Quick Start Guide

Read this First

This Quick Start Sheet describes the installation and configuration of four product families:

- SDBX CATx KVM Extenders
- SDLink CATx KVM Mini Extenders
- SDLink CAT5/5e KVM Extenders
- SDRK CATx KVM Extender Local Hubs

Please follow these instructions to set up your KVM extender. To get the best out of the system, it is *essential* that you configure it correctly and tune the video signal.

For more information, you can download the full manual for your product from:

http://manuals.kvmextender.info

We strongly recommend that you read the full manual, particularly if you have purchased an SDBX system.

If you have any problems or questions, contact your dealer for technical support.

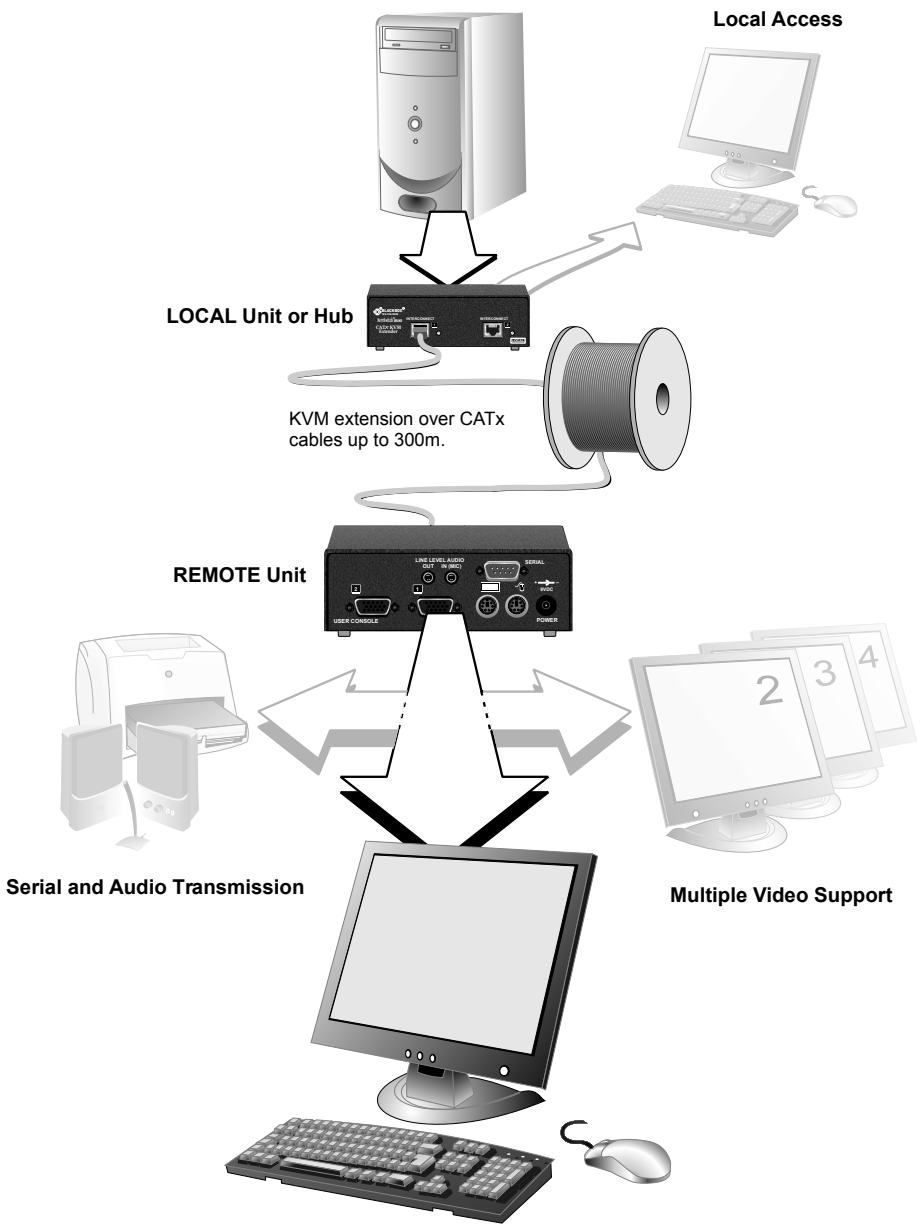
Extender Compatibility

You can use SDLink and SDBX products belonging to the *same* family in any combination. For example, it is not possible to mix Standard and Audio products within a system.

