INSTALLATION AND OPERATIONS SUPPLEMENT
LIMITED WARRANTY

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Limited Warranty service may be obtained by delivering this unit during the one-year warranty period to Rose Electronics or an authorized repair center providing a proof of purchase date. If this Unit is delivered by mail, you agree to insure the Unit or assume the risk of loss or damage in transit, to prepay shipping charges to the warranty service location, and to use the original shipping container or its equivalent. You must call for a return authorization number first. Under no circumstances will a unit be accepted without a return authorization number. Contact an authorized repair center or Rose Electronics for further information.

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Rose Electronics Part # MAN-MV1.3
Printed In the United States of America
This manual supplement explains the additional information needed to install and configure the MultiVideo products. Use this supplement in conjunction with the supplied manual. The supplied manual explains the additional features and the on-screen display capability of the MultiVideo.

**System overview**

The MultiVideo is designed to provide seamless, trouble-free switching from a single KVM station to any connected computer and display the multi-video output from the computer. You can switch to any of the connected computers by simple keyboard commands, the front panel – or + buttons, or from a computer terminal or standalone PC connected to the RS/232 serial port (not connected to a CPU port). With the OSD option, you can switch to a connected computer from an on-screen list of the connected computers.

Refer to the UltraView Pro manual for detailed switching instructions.

If your system demands are greater than a single unit can provide, the MultiVideo can be easily expanded to connect up to 64 computers by chaining units together with expansion cables. All MultiVideo models can easily be expanded by chaining the units together and configuring the system. Using the 2 port “M”-chassis, you can expand the system to 4 computers. The 4 port “B”-chassis can expand to 16 computers, and the 8 port “C”-chassis can expand to 64 computers.

**Features**

- Access up to 64 computers from one KVM station
- Optional On-Screen-Display
- Available in three different chassis sizes:
  - M - Chassis - 2 CPUs to 1 Kbd, 1 mouse, and 2 monitors
  - B - Chassis - 4 CPUs to 1 Kbd, 1 mouse, and 2 monitors
  - C - Chassis - 2 CPUs to 1 Kbd, 1 mouse, and 4 monitors
  - 4 CPUs to 1 Kbd, 1 mouse, and 4 monitors
  - 8 CPUs to 1 Kbd, 1 mouse, and 2 monitors

**VIDEO connection**

Video inputs 2-4 are DB25F connectors. A DB25 to HD15 cable is needed for each video output from a CPU.
MultiVideo models

Figure 1. MultiVideo models

<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>Power LED - Green when unit is on</td>
</tr>
<tr>
<td>LEDs</td>
<td>Indicator LEDs; Numbered pairs of LEDs shows status and power of</td>
</tr>
<tr>
<td></td>
<td>connected computers</td>
</tr>
<tr>
<td>- and +</td>
<td>- Connects to the previous CPU</td>
</tr>
<tr>
<td>Switches*</td>
<td>+ Connects to the next CPU</td>
</tr>
</tbody>
</table>

* The - and + switches are used when:
  - upgrading the firmware
  - resetting the unit to factory defaults
  - running diagnostics.

Table 1. Front panel
MultiVideo models (rear)

“M” Chassis (2U2V)

“B” Chassis (4U2V)

“C” Chassis (2U4V)

“C” Chassis (4U4V)

“C” Chassis (8U2V)

Figure 2. Rear panel

NOTE: DB9 (LINK) connector on Video expansion units only
Power connector not used on Video expansion unit.
<table>
<thead>
<tr>
<th>Label</th>
<th>Connector</th>
<th>Description</th>
</tr>
</thead>
</table>
| Power   | ![Power Connector](image) | “M” Chassis only  
DIN 5F  
Power adapter connector |
| None    | ![None Connector](image) | “B” and “C” Chassis only  
IEC320  
Power receptacle w/switch |
| Link    | ![Link Connector](image) | DB9F – Expansion connector  
(Video expansion models only) |
| X = CPU # | ![X = CPU Connector](image) | DB25F – CPU connectors |
| X = Video # | ![X = Video Connector](image) | DB25F – CPU monitor only connectors |
| KVM-1   | ![KVM-1 Connector](image) | DB25F - KVM connector. |
| MONITOR | ![MONITOR Connector](image) | DB25F - KVM additional monitor(s) |
| RS232   | ![RS232 Connector](image) | RJ12 6-conductor jack |

Table 2. Rear panel connectors

**Cables**

**Master to Slave unit cables**

In systems needing additional CPUs, the MultiVideo can be cascaded to other MultiVideos. To cascade a MultiVideo to other “Slave” units, you will need one DB25M to DB25M, switch-to-switch cable for each cascaded unit.

