

# DVI KVM Switches

# DVIMUX-DL 7.2

## KVM Switches

Switches for the effective operation of multiple computers via one workstation



**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.

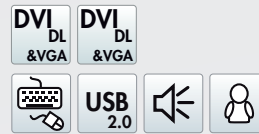
The KVM switches DVIMUX-DL enable you to operate two or four computers over one user console.

The DVIMUX-DL switches the following signals:

- keyboard/mouse
- dual-link DVI and VGA
- audio
- USB 2.0

The devices are available as variants transmitting one, two, three or four video channels.

A working system consists of a DVIMUX-DL and the required computer connection cable sets.



DVIMUX4-DL-MC2-PS/2 - front view

## Highlights

### Video

- mixed DVI/VGA operation on input and output side
- E-DDC support
- single- and multi-channel variants
- DVI dual-link 300 Mbps

### Signals

- switches audio and transparent USB 2.0 signals
- USB and PS/2 keyboard/mouse support

### Miscellaneous

- suitable for all operating systems
- external switching over RS232 possible
- also available as 12V or 24V variant

## Features

### Video

- DVI resolution up to 2560 x 1600 @ 60Hz or 2k x 2k @ 60Hz per channel
- VGA resolution up to 1920 x 1440 @ 75Hz or 2k x 2k @ 60 Hz per channel
- video bandwidth DVI dual-link 330 MP/s
- video bandwidth VGA up to 400 MHz
- digital colour mode 24 bit or analog
- backward-compatible to single-link
- DVIMUX2-DL & DVIMUX4-DL are 3D-capable with NVIDIA® 3D Vision™; resolution up to 1680 x 1050@120Hz

### System upgrade

- update by flash upgrade at device

### Devices

- only access standard computer interfaces
- no software installation required
- internal power supply
- available as desktop and rack mount variant
- housed in an aluminium casing for best interference resistance
- hot-pluggable

## Variants

### Design

- available as desktop (DT) or rack mount (RM) variant
- PS/2 or USB 2.0 transparent

### Video channels

- DVIMUX2-DL - Single-Channel, MC2
- DVIMUX4-DL - Single-Channel, MC2, MC3, MC4

## Expansion

The DVIMUX-DL devices are fully equipped.  
Recently no expansions are available.

## Installation

Connect the computers to the back side of the device.  
Distinctive standard cables link keyboard, video, mouse,  
audio, and USB interfaces to the switch.

Cable length for PS/2 cable sets: 2 m, 5 m

Cable length for USB cable sets: 2 m, 5 m

The user console is simply connected by linking keyboard,  
monitor, mouse, speakers, and USB devices to the intended  
interfaces.

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

DVIMUX2-DL



left: DVIMUX2-DL-USB - front view  
right: DVIMUX2-DL-USB - rear view

	DVIMUX2-DL-USB	DVIMUX2-DL-PS/2
<b>Video</b>		
User console connection per device	1	
Signal type/video	analog/digital video	
Analog resolution	up to 1920 × 1440 @ 75 Hz or 2k × 2k @ 60 Hz	
Digital resolution	btw. 640 × 480 @ 100 Hz and 2560 × 1600 @ 60 Hz or 2k × 2k @ 60 Hz	
Analog video bandwidth	400 MHz	
Digital video bandwidth	DVI single-link 165 mbps DVI dual-link 330 mbps	
Standards	E-DDC support	
Digital colour mode	24 bit	
Video sources per computer	1	
Computer connection	KVM cable set	
Computer ports	2	
Interfaces for user console	DVI-I socket	
Interfaces to computer	2 × DVI-I socket	

<b>Keyboard/Mouse</b>		
Interfaces for user console	2 × Mini-DIN 6 socket	
	2 × USB-A socket	
Interfaces to computer	2 × USB-B socket	2 × (2 × Mini-DIN 6 socket)
<b>Audio</b>		
Connection	analog	
Bandwidth	22 kHz	
Interfaces for user console	2 × 3.5 mm jack plug (line in + speaker)	1 × 3.5 mm jack plug (speaker)
Interfaces to computer	2 × (2 × 3.5 mm jack plug) (line in + line out)	2 × 3.5 mm socket (line in)