Family	*SDLink*	*SDBX*	*Mini Extenders*	*Local Hubs*
Standard/ Switching	SDLink1 SDLink2 SDLink2/SW SDLink/R SDLink/RSW	SDBX/S1 SDBX/D1 SDBX/S2 SDBX/R1 SDBX/R2 SDBX/R4	SDLink/LC SDLink/DM SDLink/RLC SDRK/6R	SDRK/6 SDRK/6D SDRK/12
Audio	SDLink1/AU SDLink2/AU SDLink/RA	SDBX/SA1 SDBX/DA1 SDBX/SA2 SDBX/RA1 SDBX/RA2 SDBX/RA4	SDLink/AM SDLink/MAR SDRK/6RA	SDRK/6A SDRK/6AD
Serial	SDLink1/S SDLink2/S SDLink/RS			SDRK/6S SDRK/6SD
SUN	SDLink1/SU SDLink2/SU SDLink/RSU			

Overview

A basic KVM extension system comprises a *Local* unit (transmitter) and a *Remote* unit (receiver). The Local unit connects directly to the computer (or a KVM switch system) using the supplied cable(s). The user *console* (keyboard, mouse and monitor) attaches to the Remote unit. The Remote and Local units communicate video and data information along the connecting CATx cable.



SDBX CATx KVM Extenders

Standard: SDBX/S1, SDBX/S2, SDBX/D1, SDBX/R1, SDBX/R2, SDBX/R4
Audio: SDBX/SA1, SDBX/SA2, SDBX/DA1, SDBX/RA1, SDBX/RA2, SDBX/RA4

Installation

The SDBX product range enables high-resolution video, PS/2 keyboard and mouse, stereo audio, and serial port signals to be communicated up to 300m over Category 5, 5e, 6 or higher (CATx) cable.

Within the product range, models are available with combinations of the following additional interfaces:

- Audio and Serial: bi-directional stereo audio (16-bit digitized) and transparent serial COM port (to 19.2Kbps).
- Dual access: allowing a second user console at the Local unit.
- Multiple video channels: single, dual and quad video heads.

Install system
1. Connect Remote unit to KVM and audio/serial devices (if present)
2. Connect Local unit or Extender hub to CPU.
3. Connect Remote unit and Local units with compatible CATx Interconnect cable.
4. Power up system.

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View Test Card
http://testcard.kvmextender.info

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Enter Command Mode on Remote unit
<Left Control> + <Left Shift> + <F10>

↓

Choose video channel
<1>,<2>,<3>,<4> or <0> (all)

↓

Reset channel
<Left Control> + <Home>

↓

Apply Assisted EQ
Next: **<Left Control> + <Page Up>**
Previous: **<Left Control> + <Page Down>**

↓

Correct Skew
Adjust the individual colour delays until the test card's RGB vertical lines are aligned.

↓

Fine tune LF and HF EQ
Reduce smearing and loss of sharpness.
TFT Users: Set to auto-adjust, or if you are an advanced user, manually adjust the monitor's clock and phase.

↓

More channels?

Yes → back to **Choose video channel**

No →

Exit Command Mode
<Esc>

⚠ **NEVER CONNECT A REMOTE UNIT'S POWER SUPPLY TO A LOCAL UNIT. THIS COULD DAMAGE THE EXTENDER SYSTEM.**

Commands

The following table summarizes the 'hot' key command sequences used in system configuration and video tuning on a Remote unit console.

