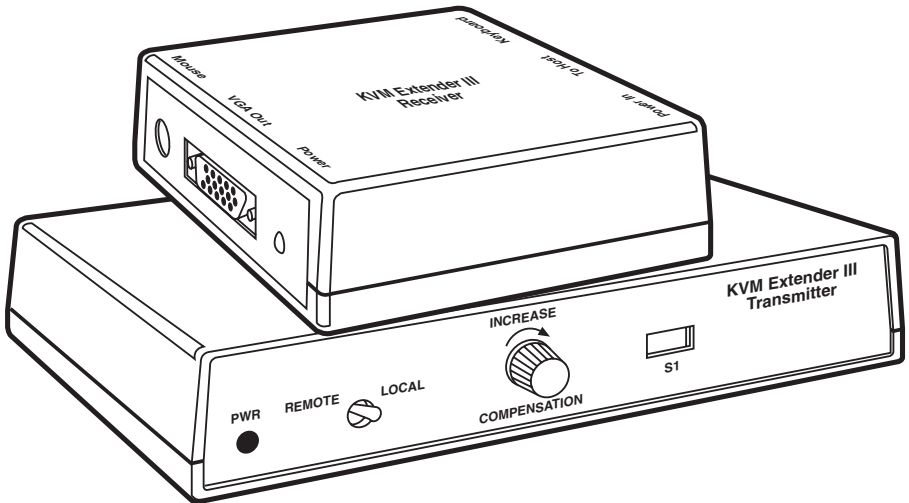




## KVM Extender III Transmitter and Receiver



**CUSTOMER  
SUPPORT  
INFORMATION**

Order **toll-free** in the U.S. 24 hours, 7 A.M. Monday to midnight Friday: **877-877-BBOX**  
FREE technical support, 24 hours a day, 7 days a week: Call **724-746-5500** or fax **724-746-0746**  
Mail order: **Black Box Corporation**, 1000 Park Drive, Lawrence, PA 15055-1018  
Web site: [www.blackbox.com](http://www.blackbox.com) • E-mail: [info@blackbox.com](mailto:info@blackbox.com)

**FEDERAL COMMUNICATIONS COMMISSION  
AND  
INDUSTRY CANADA  
RADIO FREQUENCY INTERFERENCE STATEMENTS**

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio communication. It has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when the equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user at his own expense will be required to take whatever measures may be necessary to correct the interference.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

*This digital apparatus does not exceed the Class A limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of Industry Canada.*

*Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de classe A prescrites dans le Règlement sur le brouillage radioélectrique publié par Industrie Canada.*

### NORMAS OFICIALES MEXICANAS (NOM) ELECTRICAL SAFETY STATEMENT

#### INSTRUCCIONES DE SEGURIDAD

1. Todas las instrucciones de seguridad y operación deberán ser leídas antes de que el aparato eléctrico sea operado.
2. Las instrucciones de seguridad y operación deberán ser guardadas para referencia futura.
3. Todas las advertencias en el aparato eléctrico y en sus instrucciones de operación deben ser respetadas.
4. Todas las instrucciones de operación y uso deben ser seguidas.
5. El aparato eléctrico no deberá ser usado cerca del agua—por ejemplo, cerca de la tina de baño, lavabo, sótano mojado o cerca de una alberca, etc..
6. El aparato eléctrico debe ser usado únicamente con carritos o pedestales que sean recomendados por el fabricante.
7. El aparato eléctrico debe ser montado a la pared o al techo sólo como sea recomendado por el fabricante.
8. Servicio—El usuario no debe intentar dar servicio al equipo eléctrico más allá a lo descrito en las instrucciones de operación. Todo otro servicio deberá ser referido a personal de servicio calificado.
9. El aparato eléctrico debe ser situado de tal manera que su posición no interfiera su uso. La colocación del aparato eléctrico sobre una cama, sofá, alfombra o superficie similar puede bloquea la ventilación, no se debe colocar en libreros o gabinetes que impidan el flujo de aire por los orificios de ventilación.
10. El equipo eléctrico deber ser situado fuera del alcance de fuentes de calor como radiadores, registros de calor, estufas u otros aparatos (incluyendo amplificadores) que producen calor.

11. El aparato eléctrico deberá ser conectado a una fuente de poder sólo del tipo descrito en el instructivo de operación, o como se indique en el aparato.
12. Precaución debe ser tomada de tal manera que la tierra física y la polarización del equipo no sea eliminada.
13. Los cables de la fuente de poder deben ser guiados de tal manera que no sean pisados ni pellizcados por objetos colocados sobre o contra ellos, poniendo particular atención a los contactos y receptáculos donde salen del aparato.
14. El equipo eléctrico debe ser limpiado únicamente de acuerdo a las recomendaciones del fabricante.
15. En caso de existir, una antena externa deberá ser localizada lejos de las líneas de energía.
16. El cable de corriente deberá ser desconectado del cuando el equipo no sea usado por un largo periodo de tiempo.
17. Cuidado debe ser tomado de tal manera que objetos líquidos no sean derramados sobre la cubierta u orificios de ventilación.
18. Servicio por personal calificado deberá ser provisto cuando:
  - A: El cable de poder o el contacto ha sido dañado; u
  - B: Objetos han caído o líquido ha sido derramado dentro del aparato; o
  - C: El aparato ha sido expuesto a la lluvia; o
  - D: El aparato parece no operar normalmente o muestra un cambio en su desempeño; o
  - E: El aparato ha sido tirado o su cubierta ha sido dañada.

