

# KVM SWITCH VIA CAT5

Control up to 64 servers in zero rack space



**PRIMUX-UZR (Front and Back) and HA-USB Host Adapter**

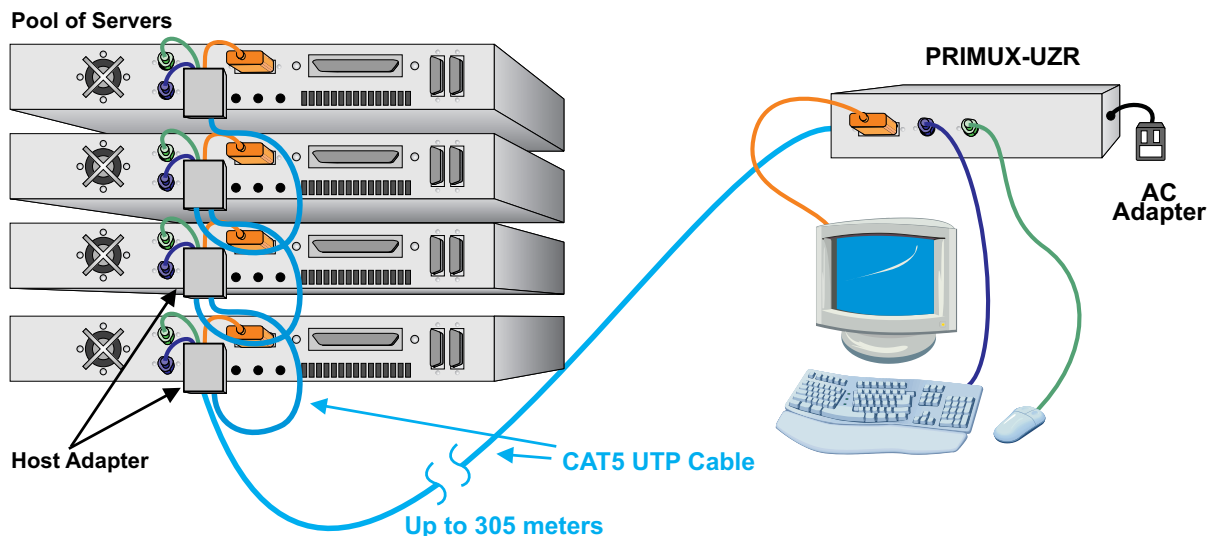
## Features & Applications

The PRIMUX® Zero-U KVM Switch System allows you to control up to 64 computers without consuming rack space. The switch frees up valuable space by eliminating large KVM switchboxes and bulky hard-to-manage coax cables.

The PRIMUX system consists of two components: the User Station that connects to a keyboard, monitor and mouse, and Host Adapter that connects to a server. Up to 64 Host Adapters can be daisy-chained together providing user access to up to 64 servers. The User Stations and Host Adapters can be located as far as 305 meters from each other via CAT5/5e/6 UTP cable.

- A single, inexpensive CAT5/5e/6 UTP cable replaces bulky KVM cables.
- Ideal for hazardous/unsecured environments. User station can be located up to 305 meters from servers.
- Easy to install and use with plug-and-play functionality.
- Provides a simple daisy-chained wiring configuration.
- Hot-swap components with no disruption of server operation.
- Crisp and clear 1024x768 video resolution at 305 meters; higher resolution supported at shorter distances up to 1920x1440 (see resolution chart on page 2).
- Keep-alive keyboard/mouse emulation for flawless operation.
- Interconnect multiple servers at different locations throughout a building. Servers can be the same or different platforms (PS/2 or USB).
- Dedicated microprocessors prevent computers from locking up, ensuring reliable control.
- OSD provides fine tuning for optimal video quality.
- Color-coded LEDs on both the local and remote units indicate power status and verify communication between the units.
- Automatically adjusts the video quality to compensate for varying lengths of CAT5/5e/6 cable.
- Configuration is saved and restored even if unit loses power.

