Time Base Corrector/ Colour Corrector CTB-100 ID#48



Operation Manual



Introduction

This unit is a Multi-system colour corrector with a TBC/Frames Synchronizer. It is ideal for rectifying distorted or de-shaped vertical and horizontal sync as well as removing colour burst. It will eliminate picture jittering and ensure a stable image on screen through duel-field full-frame reconstruction.

Features

• It restores distorted or de-shaped vertical and horizontal sync as well as colour burst.

• Eliminates picture jittering and ensures a stable image on screen through Dualfield full-frame reconstruction.

• Correct time error of video that normally is associated with VCR source.

• Allows the user to adjust Brightness, Color, Tint, Sharpness and Contrast to improve video picture.

• A true multi-system Time Base Corrector automatically processes video input of any systems-NTSC, NTSC 4.43, PAL, PAL M, PAL N, or SECAM.

• Digital comb filter for input Y/C separation offers best output quality.

• Built-in automatic gain control (AGC) ensures 1 Vp-p output signal (input level ranges from 0.5Vp-p to 2 Vp-p).

• Automatically sends out colour bar patterns when there is no video signal present on the input.

• Ideal for use in rectifying any video errors and abnormal picture.



Operation Controls and Functions

Top View



Input video system indicator- Auto, N3, N4, PAL, PAL M, PAL N, SECAM.

- 1. Illuminates when input auto detection mode is selected.
- 2. Illuminates when input system is set to NTSC 3.58.
- 3. Illuminates when input system is set to NTSC 4.43.
- 4. Illuminates when input system is set to PAL.
- 5. Illuminates when input system is set to PAL M.
- 6. Illuminates when input system is set to PAL N.
- 7. Illuminates when input system is set to SECAM.

Note- When in auto detection mode one of the system indicator will also illuminate to show video system of the input.

Picture adjustment controls

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1. **Select-** Press this button repeatedly to choose the picture adjustment you desire. Each depression of the button will toggle through adjustment controls as follows-

System- Contrast- Brightness-Colour-Tint-Sharpness.

- 2. + **Button-** Press the button for adding picture effect value.
- 3. Button- Press the button for reducing picture effect value.



4. **Reset-** Press "Reset" for over 3 seconds, all controls will be reset to their 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.

Picture adjustment indicators-

1. System indicator- When system adjustment in selected, use Reset button to choose auto or manual input detection. When manual detection is selected, use the + and - keys to select the output system you want.

2. **Contrast indicator-** when it lights up, use + and – buttons to adjust picture contrast.

3. **Brightness indicator-** When it lights up, use the + and - buttons to adjust the picture brightness.

4. Colour indicator- When it lights up, use the + and – buttons to adjust the picture colour.

5. **Tint indicator-** When it lights up, use the + and – buttons to adjust the tint of the picture (NTSC only).

6. Sharpness indicator-When it lights up, use the + and – buttons to adjust the sharpness of the picture.

Rear Panel



1. **Video input port-** This is the video input port. There is one Video and one S-video on the input. The unit will automatically detect the video input when either one of the input is connected. When both inputs are connected, S-video input has the priority

2. **Video output-** This is the video output port. 2 different formats of video out, Composite and S-Video.

3. **Power Supply DC 12 V 1A Center negative-** This is the power supply input port. It is to be used with the power pack supplied.



Connection and Installation

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

- Using your connector cable connect the output port (Number 2 on the rear panel) to the output device (TV or Video recorder). For Composite Video, use a composite RCA connector cable to connect the converter to your video device. For S-Video use a 4-pin mini DIN connector cable to connect the converter to your video device.

- Using your connector cable connect the input port (Number 1 on the rear panel) to the input device (Video cassette recorder, satellite receiver or camcorder). For Composite Video, use a composite RCA connector cable to connect the converter to your video device. For S-Video use a 4-pin mini DIN connector cable to connect the converter to your video device.

- Adjust the system, brightness, contrast, colour, tint and sharpness to the level desired using the + and - keys.

Once all connections are complete please connect the power supply provided to the power socket.

Input TV Systems	Conversion from input signal of NTSC 3.58, NTSC 4.43, PAL, PAL M, PAL N and SECAM
Video Inputs	1 S-Video Inputs: 1
Video Outputs	1 S-Video Outputs: 1
Sampling frequency	Y: 13.5 Mhz R-Y: 6.75 Mhz B-Y: 6.75 MHz
Digital Code Bit	Y:8 bits R-Y: 8 bits B-Y: 8 bits
Processing controls	Contrast, brightness, colour, tint, sharpness
Correction range	Full Frame TBC
Frequency responses	400 lines
S/N Ratio	50dB
Power Supply	DC 12V 1A Center negative
Dimension	145 (W) X 95 (D) X 34 (H) mm
Weight	1 Kg
Accessory	DC Adaptor
Memory	6M Bits

Specifications

