

## TECHNICAL CHARACTERISTICS

|                             |                                                     |                                             |
|-----------------------------|-----------------------------------------------------|---------------------------------------------|
| <b>IF OUTPUT</b>            | Output frequency                                    | IF (depending on video modulation standard) |
|                             | Output level of video carrier                       | -10 to +5 dBm adjustable                    |
|                             | Output frequency stability                          | ± 50 Hz                                     |
|                             | Output impedance                                    | 50 Ω                                        |
|                             | Output connector                                    | BNC                                         |
|                             | Harmonic and spurious emissions                     | < -60 dBc                                   |
|                             | In band intermodulation (3 tone CCIR test)          | < -65 dBc                                   |
| <b>VIDEO</b>                | Input connector                                     | BNC unbalanced                              |
|                             | Input impedance                                     | 75 Ω                                        |
|                             | Input signal level                                  | 1 Vp.p.                                     |
|                             | Input return loss                                   | >30 dB                                      |
|                             | Differential gain                                   | < ± 1 %                                     |
|                             | Differential phase                                  | < ± 1°                                      |
|                             | Amplitude frequency response (in the vision band)   | < ± 0.5 dB                                  |
|                             | Group delay frequency response (in the vision band) | < ± 20 nS                                   |
|                             | S/N ratio                                           | > 65 dB                                     |
|                             | 2T K factor                                         | < 1 %                                       |
|                             | Luminance non linearity                             | < 0.5 %                                     |
| <b>AUDIO</b>                | Input connector                                     | XLR balanced                                |
|                             | Input impedance                                     | 600 Ω                                       |
|                             | THD (50 KHz peak deviation at 1 KHz)                | < 0.4 %                                     |
|                             | S/N (50 KHz peak deviation at 1 KHz)                | ≥ 65 dB                                     |
|                             | Deviation from preemphasis curve (20 Hz to 15 KHz)  | ± 0.5 dB                                    |
| <b>OPERATING CONDITIONS</b> | Operating temperature range                         | -5 °C to + 45 °C                            |
|                             | Ambient humidity                                    | max. 95%                                    |
| <b>POWER SUPPLY</b>         | AC power supply                                     | 115/208/230/240 Vac ±15%, 47 to 62Hz        |
|                             | DC power supply (optional)                          | 24 Vdc ±20%                                 |
|                             | Power consumption                                   | 19 VA                                       |
| <b>MECHANICAL</b>           | Cabinet                                             | Standard 19" 1U                             |
|                             | Dimensions                                          | W 483, D 380, H 45 mm                       |
|                             | Weight                                              | 6.5 kg                                      |
| <b>OPTIONS</b>              | Dual sound                                          | /DS                                         |
|                             | Group delay precorrector                            | /GDP                                        |
|                             | Sync restore circuit                                | /SRC                                        |
|                             | Battery operations 24 VDC                           | /VDC                                        |

Features and specifications subject to change without notice.

**DB**  
broadcast

## Digital-Quality Television IF Modulator

VAM 01/DV



**DB**  
broadcast

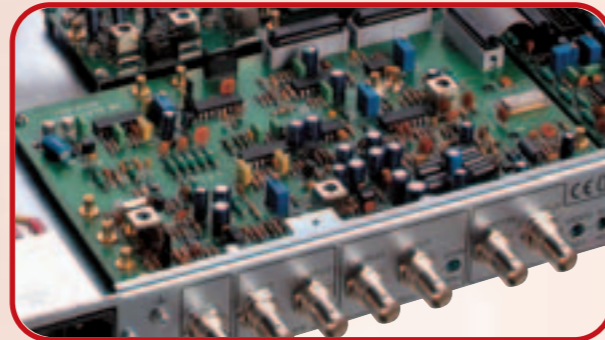
DB Elettronica Telecomunicazioni SpA  
Via Lisbona, 38 - 35127 Padova - Italy  
Tel +39 049 8700588 - Fax +39 049 8700747  
sales@dbbroadcast.com - www.dbbroadcast.com

# Digital-Quality Television IF Modulator

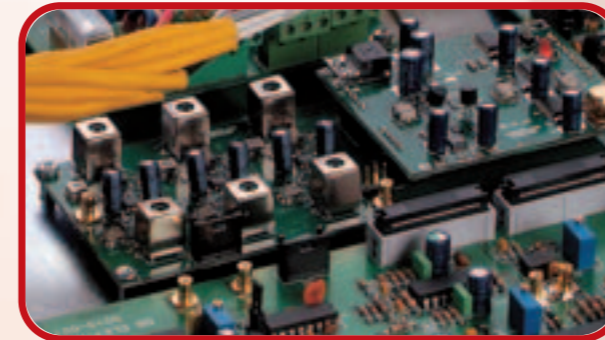
VAM 01/DV

- **Digital-quality.** The video quality of VAM 01/DV represents the right step just before the DTV generation. Using a new back-porch clamping circuit, combined with a full band linearity corrector it's possible to obtain a perfect video quality with negligible distortions and intermodulations. All this means a superior video modulation quality.
- **Compatible with all standards.** The VAM 01/DV is fully compatible with all video standards (PAL, NTSC, SECAM) and is available for B,G,M,N,I,D,K,K1 and L modulation systems. VAM 01/DV professional multistandard modulator is designed to produce sound and vision modulated signals at any standard intermediate frequency.
- **Vestigial sideband SAW filter.** For a perfect vestigial sideband modulation an high quality SAW filter is used complying with all international standards. This filters outstand for their excellent phase linearity and flat pass-band and group-delay characteristics.

- **Group delay precorrection.** TV receiver group delay precorrection is available for all standards (optional).
- **White clipper.** The white clipper is factory set to guarantee the best modulation quality.
- **Sync restore.** An internal sync restore circuit (optional) allows to ripristinate a perfect video sync pulse also with corrupted or scrambled video signal input.
- **PLL sound carrier.** Sound and video intercarrier is synchronized by PLL to video line frequency for maximum stability and negligible intermodulations.
- **Stereo and dual sound.** Available with dual sound facility (optional) for stereo or dual sound transmissions.
- **Panel metering.** Full front panel metering and control for complete setting and performance checking.
- **Input for external frequency synchronization.** Input for external frequency synchronization is available for higher frequency stability or precision offset.



VIDEO PROCESSING AND MODULATION



GROUP DELAY PRECORRECTOR AND SYNC RESTORE CIRCUIT



DUAL SOUND OPTION