

## Regulatory information

### EMC directive 2004/108/IEC

This equipment has been tested and found to comply with the limits for a class A computing device in accordance with the specifications in the European standard EN55022. These limits are designed to provide reasonable protection against harmful interference. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions may cause harmful interference to radio or television reception. However, there is no guarantee that harmful interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment on and off, the user is encouraged to correct the interference with one or more of the following measures: (a) Reorient or relocate the receiving antenna. (b) Increase the separation between the equipment and the receiver. (c) Connect the equipment to an outlet on a circuit different from that to which the remote is connected. (d) Consult the supplier or an experienced radio/TV technician for help.

### FCC compliance statement (United States)

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 communications. 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 may 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 manufacturer could void the user's authority to operate the equipment.

## Safety information

- For use in dry, oil free indoor environments.
- Ensure that the twisted pair interconnect cable is installed in compliance with all applicable wiring regulations.
- Do not connect the interconnect cable to any other equipment, particularly network or telecommunications equipment.
- Do not attempt to service the units yourself.



### Customer Support Information

Order toll-free in the U.S.: Call 877-877-BBOX (outside U.S. call 724-746-5500)  
FREE technical support 24 hours a day, 7 days a week: Call 724-746-5500 or fax 724-746-0746  
Mailing address: Black Box Corporation, 1000 Park Drive, Lawrence, PA 15055-1018  
Web site: www.blackbox.com • E-mail: info@blackbox.com



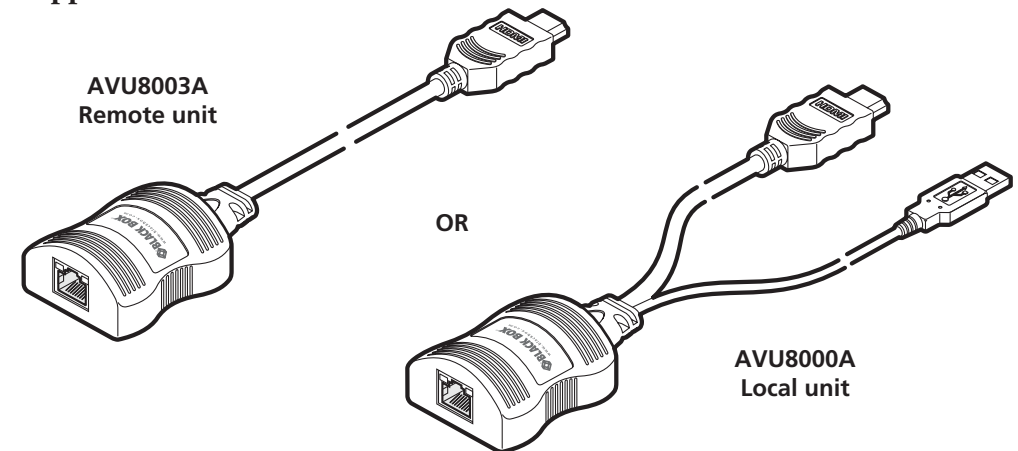
# AVU8000A / AVU8003A

## User Guide

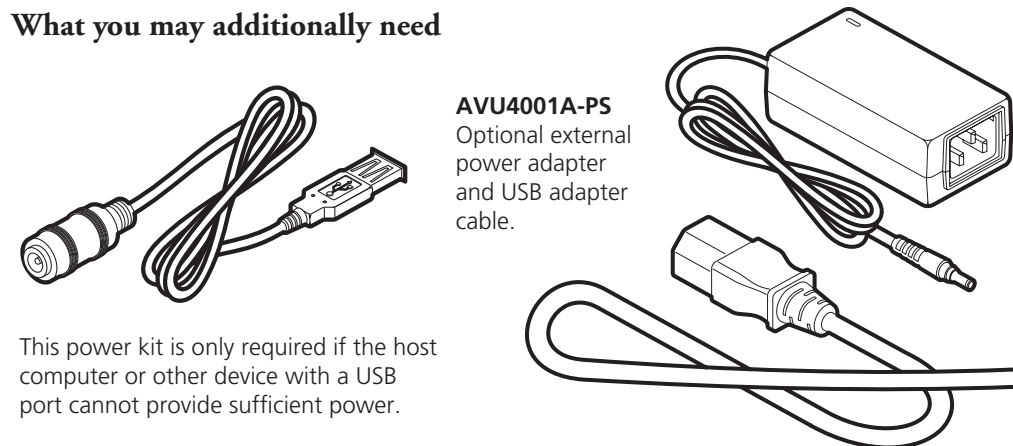
## Your Black Box video extender(s)

The Black Box AVU8000A (local) and AVU8003A (remote) units allows you to extend HDMI digital video over a maximum of 164 feet (50 meters) of twisted pair cable with the minimum of infrastructure and fuss. It is simply powered via USB from the local end, so that no additional power supply is required at the remote, simultaneously saving time and space as well as making installation very straightforward.

