

# Multisystem Color Corrector with TBC/Frames Synchronizer

Operation Manual

## Precautions

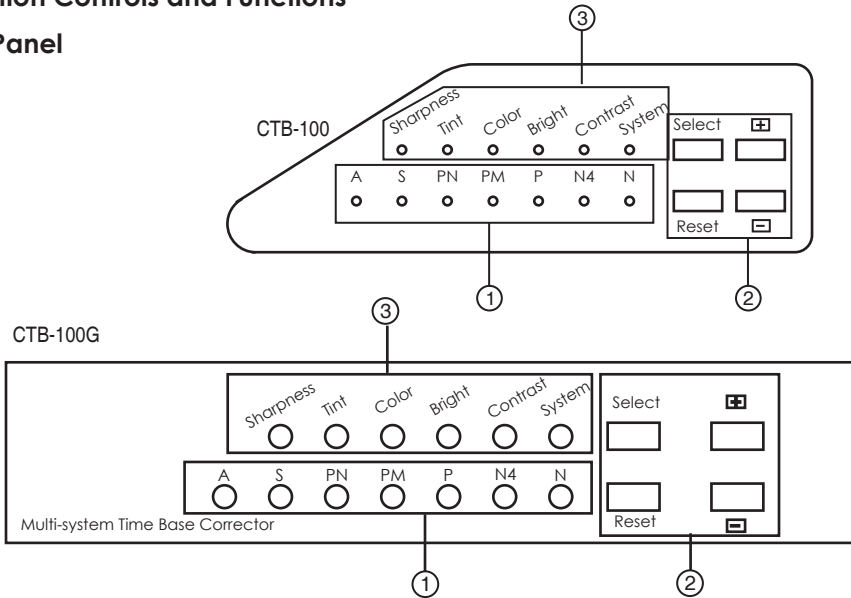
1. Do not expose this product to direct sunlight.
2. Keep the unit away from radiator, heat sources and magnetic field.
3. Do not place it in very dusty or humid locations.
4. Use this unit in a horizontal position only.
5. Do not put heavy object on top of the converter.
6. Put the unit in an open space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

## Features

1. Restores distorted or de-shaped vertical and horizontal sync. and color burst.
2. Eliminate picture jittering and ensure stable image on screen through Dual-field full-frame reconstruction.
3. Correct time error of video that normally associated with VCR source.
4. Adjust Brightness, Color, Tint, Sharpness and Contrast to improve video picture.
5. A true multisystem Time Base Corrector automatically processes video input of any systems-NTSC, NTSC 4.43, PAL, PAL M, PAL N, SECAM.
6. Digital comb filter for input Y/C separation offers best output quality.
7. Built-in automatic gain control (AGC) ensures 1 Vp-p output signal (input level ranges from 0.5 Vp-p to 2 Vp-p).
8. Automatically sending out color bar patterns when there is no video signal presents on the input.
9. Built-in TBC/Genlock capability for synchronizing multiple asynchronous video sources.(CTB-100G)
10. Ideal for use in rectifying any video errors and abnormal picture.

# Operation Controls and Functions

## Front Panel



### 1. Input video system indicator

#### AUTO, N3, N4, PAL, PAL M, PAL N, SECAM

1. A illuminates when input auto detection mode is selected.
2. N illuminates when input system is set to NTSC 3.58.
3. N4 illuminates when input system is set to NTSC 4.43.
4. P illuminates when input system is set to PAL (BDGK).
5. PM illuminates when input system is set to PAL M.
6. PN illuminates when input system is set to PAL N.
7. S illuminates when input system is set to SECAM.

