

# BAVM-860SAW

## Audio/Video Modulator

### Features

- 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  $\pm 5$  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 outboard 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:  
 $\pm 10$  kHz - Standard Channels  
 $\pm 5$  kHz FCC 21006 Offsets  
 Audio Carrier Frequency Setting  
 $\pm 1$  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: 0.7V 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  $\leq 5\%$   
 Differential Phase at 87.5% Modulation  $\leq 5^\circ$   
 Group Delay: 170  $\pm$  50 nS

#### Audio

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

#### General

Power Requirements:  
 105-130 VAC, 60 Hz, 10.5 W  
 Temperature Range: 0 to +50  $^\circ$ 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

### Ordering Information

Model	Stock #	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