



Instruction Manual

**CTB-530TR and CTB-530
Multi-System Time Base
Corrector**

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1.0 INTRODUCTION

Thanks for purchasing this CTB-530TR/CTB-530 Time Base Corrector from TV One. The CTB-530TR/CTB-530 is designed to correct time base errors present in Video Tape playback. Our professional video conversion products have been serving the industry for over twenty years. TV One offers a full line of high quality Video Scalers, Scan Converters, Analog-Digital (DV, SDI, DVI) Converters, Standards Converters, Digital Video Recorders, Frame Synchronizers, Time Base Correctors, LCD Monitors, Matrix Routing Switchers and Distribution Amplifiers.

1.1 Liability Statement

Every effort has been made to ensure that this product is free of errors. TV One cannot be held liable for the use of this hardware or any direct or indirect consequential damages arising from its use. It is the responsibility of the user of the hardware to check that it is suitable for his/her requirements and that it is installed correctly. All rights reserved. No parts of this manual may be reproduced or transmitted by any form or means electronic or mechanical, including photocopying, recording or by any information storage or retrieval system without the written consent of the publisher.

TV One reserves the right to revise any of its hardware and software following its policy to modify and/or improve its products where necessary or desirable. This statement does not affect the legal rights of the user in any way.

All third party trademarks and copyrights are recognised. The TV One logo, TV One-task and CORIO are the registered Trademarks of TV One. All other trademarks are the property of their respective holders.

1.2 FEATURES

The CTB-530TR/CTB-530 Time Base Corrector has several features that enable it to perform in a superior manner. Among those features you will find:

- Multi-Standard Capability for Worldwide TV Standards
- Digital Comb Filter for Input System Decoding
- Integral Processing Amplifier for Signal Adjustments
- Genlock Feature allows timing to studio reference signal
- Built in Color Bar Generator
- Two Independent Video Inputs
- Multi-Video Format Inputs and Outputs
- Stereo Audio I/O

2.0 SPECIFICATIONS

Inputs	
Composite Video	2x via BNC Connector
S-Video (Y/C)	2x via 4-PIN Mini-DIN Connector
Stereo Audio	2x via RCA Connectors (R/L)
Genlock	1x Composite Video via BNC
Outputs	
Composite Video	1x via BNC Connector
S-Video (Y/C)	1x via 4-PIN Mini-DIN Connector
YUV Component	1x via 3x BNC Connectors
Stereo Audio	2x via RCA Connectors (R/L)
Genlock Loop-Thru	w/75Ω Termination Switch
General	
Impedance	75Ω
Television Standards Supported	NTSC 3.58, NTSC 4.43, SECAM, PAL-B,D,G,I,K PAL-M, PAL-N
Sampling Frequency	Y=13.5Mhz, R-Y, B-Y=6.75Mhz
Sampling Rate	8-Bits per Channel
Proc-Amp Controls	Contrast, Brightness, Color, Hue, Horizontal and Vertical Positioning
AGC Range	0.5V-2.0V p-p
Controls	Front Panel Push Buttons
Indications	Front Panel LEDs
Warranty	
Limited Warranty	2 Years, Parts and Labor
Mechanical	
CTB-530TR Size (HWD)	1.75"x19"x9.5" (44x482x242mm)
CTB-530 Size (HWD)	2.2"x11.8"x9.5" (55x300x242mm)
CTB-530TR/CTB-530 Weight	4.4 Lbs (2.0 kg)
Environmental	
Operating Temperature	+32° to +120° F (0° to +48° C)
Operating Humidity	10% to 85% Non-Condensing
Storage Temperature	-40° to +150° F (-40° to +65° C)
Storage Humidity	10% to 85%, Non-Condensing
Power Requirement	
External Power Supply	12VDC, 830ma, Center Pin -
Regulatory Approvals	
TBC Unit	FCC, CE
Power Supplies	UL, CE, CSA

3.0 CHECKING PACKAGE CONTENTS

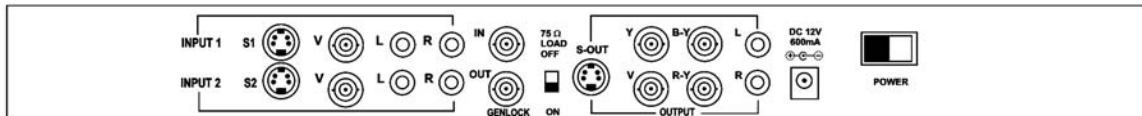
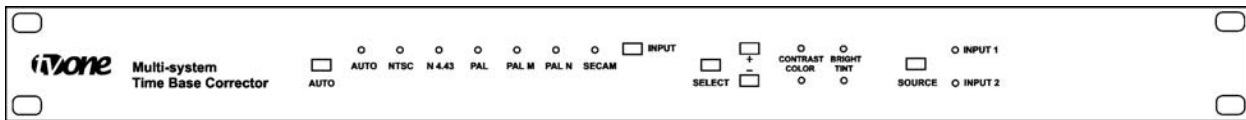
Before attempting to use this unit, please check the packaging and make certain the following items are contained in the shipping carton:

