Multisystem Digital Converter with TBC/Frames Synchronizer
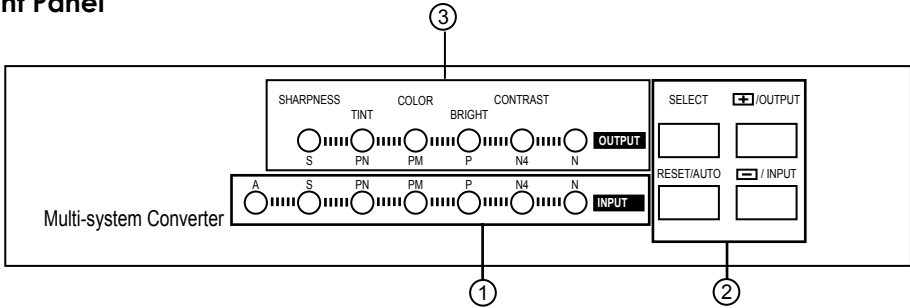
Operation Manual

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 horizational 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. Digital conversion from input TV signals of NTSC 3.58, NTSC 4.43, PAL, PAL M, PAL N, SECAM to output signals of NTSC 3.58, NTSC 4.43, PAL, PAL M, PAL N, SECAM.
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 (BDGIK).
   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.
   Auto/Manual detection mode: Press the " Select " button repeatedly until one of the six LEDs on the top row shine steadly (not blinking), which means a video system is selected. Then press "Reset" button to switch between Auto and Manual detection mode for the input. When Auto mode is selected the "Auto" LED illuminates along with one of the system LED. When manual mode is selected use ⊟ button to select your desired input system.
Note: When in auto detection mode one of the system indicator will also illuminate to show video system of the input.
2. Picture adjustment controls:
   1. Select: Press this button repeatedly to choose the picture adjustment you wish to do.
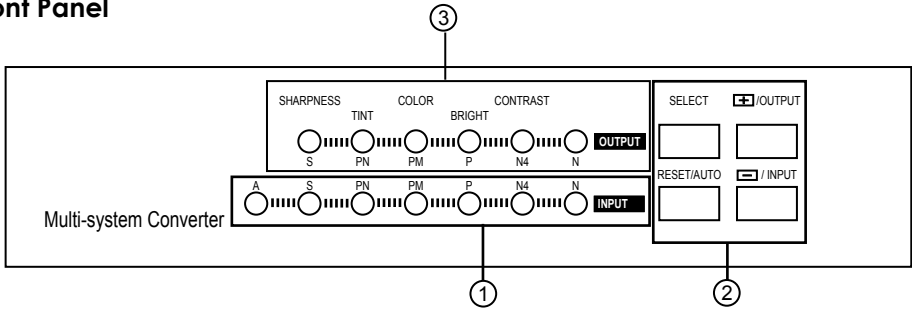   Each depression of the button will toggle through adjustment controls as follows:
   System→Contrast→Bright→Color→ Tint→Sharpness (Please see point 3 on next page for more detail)
   2. ⊞   : Press the button for adding picture effects value.
   3. ⊟   : Press the button for reducing picture effects value.
   4. Reset: When pressing reset button, the setting of the selected control will be reset to its default value.
   Press reset for over 5 seconds, all controls will be reset to their default values.

Operation Controls and Functions

Front Panel

3. Output video system/Picture adjustment indicators:
Each of the six indicators on the top row respresents two different meaning, corresponding to intermittent or constant shining of the LED.
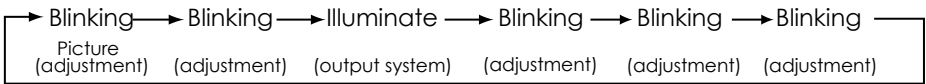A. When the LED illuminates constantly (without blinking). It repressents output video system.
From left to right stands for SECAM, PAL N, PAL M, PAL, NTSC 4.43, and NTSC 3.58.
B. Picture adjustment indicator:
When the LED blinks, it represents one of the five adjustment parameters Sharpness-Tint-Color-Bright-Contrast.
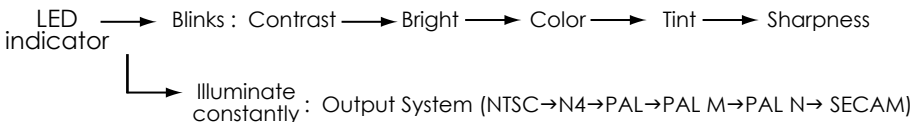
3.1. Output system select: Use ⌐select⌐ & ⊞
Press " Select" button repeatedly to toggle through varies picture adjustments and output system as below:

Blinking → Blinking → Illuminate → Blinking → Blinking → Blinking
Picture (adjustment) / (adjustment) / (output system) / (adjustment) / (adjustment) / (adjustment)

Once the LED has circled through to the output system(lit without blinking), Press the "⊞" button repeatedly to choose your desired output video system. NTSC→N4→PAL→PAL M→PAL N→ SECAM
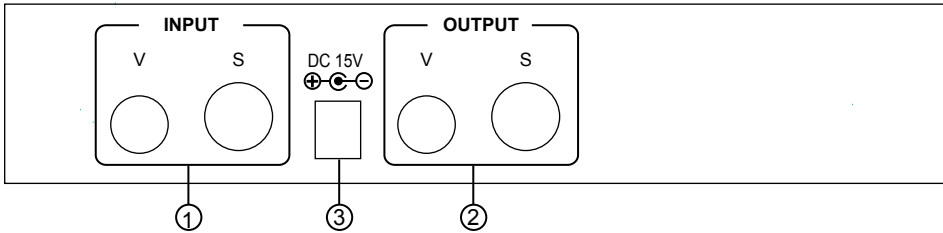
3.2. Picture adjust: Use ⌐select⌐ & ⊞/⊟
Press the "select" button repeatedly to toggle through to your desired picture adjustment parameter. then use ⊞/⊟ button to increase/decrease setting value.

LED indicator → Blinks : Contrast → Bright → Color → Tint → Sharpness

→ Illuminate constantly : Output System (NTSC→N4→PAL→PAL M→PAL N→ SECAM)

Operation Controls and Functions
Rear Panel

1. Video input:
   There are 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 over composite video.
2. Video out:
   CDM-680 offers two different formats of video out simultaneously-composite, and S-Video.
3. DC 15V.

Specifications:

Input TV systems	NTSC 3.58, NTSC 4.43, PAL, PAL M, PAL N, SECAM
Output TV System	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
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
Line Conversion	525 ⇆ 625 Lines
Field Conversion	60 ⇆ 50 Fields
Processing controls	Contrast, Bright, Color, Tint, Sharpness
Frequency Response	400 lines
S/N Ratio	50 dB
Power supply	DC 15V
Dimensions (mm)	145(W)x 95(D)x 34(H)
Weight (g)	1000
Accessory	DC Adaptor
Memory	6M Bits

Connection and Installation

Video Cassette Recorder
Laser Disc

Satellite Receiver

Camcorder

PAL
NTSC
or
SECAM

INPUT

OUTPUT

V   S   DC 15V   V   S

DC Adaptor

NTSC or PAL
Video Recorder

TV

NTSC or PAL TV