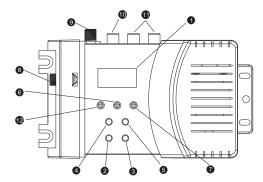
# FREEVIEWSHOP M100PLL RF MODULATOR USER MANUAL

### ▲ Features

- 1. MCU controlled PLL, high accuracy and stability of video carrier and audio subcarrier.
- 2. Audio subcarrier selectable: 5.5MHz. 6.0MHz. 6.5MHz.
- $3 \ensuremath{^{\vee}}$  With R Floop input and auto storage at power outage.
- 4. LED channel number display.
- 5. Double side band modulation for non-adjacent usage.
- 6. Output level adjustable

## **Function Diagram**



- Channel Display
- 2 Down
- 3 Lock
- **4** Up
- 6 Mode selection(channel group/audio subcarrier)
- 6 Video Level Adj(Counter Clockwise to Bright)
- Audio Level Adj(Counter Clockwise to Loud)
- 8 RFOutput
- -RFLoop Input (eg.forANT input)
- 10 Video Input
- 1 Audio Input
- RF level Adj

## ▲ Specifications

#### **※ RF**

- Freq. range: VHF: CH2~ CH4.S1~ S10.

  VHF III: CH5~ CH12.S11~ S41.UHF: CH21~ CH69
- Output Level: 90dBµVMin.
- A/V Ratio:-15+2 dB
- Video Carrier Freq. Accuracy: ±5KHz
- Output Return loss: 14dB
- Spurious Rejection:50dB
- Output Impedance: 75 Ω

### **X VIDEO**

- Input Level: 0.8Vp-p for 80% ±10% modulation
- Input Level Ad j: 0.4Vp-p ~ 0.8Vp-p
- S/N Ratio: 55 dB
- Freq. Response: ±2.5dB(50Hz to 4.2MHz)
- Input Impedance: 75 Ω

## **X** AUDIO

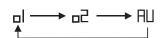
Freq. Deviation: ±50KHz
 Freq. Response: ±2dB
 Input Impedance: 600 Ω

### **※** GENERAL

- Input Voltage: AC 230V 50Hz
- Operation Temperature: -20°C to+ 50°C

## ▲ Operation Instruction

- Connect audio/video signals to audio input/video input port respectively, RF output to TV, then plug power cord.
- The modulator is set in CATV channel mode when issued from factory, with the initial mode, click mode selection key continuously, the mode number display changes according to following sequeuce.



- ☐ Indicates CATV channel setting mode.
- □ Indicates TV channel setting mode.
- HU Indicates audio subcarrier setting mode.

 $Notice: Mode \ number \ just \ display \ temporarily \ while \ switching, \ normally \ the \ LED \ displays \ channel \ number.$ 

- €. Click mode selection key until display n², means selecting TV channel setting mode. The LED will change to TV channel number display automatically, (eg. ², represents TV channel 2). Then use Up/Down key to set the desired TV channel number.
- 4. Click mode selection key until display FIU, means selecting audio subcarrier frequency setting mode, The LED will change to subcarrier frequency display automatically (eg. 5.5 represents 5.5 MHz). Then use Up/ Down key to set the desired subcarrier frequency. Notice: LED will return to current channel number display automatically in about 3 seconds after stopping operation.
- (a). Click mode selection key until display of, means selecting CATV channel setting mode, The LED will change to CATV channel number display automatically. (eg. 2 represents CATV channel 2). Then use Up /Down key to set the desired CATV channel number.
- (a). If want to lock current state, just click Lock key one time, click again will unlock it. Under locked condition, it will be no function to use other keys (except display L temporarily).
- Adjust Video Ad j variable to control video input level (video modulation index).
- Adjust Audio Adj variable to control audio input level (audio subcarrier frequency deviation).