**Note: When in auto detection mode one of the system indicator will also illuminate to show vido system of the input.**

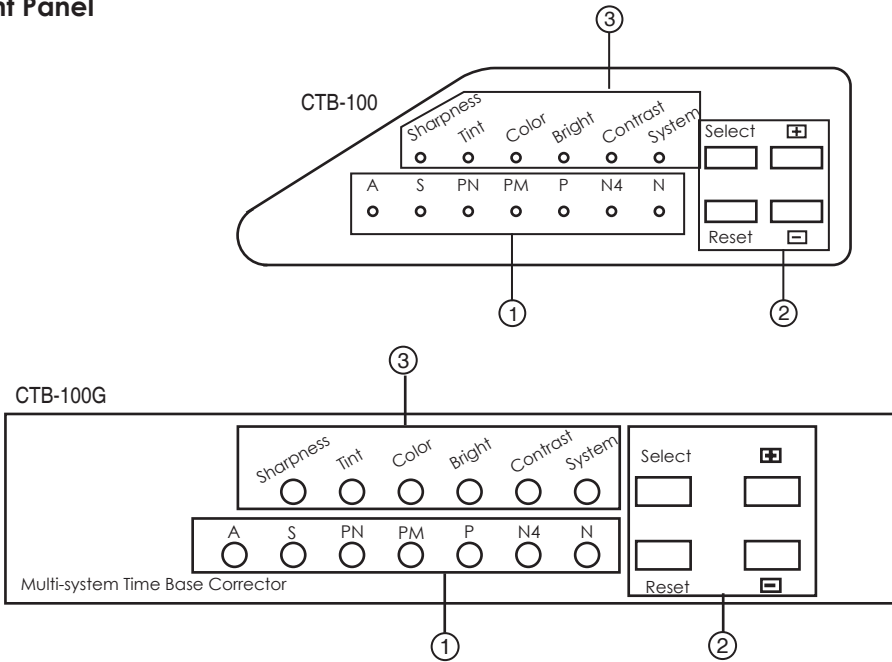
### 2. Picture adjustment controls:

1. Select: Press this button repeatedly to choose the picture adjustment you wish to do.  
Each depression of the button will toggle through adjustment controls as follows:  
System→Contrast→Brightness→Color→Tint→Sharpness
2. : Press the button for adding picture effects value.
3. : Press the button for reducing picture effects value.
4. Reset: When pressing reset button, the setting of the selected control will be reset to its default value.  
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.

# Operation Controls and Functions

## Front Panel



### 3. Picture adjustment indicators:

#### 1. System Indicator:

When system adjustment is selected, use Reset button to choose auto or manual input detection.

When manual detection is selected. Use +, - to select the output system you want .

#### 2. Contrast indicator:

When it lights up, use + or - button to adjust picture contrast.

#### 3. Brightness indicator:

When it lights up, use + or - button to adjust picture brightness.

#### 4. Color indicator:

When it lights up, use + or - button to adjust picture color.

#### 5. Tint indicator:

When it lights up, use + or - button to adjust tint of the picture(NTSC only).

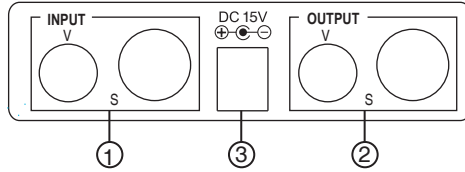
#### 6. Sharpness indicator:

When it lights up, use + or - button to adjust picture sharpness.

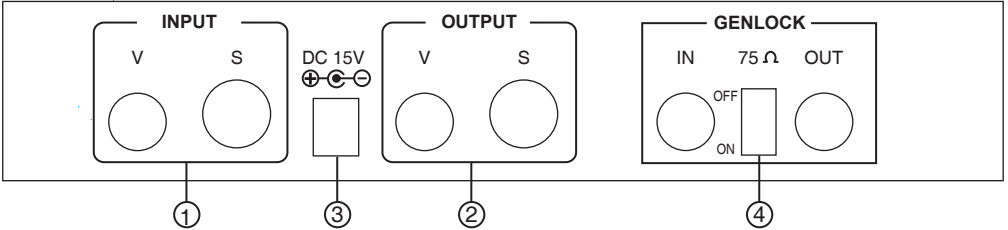
# Operation Controls and Functions

## Rear Panel

CTB-100



CTB-100G



### 1. Video input:

There are one video input 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 out:

CTB-100 offers two different formats of video out simultaneously-composite, and S-Video.

### 3. DC 15V.

### 4. Genlock input/Genlock output:(Only available on CTB-100G)

CTB-100G offers TBC/Genlock function in which video input is time base corrected and genlocked to the sync of another video (Genlock in), therefore making the two video output synchronized.

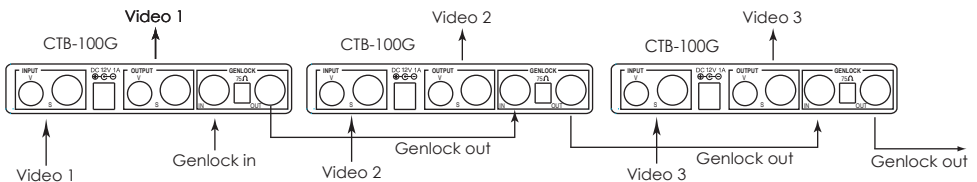
The full frame processing also reconstruct the sync burst and timing of the video input and provide an error-free video output.

