

GWM860 Frequency Agile TV Modulator

GWM860 is a professional high quality, agile audio/video modulator, which can be used as an alternate IF input and is specifically designed for CATV Head-end.

GWM860 provides audio and video modulated RF carrier on any channel in the 45 to 860MHz frequency range. Many standard audio/video sources can be used, such as satellite receivers and video tape recorders. The modulator has a wide range of standard and optional features that are very suitable for advanced MATV, SMATV or CATV systems.

FEATURES

- 19" 1U Rack with Front Panel Adjustment Button
- Advanced Technique and the latest circuit design
- Output Frequency Adjustable between 47MHz and 860MHz
- LCD displays main working parameters
- IF Modulation Assures Superiority Performance
- PLL Technique is applied to Audio IF, Video IF and Local Oscillator
- Clamp Circuit with High Anti-hum Performance

SPECIFICATIONS

Items	Unit	Specifications
RF		
Output Frequency	MHz	47-860
Tuning Increment	KHz	250
Frequency accuracy	KHz	±5
Output Level	dBmV	55
Output Level Adjustment		0~-18dB
Audio to Video Carrier Ratio	dB	-10 ~-20
Aural/Visual Carrier Spacing	Hz	5.5M±6K
Output Impedance	Ω	75
Output reflection		12dB min, any channel
Spurious Output	dBc	-60
CNR In Channel	dB	61.5
IF		
Aural Frequency	Hz	33.4M±2K
Visual Frequency	Hz	38.9M±4K
Composite IF Loop Output		
Aural Carrier Level		20dBmV
Visual Carrier Level		35dBmV
Output/Input Impedance	Ω	75

Video

Video Input Level	Vp-p	0.6-1.5
Video Output Impedance	Ω	75 (unbalanced)
Frequency Response Fv-0.5MHz to Fv+4.75MHz	dB	± 1.0
P-P Video to RMS Hum Ratio	dB	48
Video Output reflection	dB	30dB min
C/L Delay	nsec	20
Differential Gain		$\pm 3\%$ (87.5% Modulation)
Differential Phase		$\pm 5^\circ$ (87.5% Modulation)

Audio

Audio Input Level	dBm	-10~ +10
Frequency Range	Hz	50~10K
Frequency Response	dB	± 1.0 dB
Pre-Emphasis	us	50
Audio SNR	dB	60
Audio input impedance		10K Ω , unbalanced
Audio Band Flatness	dB	± 1 dB max (40Hz-150KHz)
Total Harmonic Distortion	<	1%
Over Modulation Indicator	KHz	50 \pm 2

General

Power Supply		110-250V AC 50/60Hz
Fuse	mA	500
Temperature Range		0°C ~50°C
Power Consumption	W	12
Mechanical		
Dimensions (W×H×D)	mm	440×44×268
Weight	Kg	3

Connector

Video Input		“RCA” Female
Audio Input		“RCA” Female
IF Output		“F” Female
IF Input		“F” Female
RF Output		“F” Female

Control (Front Panel)

Frequency Selection: Push wheel ID Switches

Video Level: Tunable

Aural Carrier Level: Tunable

Audio Level: Tunable

RF Output Level: Tunable

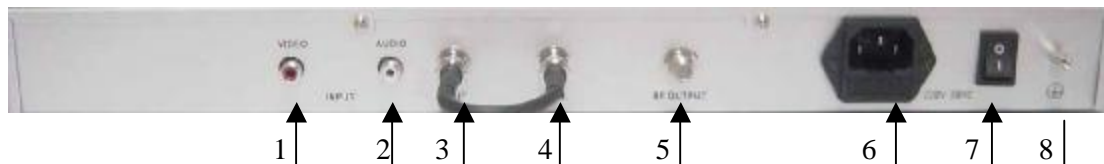
PANEL ILLUSTRATION

Front Panel



- | | |
|--------------------------------|---|
| 1. Logo | Company Logo |
| 2. Part Number | Agile Modulator |
| 3. LCD | Channel Number, Video, Audio, A/V, RF Attenuation |
| 4. Menu | Switch the Content |
| 5. Up Key | Increase the number |
| 6. Down Key | Decrease the number |
| 7. RF Output Test Port (-30dB) | |

Rear Panel



1. Video Input (RCA female)
2. Audio dual (L/R) Input (RCA female)
3. IF Output
4. IF Input
5. RF Output
6. Power socket with external fuse
7. Power Switch
8. Grounding Screw

Ordering Information:

GAM860-Sys Frequency Agile TV Modulator
Sys: B_PAL B/G; D_PAL D/K; I_PAL I; N_NTSC