DVI KVM Extender

DVIVision 7.2

KVM Extender
Extender systems to bridge IT-distances

Leading the way in digital KVM

Leading the Way in digital KVM

Guntermann & Drunck GmbH has been established in 1985 and is named after its founders. Over 25 years have since past, and we are now a leading manufacturer of digital and analog KVM switching systems.

As an owner-managed company we work with a broad range in both digital and analog KVM closely with the marketplace and make our decisions with and in the interests of our customers. It is our philosophy to meet our customers while making decisions, to accompany them in the process and ensure that they achieve their goals.

We can do this because as a medium sized company we have short communication paths and all core competencies are in house – from development through to production. This way we can even make the impossible possible at times. If it is thanks to the modularity of the products or by implementing a customised solution. We orient ourselves towards the needs of the customer – and not the other way round.

Organisations, service providers and companies of all sizes managing numerous computers, servers and other network devices trust the comprehensive advice and service provided by Guntermann & Drunck GmbH.

Thanks to these different fields of specialisation, the demands placed on the products are many and are manifold. Our products have to provide a long-life service, be secure, uncomplicated, user-friendly, understandable and adaptable.

Guntermann & Drunck
GmbH

The DVIVision KVM extender system extends the following signals:

- keyboard/mouse
- single-link DVI
- audio
- RS232
- USB 1.1 or USB 2.0

The system consists of a computer module (transmitter) and a user module (receiver) and facilitates the remote operation of one computer. At each user module, a console can be connected.

DVIVision uses CAT-x cables to transmit signals up to 140 m. The devices are available as variants displaying 1, 2, or 4 video channels.

above: DVIVision-MC4-ARU2-CPU computer module
below: DVIVision-MC4-ARU2-CON user module

Highlights

Video
- single- and multi-channel variants
- both digital and analog monitors can be connected

Operation
- at both modules console with all video channels

Signals
- transmission up to 140 m via CAT-x cables at maximum resolution
- PS/2 and USB keyboard/mouse support

Safety
- Screen-Freeze function
- redundant power supply (optional)

Screen-Freeze Function
If the display loses the video signal due to a broken connection or a problem with the computer's graphics card, the Sreen-Freeze function „freezes" the last displayed image of the monitor. This state is highlighted by a red semi-transparent frame. The function is automatically cancelled when the display receives an active video signal.

Features

Video
- resolutions per channel up to 1920 × 1200 @ 60 Hz
- video bandwidth up to 165 MHz
- 24 bit colour mode
- HDIP2 for cristal crear images and best mouse performance
- both digital and analog monitors can be connected to the console
- transparent forwarding of E-DDC information

Transmission
- distances up to 140 meters at maximum resolution via
- CAT-x cable (x = 5e, 6, 7; depending on cable)
- bidirectional transmission of audio and RS232 signals (optional)

- transparent transmission USB 1.1 and USB 2.0 (USB 2.0 up to 100 meters)

Device
- supports PS/2 and USB keyboard/mouse; also mixed operation
- 100 % permanent keyboard/mouse emulation
- redundant, external power supply (optional)
- available as desktop, 19" and twin variant

System update
- via wizard at service socket

Variants

Design
- available as desktop (DT) or rack mount (RM) variant
- twin variant combines two DVIVision modules behind one blind

Video channels
- single-channel, multi-channel 2 and multi-channel 4 variant

Expansion

Increased system range: DVI-FiberLink(S)
The DVI-FiberLink(S) increases the range of the DVIVision to up to 10,000 m. The system consists of two identical modules (transceivers). Two singlemode fiber optics (9/125µm) transmit the signals.

The pair of DVI-FiberLink devices are placed between the DVIVision transmitter and the receiver.

Remote Power Switching: DVI-Power
DVI-Power enables the user to remotely turn on/off a computer (reset and ATX power switching). A slot card is implemented in the computer and connected to the computer module. The customer provides the operating hardware at the remote side (button or similar). The hardware is connected to the user module.
Applying DVI-Power requires the Audio-RS232 version of the DVIVision. For further information, please contact our sales team.