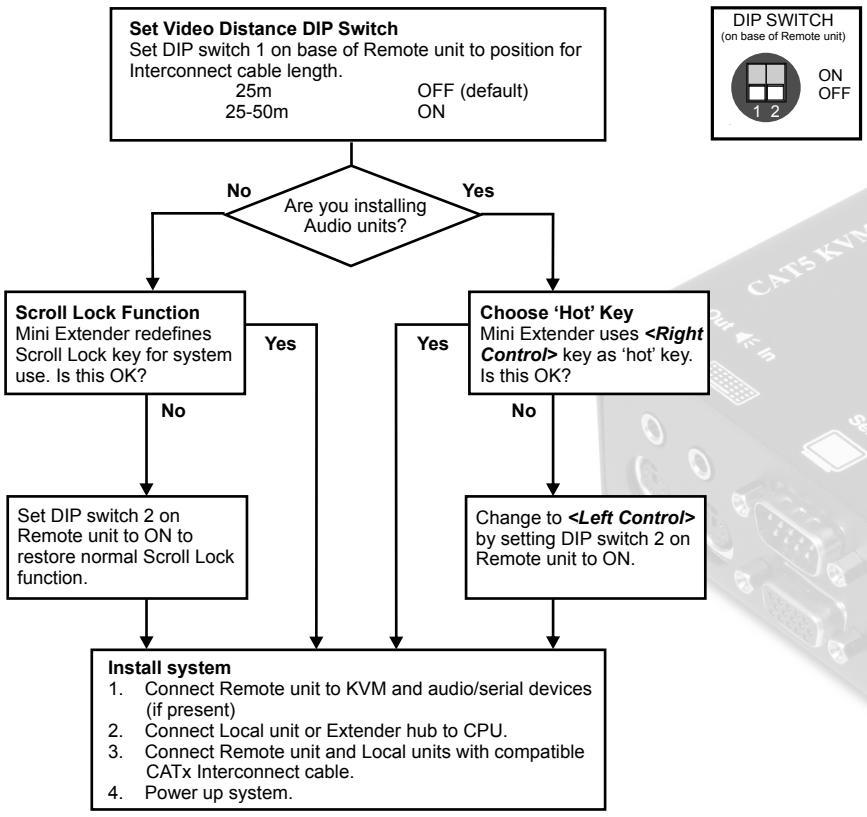
Command Mode	
Enter Command Mode	<Left Control> + <Left Shift> + <F10>
Exit Command Mode & Save	<ESC>
Exit Command Mode Without Save	<Left Control> + <ESC>
Video Channel Selection	
Select Channel For Adjustment	<1>, <2>, <3> or <4>
Select ALL Video Channels	<0>
Assisted EQ	
Next Assisted EQ Setting	<Left Control> + <Page Up>
Previous Assisted EQ Setting	<Left Control> + <Page Down>
Reset EQ & Delay Values	<Left Control> + <Home>
Reset EQ Values	<Left Control> + <End>
LF/HF Equalization	
Increase LF Equalization (Coarse)	<L> + <Up Arrow>
Increase LF Equalization (Fine)	<L> + <Right Arrow>
Decrease LF Equalization (Coarse)	<L> + <Down Arrow>
Decrease LF Equalization (Fine)	<L> + <Left Arrow>
Increase HF Equalization (Coarse)	<H> + <Up Arrow>
Increase HF Equalization (Fine)	<H> + <Right Arrow>
Decrease HF Equalization (Coarse)	<H> + <Down Arrow>
Decrease HF Equalization (Fine)	<H> + <Left Arrow>
Quick Skew	
Toggle RED Delay (19nS)	<Left Control> + <R>
Toggle GREEN Delay (19nS)	<Left Control> + <G>
Toggle BLUE Delay (19nS)	<Left Control> + <B>
Delay (Skew)	
Increase RED Delay	<R> + <Right Arrow>
Increase GREEN Delay	<G> + <Right Arrow>
Increase BLUE Delay	<B> + <Right Arrow>
Decrease RED Delay	<R> + <Left Arrow>
Decrease GREEN Delay	<G> + <Left Arrow>
Decrease BLUE Delay	<B> + <Left Arrow>
Reset Commands	
Reset Mouse and Keyboard	<F1>
Mouse Recovery	<F3>
Set Extender To Default State	<Left Control> + <F9>
Other Commands	
Toggle Remote Unit Private Mode	<Scroll Lock>
Toggle Local Unit Initial Hot Key	<F7>
Local Unit Scroll Lock Key Mode	<F5>

Installation

CATx KVM Mini Extenders enable high-resolution video, PS/2 keyboard and mouse, stereo audio and serial port signals to be communicated up to 50m over CATx (Category 5, 5e, 6 or higher) UTP/STP 4-pair cable.

