

Worldwide **VHF/UHF** Agile Modulator



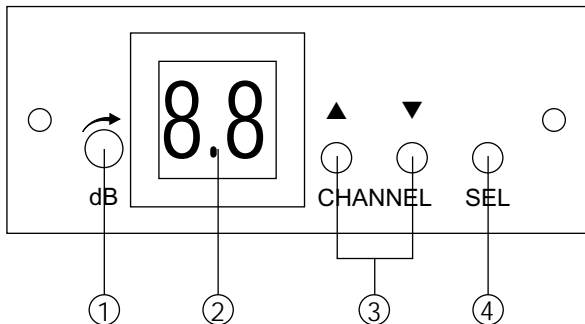
Operation manual

Features

- * RF output ranges from 45 to 860 MHz, covering both VHF and UHF band.
- * Low pass filter is installed for each of the six output frequency bands to filter out high-order harmonic oscillations thereby avoids inter-channel interference.
- * 1. 45 MHz---70 MHz 4. 197 MHz---340 MHz
2. 70 MHz---115 MHz 5. 341 MHz---609 MHz
3. 116 MHz---196 MHz 6. 469 MHz---885 MHz
- * RF output available in 12 worldwide TV/Cable channel systems. Customer can easily choose one that is most suitable to his country. The 12 systems are NTSC M Air/Cable, PAL B/G Air/Cable, PAL A/I Air/Cable, PAL D/K Air/Cable, PAL B/H Air Australia, PAL B/H Air NZ, and SECAM L/L'.
- * Output level is adjustable between 85 and 113 dBuV.
- * Aural/visual Carrier Ratio adjustable between -11 dB and -18dB(option).
- * Visual Modulation Depth adjustable between 75 % +/- 10%.
- * Last channel memory.
- * Microprocessor controlled tuning.
- * Digital crystal PLL modulation.
- * Easy push button channel up/down control.
- * Spurious output: -60dB(@ sound-carrier 18 dB below picture-carrier)
- * Modulation type: Double side band modulation.

Operation Controls and Functions

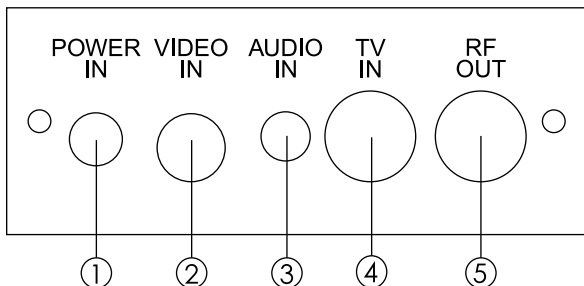
Front panel



1. Output level adjustment: The adjustable range is 85~113 dB.
2. LED channel indicator: To show output channel number. When the dot lights up, the actual channel number is one hundred plus the number of the two-digit display.
3. Channel ▲, ▼: When SEL pressed and one of the 12 system is blinking. press ▲ or ▼ to toggle through to other system. When a channel number is displayed on the LED, press ▲ or ▼ to increen or decrease the channel number.
4. "SEL" Output system select: When it is pressed, one of the 12 RF systems as shown in next page will blink on the LED display. press ▲ or ▼ repeatedly to circle through to your desired system. After a system is selected, the blinking will stop and a corresponding channel of your selected system will display on the LED.

Operation Controls and Functions

Rear panel



1. Power In: DC power supply (7.5V input).
2. Video In: Video input to the modulator.
This input accepts video at level of 1 Vp-p.
3. Audio in: Audio input to the modulator.
This input accepts baseband thru 15KHz audio at a nominal level of 500mV RMS.
4. TV In: RF output connector to TV.
5. RF Out: RF input connector for CATV cable or TV antenna.

Top Cover

System Code

U1	U2	P1	P2	P3	P4	P5	P6	P7	P8	S1	S2
NTSC	NTSC	PAL	PAL	PAL	PAL	PAL	PAL	PAL	PAL	SECAM L/L'	SECAM L/L'
Air	Cable	B/G	B/G	A/I	A/I	D/K	D/K	B/H Air	B/G Air		
USA	USA	Air	Cable	Air	Cable	Air	Cable	Australia	New Zealand	Air	Cable

There are 12 worldwide aerial/cable channel systems that have been programmed into the unit. Use SEL and ▲, ▼ to choose the one that fit your country's TV broadcast or cable system.