DVI-F berLink(S) - Rear view

Installation

Link the computer to the back of the DVIVision transmitter. Distinctive cables connect the computer's keyboard, video, mouse, audio, RS232, and USB interfaces to the DVIVision computer module.

Installing the user console is just as easy: Simply connect the operating hardware with the corresponding interfaces of the DVIVision receiver.

Use the existing CAT-x cabling structure to link transmitter and receiver.

Feel free to download the DVIVision manual to find out more details about the start-up.

Note

Please note that not all CAT-x cables can transmit the max. distance and resolution in the highest quality possible. Please do not hesitate to contact us in case of doubt.

DVIVision Single-Channel

left: DVIVision-ARU2-CPU computer module
right: DVIVision-ARU2-CON user module

	Computer module	User module
Video		
Number of monitors	1	
Signal type/video	digital video	
Analog resolution	up to 1920 × 1200 @ 60 Hz and 1280 × 1024 @ 85 Hz	
Digital resolution	btw. 640 × 480 @ 100 Hz and 1920 × 1200 @ 60 Hz	
Standards	E-DDC support at DVI	
Colour depth	24 bit	
Interfaces for user console	1 × DVI-I socket	
Interfaces to computer	1 × DVI-D socket	
Keyboard/Mouse		
Interfaces for user console	2 × Mini-DIN 6 socket	
		2 × USB-A socket
Interfaces to computer	2 × Mini-DIN 6 socket	
	1 × USB-B socket	
Audio		
Design	internal	
Sampling rate	96 kHz	
Resolution	24 bit digital	
Bandwidth	22 kHz	
Microphone preamplification	20 dB	
Interfaces for user console		2 × 3.5 mm jack plug (speaker, micro in)
Interfaces to computer	2 × 3,5 mm jack plug (line in, line out)	
RS232		
Design	internal	
Transmission rate	max. 115,200 bit/s	
Transmittable signals	RxD, TxD, RTS, CTS, DTR, DSR, DCD	
Interfaces for user console		1 × D-Sub 9 plug
Interfaces to computer	1 × D-Sub 9 plug	

Transparent USB 1.1		
Design	internal	
Transmission length	up to 140 m	
USB power supply	high power devices up to 500 mA	
USB transmission rate	up to 12 Mbit/s	
Interfaces for user console		4 × USB-A socket
Interfaces to computer	1 × USB-B socket (both for keyboard/mouse)	
Transparent USB 2.0		
Design	internal	
Transmission length	up to 100 m	
USB power supply	high power devices up to 500 mA	
USB transmission rate	up to 480 Mbit/s	
Interfaces for user console		4 × USB-A socket
Interfaces to computer	1 × USB-B socket	
Transmission		
Type of cable connection	dedicated CAT-x link	
Transmission cable type	CAT-x cable	
Transmission length (max.)	140 m at max. resolution (depending on cable)	
Connection	1 × RJ45 socket	
Connection with USB 2.0	1 × RJ45 socket	
No. of CAT-x cable	1	
Audio - RS232 transmission	no additional CAT-x cable	
USB 1.1 transmission	no additional CAT-x cable	
USB 2.0 transmission	1 additional CAT-x cable	
Main power supply		
Type	internal power pack	
Connection	1 × IEC plug	
Voltage	AC100-240V/60-50Hz	
	0.4-0.2A	
USB 2.0 variant	0.4-0.2A	0.5-0-3A
Redundant power supply		
Type	external power pack	
Connection	Mini-DIN 4 socket	
Voltage	AC100-240V/60-50Hz	
	+12VDC/1.2A	
USB 2.0 variant	+12VDC/1.2A	+12VDC/2.0A
Casing		
Material	anodised aluminium	
Desktop (W × H × D)	210 × 44 × 210 mm	
USB 2.0 variant	270 × 44 × 210 mm	
Rackmount (W × H × D)	19" × 1 U × 210 mm	
Weight	approx. 1.2 kg	
USB 2.0 variant	approx. 1.5 kg	
Update		
Process	with wizard at service socket of computer module or user module	
Connection	1 × 2.5 mm jack plug	
Operating environment		
Temperature	+5 to +45 °C	
Air humidity	20 - 80% non-condensing	
Conformity	CE, RoHs	

