

SR 20C : Technical Specifications

The SR 20C is the companion receiver to the STL 20C transmitter. This unit is fully synthesized and can be operated in any frequency within the specified band of operation. The SR 20C is frequency agile and can be programmed easily to any operating frequency in the band of interest.



AVAILABLE OPERATING FREQUENCIES

150 MHz Band:
Range from 135 to 185 MHz

240 MHz Band:
Range from 215 to 265 MHz

330 MHz Band:
Range from 300 to 350 MHz

450 MHz Band:
Range from 430 to 480 MHz

950 MHz Band:
Range from 935 to 965
MHz

RF SPECIFICATIONS

Frequency Programming:

Increments:

1 Hz

Accuracy:

$\pm 0.00025\%$ of center frequency

Change Time:

<2 seconds

Receive Bandwidth:

125-250 KHz, depending on selected frequency

Deviation:

[spec]

Stability over Operating Temperature range:

$\pm 0.0001\%$

Sensitivity:

50 dB Signal-to-Noise:

4 μ Vs

60 dB Signal-to-Noise:

14 μ Vs

Max Signal-to-Noise (typically 75 dB or greater):

100 μ Vs

AUDIO SPECIFICATIONS

Type of technology to produce carrier:

Phase-locked loop (synthesized)

Spurious Response:

-90 dB

Mono Operation:

Connector Type:

15-pin D connector or external terminal strip

Output Impedance:

Balanced 600 Ohms

Output Level:

-10 dBm to +11 dBm

Frequency Response (20 Hz to 15 kHz):

±0.2 dB

S/N Ratio @ 100 µV Input:

200 kHz BW @ 50 kHz Dev:

>75 dB

125 kHz BW @ 15 kHz Dev:

>64 dB

125 kHz BW @ 9 kHz Dev:

>60 dB

THD + Noise:

200 kHz BW @ 50 kHz Dev:

0.25% or less, 20 Hz to 15 kHz

125 kHz BW @ 15 kHz Dev:

0.3% or less, 20 Hz to 15 kHz

125 kHz BW @ 9 kHz Dev:

0.3% or less, 20 Hz to 15 kHz

Composite:

Connector Type:

BNC connector, unbalanced Female

Impedance:

75 Ohm

Output Level:

0.25 Vpp to 8 Vpp

Frequency Response:

Composite:

±0.2 dB, 30 Hz to 53 kHz

Wideband:

±0.3 dB, 30 Hz to 100 kHz

S/N Ratio:

>75 dB, dependent upon operating frequency, demodulated, deemphasized

THD + Noise:

0.2% or less, 20 Hz to 15 kHz, demodulated, deemphasized, low-pass filtered, left or right channel

Separation:

250 kHz BW:

-55 dB @ 400 Hz; -52 dB, 50 Hz to 15 kHz

200 kHz BW:

-50 dB, 50 Hz to 15 kHz

IMD:

75 dB for 20 dB signal-to-noise

Image Rejection:

100 dB

MECHANICAL/PHYSICAL

RF Input Connector:

Type N Female

Accessory Connector:

15-pin D connector or terminal strip

Output Connector:

15-pin D connector or terminal strip

Dimensions (Unpacked):

3.5"H x 19"W x 15.5"D (8.9cm H x 48.3cm W x 39.4cm D)

Weight (Unpacked):

7.8 lbs (3.5 kg)

ENVIRONMENTAL

Operating Temperature:

-20° C to +50° C

Altitude:

10,000 ft (3048m) max

Humidity:

95% maximum, non-condensing

ELECTRICAL

Voltage:

AC Operation:

85-264 VAC; 47-63 Hz

DC Operation:

+10 to +14 VDC (Via D Connector)

Current Draw:

1.5 A @ 12 VDC

Power Consumption:

55 Watt Max (25 W Typ)

Heat Dissipation:

55 W Max

Fuse:

1.25 amp slo-blo