



○ Features & Benefits

- Rack Mountable - 1 EIA (1.75") Rack Space
- DVB Compliant Decompression with FEC and Virtual Channel Mapping Support
- Front Panel Mounted Push Button Switches for Easy Channel Selection
- Professional Commercial Satellite Receiver for EchoStar Dish Network Compatibility

The CDSR-6198 is a professional quality, high performance, commercial digital satellite receiver. The unit is designed to receive MPEG-2, DVB compliant DISH Network™ programs. The CDSR-6198 is ideal for cable systems requiring a single small DBS antenna while maintaining the highest signal quality and reliability. The best possible video and audio quality is delivered by using a combination of forward error correction (FEC) techniques.

Each receiver has a unique address stored on the communication card. The receiver automatically handles virtual channel mapping using a programmer transmitted satellite transponder lookup table. Channels are user-selectable via push button switch on the front panel. Monaural and stereo audio outputs are provided.

○ Specifications

RF

Frequency Range: 950 - 1450 MHz
 Impedance: 75 Ohm
 Input Level: -70 to -30 dBm
 IF Band Width: 32 (at -3 dB) MHz

Video

Frequency Range Composite:
 ± 0.6 (100 KHz to 4.2 MHz) dB
 Level: 1.0 (± 3 % into 75 Ohm) Vp-p
 Format: QPSK, MPEG-2 DVB
 C/L Delay Inequality: ± 40 ns
 Differential Gain: < 3 % p-p
 Differential Phase: < 3 ° p-p
 Signal-to-Noise Ratio: > 55 dB (weighted)
 Luma Delay: < 40 ns
 Line Time Distortion: < 1.5 % TILT
 Field Time Distortion: < 1.5 % TILT

Audio

Frequency Range: 20 Hz - 20 kHz (±1 dB)
 Output Level
 (Left and Right): 0 (into 600 Ω) dBm
 Mono: 1 (into 10K Ω) Vp-p
 Stereo L-R Separation: 50 dB
 Signal-to-Noise Ratio: 80 dB
 Harmonic Distortion: < 0.1 (at 1 KHz) % THD
 Dynamic Range: 90 dB
 Left to Right Balance: < 0.8 dB

General

Power Requirements
 Voltage: 110 (± 22%) VAC
 Frequency: 54 to 66 Hz
 Power: 23 W

LNB Supply RHCP Polarity Switching:
 +13.3 (±7%) V
 LHCP Polarity Switching: +18.3 (±7%) V
 Current: 300 (max) mA
 Protection: Lightning, short circuit
 Safety: UL listed 1409

Mechanical

Dimensions (WxHxD):
 19.00 x 1.75 x 14.5 in
 482.6 x 44.4 x 368.3 mm
 Weight: 5.00 lbs, 2.27 kg
 Operating Temperature:
 32 to 122 °F, (0 to 50) °C

System Specifications

TV System: NTSC
 Input Symbol Rate: 20 Msps
 Inner FEC: Convolutional Rate 3/4
 Outer FEC: Reed Solomon coding (204,188) t=8
 Demultiplexing: ISO/IEC 13818-1
 Video Decoding: ISO/IEC 13818-2 (MP-ML)
 Audio Decoding: MPEG 1, layer 1 and 2

Connectors (Rear Panel)

RF Input/LNB Power: "F" type, female
 Video Composite: "F" type, female
 Left And Right Audio Output: Terminal Strip
 Mono Audio Output: Terminal Strip

Controls (Front Panel)

Channel Selector: Push Buttons

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

○ Ordering Information

Model	Stock No.	Description
CDSR-6198A	6198A	Commercial Digital Satellite Receiver Dish Network DBS Programming

Commercial Digital Satellite Receiver

CDSR-6181

Headend



○ Features & Benefits

- Rack Mountable - 1 EIA (1.75") Rack Space
- DVB Compliant Decompression with FEC and Virtual Channel Mapping Support
- Front Panel Mounted Push Button Switches for Easy Channel Selection
- Professional Commercial Satellite Receiver for Bell ExpressVu Compatibility

The CDSR-6181 Series is a professional quality, high performance, commercial digital satellite receiver. The unit is designed to receive the MPEG-2, DVB compliant Bell ExpressVu programs. The CDSR-6181 is ideal for cable systems requiring a single small DBS antenna while maintaining the highest signal quality and reliability. Proprietary on-board software shields the receiver from consumer DBS transmitted instructions. Each receiver has a unique address stored on the communication card. The receiver automatically handles virtual channel mapping using a programmer transmitted satellite transponder lookup table. Channels are user-selectable via push button switches on the front panel. The CDSR-6181 delivers the best possible video and audio quality by using a combination of forward error correction (FEC) techniques. Monaural and stereo audio outputs are provided.

