BLACK BOX®
NETWORK SERVICES

Model ACL201A

20 in x 1 out PC (VGA) Video Switch

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FEDERAL COMMUNICATIONS COMMISSION

RADIO FREQUENCY INTERFERENCE STATEMENT

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 designed and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart B of Part 15 of FCC rules, which are intended 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 or her 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 the Canadian Department of Communications.

EUROPEAN UNION DECLARATION OF CONFORMITY

This product complies with the requirements of the European EMC directive 89/336/EEC

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Contents

1. Introduction

1.1 Model ACL201A

The Model ACL201A is a 20 in x 1 out video switch that allows a monitor to display any of the 20 inputs.
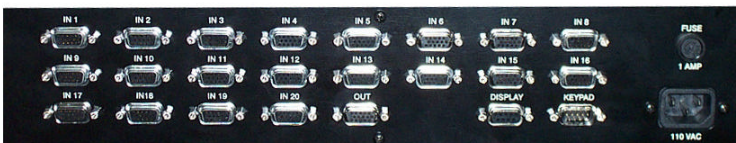
The inputs can be RGBHV (e.g. VGA from a PC), RGBS, or RGsB with resolutions to 1600x1200 pixels, all inputs are terminated and buffered using 250 MHz DC-coupled video amplifiers for a sharp and perfect reproduction at each output.

The ACL201A's output can drive cables in excess of 300 feet. Each channel provides a user selectable compensation for long cable runs. The compensation should be applied to those inputs where the total length of the cable from that particular input to the monitor exceeds 150 feet.

An RS232 "Serial Port" is provided on the unit to control the selection for the output. A Serial Keypad is supplied with each unit. The ACL201A has a built-in universal power supply and requires standard 110/220 v AC, 50 or 60 Hz for operation. A power cord is furnished with the unit.

The ACL201A employs HDD15 female connectors for all video inputs and outputs (with standard VGA pinout). All cable connections are located on the rear of the unit. The front panel provides the on/off power switch and individual indication of the channels selected for each output. The brightness of the Channel LED's on the front panel is an indication of the "compensation" setting for that channel.

The ACL201A's output can also be blanked.

1.2 Features

- 20 inputs to 1 output

- Can drive long cables

- Output can also be blanked

- Amplifies the signal for clean and crisp transmission

- Handles resolutions up to 1600x1200 at any refresh rate

- Rugged, Reliable, Compact & Rack-mountable size

- Universal Power Supply

- Perfect for Remote Monitoring, Video Staging, Conference Rooms, Classrooms and more

2. Installation

1. Make sure the unit is powered off.
2. Connect your video sources to the input connectors (labeled IN 1 through 20)
3. Connect the Monitor or projector to the connector (labeled OUTPUT).
4. Connect the keypad to the RS232 port on the device (labeled KEYPAD).
5. Connect and power up the optional external numeric display to connector labeled DISPLAY.
6. Plug the power cord to the unit and turn the unit on using the front panel switch.

Shown with Optional Remote Channel Display

3. Configuration & Operation

Upon power-up, the device performs a self-test and selects the previously displayed input (also recalls the compensation level that was used.

Select input channels by pressing the following key sequence on the keypad:
Single or Double digit input channel number, followed by ENTER

For example, to select input #12 punch: [1][2][Enter]

In entering the keys, you have 5 seconds to hit enter or the operation is automatically cancelled. So if you stop for more than 5 seconds, the keypad automatically resets itself. Also, if you press a key that is unexpected (such as Esc or *) or if the channel is out of range, it will be ignored and the keypad resets once again.

Special Characters:

➢ To blank the output signal altogether, enter zero for input.
i.e.:   [0][Enter]

➢ To apply compensation to any input press: **+**
This clears up the display when long cables are used. The LED on the front panel will be brightened.

➢ To turn compensation off for a particular input press: **-**
This causes the signal gain to go down, and the LED on the front panel will be dimmed.

Note

The unit stores the compensation status of the outputs after power off

4. Troubleshooting

If you have a stable image but it looks somewhat blurry (object or character edges are not sharp), try to adjust the compensation first. Press + or – on the Keypad to apply to remove the compensation.

Contacting Black Box

If you determine that your Switch is malfunctioning, do not attempt to repair the unit. Contact Black Box Tech. Support at 724-746-5500.

Before you do, make a record of the history of the problem. We will be able to provide more efficient and accurate assistance if you have a complete description.

Shipping and Packaging

If you need to transport or ship your extender:

- Package it carefully. We recommend that you use the original container.
- Before you ship the units back to Black Box Corporation for repair or return, contact us to get a Return Authorization (RA) number.

5. Specifications

Video Types   VGA through UXGA, RGB , YPbPr , or YCbCr

Resolution   Up to 1600 x 1200 at up to 85 Hz

Bandwidth   DC to 250 MHz

Max. Distance Up to 300 ft. (90 m)

Connectors   HD15 female for video in and out

Interfaces   Standard Analog VGA; RS-232

Max. Altitude 10,000 ft. (3048 m)

Temperature Operating: 32 to 122°F (0 to 50°C);
Storage: –40 to +185°F (–40 to +85°C)

Humidity   Up to 95% non-condensing

Enclosure   Steel

MTBF   65,000 hours (calculated estimate)

Power   110 to 240 vAC, 50 to 60 Hz

Size   15.5 " wide x 3.19" high x 10" deep

Weight   15 lbs. (shipping)

NOTES

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