- 1x CTB-530TR or CTB-530 TBC
- 1x 6' BNC to BNC Cable
- 1x 6' 4-PIN S-V to 4 Pin SV Cable
- 1x AC to 12VDC Power Adapter
- 1x Operation Manual
- 4x Rackmount Screws (CTB-530TR Only)

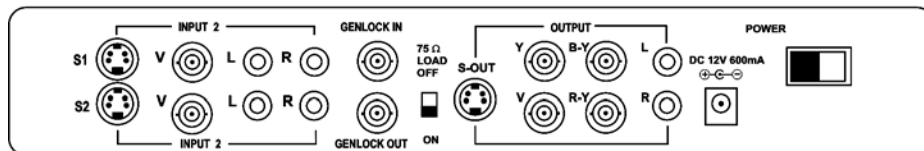
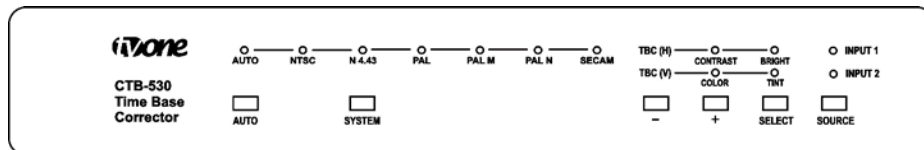
Note: Please retain the original packing material should the need ever arise to return the unit. If you find any items are missing, contact your reseller or TV One immediately. Have the Model Number, Serial Number and Invoice available for reference when you call.

4.0 CONNECTING THE HARDWARE

Please study the panel drawings below and become familiar with the signal inputs, outputs, power requirements plus any controls present.



CTB-530TR



CTB-530R

Connect the supplied AC to DC adapter to the rear of the unit, insuring that the power switch is in the off position. Next connect the adapter to an available AC source.

Connect the appropriate cables to one or both of the inputs and also to the appropriate output of the TBC and then to the external devices.

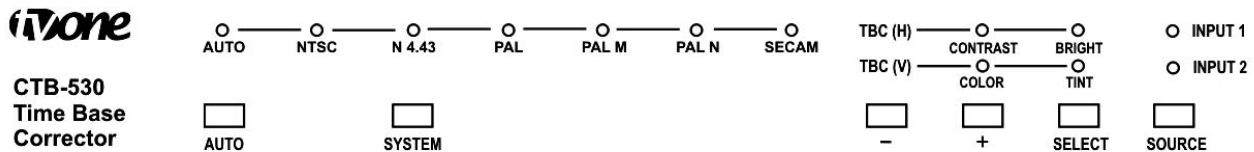
Connect a Composite Video signal to use as a Genlock source if you wish the output of the unit to be in time with your studio reference. Move the 75Ω termination switch to the “On” position if you’re not looping the reference signal through the unit to another device.

When you have finished connecting the cables, move the unit’s power switch to the ‘On’ position.

5.0 OPERATING THE UNIT

5.1 Initial Power Up

When power is applied to the unit, it will default to the auto detect mode and select the proper Television Standard. The LED labeled “Auto” will be illuminated and the lighting of the LED above a particular word or letter on the top row of LEDs will indicate the standard detected.



The meaning of the abbreviations on the row of LEDs is as follows:

Auto	Auto-Detect the TV Standard
NTSC	NTSC 3.58 Mhz Standard
N 4.43	NTSC 4.43 Mhz Standard
PAL	PAL B,D,G,I and K Standards
PAL-M	PAL-M Standard
PAL-N	PAL-N Standard
SECAM	SECAM Standard

As examples of how the auto-detect works; if you live in the United States or Japan, the input will be the NTSC 3.58 Mhz Standard and the unit will light the “Auto” LED and the “NTSC” LED. If you live in the United Kingdom, the standard will be PAL so the “Auto” LED will light as well as the “PAL” LED. Finally, in France, the “Auto” and “SECAM” LEDs will light.

5.2 System Button Function

To force a manual selection of the desired standard, Press the “Auto” button and note that the “Auto” LED goes out on the unit. Using the button marked “System”, step through the various standards until you have arrived at the one you want. To return to the automatic detect function, press the “Auto” button a second time. The “Auto” LED will light and the unit will detect the proper standard to use based on the characteristics of the input signal.

