

## 1 Read this first

This section briefly describes how to install your SD-VUE/5x Extender device

This Quick Start Guide describes the installation and configuration of the SD-VUE family of USB Extenders:

• SD-VUE/50 • SD-VUE/50A • SD-VUE/52 • SD-VUE/52A

Please follow these instructions to set up your USB extender. To get the best out of the system, it is essential that you configure it correctly. For more information, you can download the full manual for your product from:

[www.ihse.de/pdf/b434-v5\\_e.pdf](http://www.ihse.de/pdf/b434-v5_e.pdf)

We strongly recommend that you read the full manual. If you have any problems or questions, contact your dealer for technical support.

Note: SD-VUE USB Extenders are not compatible with SDLink or SDBX KVM Extenders.

### 1.1 Overview

A basic USB extension system comprises a Local Unit (transmitter) and a Remote Unit (receiver). The Local Unit connects directly to the computer (or a USB hub) using the supplied cable(s). The user console (keyboard, mouse, monitor and other USB devices) attaches to the Remote Unit. The Remote and Local Units communicate video and data information along the connecting CATx cable.

## 2 Installation

For first-time users, we recommend that you carry out a test placement, confined to a single room, before commencing full installation. This will allow you to identify and solve cabling problems, and experiment with the SD-VUE/5x Extender more conveniently.

SD-VUE USB Mini Extenders enable high-resolution video and USB (2.0 compliant low/full speed) to be communicated up to 50m over CATx (Category 5, 5e, 6 or higher) UTP/STP 4-pair cable. Within the range, models are available with:

- Dual head video support
- Independent (non-USB) bi-directional audio and serial transmission

All models feature local video output on all channels. This allows dual access operation if you connect a USB keyboard and mouse directly to the CPU or hub.

### 2.1 Package Contents

Your SD-VUE USB Extender kit should contain the following:

- 1 x Local Unit, 1 x Remote Unit
- 1 x Remote Unit 5V PSU
- 1 x IEC Power Cord
- 1 x Quick Start Guide
- 1 x CPU Cable Set: 1.0m USB/Video Combination (Zip) Cable
- 1 x Video Cable, 1.0m (SD-VUE/52 and SD-VUE/52A only)
- 1 x Serial Cable, DB9 male/female, 1:1 connections (SD-VUE/52A only)
- 2 x Stereo Audio Cables, 3.5mm jack plugs (SD-VUE/52A only)

If any items are missing or damaged please contact your dealer or technical support.

### 2.2 Installation Procedure

#### Set Video Distance DIP Switches

Set DIP switches on base of Remote Unit according to the length of Interconnect cables:

5-25m OFF (default)  
25-50m ON

DIP switch 1: Primary Interconnect (channel 1);  
DIP switch 2: Interconnect 2 (SD-VUE/52 and SD-VUE/52A only)



#### Connect Remote Unit and devices

Connect Remote Unit to monitor, USB and audio/serial devices (if present). Connect 5V power supply.

#### Connect Local Unit to CPU

Connect Local Unit to CPU Video, USB port and Audio/Serial (if used).

Note. If you intend to connect the Local Unit to an external hub ensure that it is self-powered. If not, you will need an additional 5V power supply for the Local Unit.

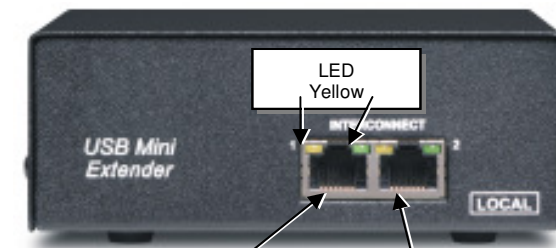
#### Connect Local and Remote Units

Connect extender units with up to 50m of compatible CATx Interconnect cable.

#### Power up

Power up the CPU.  
Switch on the Remote Unit power supply.

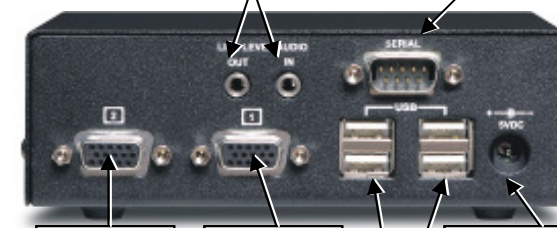
### 2.3 Connectors



Primary Interconnect Carries Video1, Keyboard + Mouse  
Secondary Interconnect Carries Video2, + (optional) serial/audio

Connect to audio device (option)

Connect to serial device (option)



Connect to 2<sup>nd</sup> monitor (option)

Connect to 1<sup>st</sup> monitor

Connect to 5V Power supply

USB- Connectors –Connect to keyboard, mouse, USB devices

### 2.4 Diagnostic LEDs

There are two status LEDs on each RJ45 connector.

