

# Digital Video+ Audio Signal to TV Channel Modulator User Manual

ITEM NO.: MOD-1001D



## Feature

- ▶ Output Channel Tunable from to CH14~69 (NTSC, TV), CH21~69 (PAL, TV), CH65~135 (NTSC, CATV) (excluding CH 95~99), CH58~107 (PAL, CATV).
- ▶ Last channel memory.
- ▶ Easy Push button channel up/down operation.
- ▶ High quality picture.
- ▶ Full 90dB $\mu$ V output.
- ▶ Compact size comply to CCD camera metal housing.

## Specification

### RF

Output Frequency Range: 470-863MHZ

Output Channels

TV/ UHF: CH14~ CH69 (NTSC),  
CH21~69 (PAL, TV)

CATV: CH65~135, (NTSC, excluding CH95 ~CH99 ), CH58~107 (PAL).

Output Level: 90dB $\mu$ V min.

Output Impedance: 75 $\Omega$

Visual Accuracy:  $\pm 5$ kHz @ -20 $^{\circ}$ C~+50 $^{\circ}$ C

Aural Accuracy:  $\pm 5$ kHz @ -20 $^{\circ}$ C~+50 $^{\circ}$ C

Visual/Aural Carrier Ratio: 15  $\pm$  1dB (Preset)

### Video

Input Level: 0.7Vp-p ~1.2Vp-p

Input Impedance: 75 $\Omega$

S/N Ratio: -55 dB Typical

Frequency Response:  $\pm 2.0$ dB

Hum and Noise: -55dB@87.5% Depth

Differential Gain: <5%

Differential Phase: <5 $^{\circ}$

**Audio**

Frequency Range: 50Hz to 50KHz

Input Level: 0.5Vp-p

Frequency Response:  $\pm 2.0$ dB

Input Impedance: 10K $\Omega$ (unbalanced)

Dimension: 75(D)x64(W)x25 (H) mm

Weight: 140g

Power Requirement: 9VDC~ 12VDC (300mA)

Power Adapter: 110V~120VAC/ 60Hz or  
220~ 230VAC/50Hz

**Accessories**

Adapter DC12V	x	1
F connector cable	x	1
Modulator	x	1

**Optional**

5MHz-1000MHZ 2 way splitter

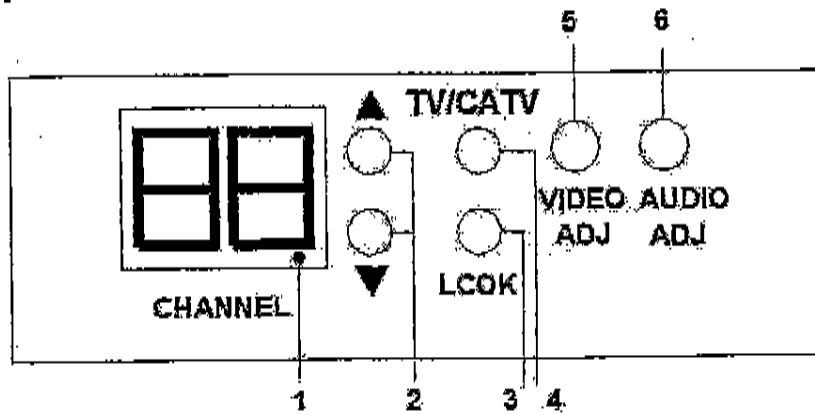
5MHz-1000MHZ 3 way splitter

5MHz-1000MHZ 4 way splitter

BNC TO F-male adapter

CCD camera metal housing.