### Supplied item



### What you may additionally need

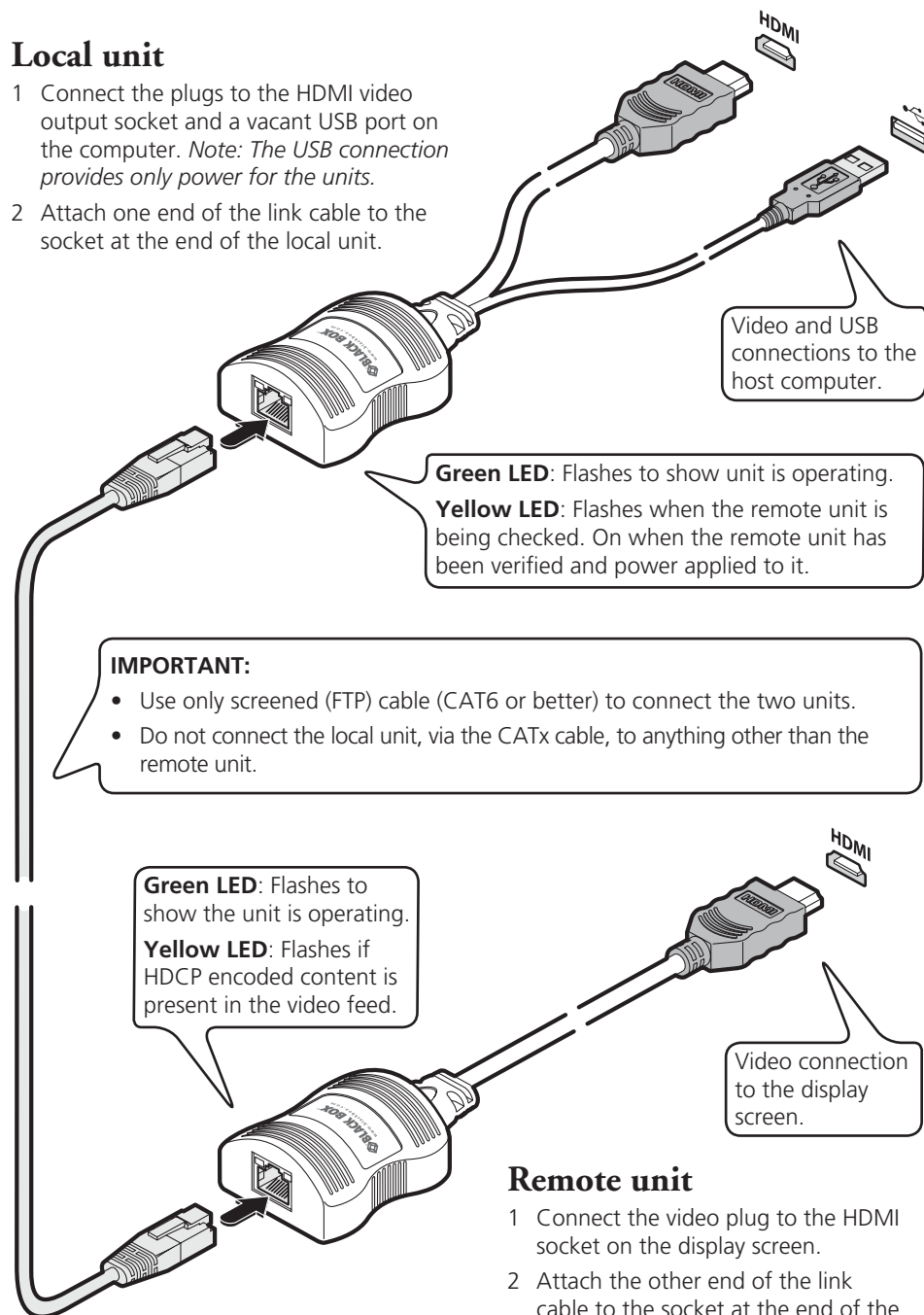


This power kit is only required if the host computer or other device with a USB port cannot provide sufficient power.

# Connecting your AVU8000A/AVU8003A units

## Local unit

- 1 Connect the plugs to the HDMI video output socket and a vacant USB port on the computer. *Note: The USB connection provides only power for the units.*
- 2 Attach one end of the link cable to the socket at the end of the local unit.



## Remote unit

- 1 Connect the video plug to the HDMI socket on the display screen.
- 2 Attach the other end of the link cable to the socket at the end of the remote unit.

## Power control

**IMPORTANT:** Do not connect the local unit, via the CATx cable, to anything other than the remote unit.

Low voltage power for the remote unit is fed via the same link cable as is used for the video. The local unit always performs a check before applying power along the link cable.

The local unit will disable the power if:

- The cable is disconnected, or
- Line power is overloaded.

## Cable considerations

To ensure correct operation, Category 6 (or better) shielded twisted pair cable, no longer than 164 feet (50 meters) in length, must be used to connect the local and remote units. The use of shielded cables is important to maintain compliance with radio frequency energy emission regulations and ensure a suitably high level of immunity to electromagnetic disturbances.

For best results, we recommend using S/FTP CAT7 cable.

Patch panels or cable couplers should only be used close to the local unit, connected by CAT7 patch cables of no more than 6.5 feet (2 meters) in length. The overall cable run must be reduced by 16 feet (5 meters) if a coupling is used.

## HDMI operation

The AVU8000A/AVU8003A units can support HDMI video (including 480p, 720p and 1080p) and audio up to a maximum 165MHz clock rate.

High-bandwidth Digital Content Protection (HDCP) is supported, however, the Consumer Electronics Control (CEC) scheme is not.

## Video display (EDID) information

Extended Display Identification Data (or EDID) is an industry standard scheme which allows video displays to declare their capabilities to the computer's video adapter circuitry, allowing the latter to optimize their outputs accordingly. Since the widespread adoption of the scheme, video adapters have become increasingly dependent on receiving relevant EDID information during start-up, before they will output anything more than a rudimentary video signal.

Each time that the AVU8000A/AVU8003A units are powered on, the remote unit attempts to read the EDID information from the connected video display. The information is then transferred to the local unit and made available to the computer's video adapter when required.