

**2007, 2007R Noise Source**

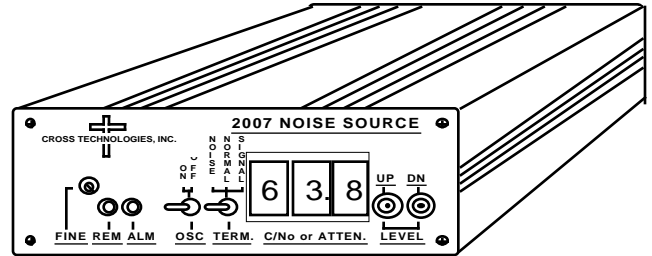
The Model 2007 Noise Source provides 70 MHz band limited noise in 0.1dB increments and summing of an external signal.

**EQUIPMENT FEATURES**

- 10MHz or 40 MHz bandwidth at 70 MHz center frequency
- Accurate attenuator provides 0.1 dB steps of noise power
- Display shows C/No or attenuation from maximum noise power

**EQUIPMENT DESCRIPTION**

Broad band noise goes to precision attenuators controlled by front panel "up" and "down" pushbutton switches via the microprocessor controller. The front panel display shows C/No or attenuation of the noise from a 50 dB- Hz C/No level calibrated for a -20.0 dBm carrier level. Bandpass filters are selected with on board jumpers to band limit the noise at 70 MHz. The 2007 has a front panel red LED that lights if the ambient temperature is outside the +15 to +40 C calibrated temperature range. A yellow LED on the front panel indicates if in remote operation.



**EQUIPMENT SPECIFICATIONS\***

**Input Characteristics- carrier input**

|                    |               |
|--------------------|---------------|
| Input Impedance/RL | 75 /15db      |
| Frequency          | 70 MHz center |
| Input Level        | -20.0 dBm     |
| Gain               | 0 dB ± 0.1 dB |

**Output Characteristics**

|                |                   |
|----------------|-------------------|
| Impedance/RL   | 75 /15db          |
| Frequency Band | 52 - 88 MHz       |
| Level          | noise power range |

Monitor level

**Channel Characteristics - noise source**

|                       |   |
|-----------------------|---|
| Selectable BW(MHz)    | 10MHz or 40 MHz @ 70MHz                                     |
| Frequency Response    | ±0.5 dB 8 MHz, 36MHz  |
| Noise Power Accuracy  | ±0.25 dB, 15 to 40 deg C; ±0.5 dB, 10 to 15, 40 to 50 deg C |
| Noise Power stability | ±0.5 dB, 15 to 40 deg C, 30 days                            |

**Controls**

|                       |   |
|-----------------------|---|
| Test Carrier          | Toggle switch turns reference 70 MHz carrier on and off |
| Term Noise or Carrier | Toggle switch terminates noise or external signal       |
| Output Level          | Potentiometer for Noise calibration                     |
| Attenuation           | PB switches w/ readout of attenuator or C/No setting    |

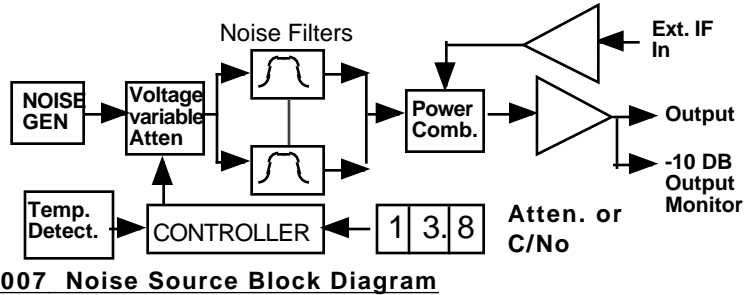
**Indicators**

|        |   |
|--------|---|
| Alarm  | Red LED for temp range (with FET open drain )   |
| Remote | Yellow LED lights when remote control of noise power level is selected                    |
| Level  | Three digit displays show C/No for a -20.0dBm carrier or attenuation from max noise level |

**Other**

|                       |  |
|-----------------------|--|
| RF, IF Connectors     | BNC, female  |
| Size, Bench Top       | 4.7" wide X 1.75" high X 12.5" deep                        |
| Size, Rack Mount (-R) | 19 inch standard chassis 1.75"high X 13.0" deep (Optional) |
| Power                 | 120 ± 10% VAC, 60Hz, 20 watts max, wall mount power supply |

\*+10 to +40 degrees C; Specifications subject to change without notice



**CROSS TECHNOLOGIES, INC.**

6170 Shiloh Road  
Alpharetta, Ga. 30005

770-886-8005, FAX 770-886-7964

Visit our web site at [www.crosstechnologies.com](http://www.crosstechnologies.com)