The Showman 1000 Off Air Receiver from Broadcast Technology is a multistandard (PAL / NTSC / SECAM) Analogue TV demodulator for professional broadcast applications.

APPLICATIONS

- Fixed Monitoring / MCR - Monitoring of outgoing TV signals
- Analogue Cable head ends - Off air reception prior to modulation on to cable
- Digital TV head ends - Off air reception of analogue services prior to MPEG encoding
- Outside Broadcast monitoring - monitoring live programs and own transmission monitoring
- News Gathering - reception and recording of analogue TV, either in fixed or mobile situations
- Analogue TV Transmitter monitoring

FEATURES

- Over 20 pre-installed country/region tables
- Direct keying of frequency
- 99 program memory
- IF input/output option
- Alarm and logging option
- Headphone socket - Front Panel
- RS232 control
- Dual composite video outputs
- Dual audio outputs
- Second Audio Processor option
-Compact 1RU solution

STANDARDS COVERED

<table>
<thead>
<tr>
<th>SYSTEM</th>
<th>AUDIO</th>
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<th>AUDIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAL I</td>
<td>FM Mono</td>
<td>PAL I</td>
<td>FM Mono + NICAM</td>
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<tr>
<td>PAL B/G</td>
<td>FM Mono</td>
<td>PAL B/G</td>
<td>FM Stereo</td>
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<tr>
<td>PAL</td>
<td>FM Mono + NICAM</td>
<td>PAL M/N</td>
<td>FM Mono</td>
</tr>
<tr>
<td>PAL D/K</td>
<td>FM Mono + NICAM</td>
<td>SECAM D/K</td>
<td>FM Mono</td>
</tr>
<tr>
<td>PAL M/N</td>
<td>FM Mono + BTSC Stereo + SAP</td>
<td>SECAM L</td>
<td>AM Mono</td>
</tr>
<tr>
<td>SECAM D/K</td>
<td>FM Mono + NICAM</td>
<td>NTSC M/N</td>
<td>FM Mono</td>
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<td>FM Mono + BTSC Stereo</td>
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ORDERING INFORMATION

SM1000S  – Standard Receiver Demodulator
SM1000P  – Includes 38.9 MHz IF input and output, (for PAL/SECAM applications) Second Audio Processor, Alarms and logging.
SN1000N  – Includes 45.75MHz IF input and output (for NTSC applications), Second Audio Processor, Alarms and logging.
**TECHNICAL SPECIFICATION**

**RF Input**
- **Input connector:** BNC Type connector
- **Impedance:** 75Ω
- **Tuning Range:** 45.25 MHz to 863.25 MHz (PAL & NTSC)
- **Tuning step size:** 250 KHz
- **Input level:** 0.2mV to 10mV min/max (+46 to +80dBmV)
- **Frequency Stability:** Crystal controlled

**IF Input (Optional)**
- **Connector:** BNC Type connector
- **Impedance:** 50Ω
- **Frequency:** 38.9 MHz (P option), 45.75 MHz (N option)
- **Input Level:** -10dBm nominal AGC

**IF Output (optional)**
- **Connector:** BNC Type connector
- **Impedance:** 50Ω
- **Frequency:** 38.9 MHz (P option), 45.75 MHz (N option)
- **Output Level:** -10dBm

**Video Output**
- **Connector:** 75Ω BNC Type (2 off)
- **Output Level:** 1V p-p into 75Ω (P option), 140 IRE (N option)
  
  Adjustable +/- 3dB
- **Differential Phase:** < ±1.5° p-p (for RF input >6dBmV)
- **Differential Gain:** < 3.5% p-p (for RF input > 6dBmV)
- **Chrom/Lum Delay:** < 40ns (for RF input > 6dBmV)
- **Frequency Response:** 100KHz to 4.43MHz ±1dB for I, B/G, D/K 5-35 ºC ambient
  
  100KHz to 3.58MHz ±1dB for M/N 5-35 ºC ambient
- **Group Delay (post Correction off):** 100KHz to 4.43MHz ± 60ns for I, B/G, D/K
  
  100KHz to 3.58MHz ± 50ns M/N
- **Bar Line Time Distortion:** 1%
- **Bar Line Time Tilt:** ±1% (PAL/NTSC)
- **Bar Amplitude:** PAL 700mV ±0.5 (1.5%) / NTSC 100 IRE ± 1.5 (1.5%)
- **Signal to Noise:** > 50dB weighted, for RF inputs < 6dBmV

**Audio**
- **Outputs:** 2 pairs (Audio 1 and Audio 2) User configurable
- **Output Impedance:** Low (electronically balanced)
  
  Adjustable via 'Configuration' menu

**Control**
- **Via front panel or RS232**

**Alarms (P, N options)**
- **2 contacts: critical and warning alarms**