

# CESR Series

## Commercial Satellite Receiver



### ○ Features & Benefits

- Three Year Warranty
- C and Ku Band Compatible - 950 to 1750 MHz
- Push Button Tuning of Transponder Frequency
- External 70 MHz IF loop for Easy TI Management

The CESR-c is a professional quality, high performance, commercial satellite receiver. This unit is ideal for applications requiring a low cost, commercial grade satellite receiver. The CESR-c is C and Ku band compatible, accepting signals in the 950 to 1750 MHz frequency range. Frequency selection is accomplished via front panel push button switches, supporting both C band transponder and direct C and Ku band frequency settings. The receiver offers two modes of synthesized frequency control. A high-stability quartz crystal reference mode, with a 1 MHz tuning increment, allows for optimizing the receiver's terrestrial interference immunity. An AFC mode is also included, which provides tracking of the LNB frequency drift of the input signal. The ultra-stable phase locked loop demodulator features superior C/N threshold extension. This design delivers excellent picture quality, even under weak signal conditions. The unit can be set to one of two aural subcarrier modes, including fixed (6.8 MHz) and variable (5.4 to 8.2 MHz). An external 70 MHz IF loop is provided, which allows TI filters to be inserted as needed. This receiver comes standard with a 32 MHz IF bandwidth filter installed.

### ○ Specifications

#### RF

Frequency Range: 950 to 1750 MHz  
Tuning Increment: 1 MHz  
Input Level: -60 to -25 dBm  
Image Rejection: 45 dB  
Impedance: 75 Ohm

#### IF

Frequency: 70 MHz  
Bandwidth: 32 (18, 20, and 25 optional) MHz  
Level: -10 dBm  
Static Threshold C/N: <8.0 dB  
Impedance: 75 Ohm

#### Video

Standard Video Frequency Range:  
25 Hz to 4.2 MHz  
Flat Video Frequency Range:  
25 Hz to >8.0 MHz  
Composite Video Frequency Range:  
25 Hz to >8.0 MHz  
Output Level: 1.0,  $\pm 3$  dB adj. (V p-p)  
Format: NTSC, negative sync  
De-Emphasis: CCIR 405-1, 525 lines  
Polarity: standard or inverted  
Differential Gain: <5 %  
Differential Phase: <5 °  
Chrominance/Luminance Intermod Distortion:  
3 %  
Gain Inequality:  $\pm 5$ , max IRE  
Delay Inequality:  $\pm 26$  ns  
Distortion  
Short Time: <3 %  
Line Time: <2 %  
Field Time: <3 %  
Dispersion Removal: >40 dB

#### Audio

Frequency Range: 20 Hz to 15 kHz  
Frequency Response:  $\pm 1.0$  dB  
Output Level: 0 dBm  
Output Level Range: 0 to 12, minimum dB  
De-Emphasis: 50, 75, 117  $\mu$ s  
Signal-to-Noise Ratio: 60 dB  
Harmonic Distortion: <1.0 %  
Impedance: 600, unbalanced Ohm

#### General

Power Requirements  
Voltage: 117,  $\pm 10\%$  VAC  
Frequency: 60 Hz  
Power: 15 W  
LNB Supply  
Voltage: 17, min VDC  
Current: 250, max mA  
Fuse: 1/4  
Temperature Range: 0 to +50 °C

#### Mechanical

Dimensions (WxHxD):  
19.0 x 1.75 x 12.0 in.  
483 x 44 x 305 mm  
Weight: 7.50 lbs. (3.41 kg)

#### Controls (Front Panel)

Frequency Selection: Push Button Switches  
Video Polarity (NORM/INV): Slide Switch  
Tuner Reference (XTAL/AFC): Slide Switch  
AFC Fine Tuning: Control  
Audio Subcarrier Select (6.8/VAR): Slide Switch  
Audio Subcarrier Tuning: Control  
Video Level: Control  
Audio Level: Control

#### Controls (Rear Panel)

LNB Power (ON/OFF): Slide Switch  
Aural Bandwidth (Narrow/Wide): Slide Switch

#### Indicators (Front Panel)

Power ON: LED, green  
Signal Strength OK: LED, green

#### Connectors (Rear Panel)

RF Input/LNB Power: "F" type, female  
70 MHz IF Output: "F" type, female  
70 MHz IF Input: "F" type, female  
Video Output, Standard: "F" type, female  
Video Output, Flat: "F" type, female  
Video Output, Composite: "F" type, female  
Audio Output: RCA Phono, female

Refer to product instruction manual for additional specification measurements and notes.

### ○ Ordering Information

Model	Stock No.	Description
CESR-C	6166	Commercial Satellite Receiver 950-1450 C & Ku Band Capable
<b>CESR Options</b>		
CESR-OPT 02	6470	CESR-c Option: Stereo Audio
CESR-OPT 03	6480	CESR-c Option: Second Audio Subcarrier

Order From:



Toll Free: 800-423-2594  
www.multicominc.com  
multicom@multicominc.com