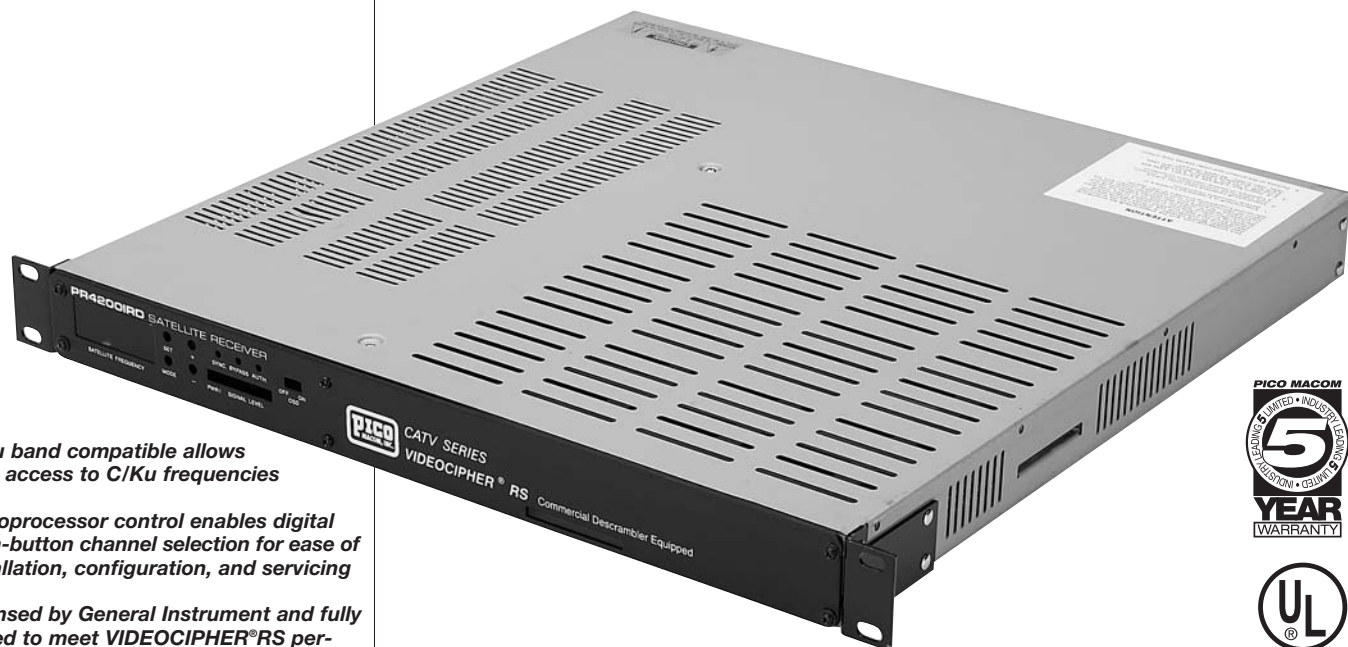


# PR4200IRD

## Commercial Satellite Integrated Receiver-Descrambler



- ▶ *C/Ku band compatible allows easy access to C/Ku frequencies*
- ▶ *Microprocessor control enables digital push-button channel selection for ease of installation, configuration, and servicing*
- ▶ *Licensed by General Instrument and fully tested to meet VIDEOCIPHER®RS performance standards*
- ▶ *State-of-the-art digital phase-locked loop (PLL) design guarantees precise frequency locking for solid drift-free operation*
- ▶ *Front panel OSD (on screen display) enable switch for VIDEOCIPHER®RS status monitoring allowing easy setup and troubleshooting*
- ▶ *LED digital display provides quick frequency and channel identification*
- ▶ *Front panel signal strength meter displays relative strength of FM modulated I.F. signal for easy setup and calibration with minimal test equipment*
- ▶ *Separate clamped and unclamped video outputs provide easy stand-alone interface to external modulator and descrambler*
- ▶ *70 MHz I.F. loop allows insertion of external terrestrial interference filtering*
- ▶ *LNB on-off switch controls power to LNB for convenient system configuration*
- ▶ *UL Approved*



# PR4200IRD

## Commercial Satellite Integrated Receiver-Descrambler

The **Pico Macom PR4200IRD** is a very user friendly and professional re-broadcast grade microprocessor-controlled satellite receiver decoder designed for CATV, SMATV, and cable radio services. The receiver uses a phase-locked loop (PLL) demodulator ensuring precise tuning and crisp clear video, even under weak signal conditions. The descrambler unit is licensed by General Instrument and meets all VIDEOCIPHER®RS requirements. The receiver is both C and Ku band compatible, operating from 950-1750MHz in compliance with all international CCIR standards. Front panel access provides quick module identification and easy replacement. Front panel displays enable channel selection, relative signal strength, VC sync, bypass and authorization status. **Pico Macom** backs up this product with its industry leading 5-year limited warranty.

