

Lock-In Pre-amplifier

SR552 — BJT input preamplifier

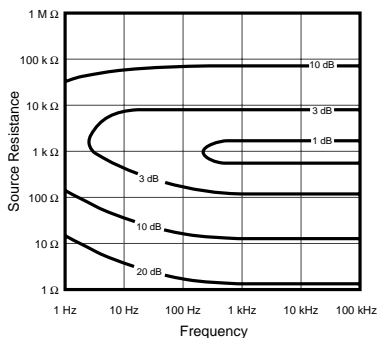


The SR552 Voltage Pre-amplifier is designed to work with any SRS lock-in amplifier, providing gain where it is needed most—right at the experiment. The preamplifier minimizes noise and pickup in the connecting lines and can reduce measurement time in noise limited experiments. The SR552 has a bipolar front-end design (100 kΩ impedance, 1.4 nV/√Hz noise). Power and control signals are brought from the lock-in by a 9-pin cable (included). The SR552 may also be operated independently by applying appropriate power supply voltages (±20 VDC, +5 VDC).

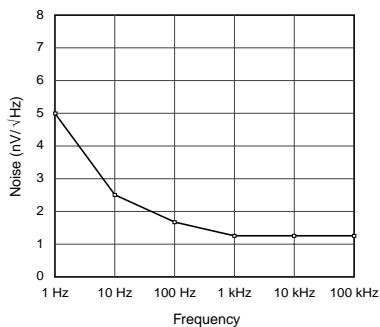
- **1.4 nV/√Hz input noise**
- **BJT input, 100 kΩ input impedance**
- **Gain of 10, 20, 50 or 100**
- **Single-ended and differential inputs**
- **AC coupled input**
- **Powered by any SRS lock-in amplifier**

• **SR552 ... \$595 (U.S. list)**

SR552 Specifications



SR552 noise contour



SR552 noise plot

Input impedance	100 kΩ + 25 pF
Inputs	Single-ended or differential
Maximum input	70 mVrms for overload 50 VDC, 20 VAC damage threshold
Noise (typ.)	1.4 nV/√Hz at 1 kHz 1.6 nV/√Hz at 100 Hz 2.5 nV/√Hz at 10 Hz
Coupling	AC (0.016 Hz)
CMRR (1 V input)	110 dB at 100 Hz 100 dB at 1 kHz 80 dB at 10 kHz 60 dB at 100 kHz
Gain	10, 20, 50, 100 (Automatically set by SR510 or SR530 lock-in)
Full-scale input	10 nV to 200 mV
Gain accuracy	1 % (2 Hz to 100 kHz)
Gain stability	200 ppm/°C
Outputs	A (signal, 600 Ω, single-ended) B (shielded ground)
Maximum output	10 Vpp
Power	Supplied by SR510, SR530, SR810, SR830, or SR850 via control cable.
Mechanical	3.0" × 1.3" × 5.1" (WHD)
Weight	1 lbs.
Warranty	One year parts and labor

Ordering Information

SR552 Lock-in preamplifier \$595