### TRADEMARKS

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## **IMPORTANT!**

### Using the AC072A-R2 with Windows and Windows NT

This product has been upgraded for compatibility with Windows NT. DIP-switch position 8 controls this feature.

DIP-switch position 8 should be placed in the On (Down) position when using the product with Windows NT. This switch should be left in the Off (Up) position when used with other operating systems.

Try moving this switch to the Off (Up) position if you encounter erratic operation of the mouse after both the local and remote mice have been initialized.

DIP-switch position 8 was formerly used to connect pin 15 of the local VGA connector to ground. Pin 15 of this connector is unused and is now unconnected.

# 1. Specifications

## *Host Module:*

**Connectors** — Video input: DB15HD male;  
PC keyboard and mouse input: 6-pin mini DIN female;  
Video output: DB15HD female (local monitor);  
Local keyboard and mouse output: 6-pin mini DIN female;  
Extension input/output to Remote Module: DB15 female

## *Remote Module:*

**Connectors** — Video output: DB15HD female;  
Keyboard and mouse input/output: 6-pin mini DIN female;  
Extension input/output from Host Module: DB15 male

**Maximum Resolution Supported** — 1024 x 768 maximum for VGA, SVGA, and XGA

**Distance Limits (Extension)** — Up to 700 ft. (213.4 m) @ 640 x 480 pixels;  
Up to 600 ft. (182.9 m) @ 800 x 600 pixels;  
Up to 500 ft. (152.4 m) @ 1024 x 768 pixels

**Power** — AC072A-R2: 5 VDC/600 mA (part number PS112);  
AC072AE-R2: 5 VDC, 1 amp (part number PS112E)

**Size** — Host Module: 1.5"H x 8"W x 4.25"D (3.8 x 20.3 x 10.8 cm);  
Remote Module: 1.5"H x 5"W x 5"D (3.8 x 12.7 x 12.7 cm)

**Weight** — Host Module: 0.87 lb. (0.39 kg);  
Remote Module: 0.38 lb. (0.17 kg)

## 2. Introduction

Extend the keyboard, video, and PS/2® mouse up to 700 feet (213 m) from the PC with the KVM Extender III. A local user can view the display simultaneously and operate a second keyboard and mouse non-simultaneously. A keyboard emulator is built into the Host Module to maintain keyboard signals to the PC even when the remote keyboard is disconnected.

The Extender package contains:

- (1) KVM Extender III Host Module,
- (1) KVM Remote Module,
- (1) 5-ft. (1.5-m) VGA input cable,
- (2) 5-ft. (1.5-m) Mini DIN 6 male/male cable,
- (2) 5-VDC power supplies, and
- This User's Manual.

You will also need Remote Module extension cables (ordered separately) specially designed for use with this product (part number EHM027).



## 3. Installation

### 3.1 The Installation Procedure

1. Place the Extender within 5 ft. (1.5 m) of the computer.
2. Connect the 5-ft. VGA input cable (included) from the VGA output of the computer to the connector marked “VGA IN.”
3. Connect the Mini DIN cables to the connectors marked “PC Mouse” and “PC Keyboard.” Connect the local monitor, if any, to “VGA OUT.”
4. Connect the local keyboard and mouse, if used, to the Host.
5. Connect the extension cable. Refer to **Table 3.1** on the next page for maximum distance.
6. Plug the remote monitor into the Remote Module port marked “VGA OUT.”
7. Plug the remote keyboard and mouse into the Remote Module ports marked for them.
8. Plug the DB15 female connector into the Remote Module.
9. The unit is factory set for VGA color displays. If you are using VGA monochrome, or XGA® or IBM® 8514/A type displays, set the DIP switches on the Host Module according to **Table 3-2** on the next page.
10. Plug the included 5-VDC power supplies into the Host and Remote Modules.
11. Power on the monitor(s) and the PC.
12. Use the front-panel control to adjust for the length of cable you are using. The control is continuously variable and will hold your settings after adjustment.
13. Use the monitor’s size, position, and brightness controls as required to finish the installation.

Table 3-1. Distance Limits

Display Resolution	Maximum Cable Length
640 x 480	700 feet (213.4 m)
800 x 600	600 feet (182.9 m)
1024 x 768	500 feet (152.4 m)

### 3.2 ID Bits

Some computers detect the type of monitor connected to the system by reading the monitor's ID bits and use this information to configure the operating parameters of the video port. Configure the Extender for these computers by selecting the appropriate DIP switches. Set the individual DIP switch positions to ON (Up) according to **Table 3-2**.

Table 3-2. DIP-Switch Settings

Monitor Type	Switch Settings
VGA Monochrome	6
VGA Color	5
XGA, 8514/A	4 + 5
Local Monitor not used	1 + 2 + 3 + above

## 4. Troubleshooting

**Problem:** Power LEDs glow, but there's no video.

**Solution:** Disconnect all video cables. Is the LED off? Check AC power at the outlet. Check the power supply plug for proper seating.

**Problem:** Monitor(s) dim.

**Solution:** Make sure DIP switches 1, 2, and 3 are OFF (Up).

**Problem:** Output is not clear or some colors are blurred.

**Solution:** Change the video software driver. Use another driver that supports the resolution you are using. (Under Windows® this can be changed using Windows Setup in the Main Menu. Select "Options" and then "Change System Settings.")

**Problem:** Brightness, size, or position are different from original settings.

**Solution:** Use the monitor's brightness, size, and/or position controls to adjust the display.



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