SPECIFICATIONS

System Hardware Required: Computer of one of these types:
- IBM AT, PS/2, or compatible with VGA output.
- TV set with one of these inputs:
  - composite video
  - S-video
  - or (with modulator) RF
- Video source with composite or S-video output (required for video overlay).

Compliance: FCC Class B, DOC Class/MDC Class B

Interfaces: Input: VGA, Composite video, S-video
Output: Composite Video, S-video, VGA and RGB SCART

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

Resolutions Supported: Up to 1600 x 1200 (60Hz), 1280 x 1024 (60Hz), 1280 x 960 (60Hz), 1152 x 864 (60, 70, 72, 75Hz), 1024 x 768 (60, 70, 72, 75Hz), 800 x 600 (56, 60, 70, 72, 75, 85, 100, 120Hz), 720 x 400 (70Hz)

User Controls: Top-mount and remote controls for:
- Menu, Zoom, Video Standard, Video Source, Genlock, Power (ON/OFF)
- 30 button remote control.

Connectors: (7) 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 output
- (1) RCA jack for composite video input
- (1) 4-pin mini-DIN for S-video input
- (1) barrel jack for power output

Power: 5V @400 mA, 2 watts power consumption

INTRODUCTION

General Overview

The VGA-Video Ultimate Plus is a portable high-resolution computer-to-TV video converter with video overlay. It transfers images from your computer for display on a TV or video projector of any size or for recording on a VCR or any type (VHS, VHS-C, 8mm, or Beta), or overlays images from your computer onto existing video for display on a TV or video projector. The Ultimate Plus is completely hardware based - you don't have to run any computer software to make the converter work. 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.
- Composite and S-Video inputs for video overlay.
- Supports NTSC, NTSC-EIAJ, PAL-M, PAL-N, PAL, and PAL Combination N (switch selectable) video for TV output.
- Area Zoom function allows areas of the computer screen to be enlarged for special emphasis.
- One touch freeze function.
- Brightness, Contrast, Color, and Hue control.
- Adjustable vertical and horizontal position and scaling controls.
- Three video output ports (Composite, S-video and RGBs (SCART).
- On-screen display.

INSTALLATION

System Requirements

- IBM PC compatible 386, 486, Pentium or faster or Macintosh (including iMAC) with HD15 VGA standard display port.
- VGA Monitor (optional for simultaneous dual-display).
- TV, VCR, or large-screen display with composite or S-video input.
- VCR, video camera, DVD, or other video source for video overlay.
Installation Procedures

Take these steps to install your Ultimate Plus:

1. Turn off your computer
2. Plug the supplied VGA pass-through cable (the T-end labeled “PC”) into your computer's VGA output and the end labeled "SCAN CNVTR" into the VGA IN/OUT port on the Ultimate Plus.
3. If using a local monitor, plug the monitor's VGA cable into the VGA pass-through cable port labeled "Monitor".
4A. If using the composite video output, plug one end of the included composite video cable into the Ultimate Plus’s VIDEO OUT and the other end into the VIDEO IN on your TV, VCR, etc.
4B. If using the higher quality S-video output, plug one end of the included S-video cable into the Ultimate Plus's S-VIDEO OUT and the other end into the S-VIDEO IN on your TV, VCR, etc.
4C. If using the RGBs video output, plug the DB9 end of an RGBs cable (not included) into the Ultimate Plus’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. On the Ultimate Plus, toggle the RGB-Video switch to RGB to enable the RGBs output.
5. Choose one of the power cables (AT style, PS/2 style or USB) and connect it into either the corresponding keyboard port or USB port and into the DC IN port of the Ultimate Plus.

**NOTE:** Never connect or disconnect the power cable while the computer is on.

6. Connect a composite video and/or an S-Video source (from a DVD, VCR, Video camera, etc.) from the video out of the source to the corresponding video input on the Ultimate Plus. Toggle between the composite and the S-Video sources via the VIDEO SOURCE button on the remote.
7. If using a local monitor with the Ultimate Plus, plug it into a working electrical outlet and turn it on.
8. Turn on the Ultimate Plus.
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 Plus is connected correctly and you have no picture receiving on the 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 de-activated 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.

OPERATION

While plugged in and securely connected with the power on, the Ultimate Plus performs signal conversion more or less automatically. For this reason, operating Ultimate Plus 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** (remote only)
Toggle between frozen and normal display.

**ZOOM button**
Toggle between Zoom and Normal display. Available as AREA ZOOM on the remote.

**GENLOCK**
Toggles between VGA display only, VGA and video mix, and VGA with video overlay.

**VIDEO STANDARD**
Switches between video system standards.

**PC/VIDEO**
Toggles between displaying PC only and video source only.

**POWER BUTTON**
Toggle between power on & power off.

**VIDEO SOURCE**
Toggles between the composite video and the s-video sources.

**CONTRAST, COLOR, HUE, BRIGHTNESS, SHARPNESS**
These five buttons adjust the aspects of the video display. Similar adjustments are available in most TV's. Use the adjustments on the remote control when you only want the settings to apply when using the Ultimate Plus.

**CHAR. DISPLAY** (remote only)
Toggles the on-screen displays on & off.

**LUMI/COLOR KEY** (remote only)
Provides ability to customize and set the color that is removed during overlay to provide transparency. The default settings of zero are assigned to provide overlay using black as the chroma key. Use the Color Key in conjunction with the Mix Ratio to completely remove the desired color for overlay.

**MIX RATIO**
Increase or decrease the mix ratio between the video and the VGA signals in overlay mode.