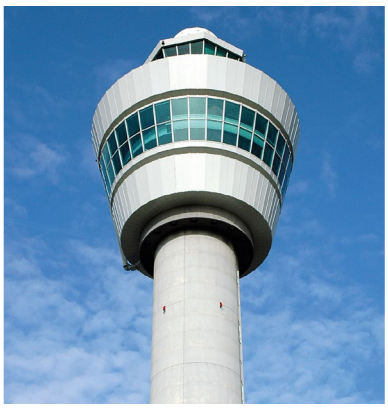
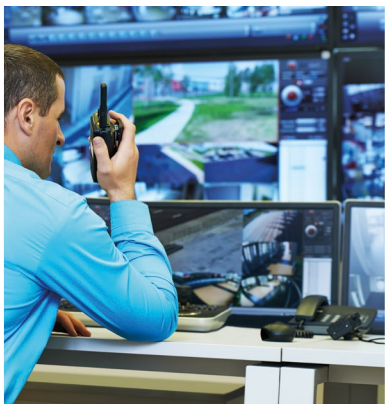
DP KVM Switches

DP1.4-MUX

KVM switches

Switches for the effective operation of multiple computers via one workstation

Catalogue V1.2

G&D IF IT'S KVM

G&D IF IT'S KVM

Guntermann & Drunck is regarded as a leading manufacturer of 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.

DP1.4-MUX - The KVM switch for native 4K UltraHD resolution over DisplayPort™ 1.4

The KVM switch **DP1.4-MUX** switches the signals

- DisplayPort™ 1.4
- USB keyboard / mouse
- USB 2.0 transparent
- Audio
- Variants with RS232 support on request

The DP1.4-MUX4 KVM switch enables you to operate up to four computers via one console and the DP1.4-MUX2 enables you to operate two computers.

The console is provided with a USB keyboard, a USB mouse and a DisplayPort™ monitor. Variants with RS232 support are also available on request. The computers connected to the KVM switch are operated from the installed console.

The switching between computers takes place either via the push buttons on the front panel, configurable key combinations, or a serial device which is connected to the Service or RS232 port.

DP1.4-MUX4 - front view

DP1.4-MUX4 - rear view

The front panel of the device provides two USB 2.0 interfaces to operate any USB devices. The connected USB devices are available to whichever active computer.

The KVM switch works with full keyboard and mouse emulation on each channel and guarantees error-free booting and operation of the connected computers at all times. The multichannel version allows you to connect up to four monitors per computer to the KVM switch.

Details

Video

- DisplayPort™ 1.4 on input and output side
- E-DDC support
- Colour depth: 24 Bit

Exemplary resolutions:

- 7680 x 4320 @ 30 Hz (UHD-2/30 Hz)
- 5120 x 2880 @ 60 Hz (5K/60 Hz)
- 3840 x 2160 @ 120 Hz (4K UHD/120 Hz)
- 4096 x 2160 @ 60 Hz (4K2K/60 Hz)
- 3840 x 2160 @ 60 Hz (4K UHD/60 Hz)
- 2560 x 1600 @ 60 Hz
- 2560 x 1440 @ 144 Hz
- 2560 x 1440 @ 240 Hz
- 1920 x 1200 @ 60 Hz
- 1920 x 1080 @ 240 Hz (Full HD/240 Hz)
- 2048 x 2048 @ 60 Hz (2K x 2K/60 Hz)

More standardised resolutions within the pixel rate and horizontal/vertical frequency.

Device

- Accesses the computer's standard interfaces only
- Switching via push button, keyboard hotkeys or serial device connected to the service interface
- Requires no software installation
- Available as desktop variant
- Internal power supply
- Aluminium housing for best interference resistance
- Hot-pluggable

Signals

- DisplayPort™ 1.4
- USB keyboard / mouse
- USB 2.0 transparent
- Audio
- Variants with RS232 support on request

System-Upgrade

- Flash upgrade at device

Variants

Connections to computers

- for 2 computers (MUX2)
- for 4 computers (MUX4)

Video channels

- Single-Channel
- Multi-Channel 2 (MC2)
- Multi-Channel 3 (MC3)
- Multi-Channel 4 (MC4)

Peripheral connections

- Available for USB connections

Signals

- Variants with RS232 support on request (-R)

Design

- Desktop variant

Expansion

The DP1.4-MUX switches are fully equipped. There are no recent expansions available.

Installation

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

- Cable length of USB cable sets: 2 m, 5 m

For connecting the user console simply link keyboard, monitor, mouse, speakers and USB devices to the intended interfaces.

