

TECHNICAL SPECIFICATION

RF Input

Input connector	F type female, 75 Ohm
Tuning Range	PAL 45.25 MHz to 860.25 MHz NTSC 55.25 MHz to 801.25 MHz
Tuning step size	250 KHz
Input level	0.2 m V to 30 m V min/max (-14 dBmV to +29 dBmV)
Frequency Accuracy	to within ± 36 KHz
Frequency Stability	Crystal controlled
AFC	Operational capture range ± 4 MHz

IF Input

Connector	BNC type connector
Impedance	75 Ohm
Frequency	PAL 38.9 MHz, NTSC 45.75 MHz
Input Level	AGC

IF Output

Connector	BNC type connector
Impedance	75 Ohm
Frequency	PAL 38.9 MHz, NTSC 45.75 MHz
Output level	50 to 500 mV pp

IF Sound Output

Output	Mono Audio channel
Connector	BNC type connector
Impedance	75 Ohm
Frequency	PAL I 6.0 MHz / D/K 6.5 MHz / B/G 5.5 MHz NTSC 4.5 MHz
Output level	800 mv pp (typical) for RF input > 6dBm

Video Output

Connector	2 outputs on BNC type connectors
Impedance	75 Ohms
Output level	1 Vpp into 75 Ohm
Differential Phase	$< \pm 1.5^\circ$ (typical for RF input > 6dBm)
Differential Gain	$< 1.5\%$ pp (typical for RF input > 6dBm)
Chroma/Luma Delay	< 40 ns (typical for RF input > 6dBm)
Frequency Response	100 KHz to 4.43 MHz ± 1 dB for I, B/G, D/K 5-35°C ambient 100 KHz to 3.58 MHz ± 1 dB for M/N 5-35°C ambient
Group Delay (post correction off)	100 KHz to 4.43 MHz ± 60 ns (35 ns typical) for I, B/G, D/K 100 KHz to 3.58 MHz ± 50 ns (35 ns typical) M/N
Bar Tilt	$\pm 2.0\%$ (PAL/NTSC)
Bar Amplitude	PAL 700mV ± 0.5 (1.5%) / NTSC 100ire ± 1.5 (1.5%)
Signal to Noise	> 50 dB weighted, for RF inputs < 6 dBm. (typically 53 dB weighted)

Zero Carrier Pulse (ZCP)

Configuration	On/Off selected through Configuration menu
Line	Selected line: PAL 6-16, 319-329. NTSC 10-20 (Field 1 and 2)
Position	ZCP on selected line, 4 positions available

TECHNICAL FEATURES



Channel Selection and Operation

Channel	Up to 198 channels available pre-programmed to 'country or application' channel table. Channel table selection through 'Configuration' menu.
Frequency	Channel selection via direct keying of Vision carrier frequency.
Program	Up to 99 channels may be stored and recalled as 'Program' selected channels.
IF	IF input selected via 'Configuration' menu.
Audio	Select Audio output from available input sources, level adjustable via 'Configuration' menu.
Monitor	Monitor Audio sources through headphone socket, level adjustable under menu control.

Demodulation

Phase locked video IF stage providing synchronous demodulation and active carrier regeneration. Resulting in ultra linear demodulation, good intermodulation performance and pulse response. IF output is available for distribution or remodulation and has adjustable output level controlled through the 'Configuration' menu.

Audio Output

A quasi split sound processor stage suitable for all FM standards is used to provide excellent audio quality. All outputs are low impedance, electronically balanced. Each pair has output level control adjustable via 'Audio' menu. NICAM units offer option to default to FM or silence and also IEC/EBU 958 Digital Audio Output. Sound Intercarrier output as standard.

Display and Configuration menu

2 x 20 character LCD with contrast control and auto scroll provides clear display of Channel, Frequency and RF Input level. Through the 'Configuration' menu, the user has control of: Channel table selection, AFC, Sound trap, IF or RF input select, RS232 or RS485 serial control options, ZCP and associated line and position for depth of modulation measurements.

TELEVISION STANDARDS AND SHOWMAN 6000 TYPE SELECTION

MODEL	SYSTEM	AUDIO
6011	PAL I	FM Mono*
6012	PAL B/G	FM Mono*
6013	SECAM D/K	FM Mono*
6014	PAL B/G	FM Stereo**
6015	PAL I	FM Mono + NICAM
6016	PAL B/G	FM Mono + NICAM
6017	SECAM D/K	FM Mono + NICAM
6018	PAL B/G	FM Stereo + NICAM
6021	SECAM L	AM Mono*
6022	SECAM L	AM Mono + NICAM
6023	NTSC M/N	FM Mono
6024	NTSC M/N	FM Mono + BTSC Stereo
6025	PAL D/C	FM Mono + NICAM (China)
6026	PAL M/N	FM Mono
6027	PAL M/N	FM Mono + BTSC Stereo

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

** Two carrier (Zweitton/IIRT) FM Dual Mono/Stereo system