AC334A
Specifications:

**System Hardware**

**Required:** Computer of one of these types:
IBM AT, PS/2, or compatible with VGA output, or Apple Macintosh or compatible supporting standard Macintosh display mode (640 x 480, 31.5 or 35 KHz); TV set with one of these inputs: composite video, S-video, analog RGBS video, or (with modulator) RF.

**System Software**

**Required:** Microsoft serial mouse driver or included utility (IBM compatibles only)

**Interfaces:**

Input: VGA or Macintosh video
Output: Composite video, S-video, RGBS video, and VGA or Macintosh video.

**Resolutions supported:**

VGA: Up to 1024 x 768 (46.4KHz hsync/60 Hz vsync), 800 x 600 (35.2KHz hsync/56 Hz vsync) or 640 x 480 (37.9KHz hsync/72 Hz vsync);
MAC: 640 x 480 (35 KHz hsync 66.6 Hz vsync)

**Color:**

Full color support, including 24-bit (true color) input.

**Horizontal sync supported:**

24 to 38 KHz (autosensing)

**Vertical sync (Refresh rates) supported:**

56 to 72 KHz

**Maximum Distance:** 50 ft. (15.2 m) to any input or output device.

**User Controls:**

Top-mounted and remote controls for: Freeze, Zoom, Width (Overscan/Underscan), PAL/NTSC, sharpness, and Power (On/Off)

**Indicators:**

Top-mounted: Power LED, Zoom/Freeze LED, PAL/NTSC LED

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Connectors: (8) Side-mounted:
(1) DB15HD female for computer video (IN/OUT)
(1) RCA jack for composite video output;
(1) 4-pin mini-DIN for S-video output;
(1) 9-pin mini-DIN female for RGBS video;
(1) DB15HD female for computer video (IN/OUT);
(1) RCA jack for composite video output;
(1) 4-pin mini-Din for S-video;
(1) 9-pin mini-Din female for RGBS video output;
(1) barrel jack for power output;
(1) 6-pin mini-Din female for remote mouse
(1) MIC input
(1) Audio output

Power: From wallmount power supply:
Input: 100 to 240 VAC; 47 to 63 Hz
Output: 7.5 VDC at 1.2 A

Introduction

General Overview:
The VGA-Video Ultimate is a portable high-resolution computer-to-TV video converter. It transfers images from your computer for display on a TV or video projector of any size or for recording on a VCR of any type (VHS, VHS-C, 8mm or Beta). The Ultimate is completely hardware based - you don't have to run any computer software to make the converter work (A driver is required for the remote mouse function). Its portability, easy installation and use, features and high-resolution display make it perfect for presentations, training, kiosks, education, and a host of other applications.
**Features:**

- Latest generation filter technology brings you clear, 100% flicker-free video.
- Pure hardware design.
- With "Automatic Mode Detection", the Ultimate supports horizontal synchronization (refresh) rates from 24 to 38 KHz (autosensing) and vertical synchronization (refresh) rates from 56 to 72 KHz (autosensing for all colors).
- Supports NTSC and PAL (switch-selectable) video for the TV output.
- Zoom-by-2 function allows areas of the screen to be enlarged for special emphasis.
- One touch freeze screen function.
- MIC IN and AUDIO OUT allows for microphone use to add narration to presentations.
- Brightness and sharpness control.
- Adjustable vertical and horizontal position of image.
- Overscan and underscan control.
- Three simultaneous video output ports (Composite, S-Video and RGBS (SCART))

**Installation:**

**System Requirements**

- IBM PC Compatible 386, 486, Pentium or faster with VGA/SVGA/XGA Display card.
- Floppy-disk drive.
- Hard Disk.
- Windows 95 or later (for remote mouse only).
- VGA monitor.
- TV, VCR, or large-screen display with composite video or S-Video input.
- TV, VCR or large-screen display with audio input or Audio Auxillary input on any mixer or PA system.
- Microsoft Serial mouse capability (for remote mouse only).