Transparent USB 2.0		
USB power supply	high power up to 500 mA	
USB transmission rate	up to 480 Mbps	
Transmission range	5 m	
Interfaces for user console	2 x USB-A socket	
Interfaces to computer	2 x USB-B socket(also keyboard/mouse)	
Power supply		
Type	internal power pack	
Connection	1 x IEC plug	
Voltage	AC100-240V/60-50Hz	
	0.25-0.13A	0.2-0.1A
Casing		
Material	anodised aluminium	
Desktop (W x Hx D)	210 x 44 x 210 mm	
Rackmount (W x H x D)	19" x 1 U x 210 mm	
Weight	approx. 1.2 kg	
Update		
Process	local service socket	
Connection	1 x 2.5 mm jack plug	
Operating conditions		
Temperature	+5 to +40 °C	
Air humidity	< 80% non-condensing	
Conformity	CE, RoHs	

# DVIMUX2-DL-MC2



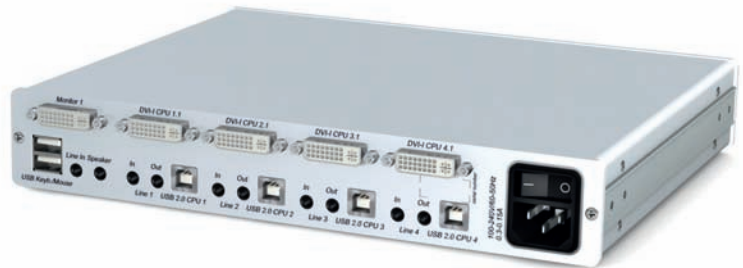
left : DVIMUX2-DL-MC2-USB - front view  
 right: DVIMUX2-DL-MC2-USB - rear view

	DVIMUX2-DL-MC2-USB	DVIMUX2-DL-MC2-PS/2
<b>Video</b>		
User console connection per device	1	
Signal type/video	analog/digital video	
Analog resolution	up to 1920 × 1440 @ 75 Hz or 2k x 2k @ 60 Hz	
Digital resolution	btw. 640 × 480 @ 100 Hz and 2560 × 1600 @ 60 Hz or 2k x 2k @ 60Hz	
Analog video bandwidth	400 MHz	
Digital video bandwidth	DVI single-link 165 mbps DVI dual-link 330 mbps	
Standards	E-DDC support	
Digital colour mode	24 bit	
Video sources per computer	2	
Computer connection	KVM cable set	
Computer ports	2	
Interfaces for user console	2 x DVI-I socket	
Interfaces to computer	2 × (2 x DVI-I socket)	
<b>Keyboard/Mouse</b>		
Interfaces for user console	2 × Mini-DIN 6 socket	
	2 × USB-A socket	
Interfaces to computer	4 × USB-B socket	2 × (2 × Mini-DIN 6 socket)
<b>Audio</b>		
Connection	analog	
Bandwidth	22 kHz	
Interfaces for user console	2 × 3.5 mm jack plug (line in + speaker)	1 × 3.5 mm jack plug (speaker)
Interfaces to computer	2 × (2 × 3.5 mm jack plug) (line in + line out)	2 × 3.5 mm socket (line in)

Transparent USB 2.0		
USB power supply	high power up to 500 mA	
USB transmission rate	up to 480 Mbps	
Transmission range	5 m	
Interfaces for user console	2 x USB-A socket	
Interfaces to computer	4 x USB-B socket(also keyboard/mouse)	
Power supply		
Type	internal power pack	
Connection	1 x IEC plug	
Voltage	AC100-240V/60-50Hz	
	0.3-0.2A	0.3-0.2A
Casing		
Material	anodised aluminium	
Desktop (W x H x D)	210 x 66 x 210 mm	
Rackmount (W x H x D)	19" x 1.5 U x 210 mm	
Weight	approx. 1.5 kg	
Update		
Progress	local service socket	
Connection	1 x 2.5 mm jack plug	
Operating conditions		
Temperature	+5 to +40 °C	
Air humidity	< 80% non-condensing	
Conformity	CE, RoHs	



