

# VGA KVM Switches

# TripleMUX & QuadMUX 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 TripleMUX and QuadMUX enable you to operate four computers over one user console.

Triple- and QuadMUX switch the following signals:

- keyboard/mouse
- VGA

The devices are offered exclusively as multi-channel variants.

- TripleMUX - with 3 video channels per computer
- QuadMUX - with 4 video channels per computer

The video sources of the connected computers enable combinations across all computers (scenarios). The scenarios can be stored within the switch and recalled by pressing a hotkey.

A working system consists of a switch and the required computer connection cable sets.



TripleMUX front view

## Highlights

### Scenario switching

TripleMUX and QuadMUX provide just as many connections on console and user side as miniMUX4-MC3 + MC4 devices. The most important difference between the units are their switching options.

miniMUX variants switch all video sources of one single computer simultaneously. TripleMUX and QuadMUX, however, combine the video sources from different computers.

These combinations (scenarios) can be retrieved using hotkeys. The correct information mix will be available immediately on three or four monitors. The scenarios are defined in the OSD AdonIS of the TripleMUX and QuadMUX. The computer to which the keyboard is switched by default in that scenario is also defined here.

This assignment can be cancelled. Hotkeys can be used to switch keyboard or mouse on each of the other computers within the scenario.

## Features

### Device

- switches 12 (QuadMUX = 16) video inputs from four computers to three (four) video outputs
- stores up to eight video combinations as scenarios that can be immediately displayed over hotkey/OSD
- only accesses standard keyboard/video/mouse interfaces
- permanent keyboard/mouse emulation for each channel
- available as desktop and 19" variant
- can be cascaded with miniMUX4
- no software installation required
- can be combined with all G&D products
- hot-pluggable
- password protection and rights assignment for each user

### Video

- VGA resolution 1920 × 1440 @ 75 Hz or 2k x 2k @ 60 Hz
- video bandwidth VGA up to 400 MHz

### System upgrade

- update by flash upgrade at device

## Variants

### Design

- available as desktop (DT) or rack mount (RM) variant

## Expansion

Triple- and QuadMUX are fully equipped.  
There are no expansions available for these products.

## Installation

Connect the computer to the back side of the switch. Standard VGA cables and a G&D triplex cable for 1 × keyboard, video, and mouse link the computers to the switch.

The PS/2 cable sets are available in the following lengths:  
2 m, 4 m, 6 m

Connect keyboard, monitors, and mouse to the corresponding interfaces of the user console.

Feel free to download the Triple- & QuadMUX manual to find out more details about the start-up.

## TripleMUX &amp; QuadMUX



left: DL-MUX4 - front view  
right: DL-MUX4 - rear view

|                                    | TripleMUX                                    | QuadMUX                    |
|------------------------------------|--|----------------------------|
| <b>Video</b>                       |  |                            |
| User console connection per device | 1  |                            |
| Signal type/video                  | analog video                                 |                            |
| Resolution                         | up to 1920 × 1440 @ 75 Hz or 2k × 2k @ 60 Hz |                            |
| Bandwidth                          | up to 400 MHz                                |                            |
| Video sources per computer         | 3  | 4                          |
| Computer connection                | KVM cable set                                |                            |
| Computer ports                     | 4  |                            |
| Interfaces for user console        | 3 × D-Sub HD 15 socket                       | 4 × D-Sub HD 15 socket     |
| Interfaces to computer (KVM)       | 4 × MDR20 socket                             |                            |
| Additional video                   | 4 × 2 × D-Sub HD 15 socket                   | 4 × 3 × D-Sub HD 15 socket |
| <b>Keyboard/Mouse</b>              |  |                            |
| Interfaces for user console        | 2 × Mini-DIN 6 socket                        |                            |
|                                    | 2 × USB-A socket                             |                            |
| Interfaces to computer (KVM)       | 4 × MDR20 socket                             |                            |
| <b>Power supply</b>                |  |                            |
| Type                               | internal power pack                          |                            |
| Connection                         | IEC plug                                     |                            |
| Voltage                            | AC100-240V/60-50Hz                           |                            |
|                                    | 0.21-0.1A                                    | 0.24-0.11A                 |
| <b>Casing</b>                      |  |                            |
| Material                           | anodised aluminium                           |                            |
| Desktop (W × H × D)                | 270 × 66 × 210 mm                            | 270 × 88 × 210 mm          |
| Rackmount (W × H × D)              | 19" × 1.5 U × 210 mm                         | 19" × 2 U × 210 mm         |
| Weight                             | approx. 1.9 kg                               |                            |
| <b>Update</b>                      |  |                            |
| Process                            | local service socket                         |                            |
| Connection                         | 1 × 2.5 mm jack plug                         |                            |
| <b>Operating environment</b>       |  |                            |
| Temperature                        | +5 to +40 °C                                 |                            |
| Air humidity                       | < 80% non-condensing                         |                            |
| Conformity                         | CE, RoHs                                     |                            |

## List of Item Numbers

























| Item No. | Description  | DT | RM |
|----------|--------------|----|----|
| A2100044 | TripleMUX    | DT |    |
| A2100045 | TripleMUX-RM |    | RM |
| A2100046 | QuadMUX      | DT |    |
| A2100047 | QuadMUX-RM   |    | 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             |   |