Agile Modulator JB862-A:

I.- Features

Professional high performance
Full channel agile mid-Frequency
Used in 48MHz –870MHz CATV adjacent channel and UHF Broadcast transmission system, **CATV(2-134 channels), UHF(2-78 channels)**
Out- band restriction can be up to above 60Db
134 programmable channels
Digital display on front panel

II.- Specification

Output frequency range	48MHz – 870MHz
Video modulation	87. 5% (Video input level 1Vp-p)
Video in-band flatness	≤2Db
Differential gain	≤5%
Differential phase	≤5º
Video S/N	≥52Db
Chr / Lum Delay	|Δ| ≤45 ns
Audio Pre weighted	50ps
Audio carrier modulating Fre.bias	± 50KHz (Audio input level 0dBm ± 6Db)
Harmony wave distortion	≤1%
Audio S/N	≥ 58Db
RF output reflection loss	VHF: ≥12Db
	UHF : ≥ 10dB
Image carrier Fre. Accuracy	VHF : ≤ ±5KHz
	UHF : ≤ ± 10KHz
Image carrier output level	115dBμV
Image / audio carrier power ratio (VIA	10~20dBcontinuously adjustable
Spurious output restriction ratio	≥60Db
Image Audio carrier space	6500KHz± 3KHz
Adjacent Channel restriction	≤ 45Db
General requirement	
Normal working condition	
Condition temperature	5ºc~ 40ºc

Relative humidity	≤ 85%
Air pressure	88k Pa~106k Pa
Power supplying Voltage	220V± 10%
Frequency	50Hz± 2Hz
Power consumption	15W

III .- Working principle

JB862-A adopts Vestigial – Side – Band (VSB) modulation, after twice frequency conversion and CPU restriction, 48 MHz ~870 MHz standart TV channel output (additional channel transmission..

Audio circuit adopts Phase- Locked technology to ensure the accuracy and stability of carrier frequency. RF amplifying adopts modularized components to keep low nonlinearity distortion and high output level.

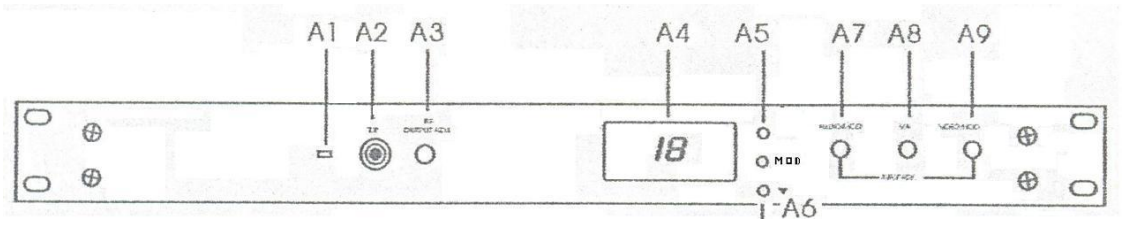
IV .- Physical feature

Adopt 19 – inch 1U Standard, easy be installed in 19- inch cabinet.

Audio , Video input, RF output end ; British Type

Dimension	483mm X340mm X45mm
Weight	3.5Kg

IV FRONT Panel.



A1 Power indicator

A2 Output testing port (T.P)

A3 RF output level adjust (RF OUTPUT ADJ)

A4 Digital display

A5 ▲Channel up key

MOD key to change mode channels from CATV to UHF broadcast channels

1- **b0** CATV Channels (2-134)

2- **b1** UHF Broadcast channels (2-78)

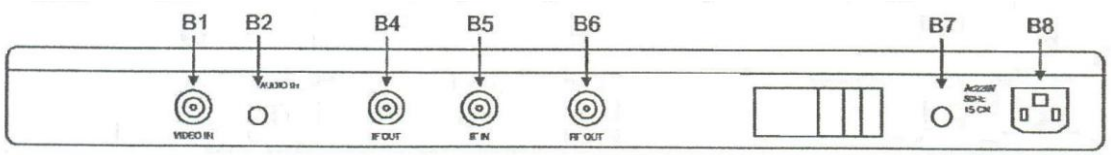
A6 ▼Channel down key

A7 Audio modulation adjust (AUDIO MOD)

A8 Image /Audio carrier power (VIA) adjust

A9 Video modulation adjust (VIDEO MOD)

V .- **Rear panel**



B1 Video input port (VIDEO IN) input Video Signal 1Vp-p,indput impedance 75Ω

B2 Audio input port , input range 0dBm± 6Db

B4 IF OUT

B5 IF IN

B6 RF output port (RF OUTPUT) RF output

B7 3-Core Power input connection cable Connect with AC 220V, frequency 50Hz (good ground needed) power is less than 500W, direct connection with AC 220 50Hz is forbidden

VI.-Application and maintenance

1. **Safety application of JBB862 –A, please the followings:**
    - High temperature application is forbidden
    - Liquid cleaning is forbidden
    - 3-core Power cable, ground removing is forbidden
    - Restart after at least 5 seconds of shutdown
    - Good ground with CATV system needed
    - Work after Power on, Power plug off when not used
    - Power off before connecting with Audio Video input cable and RF output cable
    - 115dBuV default RF output level setting pay attention to output level value and VIA adjustment ;

2. Install and debug

- 4fixed bolt holes on front panel, easily installed in 19 – inch cabinet
- enough space (>45mm) needed between equipment for heat dissipation
- Power off before audio video and RF cable connecting , pay attention to values of input audio and video signal level
- Use RFΩ cable to connect output port with cable equipment. Pay attention to output level of JB862-A.Adjusted level by RF level output hole on front panel
- Possess monitor port on front panel (T,P) to monitor working status of JB862 –A
- Us▲▼ key on front panel to adjust for wanted channel, and MOD key to change Mode **b0** (CATV Channels 2-134) and Mode **b1** UHF Broadcasting Channels (2-78)
- Adjust V/A 18Db default.