Within the product range, models are available with combinations of the following additional interfaces:

- Audio and Serial: bi-directional stereo audio (16-bit digitized) and transparent serial COM port (to 19.2Kbps).
- Dual access: allowing a second user console at the Local unit.
- 6-port Remote Hubs in a rackmount chassis.



Commands

The implementation of commands in the Mini Extender family differs in Standard and Audio systems:

Standard Units

Standard and Dual Access Mini Extenders redefine the Scroll Lock key for issuing system commands:

Command	*Key Sequence*
Reset Keyboard and Mouse Devices	<Scroll Lock>
Mouse Recovery	Hold down **Left and Right Mouse buttons** then press <Scroll Lock>
Dual Access Systems Only (for example, SDLink/DM):	
Activate Console **(Local or Remote console)**	Any key or mouse action Only operates if other console has been inactive for at least 2s
Start/End Private Session **(Local console only)**	<Scroll Lock> also resets keyboard and mouse. To do so without starting Private session, press <Scroll Lock> twice.

Audio Units

After pressing and releasing an initial 'hot' key, normally ***<Right Control>***, on the Remote keyboard, you can issue a number of commands:

Command	*Key (after pressing 'hot' key)*
Reset Local Keyboard and Mouse	<Num-Pad Up Arrow>
Mouse Recovery	<Num-Pad Left Arrow>
When Remote Unit is used with compatible Dual Access Audio Local Units/Hubs (for example, SDRK/6AD):	
Activate Console	Any key or mouse action Only operates if other console has been inactive for at least 2s
Start/End Private Session at remote console	<Scroll Lock>

*You can change the 'hot' key to **<Left Control>** by setting DIP switch 2 to ON.*

Standard: SDLink/LC, SDLink/DM, SDLink/RLC, SDRK/6R
Audio: SDLink/AM, SDLink/MAR, SDRK/6RA

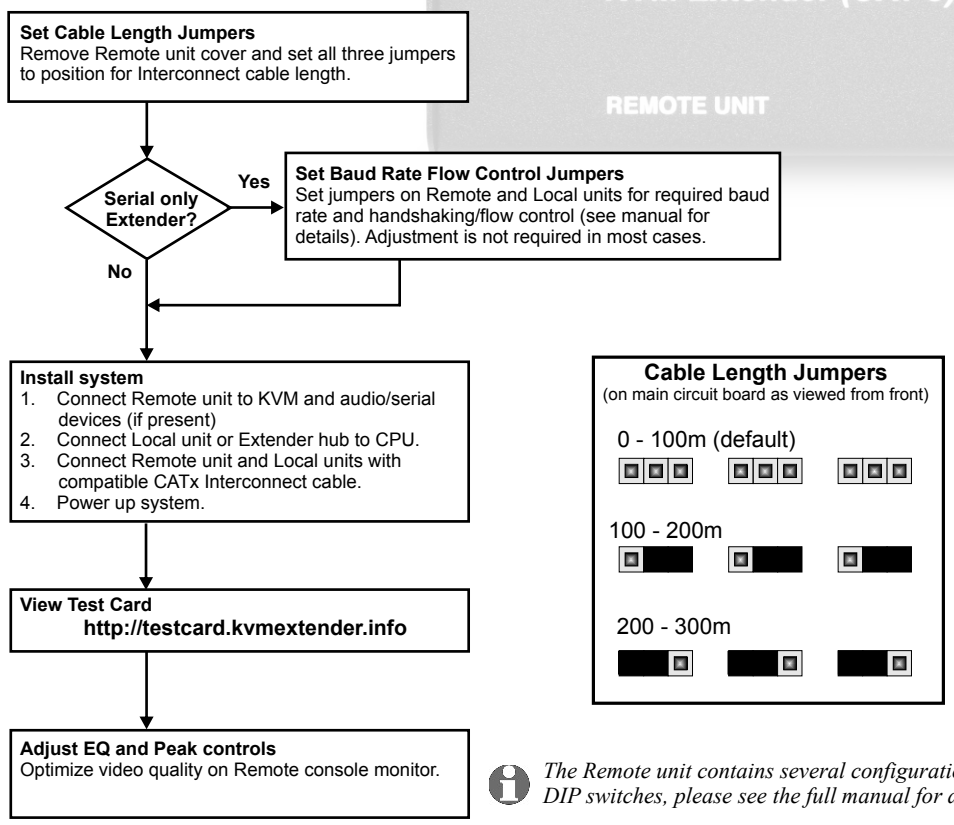
SDLink CAT5/5e KVM Extenders

Installation

The SDLink CAT5/5e KVM Extender Range enables high-resolution video, PS/2 keyboard and mouse, stereo audio, and serial port signals to be communicated up to 300m over Category 5/5e UTP/STP 4-pair cable.