The MultiVideo can also be expanded to add additional Video ports. A DB9M to DB9M, switch-to-switch cable is used with the MultiVideo video expansion units.

(Rose Electronics switch-to-switch cable part number CAB-CXVSMmnn.)

(See Appendix B for cable part numbers)
Installation – Single unit

Figure 3. 4U2V Unit installation

Installation – Cascading units

Two additional “Slave” units can be added to this configuration.
Applications

Up to 8 Video expansion units

Up to 64 CPUs

VIDEO 1

VIDEO 8
Installation – Video Expansion system

The MultiVideo can be custom configured to expand the number of video ports. The example below can have up to 16 separate video sources and up to 8 video outputs. The KVM station can switch the video by simple keyboard commands, the push-button switches on the front panel, or from the on-screen display. Refer to the UltraView Pro manual for detailed switching instructions.

Figure 5. Custom 2x8 configuration
Appendix A. Parts and cables

<table>
<thead>
<tr>
<th>Part number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAB-D9MM005</td>
<td>DB9M to DB9M Link cable</td>
</tr>
<tr>
<td>CAB-CXVSMnnn</td>
<td>DB25M to DB25M Cascading cable</td>
</tr>
<tr>
<td>CAB-C1Y0000Cnnn</td>
<td>HD15M to DB25F Video only cable (CPU)</td>
</tr>
<tr>
<td>CAB-C1V0000Mnnn</td>
<td>HD15F to DB25F Video only cable (Monitor)</td>
</tr>
<tr>
<td>CAB-S13W3000Cnnn</td>
<td>CPU (SGI) 13W3 to DB25M video only cable</td>
</tr>
<tr>
<td>CAB-SC0000Cnnn</td>
<td>CPU (SUN) 13W3 to DB25M video only cable</td>
</tr>
<tr>
<td>CAB-SB0000Mnnn</td>
<td>SUN video 13W3 to DB25M video only cable</td>
</tr>
<tr>
<td>CAB-S13W30000Mnnn</td>
<td>SGI video 13W3 to DB25M video only cable</td>
</tr>
</tbody>
</table>

Appendix B. General Specifications

The MultiVideo part number is Mwx-yUzV
Where w = platform, E = (Multi-platform) PC, SUN, Apple, Unix
    P = (PC) PC and Unix computers
Where x = chassis size, M (mini), B (low), C (high)
Where y = number of CPUs (2, 4, or 8)
Where z = number of monitors (2 or 4)

The MultiVideo Video expansion model part numbers are:
MPC – 2U4V/MV (Master unit)
MPC – 2U4V/SL (Slave unit)

<table>
<thead>
<tr>
<th>Connectors</th>
<th>Power – IEC 320 standard receptacle (MPC-2U4V/MV model only)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CPU/KVM connector – DB25F</td>
</tr>
<tr>
<td></td>
<td>Video ports – DB25F</td>
</tr>
<tr>
<td></td>
<td>RS232 connector – RJ12, 6 conductor</td>
</tr>
<tr>
<td></td>
<td>Interconnect – DB9 (Custom configuration)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicators</th>
<th>1 Power LED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2-8 Select LEDs</td>
</tr>
<tr>
<td></td>
<td>2-8 Computer power LEDs</td>
</tr>
</tbody>
</table>
Appendix C. Rack mount

Rack Mount Instructions

The optional rack mount kit includes the following items:

- Two black anodized mounting brackets.
- Four 6 x 32 x 3/8" flat head mounting screws.
- Mounting instructions insert.

To rack mount your MultiVideo, attach the two rack mounting brackets to your unit with the short flange against the unit using the four screws provided. Secure the mounting brackets to the rack using the appropriate size bolts, nuts and lock washers. Using hardware other than that provided could cause damage to the electronics and/or result in loss of mounting integrity. Do not over tighten the screws used to mount the unit to the mounting brackets.

The following general guidelines should be observed when installing your unit into a rack.

a). The MultiVideo is designed to work in an ambient temperature of 0° C to 45° C (32° F – 113° F).

b). Do not block power supply vents or otherwise restrict airflow when rack-mounting this unit.

c). Mechanical loading of the rack should be considered to prevent instability and possible tipping over.

d). Tighten all connectors securely and provide adequate strain relief for all cables.

e). Provide a grounded power source to all units. Pay special attention to overall branch circuit load ratings before connecting equipment to this source. Overloaded circuits are potential fire hazards and can cause equipment failures or poor performance.