Remote Port USB

Locate USB devices up to 328 feet from the host computer.

FEATURES

- **ExtremeUSB™ technology provides longer distances from USB device to host computer.**
- **Composed of two individual units: Local Extender (LEX) and Remote Extender (REX).**
- **Single- and 4-Port models available.**
- **Single-port unit is ideal for extension-only application.**
- **4-Port model works well for multiple-device extensions.**

OVERVIEW

Break the USB distance barrier with the Remote Port USB from Black Box.

The Remote Port USB incorporates ExtremeUSB™ technology. This technology enables you to enjoy the benefits of USB beyond the desktop.

Using older technology, USB devices must be located less than 16.4 feet (5 m) from the host computer. But with the Remote Port USB, you can locate USB devices up to 328 feet (100 m) from the host computer when you use Category 5 UTP.

Plus, the Remote Port USB can supply power to remote low-power or high-power USB devices.

The Remote Port USB is composed of two individual units, the Local Extender (LEX) and the Remote Extender (REX).

WHAT YOU NEED TO SUPPLY

- USB-compatible computer
- Category 5 unshielded twisted-pair (UTP) cable (up to 328 ft. [100 m] long) with (2) RJ-45 connectors (if using surface cabling)
  OR
- Category 5 UTP cabling with (2) information outlets and (2) Category 5 UTP patch cords with RJ-45 connectors (if using premise cabling) (NOTE: The maximum length of the Category 5 UTP cable, including patch cords, must not exceed 328 ft. [100 m].)
- USB device(s)

Technically Speaking

USB's main attraction is that it makes adding peripherals to your computer incredibly easy.

Forget proprietary interfaces. USB has been accepted and is being implemented industry-wide. The USB standard was developed by industry leaders including DEC™, IBM®, Intel®, Microsoft®, and Compaq®. Most new PCs available today feature at least one USB port with more peripherals than ever available for the USB interface, from modems to joysticks. Windows® 95 Rev. B, Windows 98, Windows Me, Windows 2000, and Macintosh® OS 8, 9, and X support USB.

A USB peripheral simply plugs right into the port and works. You don't need to install a card; you don't even need to turn off your computer—USB devices are completely hot-swappable. And because USB also distributes power, many USB devices don't require a separate power supply, although a bus-powered device must be attached upstream to either a host PC or a powered hub.

Because USB configuration happens automatically, built-in USB means you don't have to fiddle with drivers and software when adding most peripherals. USB host controllers automatically detect when peripherals are connected to or disconnected from a port. The controllers manage and control the driver software and bandwidth required by each peripheral. They even allocate the right electrical power to each peripheral.

USB uses a tiered star topology, meaning that USB devices called hubs can serve as connection ports for other USB devices. Only one device needs to be actually plugged into your PC. USB supports hubs that can be either standalone or embedded within some other device such as a keyboard or disk drive. A single USB port can support up to 127 devices.

USB 1.1 has two data rates: 12 Mbps for devices such as disk drives that need high-speed throughput and 1.5 Mbps for devices such as joysticks that need much lower bandwidth. USB 2.0 provides increased speeds of up to 480 Mbps.

USB also improves the performance of joysticks and other game controllers. A common problem with traditional joystick connections is the tendency to "drift" and lose calibration because of factors such as cable length and CPU overhead. The USB interface, however, prevents drift by effectively eliminating CPU overhead.

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TECH SPECS

Cable — Host USB: Type A/B 2m;
 Link: Must be Category 5 UTP (or better);
 UTP cabling must have a straight-through conductor configuration
 with no cross-over and terminated with 8-conductor RJ-45 connectors
 at both ends
Certifications — FCC Part 15, Class A; CE; USB-IF
USB Speeds — 1.5 Mbps and 12 Mbps (autosensing)
Connectors — IC240A/E-R2: LEX: (1) RJ-45 UTP, (1) USB Type B;
 REX: (1) RJ-45 UTP, (1) USB Type A;
 IC241A/E: LEX: (1) RJ-45 UTP, (1) USB Type B; REX: (1) RJ-45 UTP,
 (4) USB Type A
Indicators — IC240A/E-R2: LEDs: LEX: (1) Host, (1) Link, (1) Power;
 REX: (1) Link, (1) Power, (1) USB Port;
 IC241A/E: LEDs: LEX: (1) Host, (1) Link, (1) Power; REX: (1) Link,
 (1) Power, (4) USB Port
Temperature Tolerance — 39 to 104°F (4 to 40°C)
Power — IC240A/E-R2: LEX: 15 VDC @ 1 amp; USB power at REX: 500 mA;
 IC241A/E: LEX: 4 x 100 mA; USB power at REX: 4 x 500 mA
Size — IC240A/E-R2: LEX or REX: 1.4"H x 4"W x 3.1"D (3.6 x 10.2 x 7.9 cm);
 IC241A/E: LEX or REX: 1.3"H x 4.2"W x 3.3"D (3.3 x 10.7 x 8.4 cm)

IC241A

WHAT'S INCLUDED

✦ Remote Port USB 1-Port or 4-Port
✦ Local Extender (LEX)
✦ Remote Extender (REX)
✦ AC power adapter
✦ 6.6-ft. (2-m) USB cable
✦ Users' manual

Item	Code
Remote Port USB	
1-Port, 110-VAC	**IC240A-R2**
1-Port, 220-VAC	**IC240AE-R2**
4-Port, 110-VAC	**IC241A**
4-Port, 220-VAC	**IC241AE**
You may also need…	
USB 2.0 (4-Port) Hub	**IC147A-R2**
Remember to order cables…	
Universal Serial Bus (USB) Cable	
3-ft. (0.9-m)	**USB01-0003**
6-ft. (1.8-m)	**USB01-0006**
10-ft. (3.0-m)	**USB01-0010**
15-ft. (4.5-m)	**USB01-0015**
CAT5 Solid-Conductor Cable, 568-B, 100-MHz, 4-Pair, 24 AWG, PVC (NEC® CMR), Straight-Pinned,	
100-ft. (30.4-m)	**EYN737MS-0100**

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

Recognize 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.**

• **It's 9 p. m. and you need help, but your vendor's tech support line is closed.**

According to a 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.

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