

# Audio/Video Modulator

## BAVM-860SAW



### Features & Benefits

- Meets FCC Docket 21006 Aeronautical Frequency Offset Requirements
- Fully Compatible With BTSC Encoded Stereo Audio
- Front Panel Accessible Level Controls for Easy Set-Up and Adjustments
- Low Cost High Performance Channelized Audio/Video Modulator
- AC Convenience Outlet

The Blonder Tongue BAVM-860SAW is an economical commercial quality TV modulator. It provides a +55 dBmV RF output on any specified CATV channel from 2 to 135 (54 to 860 MHz). HRC and IRC frequency plans are also available. The BAVM-860SAW is ideal for placing A/V program sources such as satellite receivers, VCR's, DVD's, cameras or TV demodulators onto standard 6 MHz NTSC TV channels for broadband distribution. The BAVM-860SAW features IF SAW filtering with built-in FCC group delay pre-distortion assuring excellent adjacent channel performance and color operation. The modulator complies with FCC 21006 with +/- 5 kHz visual carrier stability and required frequency offsets on all aeronautical channels. For BTSC stereo applications, a field-defeatable audio pre-emphasis network is provided making the BAVM-860SAW compatible with any out-board stereo generator that provides a composite baseband output. A -30 dB output test point and all user controls are provided on the front panel.

### Specifications

#### RF

Frequency Range: CATV Channels 2 to 135  
Output Level: 55 dBmV, Min  
Output Level Range:  
15 dB, Continuously Adjustable by Front Panel Output Level Control  
Audio/Video Carrier Ratio Control:  
-7 dB to -20 dB,  
Frequency Tolerance:  
±10 kHz - Standard Channels  
±5 kHz FCC 21006 Offsets  
Audio Carrier Frequency Setting:  
±1 kHz, Max  
4.5 MHz Above Video Carrier  
RF to Video Response from Fv -0.5 MHz to Fv +4.2 MHz: 1 dB P/V  
Broadband Noise -90 dBc  
Spurious Output in 50 – 860 MHz Range  
@ +55 dBmV Output: -60 dBc  
Output Match (Return Loss): 12 dBc  
Vestigial Sideband Response:  
@Channel Edge -20 dB  
@Adjacent Channel -40 dB

#### Video

Input for 87.5% Modulation:  
0.7 V to 2.5 V P-P  
Video Input Return Loss: 18 dB  
Video Carrier-To-Noise Ratio in 4 MHz Bandwidth:  
62 dB  
P-P Video to 60 Hz RMS Hum Ratio: 60 dB

Differential Gain at 87.5% Modulation: ≤ 5%  
Differential Phase at 87.5% Modulation: ≤ 5°  
Group Delay: 170 ± 50 nS

#### Audio

Input Impedance: 10K Ω, Unbalanced  
Input for 25 KHz Peak Deviation: 140 mV RMS  
Audio Frequency Response:  
±1.0 dB  
(50 Hz to 15 kHz ref to std 75 msec Pre-emphasis)  
4.5 MHz Intermodulation Stability: ±5.0 kHz

#### General

Power Requirements:  
105-130 VAC, 60 Hz, 10.5 W  
Temperature Range: 0 to +50 °C

#### Mechanical

Dimensions (W x H x D):  
19 x 1.75 x 3 in.  
482.6 x 44.45 x 76.2 mm  
Line Cord:  
3 Wire Grounded,  
3 Wire Convenience Outlet  
Weight: 4 lbs., 1.81 kg

#### Connectors

Audio In: "F" Female  
Video In: "F" Female  
RF Out: "F" Female  
RF Output Test - 30 dB: "F" Female

Refer to product instruction manual for additional specification measurements and notes.

### Ordering Information

Model	Stock No.	Description
BAVM-860SAW	5990 300	Channelized Audio/Video Modulator, SAW Filtered 54-300 MHz
BAVM-860SAW	5990 860	Channelized Audio/Video Modulator, SAW Filtered 300-860 MHz