# DVIMUX4-DL



left : DVIMUX4-DL-USB - front view  
 right: DVIMUX4-DL-USB - rear view

	DVIMUX4-DL-USB	DVIMUX4-DL-PS/2
<b>Video</b>		
User console connection per device	1	
Signal type/video	analog/digital video	
Analog resolution	up to 1920 × 1440 @ 75 Hz or 2k × 2k @ 60 Hz	
Digital resolution	btw. 640 × 480 @ 100 Hz and 2560 × 1600 @ 60 Hz or 2k × 2k @ 60Hz	
Analog video bandwidth	400 MHz	
Digital video bandwidth	DVI single-link 165 mbps DVI dual-link 330 mbps	
Standards	E-DDC support	
Digital colour mode	24 bit	
Video sources per computer	1	
Computer connection	KVM cable set	
Computer ports	4	
Interfaces for user console	DVI-I socket	
Interfaces to computer	4 × DVI-I socket	
<b>Keyboard/Mouse</b>		
Interfaces for user console	2 × Mini-DIN 6 socket	
	2 × USB-A socket	
Interfaces to computer	4 × USB-B socket	4 × (2 × Mini-DIN 6 socket)
<b>Audio</b>		
Connection	analog	
Bandwidth	22 kHz	
Interfaces for user console	2 × 3.5 mm jack plug (line in + speaker)	1 × 3.5 mm jack plug (speaker)
Interfaces to computer	2 × (2 × 3.5 mm jack plug) (line in + line out)	2 × 3.5 mm socket (line in)

Transparent USB 2.0		
USB power supply	high power up to 500 mA	
USB transmission rate	up to 480 Mbps	
Transmission range	5 m	
Interfaces for user console	2 x USB-A socket	
Interfaces to computer	4 x USB-B socket(also keyboard/mouse)	
Power supply		
Type	internal power pack	
Connection	1 x IEC plug	
Voltage	AC100-240V/60-50Hz	
	0.3-0.15A	0.2-0.1A
Casing		
Material	anodised aluminium	
Desktop (W x H x D)	270 x 44 x 210 mm	
Rackmount (W x H x D)	19" x 1 U x 210 mm	
Weight	approx. 1.5 kg	
Update		
Progress	local service socket	
Connection	1 x 2.5 mm jack plug	
Operating conditions		
Temperature	+5 to +40 °C	
Air humidity	< 80% non-condensing	
Conformity	CE, RoHs	

# DVIMUX4-DL-MC2



left: DVIMUX4-DL-MC2-PS/2 - front view  
 right: DVIMUX4-DL-MC2-PS/2 - rear view

	DVIMUX4-DL-MC2-USB	DVIMUX4-DL-MC2-PS/2
<b>Video</b>		
User console connection per device	1	
Signal type/video	analog/digital video	
Analog resolution	up to 1920 × 1440 @ 75 Hz or 2k × 2k @ 60 Hz	
Digital resolution	btw. 640 × 480 @ 100 Hz and 2560 × 1600 @ 60 Hz or 2k × 2k @ 60Hz	
Analog video bandwidth	400 MHz	
Digital video bandwidth	DVI single-link 165 mbps DVI dual-link 330 mbps	
Standards	E-DDC support	
Digital colour mode	24 bit	
Video sources per computer	2	
Computer connection	KVM cable set	
Computer ports	4	
Interfaces for user console	2 × DVI-I socket	
Interfaces to computer	4 × (2 × DVI-I socket)	
<b>Keyboard/Mouse</b>		
Interfaces for user console	2 × Mini-DIN 6 socket	
	2 × USB-A socket	
Interfaces to computer	4 × USB-B socket	4 × (2 × Mini-DIN 6 socket)
<b>Audio</b>		
Connection	analog	
Bandwidth	22 kHz	
Interfaces for user console	2 × 3.5 mm jack plug (line in + speaker)	1 × 3.5 mm jack plug (speaker)
Interfaces to computer	2 × (2 × 3.5 mm jack plug) (line in + line out)	2 × 3.5 mm socket (line in)

Transparent USB 2.0		
USB power supply	high power up to 500 mA	
USB transmission rate	up to 480 mbps	
Transmission range	5 m	
Interfaces for user console	2 x USB-A socket	
Interfaces to computer	4 x USB-B socket (also keyboard/mouse)	
Power supply		
Type	internal power pack	
Connection	1 x IEC plug	
Voltage	AC100-240V/60-50Hz	
	0.4-0.2A	0.31-0.16A
Casing		
Material	anodised aluminium	
Desktop (W x H x D)	270 x 66 x 210 mm	
Rackmount (W x H x D)	19" x 1.5 U x 210 mm	
Weight	approx. 1.7 kg	
Update		
Progress	local service socket	
Connection	1 x 2.5 mm jack plug	
Operating conditions		
Temperature	+5 to +40 °C	
Air humidity	< 80% non-condensing	
Conformity	CE, RoHs	

