



## SVM Series Frequency Agile CATV Modulator

- Re-broadcast quality performance specifications match those of fixed channel modulators
- Integrated BTSC Stereo & SAP (optional)
- 60 dBmV output for optimum carrier-to-noise performance Precision SAW filter for superior adjacent channel performance enables drop-in channel expansion
- State-of-the-art digital phase-locked loop (PLL) design guarantees precise drift-free operation
- Superior design including automatic band-splitting filters for excellent carrier-to-noise ratio >65 dB)
- Bright LED bar graph provides simple modulation set-up separate video, audio left right
- Microprocessor tuning control provides digital display with push-button channel selection for ease of installation, configuration and servicing
- Rear panel interfaces accept baseband video and three audio formats to provide maximum installation flexibility
- Composite and separate audio and video IF loops allow compatibility with encoders, ghost cancellers and video override applications
- Both EIA STD and HRC frequency plans included

## Specifications

### RF OUTPUT

|                      |                          |                    |         |
|----------------------|--------------------------|--------------------|---------|
| Frequency Range      | 54-860 MHz               | Differential Phase | <1° typ |
| Channels             | CATV 2-135               | Chrom/Lumin Delay  | ±8 ns   |
| Level                | 60 dBmV min              | Hum and Noise      | -60 dB  |
| Level Adjustment     | 20 dB                    | Connector BNC      | 75Ω     |
| Impedance            | 75 Ω F-Female            |                    |         |
| Frequency Stability  | ±3 kHz                   |                    |         |
| Audio/Video Ratio    | -10 to -20 dB Adjustable |                    |         |
| Output Return Loss   | -18 dB                   |                    |         |
| In Band Spurious     | -62 dB                   |                    |         |
| Out of Band Spurious | -65 dB                   |                    |         |
| VSB Response         | -60 dB min               |                    |         |
| C/N (In-Band)        | >62 dBc                  |                    |         |
| C/N (Out-of-Band)    | >65 dBc                  |                    |         |

### IF OUTPUT

|                 |         |
|-----------------|---------|
| Video Level     | 38 dBmV |
| Audio Level     | 22 dBmV |
| Composite Level | 35 dBmV |
| Video Stability | ±3 kHz  |
| Audio Stability | ±2 kHz  |
| Impedance       | 75Ω     |

### 4.5 MHz INPUT

|           |         |
|-----------|---------|
| Level     | 37 dBmV |
| Impedance | 75Ω     |

### VIDEO INPUT

|                    |              |
|--------------------|--------------|
| Level              | .7-1.0 V p-p |
| Frequency Response | ±1.5 dB max  |
| Impedance          | 75Ω          |
| Differential Gain  | <3% typ      |

### AUDIO INPUT

|                         |                         |
|-------------------------|-------------------------|
| Level – Left/Mono Audio | 0.5 V p-p – 1 V p-p     |
| Level – Right Audio     | 0.5 V p-p – 1 V p-p     |
| Level – SAP             | 0.5 V p-p – 1 V p-p     |
| Impedance               | 600Ω Terminal strip     |
| Pre-Emphasis            | 75 μs Switchable (mono) |

### BTSC STEREO

|                           |                     |
|---------------------------|---------------------|
| Frequency Response        | 1 dB, 50 Hz –12 kHz |
| Total Harmonic Distortion | <2%                 |
| S/N                       | 60dB                |

### SAP (Secondary Audio Program)

|                           |                    |
|---------------------------|--------------------|
| Frequency Response        | 1 dB, 50 Hz –8 kHz |
| Total Harmonic Distortion | <2.5%              |

### GENERAL

|                       |                               |
|-----------------------|-------------------------------|
| Power Input           | 90-260 VAC, 28 W              |
| Operating Temperature | -10°C to 50°C                 |
| Dimensions            | 19" (L) x 12" (D) x 1.75" (H) |
| Weight                | 7.8 lbs. - 8.2 lbs.           |

## Ordering Information

|                  |  |
|------------------|--|
| <b>SVM550</b>    | Frequency Agile CATV Modulator, 550MHz |
| <b>SVM860</b>    | Agile Modulator, 860MHz                |
| <b>SVM860S</b>   | Agile Stereo Modulator, 860MHz         |
| <b>SVM860SAP</b> | Agile Stereo SAP Modulator, 860MHz     |