To find out more details about the startup, please download the manual.

DP1.4-MUX series

General features	
No. of video sources	
per computer/console:	see variant features
Console	
Connections per device:	1
Connection:	directly at the device
Interfaces for console	
Video:	see variant features
USB keyboard/mouse:	2 × USB-A socket
USB 2.0 devices:	2 × USB-A socket
Audio:	1 × 3,5 mm jack socket (Line In) 1 × 3,5 mm jack socket (Speaker)
RS232:	see variant features
Computer	
Connections per device::	see variant features
Connection:	with optional cable sets at the device
Interfaces per computer	
Video:	see variant features
USB:	1 × USB-B socket
Audio:	1 × 3,5 mm jack socket (Line In) 1 × 3,5 mm jack socket (Line Out)
Graphics	
Signal input:	DisplayPort™ 1.4 (LBR, HBR, HBR2, HBR3, SST, MST, DSC)
Signal output:	DisplayPort™ 1.4 (LBR, HBR, HBR2, HBR3, SST, MST, DSC)
Colour depth:	24 Bit
Exemplary resolutions:	7680 x 4320 @ 30 Hz (UHD-2/30 Hz) 5120 x 2880 @ 60 Hz (5K/60 Hz) 3840 x 2160 @ 120 Hz (4K UHD/120 Hz) 4096 x 2160 @ 60 Hz (4K2K/60 Hz) 3840 x 2160 @ 60 Hz (Ultra HD/60 Hz) 2560 x 1600 @ 60 Hz 2560 x 1440 @ 144 Hz 2560 x 1440 @ 240 Hz 1920 x 1200 @ 60 Hz 1920 x 1080 @ 240 Hz (Full HD/240 Hz) 2048 x 2048 @ 60 Hz (2K x 2K/60 Hz) More standardised resolutions within the pixel rate and horizontal/vertical frequency.
Pixel rate:	25 MPixel/s to 1080 MPixel/s
Pixel coding:	RGB 4:4:4 with 24 bpp/8 bpc
Vertical frequency:	20 Hz to 240 Hz
Horizontal frequency:	25 kHz to 390 kHz
EDID incl. DDC/CI:	E-DID support via DP AUX channel
DDC/CI:	The device is ready to support monitors with DDC/CI function. The DDC information is transparently transmitted to the monitor to support as many monitors as possible. However, support cannot be guaranteed for all monitor models..

DP1.4-MUX series

General features	
Audio (DisplayPort™ Digital)	
Transmission type:	L-PCM (2/4/6/8 channels), stereo
Resolutions:	16/20/24 bit
Sampling rates:	32/44,1/48/88,2/96/176,4/192 kHz
Audio (Line In/Out)	
Type:	analog, bidirectional
Resolutions:	24 bit digital, stereo
Sampling rates:	96 kHz
Other interfaces	
Service:	1 × Mini-B USB socket
Remote:	1 × Mini-B USB socket
RS232:	1 × RJ 11 socket
Power supply	
Type:	internal power pack
Connection:	IEC socket (IEC-320 C14)
Power input:	see variant features
Operational environment	
Temperature:	+5 to +45 °C
Humidity:	20% to 80%, non-condensing
Storage environment	
Temperature:	-20 to +60 °C
Humidity:	15% to 85%, non-condensing
Conformity	
	CE, EAC, RoHS

DP1.4-MUX2 variants

DP1.4-MUX2 -rear view

DP1.4-MUX2-MC2 - rear view

Individual features	DP1.4-MUX2-USB	DP1.4-MUX2-MC2-USB
No. of video sources		
per computer/console:	1	2
Interfaces for console		
Video:	1 × DisplayPort™ socket	2 × DisplayPort™ socket
RS232:	-	-
Computer		
Connections per device:	2	
Interfaces per computer		
Video:	1 × DisplayPort™ socket	2 × DisplayPort™ socket
Power supply		
Power input:	100 mA@240VAC; 200 mA@100VAC	200 mA@240VAC; 300 mA@100VAC
Casing		
Material:	anodised aluminium	
Dimensions (W × H × D):	210 × 44 × 210 mm	210 × 66 × 210 mm
Weight:	approx. 1.5 kg	approx. 1.6 kg

