

TECHNICAL SPECIFICATION

TUNER			
Frequency Range	45.25 MHz to 860.25 MHz (vision carrier)		
Frequency Accuracy	To within ± 36 KHz of programmed frequency		
Frequency Stability	Crystal controlled		
Channels	Up to 198 Channels, preprogrammed to 'system specific' channel allocations or to customer requirements.		
Input Level	0.2 mV to 30 mV min/max. (-14 dBmV to +29dBmV) 2.0 mV to 10 mV recommended (+6dBmV to +20dBmV)		
I F Output			
Vision Carrier	38.9 MHz		
Impedance	75 Ohms (nominal)		
Output Level	0 dBm (typical) for RF inputs > 6dBmV		
Sound Carriers	1st. F M	2nd F M	NICAM
System B/G/H	33.4 MHz	33.16MHz	33.05 MHz
System I	32.9 MHz	-	32.348 MHz
System D/K/K1	32.4 MHz	-	32.05 MHz
Overall Video Performance			
Output Level	1 Volt p to p into 75 Ohms		
Output Return Loss Ratio	> 30 dB (10 KHz to 6MHz)		
Differential Phase	$\pm 1^\circ$ (typical)		
Differential Gain	$\pm 1\%$ (typical)		
Adjacent Channel Rejection	>50 dB		
Group Delay			
System B/G/H	CCIR correction applied		
System I	Flat ± 50 nS		
System D/K/K1	Flat ± 50 nS		
Frequency Response	± 1.5 dB 10 KHz to 4.2 MHz		
2T Pulse, K Factor	<1% (typical)		
Pulse to bar Ratio	95 to 105%		
Chrominance/Luminance Gain	85 to 105%		
Chrominance/Luminance Gain	± 50 nS (no group delay correction applied)		
Signal to Noise	-53 dB p to p (typical) relative to 700 mV		
(+6dBmV RF Input)	-45 dB rms (typical) 10 KHz to 5 MHz		

TECHNICAL SPECIFICATION

AUDIO STANDARDS

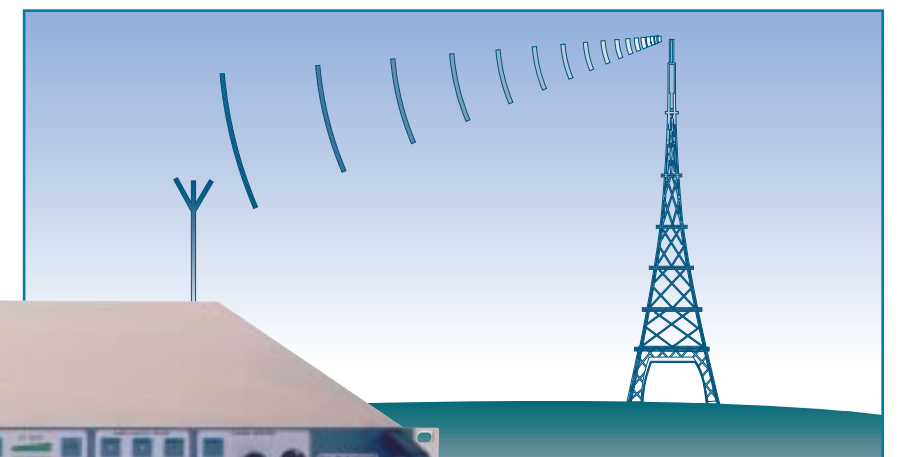
MODEL	SYSTEM	DEMODULATORS
5111	I	FM MONO*
5112	B/G	FM MONO*
5113	D/K	FM MONO*
5114	B/G	FM STEREO**
5115	I	FM MONO + NICAM
5116	B/G	FM MONO + NICAM
5117	D/K	FM MONO + NICAM
5118	B/G	FM STEREO + NICAM
5121	L	AM MONO*
5122	L	AM MONO + NICAM
5123	M/N	FM MONO*
5126	D/K	FM MONO + NICAM

* On F M Mono units only, the demodulation of a second system standard FM Mono audio can be provided as an optional extra

** Two carrier (Zweiton/IRT) F M Dual Mono/Stereo system

F M Audio

De-emphasis Time Constant	50 μ S
Frequency Response	40 Hz to 15 KHz (<-3dB)
Output Impedance	22 Ohms (electronically balanced output)
Output Level	0 dBm (nominal for ± 17 KHz deviation) (0dBm = 0.775 into 600 OHms)
Total Harmonic Distortion	< 1%
Crosstalk	Stereo Mode > 30 dB (40Hz to 15KHz) Mono Mode > 70 dB (40 Hz to 15KHz)
Signal to Noise	> 63 dB (relative to + 50 KHz deviation) (CCIR 468-3 weighted)
A M Suppression	> 48 dB



SHOWMAN 5000 SERIES

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