# DVIMUX4-DL-MC3



left : DVIMUX4-DL-USB - front view  
right: DVIMUX4-DL-USB - rear view

	DVIMUX4-DL-MC3-USB	DVIMUX4-DL-MC3-PS/2
<b>Video</b>		
Console ports per device	1	
Signal type/video	Analog/digital video	
Analog resolution	Up to 1920 × 1440 @ 75 Hz or 2k × 2k @ 60 Hz	
Digital resolution	Btw. 640 × 480 @ 100 Hz and 2560 × 1600 @ 60 Hz or 2k × 2k @ 60Hz	
Analog video bandwidth	400 MHz	
Digital video bandwidth	DVI single-link 165 mbps DVI dual-link 330 mbps	
Standards	E-DDC support	
Digital colour mode	24 bit	
Video sources per computer	3	
Computer connection	KVM cable set	
Computer ports	4	
Interfaces for user console	3 × DVI-I socket	
Interfaces to computer	4 × (3 × DVI-I socket)	
<b>Keyboard/Mouse</b>		
Interfaces for user console	2 × Mini-DIN 6 socket	
	2 × USB-A socket	
Interfaces to computer	4 × USB-B socket	4 × (2 × Mini-DIN 6 socket)
<b>Audio</b>		
Connection	Analog	
Bandwidth	22 kHz	
Interfaces for user console	2 × 3.5 mm jack plug (line in + speaker)	1 × 3.5 mm jack plug (speaker)
Interfaces to computer	2 × (2 × 3.5 mm jack plug) (line in + line out)	2 × 3.5 mm socket (line in)

Transparent USB 2.0		
USB power supply	High power up to 500 mA	
USB transmission rate	Up to 480 mbps	
Transmission range	5 m	
Interfaces for user console	2 x USB-A socket	
Interfaces to computer	4 x USB-B socket(also keyboard/mouse)	
Power supply		
Type	Internal power pack	
Connection	1 x IEC plug	
Voltage	AC100-240V/60-50Hz	
	0.5-0.2A	0.4-0.2A
Casing		
Material	Anodised aluminium	
Desktop (W x H x D)	270 x 88 x 210 mm	
Rackmount (W x H x D)	19" x 2 U x 210 mm	
Weight	Approx. 2.1 kg	
Update		
Process	Local service socket	
Connection	1 x 2.5 mm jack plug	
Operating conditions		
Temperature	+5 to +40 °C	
Air humidity	< 80% non-condensing	
Conformity	CE, RoHs	

# DVIMUX4-DL-MC4



left : DVIMUX4-DL-USB - front view  
right: DVIMUX4-DL-USB - rear view

	DVIMUX4-DL-MC4-USB	DVIMUX4-DL-MC4-PS/2
<b>Video</b>		
Console ports per device	1	
Signal type/video	Analog/digital video	
Analog resolution	Up to 1920 × 1440 @ 75 Hz or 2k × 2k @ 60 Hz	
Digital resolution	Btw. 640 × 480 @ 100 Hz and 2560 × 1600 @ 60 Hz or 2k × 2k @ 60Hz	
Analog video bandwidth	400 MHz	
Digital video bandwidth	DVI single-link 165 mbps DVI dual-link 330 mbps	
Standards	E-DDC support	
Digital colour mode	24 bit	
Video sources per computer	4	
Computer connection	KVM cable set	
Computer ports	4	
Interfaces for user console	4 × DVI-I socket	
Interfaces to computer	4 × (3 × DVI-I socket)	
<b>Keyboard/Mouse</b>		
Interfaces for user console	2 × Mini-DIN 6 socket	
	2 × USB-A socket	
Interfaces to computer	4 × USB-B socket	4 × (2 × Mini-DIN 6 socket)
<b>Audio</b>		
Connection	Analog	
Bandwidth	22 kHz	
Interfaces for user console	2 × 3.5 mm jack plug (line in + speaker)	1 × 3.5 mm jack plug (speaker)
Interfaces to computer	2 × (2 × 3.5 mm jack plug) (line in + line out)	2 × 3.5 mm socket (line in)

