on your PC or a USB Card in a PCI slot of your PC.

To use USB technology, your PC must be running Windows 95 Rev. B or better. Software to determine if your PC is USB-compliant is included with the Hubs, as well as drivers to upgrade your software to support USB.

All Black Box USB products work with the latest software on the market, including Windows 98, NT, and 2000. (If you're using Windows 2000, call for technical support.)

Ordering Information

ITEM	CODE
USB Director/4-Port Hub	
90 to 140 VAC.....	IC165A
90 to 240 VAC.....	IC165AE
USB Director (USB→RS-232 Hub).....	IC135A
USB Card.....	IC136C
USB Solo (USB→Serial).....	IC138A

You might also want to order cables...

Universal Serial Bus (USB) Cable.....USB01