PAL to NTSC (NTSC to PAL) Converter with 19 inch Rack

(CDM-640AR)



Operation Manual

Introduction

This unit will convert NTSC/PAL or VGA input signal into NTSC/PAL or VGA output. It offers premium conversion quality. The converter also accepts SECAM input and comes ready to be mounted as a tower component.

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 objects on top of the converter.
- 6. Put the unit in an open space that has good ventilation.
- 7. If the unit is acting abnormally keep the unit away from TV or other electronic equipment.
- 8. Unplug the unit from the power supply when it is not to be used for a long period of time

Features

- Y/C input and output provides best conversion picture.
- Convert any video system to any other video systems.
- Input video system auto detected
- Digital conversion from input TV signals of NTSC 3.58, NTSC 4.43, PAL, PAL M, PAL N or SECAM to output signals of NTSC 3.58, NTSC 4.43, PAL, PAL M or PAL N.
- 8-bit broadcast quality color decoding.
- Digital comb filter for input system decoding.
- Built-in Time Base Correction (T.B.C.) function for signal synchronization.
- Built-in Automatic Gain Control (A.G.C.) function ensures 1 Vp-p output signal (Input level can range from 0.5 Vp-p to 2 Vp-p).
- Full digital decoding and encoding; highly integrated digital processing reduces the board size and ensures reliable quality.
- A color-bar pattern will automatically appear on the TV screen when there is no video signal present on the input.
- TBC is active constantly, even in the bypass mode.
- Adjustable control on Contrast, Brightness, Color, Tint.

Operation controls and functions

Front Panel



- 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 (BDGIK).
- 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 indicators will also illuminate to show the video system of the input.
- Output video system indicator- Red LED illuminates when VIDEO mode is selected- N3, N4, PAL, PAL M, PAL N-
- 1. Illuminates when output system is set to NTSC 3.58.
- 2. Illuminates when output system is set to NTSC 4.43.
- 3. Illuminates when output system is set to PAL.
- 4. Illuminates when output system is set to PAL M.
- 5. Illuminates when output system is set to PAL N.

• Input Auto detection button

Push the button to auto mode, in which the LED lights and the machine will automatically detect the system of the input. Push the button again to manual mode, in which the LED lights turn off, and the user has to manually select the input system through input button select.

 Input system select button- Each depression of the button steps through a series of video systems and auto detection mode. The sequence of selection is- NTSC 3- NTSC 4- PAL (BDGIK)- PAL M- PAL N- SECAM.

- Output system select button- Each depression of the button steps through a series of video systems. The sequence is- N3- N4- PAL (BDGIK)- PAL M- PAL N.
- Picture adjustment indicators-
- 1. **Contrast indicator-** When it lights up, use + and buttons to adjust the picture contrast
- 2. **Brightness indicator-** When it lights up, use the + and buttons to adjust the picture brightness.
- 3. **Colour indicator-** When it lights up, use the + and buttons to adjust the picture colour.
- 4. **Tint indicator-** When it lights up, use the + and buttons to adjust the picture tint.
- Picture adjustment controls-
- 1. **Select-** Press this button repeatedly to choose what picture adjustment you wish to do. Each depression of the button will lead to a change on the controls as follows-Contrast- Brightness- Colour- Tint.
- 2. + **Button-** Press this button for adding picture effect value.
- 3. Button- Press this button for decreasing the picture effect value.
- 4. + And button- Press + and simultaneously, the setting of the selected control will be reset to its default value. Press + and simultaneously for over 3 seconds, all controls will be reset to their default values.

Rear Panel



- 1. **Video Input-** This is the video input port. Select the wanted input using the input selector on the front panel. S-Video has the priority over Composite video when both are selected. If S-Video is not connected, Composite video will take effect.
- 2. **Video Output-** This is the video output port. Select the wanted output using the output selector on the front panel.
- 3. **DC 12V 1A-** This is where you connect your power supply.
- 4. **Power ON/OFF-** This is the button used to switch on or off your unit.

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 (Video, TV).
- Using your connector cable connect the input port (Number 1 on the rear panel) to the input device (video, satellite receiver, camcorder).
- Select the video input system; you may select AUTO, N3, N4, PAL, PAL M, PAL N or SECAM. When an input signal has been chosen, the indicator will light up.
- Select the video output system; you may select N3, N4, PAL, PAL M or PAL N. When an output signal has been chosen, the indicator will light up.

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

Specifications

Input connection terminal	1 x Video, 1 x S-Video
Output connection terminal	1 x Video, 1 x S-Video
Input TV systems	NTSC 3.58, NTSC 4.43, PAL (M,N),
	SECAM.
Output TV systems	NTSC 3.58, NTSC 4.43, PAL (M,N).
Sampling frequency	Y:13.5 MHz
	R-Y:6.75 MHz
	B-Y:6.75 MHz
Digital Cord Bit	Y: 8 Bits, R-Y: 8 bits, B-Y: 8 Bits
Line conversion	525 to 625 lines and vice versa
Field conversion	60 to 50 fields and vice versa
Power Supply	DC 12V 1A Center negative
Dimensions	300 (W) mm X 242 (D)mm X 55 (H)mm
Weight	2.0 Kg
Accessory	One RCA cable, One S-VHS cable, One
	DC adaptor.