○ Specifications

RF

Frequency Range 950 - 1450 MHz
Impedance: 75 Ohm
Input Level: -70 to -30 dBm
IF Band Width: 32 (at -3 dB) MHz

Video

Frequency Range Composite:
± 0.6 (100 KHz to 4.2 MHz) dB
Level: 1.0 (± 3 % into 75 Ohm) Vp-p
Format: QPSK, MPEG-2 DVB
C/L Delay Inequality: ± 40 ns
Differential Gain: < 5 % p-p
Differential Phase: < 5 ° p-p
Signal-to-Noise Ratio: > 50 dB (weighted)
Luma Delay: < 40 ns
Line Time Distortion: < 1.5 % TILT
Field Time Distortion: < 1.5 % TILT

Audio

Frequency Range: 20 Hz - 20 kHz (± 1 dB)
Output Level
(Left and Right): 0 (into 600 Ohm) dBm
Mono: 1 (into 10K Ohm) Vp-p
Stereo L-R Separation: 50 dB
Signal-to-Noise Ratio: 80 dB
Harmonic Distortion: < 0.1 (at 1 KHz) % THD
Dynamic Range: 90 dB
Left to Right Balance: < 0.8 dB

General

Power Requirements
Voltage: 110 (± 22%) VAC
Frequency: 54 to 66 Hz
Power: 23 W

LNB Supply RHCP Polarity Switching:
+13.3 (±7%) V
LHCP Polarity Switching: +18.3 (±7%) V
Current: 300 (max) mA
Protection: lightning, short circuit
Safety: UL listed 1409

Mechanical

Dimensions (WxHxD):
19.00 x 1.75 x 14.5 in
482.6 x 44.4 x 368.3 mm
Weight: 5.00 lbs, 2.27 kg
Operating Temperature:
32 to 122 °F
(0 to 50) °C

System Specifications

TV System: NTSC
Input Symbol Rate: 20 Msps
Inner FEC:
Convolutional Rate 1/2, 3/4, 2/3, 5/6, 7/8
Outer FEC:
Reed Solomon coding (204,188) t=8
Demultiplexing: ISO/IEC 13818-1
Video Decoding: ISO/IEC 13818-2 (MP-ML)
Audio Decoding: MPEG 1, layer 1 and 2

Connectors (Rear Panel)

RF Input/LNB Power: "F" type, female
Video Composite: "F" type, female
Left And Right Audio Output: Terminal Strip
Mono Audio Output: Terminal Strip

Controls (Front Panel)

Channel Selector: Push Buttons

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

○ Ordering Information

Model	Stock No.	Description
CDSR-6181	6181A	Commercial Digital Satellite Receiver Bell ExpressVu DBS Programming

Commercial Digital Satellite Receiver

CDSR-6199



Headend

○ Features & Benefits

- Rack Mountable - 1 EIA (1.75") Rack Space
- Professional Commercial Satellite Receiver for DirecTV Compatibility
- Front Panel Mounted Push Button Switches for Easy Channel Selection
- DirecTV MPEG-1 & MPEG-2 Decompression and Virtual Channel Mapping Supported

The CDSR-6199 & CDSR-6182 are professional quality, high performance commercial digital satellite receivers. The CDSR-6199 and the CDSR-6182 are single receivers. Both Units occupy one 1.75" EIA Rack Space. The units are designed to receive MPEG-1 & MPEG-2 DirecTV programs. They are ideal for cable systems requiring a single small DBS antenna while maintaining the highest signal quality and reliability.

Each receiver has a unique address stored on the communication card. The receiver automatically handles virtual channel mapping using a programmer transmitted satellite transponder lookup table. Channels are user-selectable via Push Button Switch on the front panel. Monaural and stereo audio outputs are provided.

○ Specifications

RF

Input Frequency Range: 950 - 1450 MHz
Impedance: 75 Ohm
Return Loss: -10 dB (max into 75 Ohms)
Input Level: -65 to -25 dBm
Total Bandwidth: 24 MHz
Adj. Chan. Power: ± 4 dBm
Modulation: QPSK
Pulse Shaping Sq. Root:
Nyquist 20% excess BW
Transmit Symbol Rate: 20 MSPS

Video

Level: 1.0 (± 3 into 75 Ohm) Vp-p
Chrominance to Luminance Delay: ± 75 ns
Luminance K Factor
(2T Pulse): ≤ 5 %
Differential Gain: ≤ 10 %

Audio

Output Voltage:
0.2 (min) to 2.0 (max) Vrms
Impedance: 10 K Ohm
S/N: > 90 dB
THD: ≤ 0.05 %
Dynamic Range: > 90 dB
A/V Time Differential: ± 20 ms
Gain Differential L-R: ≤ 1.5 dB (50 Hz - 15 KHz)
Phase Differential L-R: ≤ 3 deg (50 Hz - 15 KHz)

General

Power Requirements
Voltage: 110 (± 20 %) VAC
Frequency: 54 to 66 Hz
Power: 20 (max) W
LNB Supply
Current: 300(max) mA
Protection: Lightning, Short Circuit
Safety: UL Listed 1409

System Specifications

TV System: NTSC

Connectors (Rear Panel)

RF Input/LNB Power: "F" female
Video: "F" female
Mono, L/R Audio: Terminal Strip
Phone Line Connection: RJ-11

Controls (Front Panel)

Channel Selector: Push Button Switch
Enter Channel: Toggle Switch
Power: Toggle Switch
LED Indicator: Green LED

Mechanical

Dimensions: 19 x 1.75 x 18 in.
Weight: 5.4 lbs.
Operating Temperature: 0 to 50 °C

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

○ Ordering Information

Model	Stock No.	Description
CDSR-6199	6199	Commercial Digital Satellite Receiver DIRECTV DBS Programming
CDSR-6182	6182	Commercial Digital Satellite Receiver DIRECTV DBS Programming with Balanced Audio