

## ServSwitch™ Brand USB Micro Extender Kits

This enhanced USB extension system saves time, space, and money.



## FEATURES

- » Features transparent USB 1.1 extension.
- » Surge protection on RJ-45 ports.
- » Advanced models support 16-bit, digitized stereo audio and 19.2-kbps serial communication.
- » Small footprint and rackmount options.
- » Single- and dual-head models available.
- » CPU cables included.

## OVERVIEW

These **ServSwitch Brand USB Micro Extender Kits** from Black Box enable USB, high-resolution video, stereo audio, and serial port signals to be sent up to 164 feet (50 meters) over CAT5, CAT5e, CAT6, and higher cable.

The basic system consists of a local unit and a remote unit. The local unit, which functions as a transmitter, connects directly to the user's PC or USB hub. The remote unit, operating as a receiver, links the local unit to the user's console—a keyboard, monitor, mouse, and optional USB/ serial/audio devices (depending on model and configuration).

The local units feature DDC (Display Data Channel) on all video channels, which allow local units to emulate universal monitors and ensure compatibility with multihead graphics cards. For non-standard resolutions, choose the monitor through the operating system and set the unit to ignore DDC.

The ACU4222A model supports expanded capabilities.

Its transparent serial port extends one device that requires handshaking lines or three simple serial devices that don't require handshaking lines at rates up to 19.2 kbps. This model also supports 16-bit, digitized stereo audio.

Power is supplied to the local unit through the USB interface. An optional 5-V power supply may be used for video applications or when USB power is insufficient to operate the unit. If either the local or remote units are connected to a power supply that creates an overvoltage (> 5 V) that might cause damage, external surge protection prevents the units from operating.

You can also increase the functionality of these units by adding external USB hubs. (However, note that the use of external USB hubs may decrease extension distance by 30 feet (10 m) for each additional hub because of the delay imposed by each new device.

Solid-core, STP/FTP cables are recommended for use with these units. Although stranded UTP will work, transmission quality drops significantly over longer distances and in electrically noisy environments.

To ensure data integrity, minimize the number of patch panels used with these devices and keep patch cable lengths less than 16.4 feet (5 meters).

## TECH SPECS

**Distance** — 164 ft. (50 m)

*Please note that some USB devices may operate up to 196.8 ft. (60 m) and others may only operate up to 147.6 ft. (45 m), depending on USB equipment and configuration.*

**Resolution (Maximum)** — 1600 x 1200 @ 75 Hz

**Transparent Serial Port** — RX, TX, DTR, DSR, RTS, and CTS to 19.2 kbps

**USB Compatibility** — Transparent USB 1.1

**Video Compatibility** — Analog VGA to UXGA, RGB separate or composite video sync, Video I/O Level: 0.7-V Pk-Pk

**Connectors** — All local units: (1) HD15 F, (1) HD15 M, (1) USB Type B F, (1) barrel power jack, (1) RJ-45;

ACU4201A, ACU4222A also include: (1) HD15 F, (1) HD15 M, (1) RJ-45;

ACU4222A also includes: (2) 3.5-mm audio jacks, (1) DB9 F;

All remote units: (1) HD15 F, (4) USB Type A F, (1) barrel power jack, (1) RJ-45;

ACU4201A, ACU4222A also include: (1) HD15 F, (1) RJ-45;

ACU4222A also includes: (2) 3.5-mm audio jacks, (1) DB9 M

**Power** — Local units: Via USB interface or optional external 5-VDC power supply (PSU1006E; contact Tech Support);

Remote units: Included external power supply, 100–240 VAC, 50–60-Hz

**Size** — ACU4001A: Local unit: 1.1"H x 4.7"W x 4.3"D (2.8 x 11.9 x 10.9 cm);

Remote unit: 1.1"H x 5.4"W x 3.9"D (2.8 x 13.7 x 9.9 cm);

ACU4201A: Local unit: 1.7"H x 4.7"W x 4.3"D (4.3 x 11.9 x 10.9 cm);

Remote unit: 1.1"H x 5.4"W x 3.9"D (2.8 x 13.7 x 9.9 cm);

ACU4222A: Local unit: 1.7"H x 5.8"W x 4.3"D (4.3 x 14.7 x 10.9 cm);

Remote unit: 1.7"H x 5.4"W x 3.9"D (4.3 x 13.7 x 9.9 cm)

### What's included

- ◆ (1) Local unit
- ◆ (1) Remote unit
- ◆ (1) Remote power supply with IEC power cord
- ◆ Manual
- ◆ Cable(s)
  - ACU4001A: (1) 3.3-ft. (1.0-m) USB/video combination cable
  - ACU4201A: (1) 3.3-ft. (1.0-m) USB/video combination cable, (1) 3.3-ft. (1.0-m) video cable
  - ACU4222A: (1) 3.3-ft. (1.0-m) USB/video combination cable, (1) 3.3-ft. (1.0-m) video cable, (1) 3.3-ft. (1.0-m) serial cable, (1) 3.3-ft. (1.0-m) audio cable

### Item

### Code

ServSwitch Brand USB Micro Extender Kits

Single-VGA

Dual-VGA

Dual-VGA with Serial and Audio

**ACU4001A**

**ACU4201A**

**ACU4222A**

**To rackmount up to three local or remote units, order...**

Rackmount Kit for CATx Extenders, 19" Rack

**RMK19U-X3**