DVIVision Multi-Channel 2

left: DVIVision-MC2-ARU2-CPU computer module
right: DVIVision-MC2-ARU2-CON user module

	Computer module	User module
Video		
Number of monitors	2	
Signal type/video	digital video	
Analog resolution	up to 1920 × 1200 @ 60 Hz and 1280 × 1024 @ 85 Hz	
Digital resolution	btw. 640 × 480 @ 100 Hz and 1920 × 1200 @ 60 Hz	
Standards	E-DDC support at DVI	
Colour depth	24 bit	
Interfaces for user console	2 × DVI-I socket	
Interfaces to computer	1 × DVI-D socket	
Keyboard/Mouse		
Interfaces for user console	2 × Mini-DIN 6 socket	
		2 × USB-A socket
Interfaces to computer	2 × Mini-DIN 6 socket	
	1 × USB-B socket	
Audio		
Design	internal	
Sampling rate	96 kHz	
Resolution	24 bit digital	
Bandwidth	22 kHz	
Microphone preamplification	20 dB	
Interfaces for user console		2 × 3.5 mm jack plug (speaker, micro in)
Interfaces to computer	2 × 3,5 mm jack plug (line in, line out)	
RS232		
Design	internal	
Transmission rate	max. 115,200 bit/s	
Transmittable signals	RxD, TxD, RTS, CTS, DTR, DSR, DCD	
Interfaces for user console		1 × D-Sub 9 plug
Interfaces to computer	1 × D-Sub 9 plug	

Transparent USB 1.1		
Design	internal	
Transmission length	up to 140 m	
USB power supply	high power devices up to 500 mA	
USB transmission rate	up to 12 Mbit/s	
Interfaces for user console		4 × USB-A socket
Interfaces to computer	1 × USB-B socket (both for keyboard/mouse)	
Transparent USB 2.0		
Design	internal	
Transmission length	up to 100 m	
USB power supply	high power devices up to 500 mA	
USB transmission rate	up to 480 Mbit/s	
Interfaces for user console		4 × USB-A socket
Interfaces to computer	1 × USB-B socket	
Transmission		
Type of cable connection	dedicated CAT-x link	
Transmission cable type	CAT-x cable	
Transmission length (max.)	140 m at max. resolution (depending on cable)	
Connection	2 × RJ45 socket	
Connection with USB 2.0	1 × RJ45 socket	
No. of CAT-x cable	2	
Audio - RS232 transmission	no additional CAT-x cable	
USB 1.1 transmission	no additional CAT-x cable	
USB 2.0 transmission	1 additional CAT-x cable	
Main power supply		
Type	internal power pack	
Connection	1 × IEC plug	
Voltage	AC100-240V/60-50Hz	
	0.5-0.2A	0.4-0.2A
USB 2.0 variant	0.6-0.3A	0.6-0.3A
Redundant power supply		
Type	external power pack	
Connection	Mini-DIN 4 socket	
Voltage	AC100-240V/60-50Hz	
	+12VDC/1.7A	+12VDC/1.5A
USB 2.0 variant	+12VDC/1.9A	+12VDC/2.6A
Casing		
Material	anodised aluminium	
Desktop (W × H × D)	435 × 44 × 210 mm	
Rackmount (W × H × D)	19" × 1 U × 210 mm	
Weight	approx. 3.0 kg	
USB 2.0 variant	approx. 3.1 kg	
Update		
Process	with wizard at service socket of computer module or user module	
Connection	1 × 2.5 mm jack plug	
Operating environment		
Temperature	+5 to +40 °C	
Air humidity	20 - 80% non-condensing	
Conformity	CE, RoHs	

