Orion

Multifunction DVI-D Switch

Fiber / CAT5 DVI KVM Switch

Supports DVI-D Video resolution up to 1920 x 1200 single-link

Configures easily for use as:
- KVM switch (Single/Dual/Quad-Head)
- Crosspoint switch

Access via OSD, serial, or the web

USB 2.0 device support

Plug-in modules for use with:
- CATx Cabling
- Singlemode Fiber cabling
- Multimode Fiber cabling

Supports USB keyboard and mouse

Features and Benefits

- Access the system using the OSD, serial interface or the graphical web interface
- Configurable for use as a single, dual, or quad-head KVM switch or a Crosspoint switch
- Up to 16 independent users
- Expandable to allow connection to 1024 computers
- KVM switch mode can be set to a special mode allowing the screen contents to be displayed on one or more additional screens
- In the KVM Switch Mode, CPU and CON Ports can be configured as USB2.0 Ports.
- The student/teacher configuration allows the screen contents to be switched to or from any connected workstation to another.
- Easy configuration and switching using the convenient on-screen display and menus
- Extends distances up to:
  - 400 feet (140 M) over CATx cable
  - 650 Feet (200M) over multimode fiber (62.5µm)
  - 1,300 feet (400M) over multimode fiber (50µm)
  - 33,000 feet (10KM) over singlemode fiber (9µm)
- Supports DVI-D video (1920 x 1200 @ 60Hz)
- Supports USB keyboard/Mouse
- 16 / 24 Bit auto-switching or 24 Bit color
- LED indicators for power and link status
- Modular design for easy configuration for fiber or CATx cabling
- Dual power supply option
- Optional serial and audio features

The Orion™ Advantage . . .

The Orion multifunction DVI KVM Switch is a unique product that offers two operating modes in a single product; a KVM Switch or a Crosspoint switch. Each operating mode can also be configured to support several different system arrangements. Selecting / switching channels can be done by keyboard commands, serial string commands, or over a graphical web interface.

The Orion interfaces to Rose Electronics DVI CATx or fiber extender family. These extenders offer single, dual, or quad head video, local access and serial/audio options. Each video source connects to a transmitter and each video display connects to a receiver. The transmitter and receiver model depends upon the application the Orion is set-up for.

As a DVI KVM switch, you can switch:
- 16 user stations to 32 computers (Single-head)
- 8 user stations to 16 computers (Dual-head)
- 4 user stations to 8 computers (Quad-head)

Connect other Orion units to the main unit and you can now have access up to 1024 computers from the user stations.

Select the Crosspoint switch operating mode and each of the input ports can be switched to an output port. This offers the flexibility of switching 1 to 32 DVI signals to 1 to 16 DVI monitors or 16 DVI signals to 32 DVI monitors.

ON-screen menus
For configuring CPUs

WWW.ROSE.COM
**Typical Applications**

KVM Switch  
(up to 16 user stations and 32 connected computers)

Crosspoint Switch  
(up to 32 signal sources to 16 monitors)

**Cables...** Cabling from the transmitters to Orion and from Orion to the receiver uses CATx solid wire (AWG24) cable or singlemode or multimode fiber cable. Cabling from the computers and the transmitter uses Rose Electronics DVI-CPU adapter cable. The KVM station’s keyboard, DVI monitor, and mouse connect directly to the receiver.

**Installation...** The installation of the Orion will vary depending upon the operating mode the unit will be configured for; KVM switch or Crosspoint switch. Cable connections will also vary depending on the configuration needed and operating mode.

**Operation...** Operating the Orion can be done by using the convenient on-screen display. The serial interface allows you to send switching commands to the unit using a RJ45 to DB9 cable connected to the unit and a computer’s serial port. Keyboard commands can also be used to place the unit in the command mode. In the command mode, you can to switch ports, sequence through all channels, and other functions.

**Keyboard:** The transmitter and receiver units have a USB Type A keyboard connector

**Monitor:** The monitor connector is a 24 pin DVI-I video connector. (30 pin connector is for serial and audio models only)

**Mouse:** The transmitter and receiver units have a USB Type A mouse connectors

**Serial / Audio option:** This option allows bi-directional stereo audio and full duplex serial data to be sent over the interface cable (CATx or Fiber).

**Part Number**  
ORS-TPyyXzz  CATx model  
ORS-FMyyXzz  Fiber model (multimode)  
ORS-FSyyXzz  Fiber model (Singlemode)  

yy = Console ports (08, 16)  
zz = CPU ports (08, 16, 24, 32)

**Specifications**

| Dimensions       | 19.0 W x 17.7 D x 3.35 H (in)  
|                  | 483 W x 450 D x 85 H (mm) |
| Weight           | 12.9 lbs (0.6 kg) |
| Resolution       | Up to 1920 x 1200 (Single-Link) |
| Connectors       | CPU / KVM LC Type fiber   
|                  | Network RJ45F   
|                  | RS232 RJ11F   
|                  | USB Type B   
|                  | Monitor24 or 30 pin DVI-I |
| Power            | 90 – 240 VAC, 47 – 63 Hz, 0.5A - +5VDC, 4000mA, auto switching |
| Switching        | KVM Switch – Keyboard, Serial interface   
|                  | Crosspoint Switch – Serial interface |
| Video            | DVI-D |
| Kbd / Mouse      | USB |
| Distance         | 400 feet (140 M) over CAT5 cable   
|                  | 650 Feet (200M) over multimode fiber (62.5µm)   
|                  | 1,300 feet (400M) over multimode fiber (50µm)   
|                  | 33,000 feet (10KM) over singlemode fiber (9µm) |
| **Environmental** | Oper. temp 41°F-113°F (5°C-45°C) |
|                  | Storage temp -13°F-140°F (-25°C-60°C) |
|                  | Humidity 80% non-condensing |
| Certificates     | CE |

(16 Fiber / 16 CATx inputs / 8 Fiber / 8 CATx outputs)