

MGT Portable Receiver Monitor

RV 2400



The RV 2400 is a combined portable receiver and monitor designed for setting up microwave links or use in remote surveillance operations.

The receiver is the successful RV 2000, a fully synthesised receiver with a frequency range of 950–2050 MHz, PLL locked to a crystal reference.

The frequency range is fully adjustable by preset switches at intervals of 1MHz spacing.

The audio subcarrier is switchable between 5.5 or 7.2MHz. The receiver can be supplied for single or dual channel audio.

Images are displayed on a 6.4" colour TFT LCD screen.

Inputs can be RF from the M & G range of microwave transmitters or direct line input from a CCTV camera.

The unit is powered by 12Vdc from battery, car or mains power supply.

Specification RV 2400	
Frequency range	950MHz–2050MHz (PLL) (2051MHz–2700MHz with S bandconverter)
Programmable steps	1MHz digital
Noise	10db
Input impedance	75Ω connector F female
Video deviation	27/16MHz SAW filter 479.5MH
Video output	1Vpp on 75Ω adjustable
De-emphasis	standard CCIR switchable
Video frequency response	50Hz–5MHz ±1dB with audio at 7.5MHz ±2dB with audio at 5.5MHz
Differential gain	±4%
Differential phase	±4%
Video S/N ratio	>40dB unweighted deviation = 4MHz RF input 50dBm
Audio sub-carrier frequency	5.5MHz–7.5MHz switchable
Audio sub-carrier deviation	±50kHz FM
Stereo version	7.500MHz Ch1, 8.065MHz Ch2
Audio de-emphasis	50μσ
Audio frequency response	15kHz–15MHz ±3dB
Audio output	0dBm on 1kΩ adjustable
Audio S/N ratio	>45dB unweighted
Power supply	12V stabilised 400mA
LNA – LNC power	12Vdc 250mA maximum, switchable
Dimensions	103mm x 42mm x 168mm
Working temperature	0–45°C
Monitor output for received signal	analogue meter full scale – 30dBm Dynamic 35–40dBm
Screen size	Typical Screen (6.4" screen) 6.4"/162.5mm (diagonal), TFT colour LCD, compatible with NTSC or PAL system
Display format	960 x 234 pixels
Active area	130.6mm x 97.3mm
Dot pitch	0.136mm (H) x 0.416mm (V)
Aperture ratio	60%
Pixel configuration	stripe
Viewing direction	6 o'clock

The RV 2400 Portable Receiver Monitor can be supplied with optional digital frame storage, time and date generator. Other sizes of screen can be supplied to order, as can alternate enclosures. Models can also have telemetry control incorporated.