## Operation Controls and Functions



### Front Panel

#### 1. LED Channel Indicator

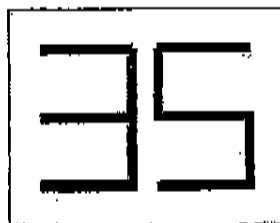
When the dot lights show on the beside of channel , the means that the real channel

should be plus 100 . For example , “ 35 . “

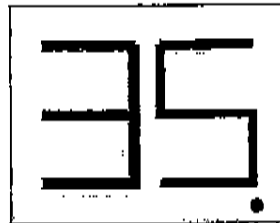
is equal to the channel 135

**35. equals to Channel 35**

**35. equals to Channel 135**



**CH35**



**CH135**

#### 2. Channel “▲” “▼”

Push “▲” to select channel up, push “▼” to select channel down.

#### 3. Lock

When the button be pressed , the display will show “L” and the channel selection up “▲” and down “▼” and TV/CATV exchanged will be locked ,but when press the lock button again , the above functions can be work again.

#### 4. TV/ CATV

When press this button ,the display will show two mode as follows:  
 "02" it is TV mode .The channel display will show from "14" ~ "69"  
 "01 " it is CATV mode. The Channel display will show from "65" ~  
 "135"

#### 5. Video ADJ

Video input level can be adjusted. When user adjust it , user can see the bright or dark picture at TV screen.

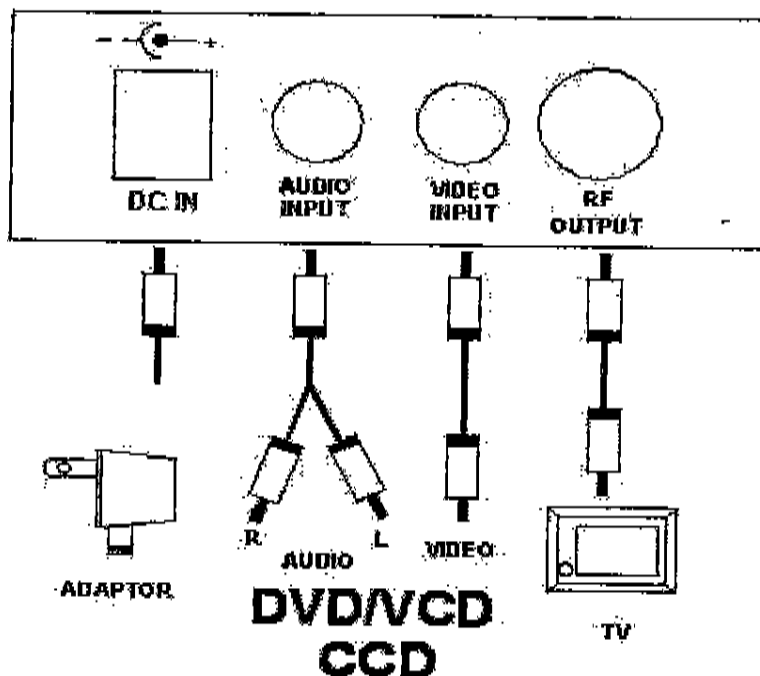
※ The function has already properly set-up at factory. Please do not adjust if it is not necessary.

#### 6. Audio ADJ

Audio input level can be adjusted. When user adjust it , it can tell the louder and quite sound at TV speaker.

※ The function has already properly set-up at factory. Please do not adjust if it is not necessary.

#### Rear Panel



**1. Power Input**

DC 9 -12V

**2. Video Input**

Video input to the modulator

Video signal accepts at 0.8Vp-p ~1.4 Vp-p

**3. Audio Input**

Audio input to the modulator.