DVIVision Multi-Channel 4

left: DVIVision-MC4-ARU2-CPU computer module
right: DVIVision-MC4-ARU2-CON user module

	Computer module	User module
Video		
Number of monitors	4	
Signal type/video	digital video	
Analog resolution	up to 1920 × 1200 @ 60 Hz and 1280 × 1024 @ 85 Hz	
Digital resolution	btw. 640 × 480 @ 100 Hz and 1920 × 1200 @ 60 Hz	
Standards	E-DDC support at DVI	
Colour depth	24 bit	
Interfaces for user console	4 × DVI-I socket	
Interfaces to computer	4 × DVI-D socket	
Keyboard/Mouse		
Interfaces for user console	2 × Mini-DIN 6 socket	
		2 × USB-A socket
Interfaces to computer	2 × Mini-DIN 6 socket	
	1 × USB-B socket	
Audio		
Design	internal	
Sampling rate	96 kHz	
Resolution	24 bit digital	
Bandwidth	22 kHz	
Microphone preamplification	20 dB	
Interfaces for user console		1 × 3.5 mm jack plug (speaker, micro in)
Interfaces to computer	1 × 3,5 mm jack plug (line in, line out)	
RS232		
Design	internal	
Transmission rate	max. 115,200 bit/s	
Transmittable signals	RxD, TxD, RTS, CTS, DTR, DSR, DCD	
Interfaces for user console		1 × D-Sub 9 plug
Interfaces to computer	1 × D-Sub 9 plug	

Transparent USB 1.1		
Design	internal	
Transmission length	up to 140 m	
USB power supply	high power devices up to 500 mA	
USB transmission rate	up to 12 Mbit/s	
Interfaces for user console		2 × USB-A socket
Interfaces to computer	1 × USB-B socket (both for keyboard/mouse)	
Transparent USB 2.0		
Design	internal	
Transmission length	up to 100 m	
USB power supply	high power devices up to 500 mA	
USB transmission rate	up to 480 Mbit/s	
Interfaces for user console		2 × USB-A socket
Interfaces to computer	1 × USB-B socket	
Transmission		
Type of cable connection	dedicated CAT-x link	
Transmission cable type	CAT-x cable	
Transmission length (max.)	140 m at max. resolution (depending on cable)	
Connection	4 × RJ45 socket	
Connection with USB 2.0	1 × RJ45 socket	
No. of CAT-x cable	4	
Audio - RS232 transmission	no additional CAT-x cable	
USB 1.1 transmission	no additional CAT-x cable	
USB 2.0 transmission	1 additional CAT-x cable	
Main power supply		
Type	internal power pack	
Connection	1 × IEC plug	
Voltage	AC100-240V/60-50Hz	
	0.9-0.4A	0.9-0.4A
USB 2.0 variant	0.9-0.4A	0.9-0.4A
Redundant power supply		
Type	external power pack	
Connection	Mini-DIN 4 socket	
Voltage	AC100-240V/60-50Hz	
	+12VDC/3.2A	+12VDC/3.2A
USB 2.0 variant	+12VDC/3.4A	+12VDC/3.3A
Casing		
Material	anodised aluminium	
Desktop (W × H × D)	435 × 44 × 285 mm	
Rackmount (W × H × D)	19" × 1 U × 285 mm	
Weight	approx. 3.0 kg	approx. 2.8 kg
USB 2.0 variant	approx. 3.1 kg	approx. 3.1 kg
Update		
Process	with wizard at service socket of computer module or user module	
Connection	1 × 2.5 mm jack plug	
Operating environment		
Temperature	+5 to +35 °C	
Air humidity	20 - 80% non-condensing	
Conformity	CE, RoHs	