Order From:



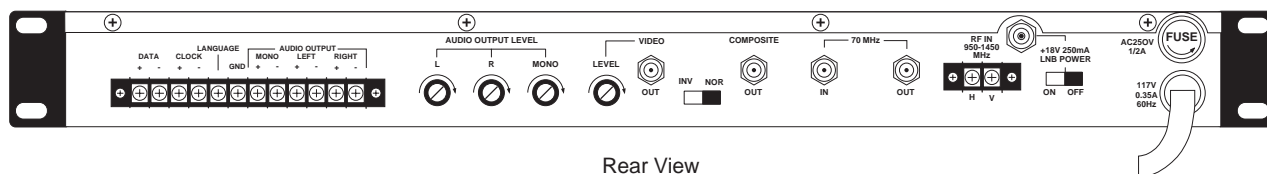
Toll Free: 800-423-2594  
[www.multicominc.com](http://www.multicominc.com)  
[multicom@multicominc.com](mailto:multicom@multicominc.com)

# PR4200IRD

Commercial Satellite Integrated Receiver-Descrambler



Front View



Rear View

## RF

|                            |   |
|----------------------------|---|
| <b>Input Impedance:</b>    | 75 ohms   |
| <b>Input Frequency:</b>    | C band 950 MHz to 1450 MHz<br>Ku band 950 MHz to 1750 MHz |
| <b>Input Level:</b>        | -30 to -60 dBm  |
| <b>IF Frequency:</b>       | 70 MHz  |
| <b>AFC Range:</b>          | @ 70 MHz, ±4 MHz  |
| <b>IF Bandwidth:</b>       | @ -3 dB, 27 MHz   |
| <b>FM Threshold:</b>       | < 7 dB  |
| <b>Intermodulation:</b>    | -40 dB  |
| <b>Spurious Rejection:</b> | -40 dB  |

## Audio

|                               |  |
|-------------------------------|--|
| <b>Sub-carrier Audio</b>      |  |
| <b>Bandwidth:</b>             | ±250 kHz deviation minimum                 |
| <b>Sub-carrier Frequency:</b> | 6.8 MHz preset or<br>5 - 8.5 MHz (tunable) |
| <b>Impedance:</b>             | 600 ohms (unbalanced)                      |
| <b>Dynamic Range:</b>         | 80 dB S/N                                  |
| <b>Deemphasis:</b>            | 75 microseconds                            |
| <b>Audio Base Band</b>        |  |
| <b>Frequency Response:</b>    | ±0.25 dB, 20 Hz – 15 kHz                   |
| <b>Dynamic Range:</b>         | 80 dB S/N                                  |
| <b>THD:</b>                   | < 0.5%                                     |
| <b>Output Level:</b>          | +17 dBm max                                |

## Ordering Information

|                     |                                      |
|---------------------|--------------------------------------|
| <b>PR-4200IRD</b>   | Specify CATV or UHF                  |
| <b>PR-4200IRD-C</b> | Chassis only                         |
| <b>VCRS+MOD</b>     | VIDEOCIPHER <sup>®</sup> Module only |

## Video

|                                     |   |
|-------------------------------------|---|
| <b>Clamped</b>                      |   |
| <b>Format:</b>                      | NTSC Negative sync  |
| <b>Output Impedance:</b>            | 75 ohms   |
| <b>Video Out Level:</b>             | (@ 10.75 MHz deviation)<br>1.0 V p-p minimum<br>@ 14 dB CNR |
| <b>Video S/N Ratio:</b>             | 52 dB weighted<br>Normal or inverted                        |
| <b>Video Polarity:</b> (Switchable) | < 5% (10-90 APL)  |
| <b>Differential Gain:</b>           | < 2 IRE   |
| <b>Differential Phase:</b>          | < 5° (10-90 APL)  |
| <b>Lum/Chrom IMD:</b>               | < 2 IRE   |
| <b>Lum/Chrom Gain Inequality:</b>   | ±5 IRE max  |
| <b>Video Frequency Response:</b>    | ±0.5 dB, 30 Hz - 4.2 MHz                                    |
| <b>Bandwidth:</b>                   | 4.2 MHz   |
| <b>Clamping:</b>                    | 40 dB   |
| <b>Deemphasis:</b>                  | CCIR REC 405-1  |
| <b>Unclamped</b>                    |   |
| <b>Composite Video:</b>             | ±0.5 dB, 30 Hz to 8.5 MHz                                   |

## General

|                               |  |
|-------------------------------|--|
| <b>Power Input :</b>          | 103.5-125 VAC 50/60 Hz                               |
| <b>Operating Temperature:</b> | -10°C to 60°C  |
| <b>Dimensions:</b>            | 19"(L) x 18"(D) x 1 <sup>3</sup> / <sub>4</sub> "(H) |
| <b>Weight:</b>                | 14.0 lbs.  |
| <b>V/H Control:</b>           | +5 VDC/-5 VDC  |
| <b>LNB Supply Voltage:</b>    | Switchable +18 Vdc                                   |

VIDEOCIPHER<sup>®</sup> is a registered trademark of General Instruments Corp. (Motorola)

Order From: 

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multicom@multicominc.com