Within the product range, models are available with combinations of the following additional interfaces:

- Audio and Serial: bi-directional stereo audio (16-bit digitized) and transparent serial COM port (to 19.2Kbps).
- Serial only: serial COM port for asynchronous RS232 devices operating at 1200, 9600 or 19,200 bps (8 data bits, no parity, 1 stop bit).
- Dual access: allowing a second user console at the Local unit.
- KVM switch: allowing additional CPU to be connected to Remote unit and used as console.



The Remote unit contains several configuration DIP switches, please see the full manual for details.

Commands

In the SDLink CAT5/5e KVM Extender family, commands are implemented in two ways: for Standard and Serial units this involves using the Scroll Lock key; for Audio and Switching units, 'hot' key command sequences are used.

Standard and Serial Units

Command	*Key Sequence*
Reset Keyboard and Mouse Devices	<Scroll Lock>
Mouse Recovery	Hold down **Left and Right Mouse buttons** then press <Scroll Lock>
Dual Access Systems Only (for example, SDLink2):	
Activate Console **(Local or Remote console)**	Any key or mouse action Only operates if other console has been inactive for at least 2s
Start/End Private Session **(Local console only)**	<Scroll Lock> also resets keyboard and mouse. To do so without starting Private session, press <Scroll Lock> twice.

Audio and Switching Units

After pressing and releasing an initial 'hot' key, normally ***<Right Control>***, on the Remote or Local keyboard, you can issue a number of commands:

Remote Unit Commands

Command	*Key (after pressing 'hot' key)*
Private Mode *(SDLink2/AU, SDLink2/SW, SDLink/RA, SDLink/RSW only)*	<Scroll Lock>
Reset Keyboard and Mouse	<Num-Pad Up Arrow>
Mouse Recovery	<Num-Pad Left Arrow>
Switch to other PC *(SDLink2/SW and SDLink/RSW only)*	<Num-Pad + >

Local Unit Commands

Command	*Key (after pressing 'hot' key)*
Private Mode *(SDLink2/AU and SDLink2/SW only)*	<Scroll Lock>
Reset Keyboard and Mouse	<Num-Pad Up Arrow>
Mouse Recovery	<Num-Pad Left Arrow>

The SDLink2/SW Local unit allows the Local console to operate the Local CPU and the Remote console to operate the Remote CPU at the same time.

Standard: SDLink1, SDLink2, SDLink/R
Serial: SDLink1/S, SDLink2/S, SDLink/RS
Audio: SDLink1/AU, SDLink2/AU, SDLink/RA
Switching: SDLink2/SW, SDLink/RSW

For information about SUN versions of these systems (SDLink1/SU, SDLink2/SU, SDLink/RSU), please refer to the full manual.

SDLink CAT5/5e KVM Extenders

Installation

If you are installing a Local Hub, follow the instructions relating to the type of Remote unit you will be using with it.

Each Local Hub port normally takes power through the PS/2 keyboard connection to the host computer. If any ports are used for video/serial only applications, the external 5V PSU (supplied) should be connected to power the rack.

NEVER CONNECT A REMOTE UNIT'S POWER SUPPLY TO A LOCAL HUB. THIS COULD DAMAGE THE EXTENDER SYSTEM.

LEDs

The green LED beside each Hub port indicates the power status of the port, and the integrity of the CATx connection:

LED off	Port not powered or keyboard PS/2 cable to Local unit disconnected.
LED on continuously	Remote unit not powered, CATx cable disconnected, or PC in BIOS boot sequence. *Dual Access Hubs only:* Local console active.
LED flashing	Remote unit powered, data link operating correctly.

Standard: SDRK/6, SDRK/6D, SDRK/12
Serial: SDRK/6S, SDRK/6SD
Audio: SDRK/6A, SDRK/6AD

SDRK CATx KVM Extender Local Hubs