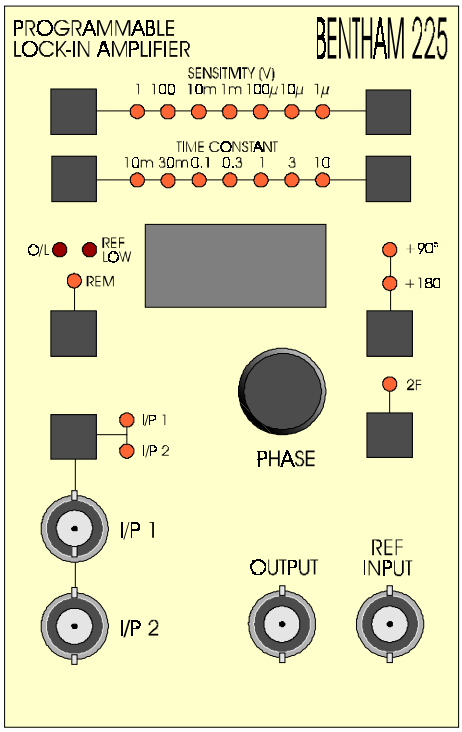
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225 LOCK-IN AMPLIFIER



The 225 is a GP-IB programmable lock-in amplifier designed with optical measurements in mind.

It features dual inputs, making spectral scanning systems with more than one detector a reality, and square wave demodulation to give the best possible signal-to-noise ratio with the signals normally encountered in chopped light systems.

The high impedance input is ideal for connection to photoconductors, including lead sulphide and lead selenide, or to the output of our pyroelectric detector head.

Features include:

- **Two remotely selectable inputs for automatic detector changeover in spectral scanning systems.**
- **Square wave response gives best signal-to-noise ratio in optically chopped systems.**
- **Modular input amplifiers to cover all existing optical detectors.**
- **Integrating A to D output allows digital signal averaging in place of conventional RC time constant.**
- **All functions programmable via GP-IB.**

225 Lock-in Amplifier

Specification

Inputs:	2 - remotely/manually selected
Frequency Range:	0.5Hz to 100kHz
Sensitivity (10V output)	1μV to 1V in decade steps
Input Impedance:	100MΩ//25Pf, Pseudo differential
Dynamic Reserve:	20dB to 80dB depending on sensitivity setting
Gain Accuracy	±1%
Gain Stability	200ppm/C
Reference Mode:	Fundamental or 2f
Phase Control:	0.025° increments plus 90° increments
Output Stability:	5ppm/C to 500ppm/C depending on sensitivity
Time Constant:	10ms to 10s. Digital signal averaging available via 228A. Integrating period 100ms to ∞
Interface:	GP-IB control of all functions
Phase Display:	3 digit LC display shows current phase setting

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