



Hall Research Technologies, Inc.

Model TBC-100

Universal Video Time-Base Corrector

Also Converts Composite Video to S-Video and Vice-Versa




TBC-100 User's Manual

**CUSTOMER
SUPPORT
INFORMATION**

Order **toll-free** in the U.S. **800-959-6439**
FREE technical support, Call **714-641-6607** or fax **714-641-6698**
Mail order: **Hall Research Technologies**, 1163 Warner Ave, Tustin, CA 92780
Web site: www.hallresearch.com • E-mail: info@hallresearch.com

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1.0 General

Thank you for purchasing Hall Research Technologies' Model TBC-100 Time-Base Corrector (TBC). The TBC is used to create a clean video signal with perfect synchronization, video timing, and color encoding from an input that may be distorted or out of spec.

Connected between any playback source (VCR, camcorder or DVD player) and a DVD recorder or other device, the TBC restores and transfers old videos to the recording medium with ideal timing and color information. It is perfect for making backup copies of DVD's or VHS or 8mm tapes.

For example the TBC-100 eliminates picture jitter and time base errors from mechanically based videotape playback and insures a stable screen image. It digitizes the input video into dual-field full-frame memory and recreates an output with a crystal based timing circuit.

The unit also restores distorted or missing vertical and horizontal sync and color burst signals. The TBC-100 features adjustments of Brightness, Contrast, Color Saturation, Hue and Sharpness. A Digital Comb Filter provides excellent video decoding and the AGC (Automatic Gain Control) insures a proper output signal level from a substandard input.

Furthermore, it can be used to convert a composite video to S-Video or vice-versa.

The TBC includes a built-in Color Bar Generator that is activated to the output when there is no video input, has Composite Video (CVBS) and S-Video (Y/C) inputs and outputs and includes a DC Power Adapter. The unit measures 1.3"H x 3.5"W x 5.7"D. 7 ounces.

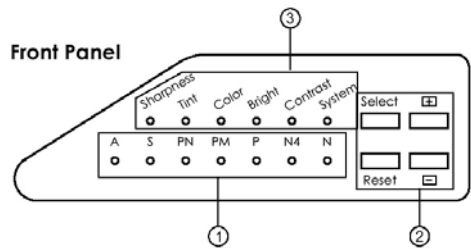
2.0 Features

- Video Inputs & Outputs: Composite Video and S-Video
- Video Standards: NTSC, PAL, and SECAM
- Adjustments: Brightness, Contrast, Color, Tint, and Sharpness
- Built-in Color Bar Generator
- Automatic Gain Control

3.0 Control and Functions

① Input Video System Indicator

- A. Auto input mode detection
- S. SECAM
- PN. PAL N
- PM. PAL M
- P. PAL (B,D,G,I,K)
- N4. NTSC 4.43
- N. NTSC 3.58 (e.g. USA)



② Picture Adjustment Controls

Select: Press this button repeatedly to choose the adjustment you wish to do. Each depression of the button will toggle through adjustment controls as follows:

System → Contrast → Brightness → Color → Tint → Sharpness

+ : Press the button for adding picture effect selected

- : Press the button for reducing picture effect selected

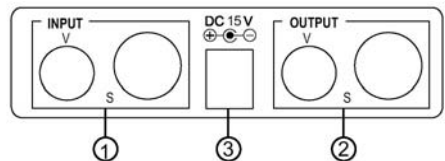
Reset: When pressing reset button, the setting of the selected control will be reset to its default value. If you press reset for over 3 seconds, all controls will be reset to their factory default values.

Auto/Manual detection mode: Press the " Select " button to choose " System" function on the top row LEDs. And then press Reset button to switch between Auto and Manual detection mode for the input.

③ Picture Adjustment Indicator LEDs

4.0 Video and Power Connections

① Use only one of the input connectors, either S-Video or Composite Video. The TBC-100 will automatically detect the active one. If both inputs are connected and active, the S-Video has priority.



② Both video outputs are active and available for use; use either one or both if you wish.

③ Use only supplied or approved power adapters. The input power can range anywhere from 7.5VDC to 15 VDC (Center Negative). Nominal power usage is 7.5 Watts.

5.0 Contacting Hall Research and Shipping/Packaging

Contact HRT Support at 714-641-6607 or via email or web. 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. If you need to ship your converter for repair, make sure to get a Return Material Authorization (RMA) number first.

6.0 Specifications

TV Standards NTSC 3.58, NTSC 4.43, PAL, PAL M, PAL N, SECAM

Video Formats S-Video (Y/C), and Composite Video (CVBS)
Inputs: Auto detect with priority on S-Video
Outputs: Both active

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

MTBF 95,000 hours (calculated estimate)

Power From utility-power (mains) outlet, through included external power supply. Voltage: 7.5 to 15v DC Center-Negative 1000 ma

Size 1.3" High x 3.5" Wide x 5.7" Deep

Weight 7 Ounces