

# OSP-1 *New!*

## Oscilloscope Preamplifier

The OSP-1 is an AC/DC Coupled amplifier extending the sensitivity of any oscilloscope up to **1000X**. Since the maximum sensitivity of most oscilloscopes is 10mV/division, the OSP-1 extends the sensitivity **1000X** to 10µV/division!

The difference input and a low pass filter are absolutely essential features for design or troubleshooting of sensitive electronic circuits, potential ground loops, testing of sensors and noise measurement. The DC offset may be employed for a minute difference signal measurement in the presence of high common mode or DC offset voltages.

The unit may be used as a temporary, general purpose preamplifier for a variety of experiments or tests in physics, chemistry, biology or other sciences.

### FEATURES

- High Gain [1000X]
- Difference Input
- High Common Mode Rejection
- AC/DC Input Coupling
- Variable Low Pass Filter
- DC Offset Control
- Output Overload Monitor
- Power Supply Included
- Low Noise
- Wide Bandwidth
- Input Overload Protection

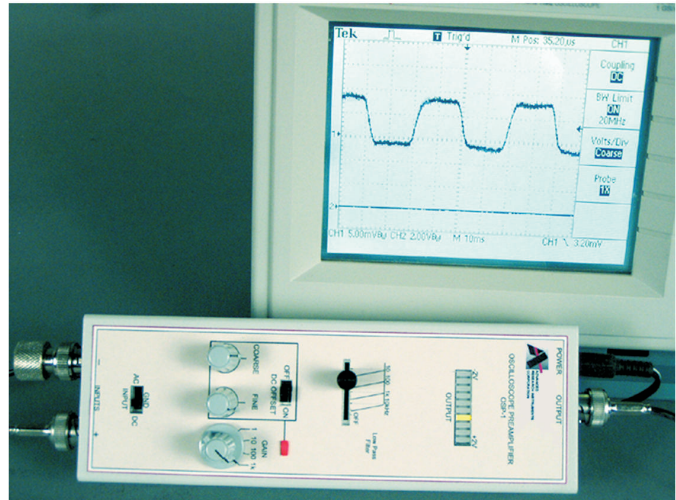
### APPLICATIONS

- Sub-millivolt signal monitoring
- Noise measurement at different bandwidths using the Low Pass Filter!
- Assistance for low noise circuit design and troubleshooting
- Signal recovery from H.F. noise at high common mode voltages
- Monitoring true difference voltage between probe 1 and probe 2
- Sensor evaluation
- Sensitive amplifier for a wide range of experiments in physics, chemistry or biology.

### SPECIFICATIONS

Amplifier Type	AC/DC Coupled Amplifier
Gain	1x, 10x, 100x, 1000x
Input and DC Offset	±3.5VDC at 1x Gain
Bandwidth	1.5 MHz at 1x Gain
Common Mode Rejection	90-100 dB Typical
Input Equivalent Noise	<0.5µV RMS at DC -10Hz
Low Pass Filter	Off, 10kHz, 1kHz, 100Hz and 10Hz
Input Impedance	1MΩ each input
Input Probes	Two Oscilloscope Probes
Input Overload Protection	±100Vmax
Output Overload Monitor	10 element LED Bar Graph
Power	+12VDC [50mA]
Output	±3V

*10µV p-p  
Square Wave*



10µV wave displayed on 5mV/div oscilloscope