DP1.4-MUX4 variants

DP1.4-MUX4 - rear view

DP1.4-MUX4-MC2 - rear view

Individual features	DP1.4-MUX4-USB	DP1.4-MUX4-USB-R	DP1.4-MUX4-MC2-USB	DP1.4-MUX4-MC2-USB-R
No. of video sources				
per computer/console:	1		2	
Interfaces for console				
Video:	1 × DisplayPort™ socket		2 × DisplayPort™ socket	
RS232:	-	1 x RS232 socket	-	1 x RS232 socket
Computer				
Connections per device:	4			
Interfaces per computer				
Video:	1 × DisplayPort™ socket		2 × DisplayPort™ socket	
Power supply				
Power input:	200 mA@240VAC; 300 mA@100VAC		200 mA@240VAC; 400 mA@100VAC	
Casing				
Material:	anodised aluminium			
Dimensions (W × H × D):	270 x 44 x 210 mm	270 x 66 x 210 mm	270 x 66 x 210 mm	270 x 88 x 210 mm
Weight:	approx. 1,5 kg	approx. 1,6 kg	approx. 1,7 kg	

DP1.4-MUX4-MC3 - rear view

DP1.4-MUX4-MC4 - rear view

Individual features	DP1.4-MUX4-MC3-USB	DP1.4-MUX4-MC4-USB
No. of video sources		
per computer/console:	3	4
Interfaces for console		
Video:	3 × DisplayPort™ socket	4 × DisplayPort™ socket
RS232:	-	-
Computer		
Connections per device:	4	
Interfaces per computer		
Video:	3 × DisplayPort™ socket	4 × DisplayPort™ socket
Power supply		
Power input:	200 mA@240VAC; 400 mA@100VAC	200 mA@240VAC; 400 mA@100VAC
Casing		
Material:	anodised aluminium	
Dimensions (W × H × D):	270 × 88 × 210 mm	270 × 132 × 210 mm
Weight:	approx. 1,9 kg	approx. 2,3 kg

Article overview

DP1.4-MUX2

Art. no.	Name
A2100169	DP1.4-MUX2-USB
A2100170	DP1.4-MUX2-MC2-USB

DP1.4-MUX4

Art. no.	Name	
A2100173	DP1.4-MUX4-USB	
A2100207	DP1.4-MUX4-USB-R	on request
A2100174	DP1.4-MUX4-MC2-USB	
A2100206	DP1.4-MUX4-MC2-USB-R	on request
A2100175	DP1.4-MUX4-MC3-USB	
A2100176	DP1.4-MUX4-MC4-USB	

ABBREVIATIONS

CPU = Computer module
PC = Computer module
CON = Console module
REM = Console module

MC2 = Multi-channel 2
MC3 = Multi-channel 3
MC4 = Multi-channel 4

M = Multimode
S = Singlemode
S+ = Singlemode+

RM = For assembly in a 19“ rack Desktop device
DT = Desktop device
DP = DisplayPort™

A = Audio
R = RS232
U = Integr. USB 2.0 up to 16 MBit/s
U2 = Transp. USB 2.0 Hi-Speed 480 Mbit/s
D = Delay

EQUIPMENT FEATURES

- Audio
- CAT cable
- Compact setup
- CrossDisplay-Switching
- Delay
- DisplayPort™
- DVI dual link video
- DVI single link video
- Expansion
- Fiber optics
- High Definition Multimedia Interface
- Keyboard/Mouse
- KVM-over-IP™
- Media control
- Mix & Match
- Modular setup
- Monitoring
- Multi user
- Multi-channel video
- Network connection
- Power switching
- Remote IP
- RS232
- Screen-Freeze
- Separate local/remote user
- Single user
- USB 2.0
- USB 3.0
- VGA video
- Web Interface

COLOUR CATEGORY

- KVM extenders
- KVM switches
- Analog KVM matrix systems
- Digital KVM matrix systems
- Digital signage
- KVM add-ons
- Monitoring & SNMP
- KVM MultiPower
- Accessories

G&D
IF IT'S KVM

From professionals to professionals:

Trust in our professional solutions - from planning through to aftersales support.

Main office

Guntermann & Drunck GmbH
Systementwicklung
Obere Leimbach 9
D-57074 Siegen

Phone +49 271 23872-0
Fax +49 271 23872-120

sales@gdsys.de
www.gdsys.de

US office

G&D North America Inc.
4001 W. Alameda Avenue
Suite 100, Burbank, CA 91505

Phone +1-818-748-3383

sales@gd-northamerica.com
www.gd-northamerica.com

Follow us on:

© All brandnames used are the registered trademarks of the relevant manufacturers.We reserve the right to make technical modifications. Illustrations are examples only. Descriptions normally reflect the max. expansion depth.

WEEE-Reg.-Nr. DE30763240