**NOTE:**
The VGA/Video Ultimate should support any VGA computer that has a vertical display frequency between 56 and 72 Hz, and horizontal display frequency between 31.5 and 38 KHz. However, because video circuitry connectors and computer display cards differ widely among manufacturers and devices, we cannot guarantee that the Ultimate will function correctly in any non-standard application.
Installation Procedures:

VGA Systems
Take these steps to install your Ultimate:

1. Turn off your computer.
2. Plug the supplied VGA Y-cable (the end with the Y-connection) into your computer's VGA output and the other end into the VGA IN/OUT of the Ultimate.
3. If using a local monitor, plug the monitors VGA cable into the short end of the Y-Cable.
4. If using the composite video output, plug one end of the included composite video cable into the Ultimate's Video Out and the other end into the Video In on your TV, VCR, etc.
   a. If using the higher quality S-Video video output, plug one end of the included S-Video video cable into the Ultimate's S-Video Out and the other end into the S-Video In on your TV, VCR, etc.
   b. To use the RGB output, switch the RGB - Video switch to the RGB setting. If using the RGBS video output, plug the DB9 end of an RGBS cable (not included) into the Ultimate's RGB Video Out. If the other end of this cable is a SCART connector, plug it into the SCART connector of your TV, VCR, etc. If, however, the other end of this cable has four BNC connectors, plug them into the RED, GREEN, BLUE, and SYNC connectors of the RGBS Video In port of your TV, VCR, etc. If you need an RGBS cable, contact BLACK BOX for technical assistance.
5. Plug the output cord of the Ultimate's power supply into the DC IN jack on the Ultimate. Plug the power supply into a working electrical outlet.
6. If using a local monitor with the Ultimate, plug it into a working electrical outlet and turn it on.
7. Plug the Serial Mouse cable into the MOUSE port of the Ultimate, and plug the other end into the serial port on your computer. (Use the DB9 to DB25 adapter if necessary).
8. Turn on the Ultimate.
9. Turn on your computer.

NOTE:
Some portable computers require that the VGA output be activated for the external VGA port to function. If the Ultimate is connected correctly and you have picture on the receiving TV or projector, this may be the cause. Consult the User's Guide that came with your computer if you're unsure how this is accomplished. The portable computer's LCD display may need to be deactivated with this procedure.
10. Insert (2) AAA batteries into the remote control.
11. Turn on your TV, VCR, etc. If necessary, select Video IN (or S-Video In or RGBS Video IN) as the receiving device’s video input source. If you’re unsure how this is done, consult the Owner’s Manual for the receiving device.
12. Insert the “VGA-Video Ultimate” installation disk.
13. Run "SETUP".
14. Choose COM port setting that corresponds with the COM port to which you connected the mouse cable.
15. Installation sets up the Folder "Ultimate" in the Programs Menu. Run the program any time you wish to use the Remote Mouse function.

NOTE:
The power ON/OFF switch toggles the power for the Ultimate, but the remote mouse will continue to function if connected with the power off. The ZOOM LED will blink as long as the power supply is plugged in.

Operation:
While plugged in and securely connected with the power on, the Ultimate performs signal conversion more or less automatically. For this reason, operating Ultimate consists primarily of using its controls to fine-tune your application. The controls are detailed below:

• **HORIZONTAL/VERTICAL position adjustments**
  Indicated by arrows on the converter and on the remote.

• **FREEZE button**
  Toggle between frozen and normal display

• **ZOOM button**
  Toggle between Zoom and Normal display. The buttons on the remote labeled with diagonal arrows represent the Area Zoom, and when pressed zooms the corresponding quadrant of the TV display.

NOTE:
When the image has been enlarged using the ZOOM controls, the V.POS, H.POS and FREEZE functions will operate. The SIZE control will not operate.
• **SIZE button**
  This button is used to control the size of the output on TV.

• **NTSC/PAL button**
  This switch selects the output video standard. Normal selections are NTSC (common in North America and Japan) and PAL (common in Europe). Setting this switch to the wrong mode will result in a loss of color and/or vertical sync.

• **RGB - VIDEO Switch**
  This switch enables the various outputs. On VIDEO, the composite and S-video outputs function simultaneously. On RGB, only the RGB output functions.

• **RESET button**
  This button resets the TV display position to the default.

• **Power button**
  Toggle between power on & off. But even when powered off, the wireless mouse is still functional & the ZOOM LED blinks, as long as a power adapter is connected.