VGA to PAL/NTSC Converter with Video Overlay

(CPT-370)



Operation Manual

Introduction

This unit superimposes PC text/graphics onto video. It allows you to mix PC picture and video as well as it permits you to add graphics to your home or corporate video. Enjoy PC games, PC movies and the Internet on TV.

Precautions

- 1. Do not expose this product to direct sunlight.
- 2. Keep the unit away from radiator, heat sources and magnetic field.
- 3. Do not place it in very dusty or humid locations.
- 4. Use this unit in a horizontal position only.
- 5. Do not put heavy objects on top of the converter.
- 6. Put the unit in an open space that has good ventilation.
- 7. If the unit is acting abnormally keep the unit away from TV or other electronic equipment.
- 8. Unplug the unit from the power supply when it is not to be used for a long period of time.

Features

- Allows you to superimpose PC text and graphics onto another channel of live video.
- It converts three VGA modes 1024 x 768, 800 x 600, 640 x 480 into NTSC or PAL, which then overlay or mix with another video.
- Plug-and-play design, no software drivers required.
- Cross-platform compatibility for PC, Macintosh and Notebook.
- Zoom & Pan.
- Vertical and horizontal over-scan / under-scan control.
- Simultaneous display on PC and TV monitor.
- Composite, S-Video (S-VHS or Hi-8) output.
- Automatically supports scan rate from 50 Hz up to 100Hz.
- Comes with an easy touch remote control.

Operation controls and functions

Front Panel



- 1. **Stand-by Indicator-** This indicator will light up when in stand-by mode.
- 2. VGA Indicator- This indicator illuminates when VGA node is selected.
- 3. **Overlay Indicator-** This indicator illuminates when in overlay mode.
- 4. **Video Indicator-** This indicator illuminates when in video mode (source).
- 5. **Mixer Indicator-** This indicator illuminates when in mixer mode.
- 6. **Remote control sensor-** This is the sensor for the remote control.

Rear Panel



- 1. **DC power supply-** This is the power supply input port.
- 2. **VGA input-** This is the VGA input port.
- 3. **VGA output-** This is the VGA output port.
- 4. **Video input-** This is the composite video input port. Using the appropriate connector cable, connect the video input port to your input device.
- 5. **Video output-** This is the composite video output port. Using the appropriate connector cable, connect the video output port to your output device.
- 6. **S-Video input-** This is the S-Video input port. Using the appropriate connector cable, connect the S-Video input port to your input device.
- 7. **S-Video output-** This is the S-Video output port. Using the appropriate connector cable, connect the S-Video output port to your output device.
- 8. **Video input select-** Top for S-Video, middle for composite video, bottom for internal black sync signal. When there is no external video signal input this switch must be set to internal for VGA genlock use.
- 9. **NTSC-PAL switch-**Top for PAL, bottom for NTSC.

- 10. **Overlay switch-** Top for PC black background keying, bottom for blue background keying.
- 11. **Mode select-** Select one of the VGA, overlay, video or mixer modes.
- 12. **Power switch-** This is the switch used to turn the unit ON or OFF.

Remote Control

- 1. **Reset the screen-** This button is used to reset what is presented on the screen.
- 2. **Over-scan/under-scan control-** Press this button to choose an overscan or underscan image,

NOTE- When using CPT-370 for overlay, it will automatically turn your underscan PC picture into overscan to avoid the black perimeter associated with all underscan pictures to be imposed onto the resultant video output. Because most PC screens are underscan it leaves a black margin on the four edges of the screen. When using the blue background keying, this black perimeter can not be keyed away, therefore will be superimposed onto the video input and resulted in a black-frame surrounded the overlayed video output.

CPT-370 has automatically turned your PC picture into over-scan to eliminate this black perimeter.

- 3. **Power ON/OFF button-** This is the button used to turn the unit On or Off.
- 4. **Adjust the brightness-** This button is used to adjust the level of brightness.
- 5. **Adjust the sharpness-** This button is used to adjust the sharpness level.
- 6. **Freeze/Unfreeze picture-** This button is used to freeze or unfreeze the image.
- 7. **Colour bar-** Press the button to show colour bar pattern on the screen when there is no PC input, press the button again to close colour bar.
- 8. **Mode select-** This button allows you to select one of the modes- VGA, overlay, video or mixer mode.
- 9. **Zoom for 9 special areas-** Under zoom mode press one of the buttons to select the corresponding sub-area, which is 1/9 of the full screen.
- 10. **Zoom On-Off control-** Press the button to zoom in on a picture, press again to zoom out.
- 11. **Pan the picture up, down, right and left-** This button is used to pan the picture in the desired direction.

Connection and Installation

The AC adaptor power unit should not be plugged into a wall outlet until all connections are complete.

- Connect your Video/S-Video input device (DVD player) into the Video/S-Video input port (Numbers 4 and 6 on the rear panel).
- Connect your Video/S-Video output device (TV) to your output port (Numbers 5 and 7 on the rear panel), where the signal output will either be NTSC or PAL.

- Connect your VGA output device (VGA monitor) to your VGA OUT port (Number 3 on the rear panel).
- Connect your VGA input device (PC, Notebook, Mac) to the VGA IN port (Number 2 on the rear panel).
- You must select one of the following modes using the mode select- VGA, Overlay, Video or Mixer mode.
- Select the appropriate video input (Number 8 on the rear panel)- S-Video, Composite video or internal black sync signal.
- Select the signal you wish to output- either NTSC or PAL, using the NTSC-PAL switch (Number 9 on the rear panel).

Once all connections are complete, switch the power button ON and please connect the power supply provided to the power socket.

Specifications

Input signal	 640 x 480 resolution scan up to 100 Hz. 800 x 600 resolution scan up to 85 Hz. 1024 x 768 resolution scan up to 75 Hz. NTSC/PAL composite video or S(Y/C) Video 1Vp-p 75 ohm.
Output signal	 VGA pass through. Composite Video 1Vp-p 75 ohm. S (Y/C) Video 1Vp-p 75 ohm.
S-Video bandwidth	5.5 MHz.
Power supply	DC 6V 1A Center negative
Accessory	Remote controller and application software two diskettes.
Dimension	236 mm (W) x 130 mm (D) x 45 mm (H).
Weight	0.6 Kg