The video system of the video input and genlock input must be the same. If they are different, the output video will be abnormal.

Genlock out is a loop-through of Genlock input which made possible the synchronization between multiple video sources by connecting Genlock out to the Genlock in of the next unit, and repeat it.

You can synchronize as many video sources as you like by cascading many CTB-100G in series.

### Synchronous

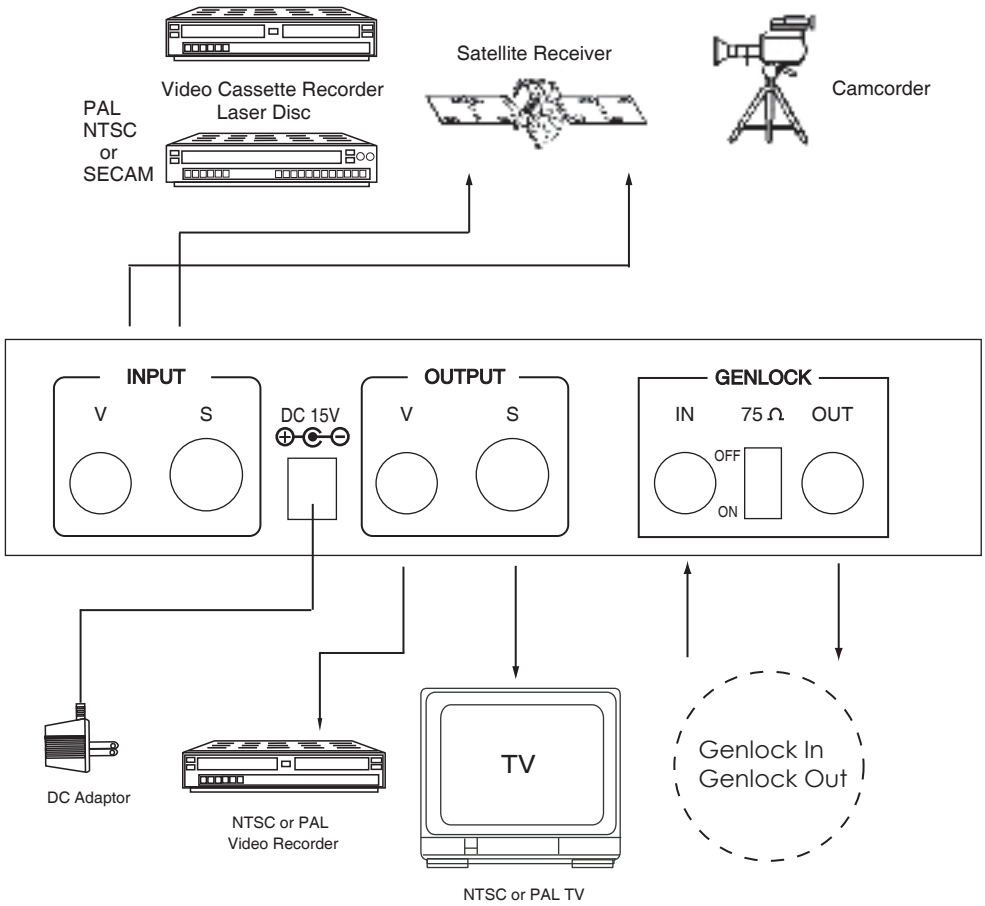


### Synchronizing multiple video sources

75 ohm connection and Installation load switch:

When CTB-100G Genlock out is not connected to the Genlock in of another unit, set the switch to ON. Set to OFF if it is connected to another unit.

# Connection and Installation



## Specifications:

Input TV systems	NTSC 3.58, NTSC 4.43, PAL, PAL M, PAL N, SECAM
Connection terminals	Video input : 1 ;S-Video input: 1 Video output: 1 ;S-Video output: 1 Genlock input: 1 composite; Genlock output: 1 composite (CTB-100G)
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, Bright, Color, Tint, Sharpness
Correction Range	Full frame TBC
Frequency Response	400 lines
S/N Ratio	50 dB
Power supply	DC 15V
Dimensions	145(W)x 95(D)x 34(H)mm
Weight	1 Kg
Accessory	DC Adaptor
Memory	6M Bits