

## SR 40A 150 : Technical Specifications

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The SR 40A is a fully synthesized and frequency agile RPU receiver. It can be operated on any frequency within its specified band through the front panel controls and there are no minimum spacing requirements with the operating band.

### RF SPECIFICATIONS

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**Frequency Band:**

135-185 MHz

**Stability over Operating Temperature range:**

± 0.0001%

**Frequency Programming:**

**Increments:**

1 Hz

**Accuracy:**

± 0.00025% of center frequency

**Change Time:**

<2 seconds

**Number of Channels/Frequencies:**

Unlimited within band, enter from front panel controls

**Minimum Channel Spacing:**

None

**Receive Bandwidth:**

20-50 kHz, depending on selected frequencies

**Deviation:**

1.5, 5.0, 7.5 or 10.0 kHz depending upon frequency and filter

**Spurious Response:**

-90 dB

**Sensitivity:**

**20 dB Signal-to-Noise:**

0.5  $\mu$ Vs

**30 dB Signal-to-Noise:**

2.0  $\mu$ Vs

**40 dB Signal-to-Noise:**

4.0  $\mu$ Vs

**Max Signal-to-Noise (typically 57 dB or greater):**

100  $\mu$ Vs

### AUDIO SPECIFICATIONS

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**Type of Technology:**

Phase-locked loop (synthesized)

**Spurious Response:**

-90 dB

**Mono Operation:**

**Connector Type:**

15- Pin D Connector

**Output Impedance:**

Balanced 600 Ohms

**Output Level:**

0 to +12 dBm

**Frequency Response:**

**50 Hz to 3 kHz:**

±1.5 dB, 10 kHz Channel BW, 1.5 kHz Dev, 20 kHz filter

**50 Hz to 7.5 kHz:**

± 1.5 dB, 25 kHz Channel BW, 5.0 kHz Dev, 25 kHz filter

**50 Hz to 10.5 kHz:**

± 1.5 dB, 36 kHz Channel BW, 7.5 kHz Dev, 36 kHz filter

**50 Hz to 10.5 kHz:**

± 1.5 dB, 41 kHz Channel BW, 10.0 kHz Dev, 50 kHz filter

**S/N Ratio @ 100  $\mu$ V Input:**

**10 kHz BW @ 1.5 kHz Dev:**  
44 dB

**25 kHz BW @ 5.0 kHz Dev:**  
53 dB

**36 kHz BW @ 7.5 kHz Dev:**  
57 dB

**50 kHz BW @ 10.0 kHz Dev:**  
57 dB

**THD + Noise:**

**10 kHz BW @ 1.5 kHz Dev:**  
2% or less, 50 Hz to 3 kHz

**25 kHz BW @ 5.0 kHz Dev:**  
2% or less, 50 Hz to 7.5 kHz

**36 kHz BW @ 7.5 kHz Dev:**  
2% or less, 50 Hz to 10.5 kHz

**50 kHz BW @ 10.0 kHz Dev:**  
2% or less, 50 Hz to 10.5 kHz

**IMD (For 20 dB Signal-to-Noise):**  
75 dB

**Image Rejection:**  
100 dB

**Headphone:**

**Control at Midrange:**

**Frequency Response:**  
 $\pm 1.5$  dB of the Specified Bandwidth

**S/N Ratio:**  
-37 dB

**THD + Noise:**  
2.5% or less at 400 Hz

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**MECHANICAL/PHYSICAL**

**RF Input Connector:**

Type N female

**Accessory Connector:**

1/4" Headphone jack and control

**Output Connector:**

**Mono:**

15-Pin D connector

**Dimensions (Unpacked):**

3.5"H x 12"W x 15"D (8.9cm H x 30.5cm W x 38.1cm D)

**Weight (Unpacked):**

6.7 lbs (3.0 kg)

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**ENVIRONMENTAL**

**Operating Temperature:**

-10° C to +50° C

**Altitude:**

10,000 ft (3048m) max

**Humidity:**

95% maximum, non-condensing

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**ELECTRICAL**

**Voltage:**

**AC Operation:**

85-264 VAC; 47-63 Hz

**DC Operation:**

+10 to +14 VDC

**Current Draw:**

1.5 A

**Power Consumption:**

150 W Max