# TVB200-Plus
## NTSC/PAL to VGA Converter

## TV ➡ VGA

## TV-to-VGA Converter & Switch with Audio

### 1 S-Video, 2 CV, and 1PC Video & Audio Inputs

### VGA & Stereo Audio Output

### RS-232 Control

**Features:**

- ➢ 3 TV and 1 PC input to one VGA output
- ➢ Compatible with NSTC & PAL formats
- ➢ Eliminates interlace flicker for a crisp image
- ➢ RS-232 interface allows external control
- ➢ "Auto" mode for switching to active video
- ➢ OSD display (can be active or disabled)
- ➢ Individual volume control for audio inputs
- ➢ Full-screen 24-bit color broadcast-quality video
- ➢ Free Serial Control Software
- ➢ Packaged in portable EMI shielded enclosure
- ➢ Affordable, high reliability
- ➢ Made in USA

The TVB200-Plus converts an NTSC or PAL video signal to VGA for display on PC monitors. The converter de-interlaces and doubles the frame rate by turning the interlaced TV signal into a "progressive scan" signal suitable for high resolution display devices.

The TVB200-Plus provides 2 composite, 1 S-Video and a PC input - all with their own corresponding stereo audio inputs.

The user can select any of the inputs using individual push-button switches on the front panel. An RS232 serial port is available for external control.

When the device is in "Auto" mode, if no TV video signal is present, it selects the PC input and as soon as a TV input is detected, it switches to the TV input by itself. This feature makes the unit perfect for educational facilities freeing the presenter from any switching.

The audio switching follows the selected video input channel and each audio input has its own adjustable volume setting making it perfect for balancing the output volume level regardless of the input selection.

OSD (On Screen Display) can be active or disabled by the user, furthermore, the front panel can be locked out! - a handy feature in many installations.

The TVB200-Plus also provides a front panel switch for enhancing (Gamma-correction) the TV video input. This enhancement is perfect for video inputs that have large dim areas (such as in endoscopes used in medical procedures).

## Block Diagram



Video Conferencing   Document Camera   Notebook PC   VCR or DVD

TVB200-PLUS

VGA Projector    - or -    VGA LCD / Monitor

## Control Panel Software

The TVB200-Plus can be controlled via the serial port using standard ASCII characters. Hall Research provides a Windows-based "Control Panel" software, available for free download. The software includes options for changing the default brightness, contrast, Hue, Saturation, Gamma setting, audio Volume, Auto, Front Panel, and OSD functions. You need a straight-through DB9 Male-to-Female cable for connection to a PC.
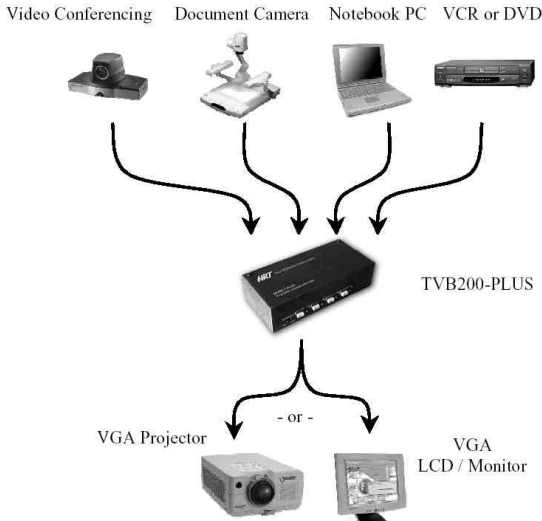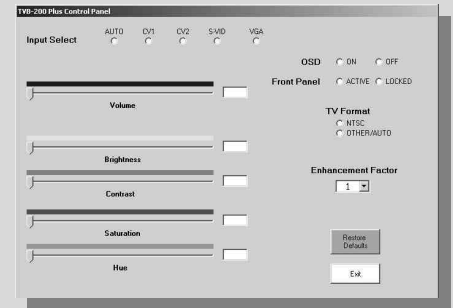
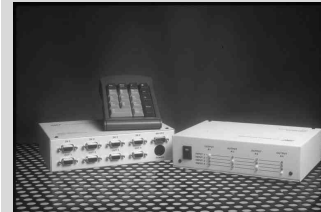

## Specifications

| | |
|---|---|
| **Video Inputs:** | 1 VGA (up to 1600x1200) on HD15 Female Connector<br>1 S-Video (Y/C) on MD4 Female Connector |
| **Video Output:** | 1 VGA on HD15 Female Connector |
| **Serial Port:** | RS-232, on DB9 Female (use straight M/F cable for PC) |
| **Video Types:** | VGA Input: to 1600 x 1200 up to 100 Hz<br>TV Inputs: NTSC or PAL<br>VGA Output: Same as VGA input, or 640x480 for NTSC / 800x600 for PAL |
| **Audio I/O:** | Line-level Stereo on 3.5mm jacks. |
| **Audio Switch:** | Audio inputs are switched to the output to follow the video. They have individual volume adjustment |
| **Bandwidth:** | Video: 200 MHz, Audio: 10 Hz to 10 KHz |
| **Video Level:** | 0.7 volts peak-to-peak |
| **Max. Distance:** | Up to 200 ft on the output VGA |
| **Max. Altitude:** | 10,000 ft. (3048 m) |
| **Temperature:** | Operating: 0 to 50℃; Storage: –40 to +85℃ (humidity up to 95% non-condensing) |
| **Enclosure:** | Steel |
| **MTBF:** | 95,000 hours (calculated estimate) |
| **Power:** | From utility-power (mains) outlet, through included power adapter (6 v DC center positive, 800 ma min.) |
| **Size:** | 6.9" W x 3.3" D x 1.8" H |
| **Weight:** | 1.2 lb. TVB-200 unit only; 2.7 lb. Shipping |

## Other Products



### VGA Matrix Switchers

Produce the ultimate presentation for your conference room, boardroom, trade show booth, courtroom, trading floor, auditorium, etc. with a Hall Research Technologies' video switch matrix. Perfect for providing real-time information updates on multiple screens.

### Video over Cat5 Extenders

The Mini-Cat® can extend your VGA or Component HDTV Video Signal to 500 feet or longer.



**HRT** *Since 1984*

**Hall Research**

1-800-959-6439

3613 W. MacArthur Blvd.
Suite 612
Santa Ana, CA 92704

| | |
|---|---|
| **Voice:** | 714 641 6607 |
| **Fax:** | 714 641 6698 |

www.hallresearch.com