Audio signal accepts at 20Hz – 50KHz at

0.5Vp-p – 1.0 Vp-p

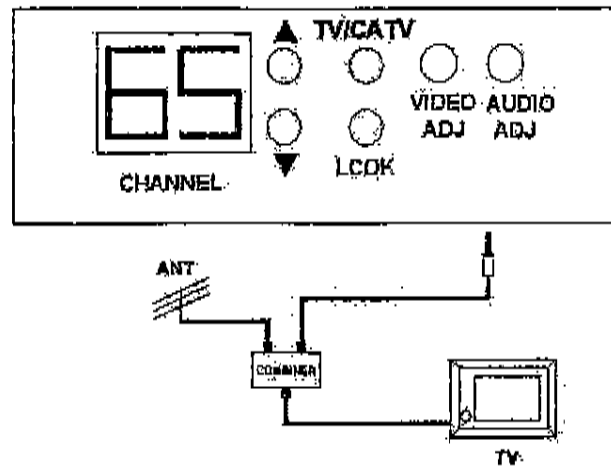
**4. RF Output**

RF Output to TV connection and installation

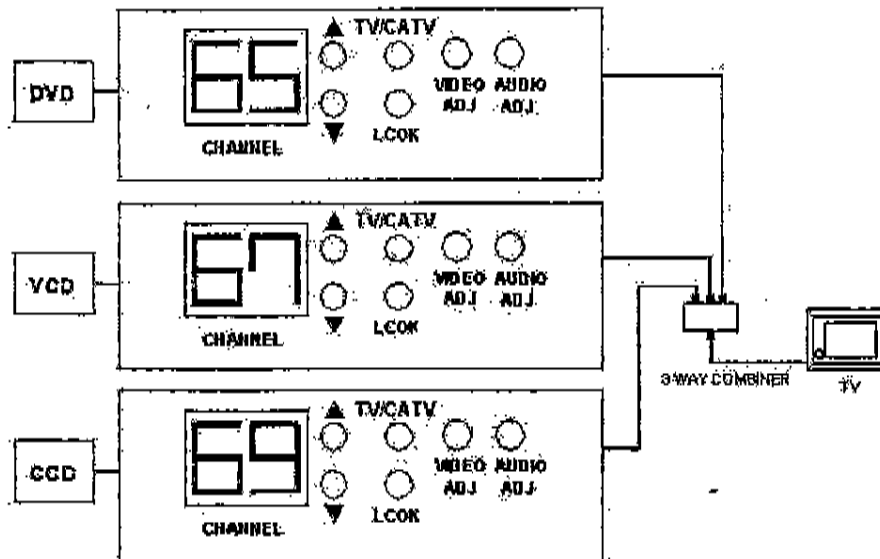
1. Insert the video male RCA connector from the video source into the Modulator **Video in jack**.
2. Insert the audio male RCA connector from the audio source into the Modulator **Audio in jack**.
3. Connect modulator **RF** output to **TV** input with F to F connection Cable.
4. Plug the provided 9 Vdc power supply into the AC outlet and Modulator power jack.
5. Set the channel to meet systems request .

# Application :

## 1. Normal modulator application connection

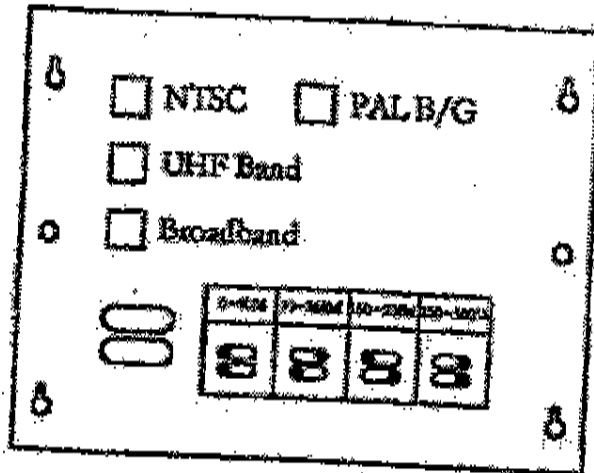


## 2. Multi-Modulator connection:



### 3. MOD-1001D Bottom switch setup define:

Refer the bellow figure



RF Out    Audio In    Video In    DC In

Follow the mark set the switch pos.

It has four kind distance

1. 0~90M
2. 90~160M
3. 160~230M
4. 230~300M