Expansion: DVI-FiberLink

left: DVI-FiberLink(S) - front view
right: DVI-FiberLink(S) - rear view

	DVI-FiberLink(S)	DVI-FiberLink(M)
Main power supply		
Type	external power pack	
Connection	Mini-DIN 4 power socket	
Voltage	+12VDC/0.3A	
Power loop support	yes	
Transmission CAT side		
Transmission mode	dedicated 1:1 CAT link	
Interface	1 × RJ45 socket	
Transmission cable	1 CAT-x cable	
Transmission length	up to 140 m	
Transmission fiber side		
Transmission mode	dedicated 1:1 fiber connection	
Interface	1 × LC duplex socket	
Transmission cable	2 single-mode fiber optic strands	2 multi-mode fibre optic strands
Transmission length	10,000 m (9/125 μm, 2,000 MHz*km, OS1)	550 m (50/125 μm, 500 MHz*km, OM2)
		275 m (62.5/125 μm, 200 MHz*km, OM1)
		220 m (62.5/125 μm, 160 MHz*km, FDDI grade)
Housing		
Material	anodised aluminium	
Desktop (W × H × D)	105 × 26 × 86 mm	
Rackmount	see KVM Accessories/19" Device Carrier	
Weight	approx. 240 g	
Update		
Mode	via service socket	
Connection	1 × Mini-USB-B socket	
Operating conditions		
Temperature	+5 to +40 °C	
Air humidity	< 80% non-condensing	
Conformity	CE, RoHs	

List of Item Numbers Single-Channel

Item No.	Computer modules	Audio-RS232	USB 1.1	USB 2.0	Desktop	Rack-mount
A1110063	DVIVision-CPU				DT	
A1110064	DVIVision-CPU-RM					RM
A1110133	DVIVision-U2-CPU-RM		U	U2		RM
A1110069	DVIVision-AR-CPU	AR			DT	
A1110070	DVIVision-AR-CPU-RM	AR				RM
A1110065	DVIVision-U-CPU		U		DT	
A1110132	DVIVision-U2-CPU		U	U2	DT	
A1110066	DVIVision-U-CPU-RM		U			RM
A1110133	DVIVision-U2-CPU-RM		U	U2		RM
A1110071	DVIVision-ARU-CPU	AR	U		DT	
A1110134	DVIVision-ARU2-CPU	AR	U	U2	DT	
A1110072	DVIVision-ARU-CPU-RM	AR	U			RM
A1110135	DVIVision-ARU2-CPU-RM	AR	U	U2		RM
A1110067	Twin-DVIVision-CPU				DT	RM
A1110073	Twin-DVIVision-AR-CPU	AR			DT	RM
A1110068	Twin-DVIVision-U-CPU		U		DT	RM
A1110074	Twin-DVIVision-ARU-CPU	AR	U		DT	RM
A1800003	DVI-Power-CPU					
Item No.	User modules					
A1120049	DVIVision-CON				DT	
A1120050	DVIVision-CON-RM					RM
A1120067	DVIVision-AR-CON	AR			DT	
A1120068	DVIVision-AR-CON-RM	AR				RM
A1120051	DVIVision-U-CON		U		DT	
A1120127	DVIVision-U2-CON		U	U2	DT	
A1120052	DVIVision-U-CON-RM		U			RM
A1120128	DVIVision-U2-CON-RM		U	U2		RM
A1120069	DVIVision-ARU-CON	AR	U		DT	
A1120129	DVIVision-ARU2-CON	AR	U	U2	DT	
A1120070	DVIVision-ARU-CON-RM	AR	U			RM
A1120130	DVIVision-ARU2-CON-RM	AR	U	U2		RM
A1120053	Twin-DVIVision-CON				DT	RM
A1120071	Twin-DVIVision-AR-CON	AR			DT	RM
A1120054	Twin-DVIVision-U-CON		U		DT	RM
A1120072	Twin-DVIVision-ARU-CON	AR	U		DT	RM
A1800004	DVI-Power-CON					