## Configuration and Cable Illustration



### Specifications

#### User Station

##### Monitor

- Female 15-pin HD connector.
- A multiscan VGA monitor is required to display the different video outputs from different platforms.
- Maximum 1024x768 video resolution at 305 meters; higher resolutions supported at shorter distances up to 1920x1440.
- Supports Separate and Composite TTL level sync.
- Supports the DDC2B protocol.

##### Devices

- Two female USB Type A/two female 6-pin miniDIN connectors.
- Supports all standard PS/2 keyboards and most USB keyboards with Windows or SUN keyboard layout.
- Keyboards and mice are hot-pluggable.
- User keyboard and mouse must be of the same platform.
- Supports standard 2-button PS/2 mice, as well as other styles.
- USB SUN 3-button mice are supported.
- Supports most USB mice (up to 3 buttons).

##### Power

- 110 or 220 VAC at 50 or 60 Hz via AC adapter
- Power consumption: 10W

##### Regulatory Approvals

- CE, RoHS

#### Host Adapters

##### Hosts

- A maximum of 64 host computers can be daisy-chained together. One platform-specific (PS/2, SUN or USB) HA-x host adapter is required for each computer.

##### HA-PS2

- Compatible with any OS supporting PS/2, including RS6000, SGI and HP 9000.
- Male 15-pin HD/male 6-pin miniDIN connectors.

##### HA-USB

- Compatible with USB-enabled PC, SUN and MAC computers.
- Male 15-pin HD/male USB Type A connectors.

##### Power

- Power provided by the host computer.

##### Regulatory Approvals

- RoHS

### Built-In Control Methods

#### On Screen Display (OSD)

- Locate and select computers by name, comment, index or ID.
- Displays the platform, name, and power status of the daisy-chained computers.
- Allows color skew compensation and video compensation fine tuning for optimal video quality.
- OS and software-independent.

##### Security

- Add or remove authorized users.
- Set individual user names and passwords for each user.
- Administrator can enable or disable all security features and select which computers each user can access.

#### Front Panel Interface

- Locally change ports with front panel buttons.
- Provides eight "favorites" buttons allowing the user to program buttons to select frequently used computers.

#### Keyboard

- Use the keyboard to command the user station to select ports or configure the Scan delay.
- Scan Mode** automatically and sequentially displays the video from each powered-on computer.
- Command Mode** allows the user to give instructions to the switch through the keyboard.

#### Cables

- To daisy chain host adapters and user station, use CAT5/5e/6 UTP straight through cable for TIA/EIA-568B wiring with standard RJ45 connectors. Cables not included.

#### Distances and Resolutions for CAT5/CAT5e and CAT6 Cables

| Cable            | Distance (meters) | Maximum Resolution |
|------------------|-------------------|--------------------|
| CAT5/CAT5e (UTP) | 305               | 1024x768 at 60Hz   |
| CAT5/CAT5e (UTP) | 213               | 1280x1024 at 60Hz  |
| CAT5/CAT5e (UTP) | 152               | 1600x1200 at 60Hz  |
| CAT5/CAT5e (UTP) | 122               | 1920x1440 at 60Hz  |
| CAT6 (UTP)       | 244               | 1024x768 at 60Hz   |
| CAT6 (UTP)       | 183               | 1280x1024 at 60Hz  |
| CAT6 (UTP)       | 152               | 1600x1200 at 60Hz  |
| CAT6 (UTP)       | 107               | 1920x1440 at 60Hz  |

#### User Station and Host Adapter Models

| NTI Part #   | Platform         | Function     | Size WxDxH (mm)  |
|--------------|------------------|--------------|------------------|
| PRIMUMUX-UZR | PS/2, SUN or USB | User Station | 279.4x279.4x44.4 |
| HA-PS2       | PS/2             | Host Adapter | 53.3x94x25.4     |
| HA-USB       | USB              | Host Adapter | 53.3x94x25.4     |