Transparent USB 2.0		
USB power supply	High power up to 500 mA	
USB transmission rate	Up to 480 mbps	
Transmission range	5 m	
Interfaces for user console	2 x USB-A socket	
Interfaces to computer	4 x USB-B socket(also keyboard/mouse)	
Power supply		
Type	Internal power pack	
Connection	1 x IEC plug	
Voltage	AC100-240V/60-50Hz	
	0.5-0.2A	0.4-0.2A
Casing		
Material	Anodised aluminium	
Desktop (W x H x D)	270 x 132 x 210 mm	
Rackmount (W x H x D)	19" x 3 U x 210 mm	
Weight	Approx. 2.5 kg	
Update		
Process	Local service socket	
Connection	1 x 2.5 mm jack plug	
Operating conditions		
Temperature	+5 to +40 °C	
Air humidity	< 80% non-condensing	
Conformity	CE, RoHs	



## List of Item Numbers Single-Channel

Item No.	Description	CPU	PS/2	U2	DT	RM
A2100091	DVIMUX2-DL-PS/2	2	PS/2		DT	
A2100092	DVIMUX2-DL-PS/2-RM	2	PS/2			RM
A2100093	DVIMUX2-DL-USB	2		U2	DT	
A2100094	DVIMUX2-DL-USB-RM	2		U2		RM
A2100098	DVIMUX4-DL-PS/2	4	PS/2		DT	
A2100099	DVIMUX4-DL-USB	4		U2	DT	
A2100100	DVIMUX4-DL-PS/2-RM	4	PS/2			RM
A2100101	DVIMUX4-DL-USB-RM	4		U2		RM

## List of Item Numbers Multi-Channel

























Item No.	Description	CPU	PS/2	U2	DT	RM
A2100122	DVIMUX2-DL-MC2-PS/2	2	PS/2		DT	
A2100124	DVIMUX2-DL-MC2-PS/2-RM	2	PS/2			RM
A2100123	DVIMUX2-DL-MC2-USB	2		U2	DT	
A2100125	DVIMUX2-DL-MC2-USB-RM	2		U2		RM
A2100102	DVIMUX4-DL-MC2-PS/2	4	PS/2		DT	
A2100102-24V	DVIMUX4-DL-MC2-PS/2 - 24V	4	PS/2		DT	
A2100103	DVIMUX4-DL-MC2-PS/2-RM	4	PS/2			RM
A2100104	DVIMUX4-DL-MC2-USB	4		U2	DT	
A2100105	DVIMUX4-DL-MC2-USB-RM	4		U2		RM
A2100106	DVIMUX4-DL-MC3-PS/2	4	PS/2		DT	
A2100107	DVIMUX4-DL-MC3-PS/2-RM	4	PS/2			RM
A2100108	DVIMUX4-DL-MC3-USB	4		U2	DT	
A2100109	DVIMUX4-DL-MC3-USB-RM	4		U2		RM
A2100110	DVIMUX4-DL-MC4-PS/2	4	PS/2		DT	
A2100111	DVIMUX4-DL-MC4-PS/2-RM	4	PS/2			RM
A2100112	DVIMUX4-DL-MC4-USB	4		U2	DT	
A2100113	DVIMUX4-DL-MC4-USB-RM	4		U2		RM

## Legend

### ABBREVIATIONS

CPU	=	Computer module	M	=	Multimode
PC	=	Computer module	S	=	Singlemode
CON	=	User module	RM	=	For assembly in a 19" rack
REM	=	User module	DT	=	Available as desktop variant
MC2	=	Multichannel 2	A	=	Audio
MC3	=	Multichannel 3	AR	=	Audio + RS232
MC4	=	Multichannel 4	R	=	RS232
			U	=	transparent USB 1.1
			U2	=	transparent USB 2.0
			D	=	Delay

### EQUIPMENT FEATURES

	=	keyboard/mouse		=	VT100
	=	dual-link DVI video		=	KVM IP access
	=	single-link DVI video		=	Network connection
	=	single-link DVI + VGA		=	Web interface
	=	VGA video		=	DevCon support
	=	Audio		=	Monitoring
	=	RS232		=	CAT cable
	=	USB 1.1		=	Fiber optics
	=	USB 2.0		=	Single user
	=	Delay		=	Multi user
	=	Screen Freeze		=	Separat local/remote user
	=	Power Switching			
	=	Fire Wire			