Item No.	Expansions DVIVision	Description
A2300044	DVI-F berLink(S)	Single-mode transceiver up to 10,000 m, please order 2 x for 1 line
A2300052	DVI-F berLink(M)	Multi-mode transceiver up to 550 m, please order 2 x for 1 line

List of Item Numbers Multi-Channel

Item No.	Computer modules	Audio-RS232	USB 1.1	USB 2.0	Desktop	Rack-mount
A1210053	DVIVision-MC2-CPU				DT	RM
A1210058	DVIVision-MC2-AR-CPU	AR			DT	RM
A1210055	DVIVision-MC2-U-CPU		U		DT	RM
A1210078	DVIVision-MC2-U2-CPU		U	U2	DT	RM
A1210060	DVIVision-MC2-ARU-CPU	AR	U		DT	RM
A1210079	DVIVision-MC2-ARU2-CPU	AR	U	U2	DT	RM
A1800003	DVI-Power-CPU					
Item No.	User modules					
A1220034	DVIVision-MC2-CON				DT	RM
A1220036	DVIVision-MC2-U-CON		U		DT	RM
A1220060	DVIVision-MC2-U2-CON		U	U2	DT	RM
A1220039	DVIVision-MC2-AR-CON	AR			DT	RM
A1220041	DVIVision-MC2-ARU-CON	AR	U		DT	RM
A1220061	DVIVision-MC2-ARU2-CON	AR	U	U2	DT	RM
A1800004	DVI-Power-CON					
Item No.	Computer modules					
A1410025	DVIVision-MC4-CPU				DT	RM
A1410026	DVIVision-MC4-AR-CPU	AR			DT	RM
A1410027	DVIVision-MC4-U-CPU		U		DT	RM
A1410028	DVIVision-MC4-ARU-CPU	AR	U		DT	RM
A1410033	DVIVision-MC4-U2-CPU		U	U2	DT	RM
A1410034	DVIVision-MC4-ARU2-CPU	AR	U	U2	DT	RM
A1800003	DVI-Power-CPU					
Item No.	User modules					
A1420015	DVIVision-MC4-CON				DT	RM
A1420016	DVIVision-MC4-AR-CON	AR			DT	RM
A1420017	DVIVision-MC4-U-CON		U		DT	RM
A1420018	DVIVision-MC4-ARU-CON	AR	U		DT	RM
A1420023	DVIVision-MC4-U2-CON		U	U2	DT	RM
A1420024	DVIVision-MC4-ARU2-CON	AR	U	U2	DT	RM
A1800004	DVI-Power-CON					

Legend

ABBREVIATIONS

CPU	=	Computer module
PC	=	Computer module
CON	=	User module
REM	=	User module
MC2	=	Multichannel 2
MC3	=	Multichannel 3
MC4	=	Multichannel 4

M	=	Multimode
S	=	Singlemode
RM	=	For assembly in a 19" rack
DT	=	Available as desktop variant
A	=	Audio
AR	=	Audio + RS232
R	=	RS232
U	=	transparent USB 1.1
U2	=	transparent USB 2.0
D	=	Delay

EQUIPMENT FEATURES

[keyboard/mouse icon]	=	keyboard/mouse
DVI DL	=	dual-link DVI video
DVI SL	=	single-link DVI video
DVI &VGA	=	single-link DVI + VGA
VGA	=	VGA video
[audio icon]	=	Audio
RS 232	=	RS232
USB 1.1	=	USB 1.1
USB 2.0	=	USB 2.0
[delay icon]	=	Delay
[snowflake icon]	=	Screen Freeze
[power icon]	=	Power Switching
FIRE wire	=	Fire Wire

VT 100	=	VT100
KVM IP	=	KVM IP access
LAN	=	Network connection
WEB If	=	Web interface
DEV CON support	=	DevCon support
Moni tor	=	Monitoring
CAT cable	=	CAT cable
Fiber optics	=	Fiber optics
[single user icon]	=	Single user
[multi user icon]	=	Multi user
[separate user icon]	=	Separat local/remote user