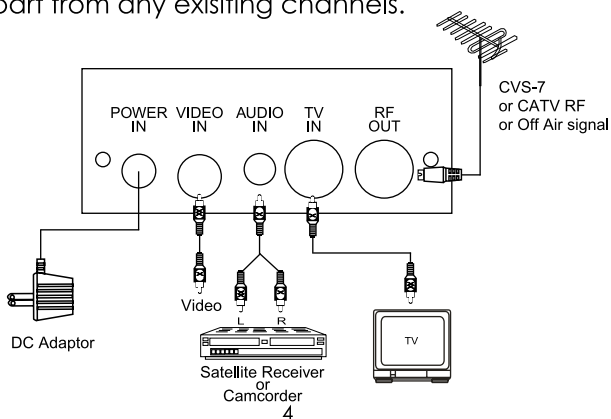
Connection and Installation

Top Cover Band width division

A	B	C	D	E	F
45~70 MHz	71~115 MHz	116~196 MHz	197~340 MHz	341~609 MHz	469~885 MHz

The dot mark on top of one of the six division shows the output frequency range of your unit.

1. Insert the male RCA connector from the video source into CVS-7 video in jack.
2. Insert the 3.5mm miniature plug from the audio source into the CVS-7 audio in.
3. Connect cable from Off-Air or CATV Line or any other RF signal source to ANT In.
4. Connect to TV (F female connector on CVS-7) with RF input on TV with F-to-F connecting cable.
5. Plug the provided 7.5V DC, 500mA power supply into the AC outlet and CVS-7 power jack.
6. Set the output channel of CVS-7 to any vacant channel of your cable (ANT) input, and be at least one channel apart from any existing channels.



Operation Controls and Functions

Note

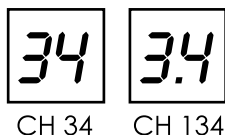
1. Channel Indicator:

At 3 digit display, it's show with a dot in between the 2 digit display on the panel.

Example:

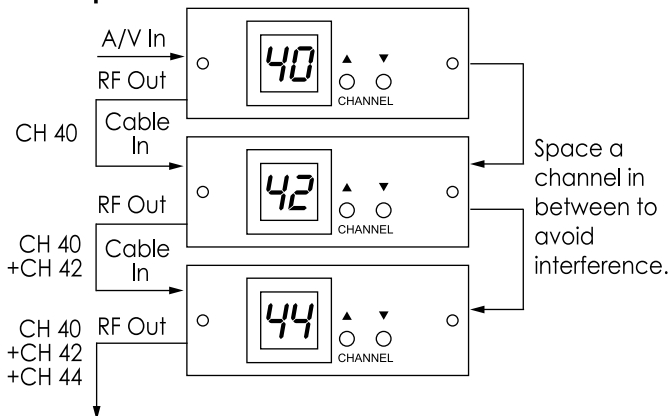
34 equals to Channel 34.

3.4 equals on the panel 134.



2. When connecting CVS-7 series please always space a channel between two adjacent units to avoid interference.

Example:



Specifications

RF

Output frequency range: 45~863 MHz

Output channels: VHF: 45~460 MHz

UFH: 469~863 MHz

CATV: 45~863 MHz

Channel select: Phase lock loop

Output level: 50 dBmV typ

Output impedance: 75 ohm

Frequency accuracy/Stability: $\pm 5\text{KHz}$ @ $0^\circ \sim 50^\circ \text{C}$

Aural intercarriers stability: $\pm 5\text{KHz}$ @ $0^\circ \sim 50^\circ \text{C}$

Aural/Visual carrier ratio: $-16 \text{ dB} \pm 2\text{dB}$

Video

Input level: 1 Vp-p

Input impedance: 75 ohm

S/N Ratio: 52 dB. TYP

Frequency response : $\pm 1\text{dB}$

Modulation depth: $75\% \pm 10\%$

Differential gain: $\leq 5\%$

Differential phase: $\leq 5\%$

Audio

Input level: 500mVp-p

Input impedance: $> 10 \text{ k}\Omega$

S/N Ratio: 47dB. TYP

THD: 1.0%. MAX

Frequenc† response: $\pm 1\text{dB}$

Size: 146(L) x 76(W) x 28(H)m/m(3 3/4"x3" x1.1")

Weight: 6 oz

Power requirement: DC 7.5V 500mA $\ominus \text{---} \oplus$