The green LED beside each RJ45 port indicates the power status:

LED off	Unit not powered or wrong PSU connected.
LED on	Unit powered correctly.

The yellow LED is only active on the primary Interconnect (channel 1):

LED off	No data transfer between Local and Remote Units, or Local/Remote not connected, or Remote Unit not powered
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LED on	Local Unit LED - Remote Unit connected. Remote Unit LED - Remote Unit USB Hub functioning.
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## 2.5 Power Supply

Connect the supplied 5V PSU to the Remote Unit.

In most circumstances, the Local Unit does not require a PSU. A Local PSU (not included) will only be required if you want to transmit video only (no USB), or if the CPU's USB interface (say, from a notebook) has limited power. Contact your dealer or technical support for more details.

## 3 FAQ

### Can all USB devices be extended to 50m?

The extension range limit is nominally 50m. Depending on your USB devices and configuration, the actual limit may be more or less than this. When the limit has been reached, USB operation ceases or becomes erratic.

### Can I connect hubs to the Extender?

Yes, but each USB hub attached to the system could reduce the extension range by about 10m.

### Is the Extender compatible with USB2.0?

The extender will operate through USB 2.0 Host Controllers. However, the speed will be restricted to that of a USB 1.1 Hub (1.5Mb/s / 12Mb/s).

Note: Devices that need high speed USB 2.0 will not work with SD-VUE USB Mini Extenders.

### Can I use CATx patch cables?

Yes, but to ensure maximum data integrity, use as few as possible. The maximum patch cable length at each end of the link should be limited to 3m.

### Do the extenders have built-in skew compensation?

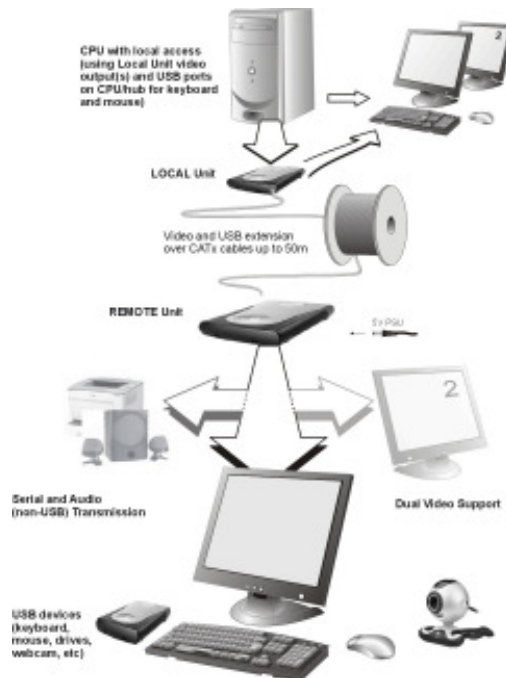
No. Skew compensation should not normally be necessary even at the full extension range of the units. Skew can become a problem when graphics signals are transmitted over CATx cables greater than 50m in length. If you do encounter problems with skew, check that you are using a recommended 'low skew' CATx cable. If the problem persists, you may require an external skew compensation device. Contact Technical Support for more details.

### Why is the image on my LCD panel so poor?

You must auto-adjust the monitor, or manually adjust the pixel clock and pixel phase parameters. Refer to the documentation supplied with your monitor for details.

### Does the unit support DDC operation?

The Local Unit emulates all common DDC modes on both video channels. If you want to use a non-standard video mode, you may have to set the resolution/monitor from Control Panel rather than relying on Plug and Play operation.



## EUROPEAN UNION DECLARATION OF CONFORMITY

This is to certify that, when installed and used according to the instructions in this manual, together with the specified cables and the maximum cable length <3m, the Units:

• SD-VUE/50 • SD-VUE/50A • SD-VUE/52 • SD-VUE/52A

are shielded against the generation of radio interferences in accordance with the application of Council Directive 89/336/EEC as well as these standards:

EN 55022:	1999	Class A
EN 55024:	1999	
	IEC 61000-4-2:	2001
	IEC 61000-4-3:	2001
	IEC 61000-4-4:	2001
EN 61000-3-2		2001
EN 61000-3-3		2002

The device was tested in a typical configuration with PC.

Oberteuringen, Wednesday, October 21<sup>st</sup>, 2006

The management

*Peter Krieger*



This equipment has been found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

# SD-VUE/5x Cat5 USB/VGA Extender

K434-V1  
K434-V1A  
K434-V2  
K434-VA

(Quick Setup)