(Note: Although you can manually select the standard, it is generally best to allow the unit to make the standard selection).

5.2.1 Source Selection

After the unit has detected a signal (or you have forced a selection) you should select one of the two possible input sources. Using the Source button, toggle between the available sources. The choice will remain until manually changed.

5.3 Adjustment of Signal Parameters, Picture Position & No Signal Display

Another user operation is the selection of a particular picture parameter you wish to change. For instance: If you wish to adjust the amount of color in the picture, press the Select button until the LED above the word “Color” is illuminated. Next press the + or – buttons to either increase or decrease the amount of color in the picture. Use the same procedure for Tint, Bright and Contrast, pressing the Select button until you have reached the picture variable you wish to change and then pressing the + or – keys to make the actual adjustment.

5.3.1 Picture Position Adjustment

To move the entire picture Horizontally, press the Select button until both the Contrast and Bright LEDs are illuminated. You can now move the picture Horizontally, relative to the monitor’s physical display by pressing the + or – buttons.

To move the picture Vertically, press the Select button until the Color and Tint LEDs are both illuminated. You can move the picture Vertically relative to the monitor’s physical display by pressing the + or – buttons.

5.3.2 Loss of Signal Display Type

A final operator adjustment is the choice of screen display when there is no signal present on the selected input. Continually pressing the select button until you are at the point where all four Signal adjustment LEDs are illuminated will provide a way to set the output signal for a No Input Signal condition.

The first choice will be Color Bars followed by nine (9) full field color choices. The last choice viewed will be memorized as the output type. Press the + or - buttons to step through the choices and then press the Select button a final time when you have made your choice.

5.4 Reset Functions

Pressing the + and – Buttons at the same time while you have one of the adjustment parameters selected will cause the unit to revert to the default setting for that parameter. If you press and hold the + and - buttons at the same time for more than 5 seconds, ALL controls will be reset to their default settings.

6.0 TROUBLESHOOTING

Most problems with the CTB-530TR/CTB-530 Time Base Corrector are related to misuse of the buttons and signal adjustment controls. If you find that the picture is not acceptable, place the unit in the automatic detection mode and then press and hold the + and - buttons for 5 seconds to restore factory defaults. This should clear the problem. Another potential problem revolves around the cables. Inspect the cables for loose connectors or damage such as crushed cables or cables with cuts or nicks. Replace any cable exhibiting these problems.

You also must use the highest quality cables if you want to achieve the best results. Poor quality cables will cause poor quality signals.

After trying the above suggestions should the problem still persist, contact your dealer for additional suggestions before contacting TV One. Should the dealer's technical personnel be unable to assist you, contact TV One via our support website: **<http://tvone.crmdesk.com>**. Create a technical support request on the site and our support team will respond within a short period of time.

7.0 LIMITED WARRANTY

LIMITED WARRANTY – With the exceptions noted in the next paragraph, TV One warrants the original purchaser that the equipment it manufactures or sells will be free from defects in materials and workmanship for a period of two years from the date of purchase. Should this product, in TV One’s opinion, prove defective within this warranty period, TV One, at its option, will repair or replace this product without charge. Any defective parts replaced become the property of TV One. This warranty does not apply to those products which have been damaged due to accident, unauthorized alterations, improper repair, modifications, inadequate maintenance and care, or use in any manner for which the product was not originally intended.

Items integrated into TV One products that are made by other manufacturers, notably computer hard drives and liquid crystal display panels, are limited to the term of the warranty offered by the respective manufacturers. Such specific warranties are available upon request to TV One.

If repairs are necessary under this warranty policy, the original purchaser must obtain a Return Authorization Number from TV One and return the product to a location designated by TV One, freight prepaid. After repairs are complete, the product will be returned, freight prepaid.

LIMITATIONS - All products sold are "as is" and the above Limited Warranty is in lieu of all other warranties for this product, expressed or implied, and is strictly limited to two years from the date of purchase. TV One assumes no liability to distributors, resellers or end-users or any third parties for any loss of use, revenue or profit.

TV One makes no other representation of warranty as to fitness for the purpose or merchantability or otherwise in respect of any of the products sold. The liability of TV One with respect to any defective products will be limited to the repair or replacement of such products. In no event shall TV One be responsible or liable for any damage arising from the use of such defective products whether such damages be direct, indirect, consequential or otherwise, and whether such damages are incurred by the reseller, end-user or any third party.

8.0 REGULATORY COMPLIANCE

This product complies with the relevant standards for CE and FCC approval.

The Power Adaptor/Supply has been tested for compliance with: UL, CSA and CE standards.

9.0 CONTACT INFORMATION

Should you have questions or require assistance with this product in areas not covered by this manual, please contact TV One at the appropriate location shown below:

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