# **CrystalView**



### CAT5 KVM extender

Extend your KVM station up to 1,000 feet away from your computer using a CAT-5 cable

Up to 1280 x 1024 resolution

Dual version allows another KVM near computer

#### **Features and Benefits**

- Extend keyboard, monitor, and mouse (KVM) up to 1000 feet away with a single CAT 5 twisted pair cable
- Available in two models
  - Single One KVM to 1 CPU up to 1000' away Dual - Two KVM's to 1 CPU, one KVM near CPU and one KVM up to 1000 feet away
- Supports PS/2 keyboard and mouse and all PC video formats
- Video resolutions up to 1024x768 at 1000 feet and 1280x1024 at 300 feet
- Video equalization and gain controls to adjust brightness and clarity
- Keyboard and mouse emulation allows plug and play operation
- Compatible with Rose switches such as ServeView, UltraView, and UltraMatrix
- Connector types use standard VGA (HD15) and PS/2 (Minidin6)
- Compatible with Windows, NT, OS/2, UNIX, Linux, and other operating systems
- Additional dual version features
  - Fully automatic KVM sharing on first-come first-serve basis
  - Displays video to both KVM's simultaneously
  - Disable remote video command
- Rack mount kits available in 19". 23", and 24" sizes



You can optimize the clarity of your video with the front panel controls

## The CrystalView<sup>™</sup> Advantage...

CrystalView allows you to position your KVM station up to 1000 feet away from your computer using common twisted pair CAT 5 cable. Video equalization and gain controls adjust brightness and clarity to compensate for image quality loss over long cables.

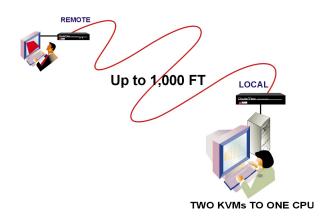
Access to your computers is made convenient in a variety of situations. You can remotely access computers in a data center from your desk. You can remove computers away from hazardous industrial environments or locations vulnerable to theft of hardware and data. You can reduce noise and heat, increase desk and floor space, or place computers together in one secure location, allowing convenient maintenance.

The CrystalView is available in two models, single and dual. The single model simply extends your KVM station from your computer. The dual version allows an additional KVM station, and PS/2 mouse next to the PC, providing operation from either of two locations.

> You'll think of many more applications for the CrystalView. Please call us today to discuss your application.



## **Typical Application**



**CrystalView models** There are two models of CrystalView. The single model allows you to extend one KVM station (keyboard, monitor, and PS/2 mouse) from your computer. The dual mode allows an additional KVM station next to the PC, providing operation from either of two locations.

**CrystalView basics** CrystalView consists of a local unit that attaches to your PC and a Remote unit that connects to your keyboard, monitor, and mouse. The Local and Remote units connect with industry standard CAT-5 shielded or unshielded twisted-pair cable using RJ45 connectors. This cable may be ordered from Rose Electronics in any length. The Remote unit transfers signals from your PC to the Local unit and to the keyboard, VGA monitor, and PS/2 mouse. Cables from each of these devices attach directly into connectors on the remote unit. The Remote unit uses a power transformer to power it and the keyboard and mouse.

The Remote unit also performs video equalization and compensation to enhance image quality loss over long cables. Jumpers on the remote circuit board set the correct level of equalization for your cable length. These jumpers need only to be set once. The front panel of the Remote unit has two knobs to adjust the brightness and sharpness.

#### **Extending a Rose switch**

In addition to extending the KVM station from a computer, you can also use the CrystalView with Rose switches. You can connect the CrystalView in one of three ways: between the computer and the switch, between the switch and the KVM, and between two switches. All of these applications are designed for trouble free usage.

