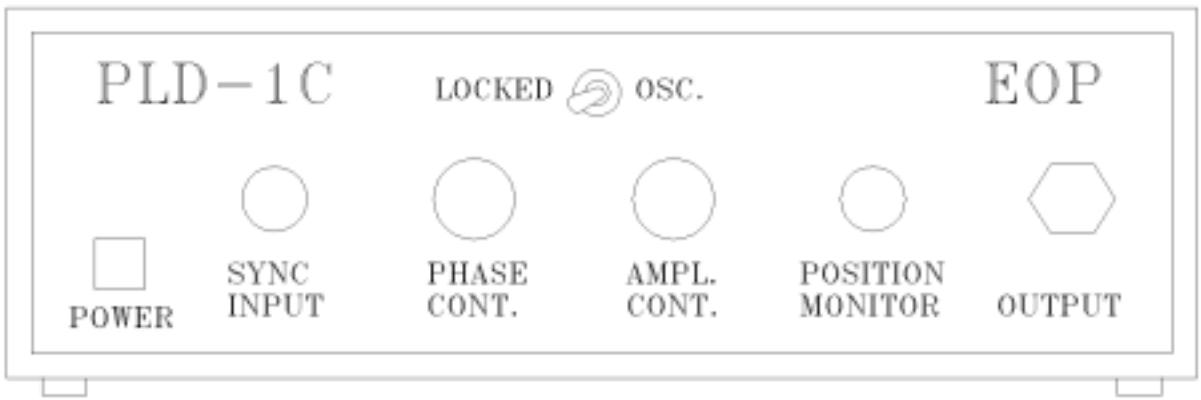
PLD-1C Driver
Synchronizer To External Clock

DESCRIPTION

The **PLD-1C** driver phase locks a **ONE FIXED FREQUENCY resonant tuning fork chopper** to **an external clock signal**. The phase relationship to the clock is factory set to customer requirement (0^o to 360^o) and is front panel adjustable in a range of +/-45^o min. It is a fully integrated driver with front panels controls and internal power supplies. The dimension of the cased driver are: 12" x 10" x 3.8". The **PLD-1C-PC** driver is a printed circuit board level driver which requires an external +/-15V DC power supply. The chopper has high amplitude stability and high frequency stability. It is IR, VIS, UV and high vacuum capable (to 10^{-10} torr) and can be used in a large temperature range. Reference signal and position output available.

CHARACTERISTICS

Frequency range: 5 Hz to 20 KHz.
External clock signal: Sine or TTL level Square wave (1V PTP to 20V PTP).
External clock stability: +/-50 PPM.
External clock accuracy: 100 PPM.
Choppers amplitude stability: .01% or better.
Reference outputs: Sine and TTL level Square wave.
Phase adjustment range: +/-45^o min.
Phase stability: .01%
Phase relationship: factory set to customer spec.
Operating temperature range: 0-60^oC.
Power input: 110V ac or 220V ac, 50-60 Hz, 20W.



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FRONT PANEL CONTROLS

POWER: Power switch to turn the drive "ON".

CLOCK INPUT: External clock input (TTL or sine wave), BNC connector.

EXT. MODE: The chopper is phase locked to the clock signal.

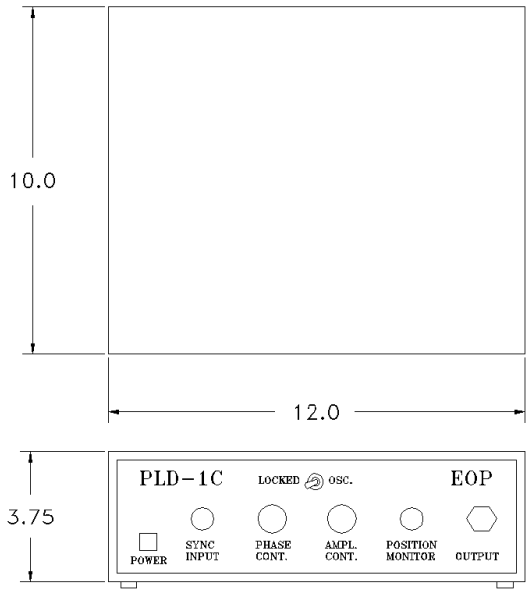
OSC. MODE: The chopper is self oscillating at its resonant frequency.
the chopper is not locked to the clock.

PHASE CONTROL POT: To adjust the phase of the chopper in relationship to the clock, +/-45°C min.

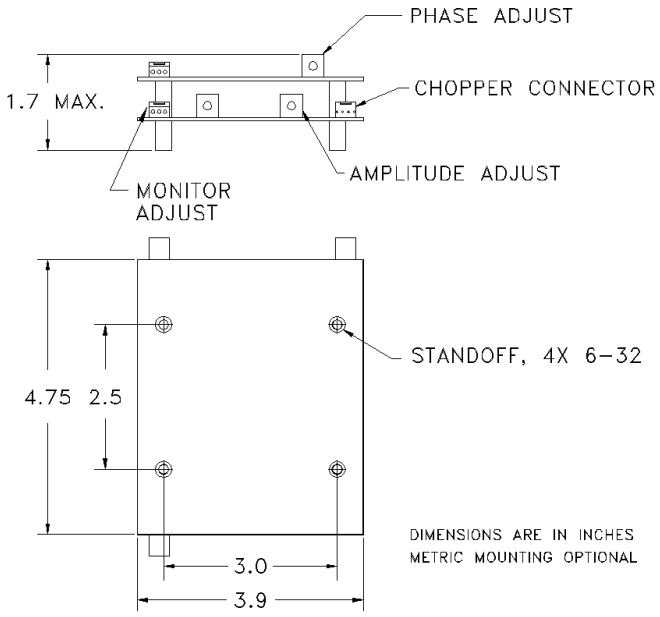
AMPLITUDE: To adjust the amplitude of the chopper.

MONITOR: Sine wave reference output, BNC connector.

OUTPUT: Output connector to interconnect to the chopper.



PLD-1C OUTLINE DRAWING



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