

# DVI KVM Switches

# DVIMUX-DL 7.3

## KVM Switches

Switches for the effective operation of multiple computers via one workstation



**Leading the way in digital KVM**

## The company

Experience the whole world of

KVM

## Leading the way in digital KVM

Guntermann & Drunck is regarded as a leading manufacturer of digital and analogue KVM equipment used in control rooms in air traffic control, broadcast studios, on ships and to monitor industrial processes.

With a powerful portfolio consisting of KVM extenders, switches and matrix switches, G&D's users get real added value. G&D provides the broadest KVM product portfolio at the market. Even with different features, all G&D products are compatible and can be combined. Our KVM solutions optimise the application of IT equipment and improve the working conditions for humans and computers.

No matter where KVM devices are installed, there's always one main requirement - robust, reliable, user-friendly and easy to operate KVM systems that can be adapted to future requirements and grow with your demands.

By short lines of communication G&D is able to solve challenging requirements and tailor systems to our customers' needs. We keep direct contact to our customers and are personally available. We are proactive and always keep an eye on the trends in the industry. Functionalities required by our customers are quickly implemented into our products. Our success can only be measured with our customers' satisfaction.

Trust in G&D for your optimal KVM solution.

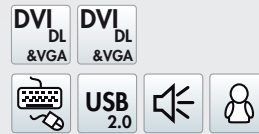
The KVM switches DVIMUX-DL enable you to operate two or four computers over one user console.

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 × 1600 @ 60Hz or 2k x 2k @ 60Hz per channel
- VGA resolution up to 1920 × 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 × USB-A socket	
Interfaces to computer	2 × USB-B socket(also keyboard/mouse)	
Power supply		
Type	internal power pack	
Connection	1 × IEC plug	
Voltage	AC100-240V/60-50Hz	
	0.25-0.13A	0.2-0.1A
Casing		
Material	anodised aluminium	
Desktop (W × H × D)	210 × 44 × 210 mm	
Rackmount (W × H × D)	19" × 1 U × 210 mm	
Weight	approx. 1.2 kg	
Update		
Process	local service socket	
Connection	1 × 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 × 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	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 × USB-A socket	
Interfaces to computer	4 × USB-B socket(also keyboard/mouse)	
Power supply		
Type	internal power pack	
Connection	1 × IEC plug	
Voltage	AC100-240V/60-50Hz	
	0.3-0.2A	0.3-0.2A
Casing		
Material	anodised aluminium	
Desktop (W × H × D)	210 × 66 × 210 mm	
Rackmount (W × H × D)	19" × 1.5 U × 210 mm	
Weight	approx. 1.5 kg	
Update		
Progress	local service socket	
Connection	1 × 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 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	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 × USB-A socket	
Interfaces to computer	4 × USB-B socket(also keyboard/mouse)	
Power supply		
Type	internal power pack	
Connection	1 × IEC plug	
Voltage	AC100-240V/60-50Hz	
	0.3-0.15A	0.2-0.1A
Casing		
Material	anodised aluminium	
Desktop (W × H × D)	270 × 44 × 210 mm	
Rackmount (W × H × D)	19" × 1 U × 210 mm	
Weight	approx. 1.5 kg	
Update		
Progress	local service socket	
Connection	1 × 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 × USB-A socket	
Interfaces to computer	4 × USB-B socket (also keyboard/mouse)	
Power supply		
Type	internal power pack	
Connection	1 × IEC plug	
Voltage	AC100-240V/60-50Hz	
	0.4-0.2A	0.31-0.16A
Casing		
Material	anodised aluminium	
Desktop (W × H × D)	270 × 66 × 210 mm	
Rackmount (W × H × D)	19" × 1.5 U × 210 mm	
Weight	approx. 1.7 kg	
Update		
Progress	local service socket	
Connection	1 × 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 x 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 × USB-A socket	
Interfaces to computer	4 × USB-B socket(also keyboard/mouse)	
Power supply		
Type	Internal power pack	
Connection	1 × IEC plug	
Voltage	AC100-240V/60-50Hz	
	0.5-0.2A	0.4-0.2A
Casing		
Material	Anodised aluminium	
Desktop (W × H × D)	270 × 132 × 210 mm	
Rackmount (W × H × D)	19" × 3 U × 210 mm	
Weight	Approx. 2.5 kg	
Update		
Process	Local service socket	
Connection	1 × 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
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
MC4	=	Multichannel 4	AR	=	Audio + RS232
			R	=	RS232
			U	=	transparent USB 1.1
			U2	=	transparent USB 2.0
			D	=	Delay

### EQUIPMENT FEATURES

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