**Keyboard & Mouse Emulation** CrystalView uses a microprocessor to emulate the keyboard and mouse. This means that a keyboard and or mouse do not have to be connected to the Remote Unit for your PC to boot. In fact the PC will boot with only the Local Unit connected. This feature ensures that your PC will always operate regardless of whether the Remote Unit is actually connected or powered. The remote keyboard and mouse may be plugged in and out at any time. In addition, the remote unit may be left permanently powered up when installed in its final location.

**Dual model features** The CrystalView dual model allows you to connect an additional keyboard, monitor, and mouse to your system through the Local Unit. The PC may now be operated from either of two locations though not simultaneously.

To activate a console, simply press any key on the keyboard. The other console cannot operate while the active console is in use. A lockout feature

**ROSE ELECTRONICS - US HEADQUARTERS** 10707 Stancliff Road **■** Houston, Texas 77099 **■** USA

Tel 281-933-7673 Tel 800-333-9343 Fax 281-933-0044 ROSE ELECTRONICS - EUROPEAN OFFICE

Bourne Works High Street Collingbourne Ducis Marlborough Wiltshire SN8 3EH UNITED KINGDOM Tel +44 (0) 126 485 0574 Fax +44 (0) 126 485 0529

ROSE ELECTRONICS - ASIA PACIFIC OFFICE PO Box 3184 ■ Robina T.C. ■ Queensland 4230 ■ AUSTRALIA Tel +617 5525 2714 ■ Fax +617 5525 2875 disables activity from a console until the other console's keyboard or mouse have not been used for more than 2 seconds.

The Private Mode feature will disable the remote keyboard, video and mouse. To enter Private Mode press Scroll Lock on the local keyboard. The Scroll Lock LED will now light on both local and remote keyboards. Press Scroll Lock again to re-enable the remote console. Pressing Scroll Lock twice on the local keyboard will re-initialize the local console.

**Going further** It is possible to run up to 1500 feet at a resolution of 640 x 480, but we cannot guarantee that this will work in every instance. You can also chain the units together to allow operation over longer distances. Unshielded twisted-pair (UTP) cable will give the best quality video over long distances because it has less capacitance per unit length. However, shielded twisted-pair (STP) may be a better choice in electrically noisy environments. Please call us for extending your KVM with fiber optic cable.

#### Part Numbers

CRK-1P	1 KVM TO 1 PC up to 1000 feet,	
	includes single local unit, remote unit,	
	and power transformer for remote unit	
CRK-2P	2 KVMs TO 1 PC up to 1000 feet,	
	includes dual local unit, remote unit,	
	and power transformer for remote unit	
CRV-R*	Remote Unit	
CRV-SL*	Single Local Unit	
CRV-DL*	Dual Local Unit	
* Units can be ordered separately, CRK units are complete kits		

#### **Specifications**

Dimensions	8.8" W x 3.4" D x 1.75" H
	22.4 x 8.6 x 4.3 cm.
Weight	Each unit: 2.5 lb.
Video bandwidth	Local: 150 Mhz; Remote: 300 Mhz
Over 300 feet UTP	95 Mhz
Resolution	To 350 feet: 1280x1024
	To 1,000 feet: 1024x768
Video compatibility	SVGA, VGA, XGA, RGB
Video levels	0.7V P-P
Video compensation	3-state continuously variable
Video coupling	DC
Video sync type	Separate/composite TTL level
	sync polarity is preserved
Connectors	PC: HD15 Male
	Monitor: HD15 Female
	Keyboard/mouse: 6-Pin Midi-DIN Female
Keyboard support	PC/AT, PS/2
Mouse support	Standard PS/2 two button,
	Microsoft Intellimouse,
	Logitech 3-button PS/2
Interconnect cable	CAT 5 UTP/STP EIA/TIA 568
	Wiring RJ45 Connectors
Local unit power	From PC
Remote unit power	9V unregulated, 1000 ma
Rack mount options	19", 23", or 24"
Chassis	Electro galvanized steel, painted
Environmental	0 to 55° C, 0% to 80% non-cond. rel. humidity



Rear view, of CrystalView dual local unit and remote unit

