ELECTRO-OPTICAL PRODUCTS CORP.
P.O. BOX 650441 . FRESH MEADOWS, NY 11365 . TEL: (718) 456-6000 . FAX: (718) 456-6050 . www.EOPC.com

PLD-1C DRIVER LOCKS A TUNING FORK CHOPPER TO AN EXTERNAL CLOCK

DESCRIPTION:

The **PLD-1C** driver phase locks a tuning fork chopper to an external clock input signal. The system can be a "stand alone" unit or a portable instrument, or incorporated into a system. Although the chopper can be used in a large temperature range this driver is not recommended for use in temperature sensitive applications. To lock the chopper to an external clock signal you need to specify the exact clock frequency (to 4 decimal places). The phase relationship to the clock is factory set to customer's requirements (0° to 360°).

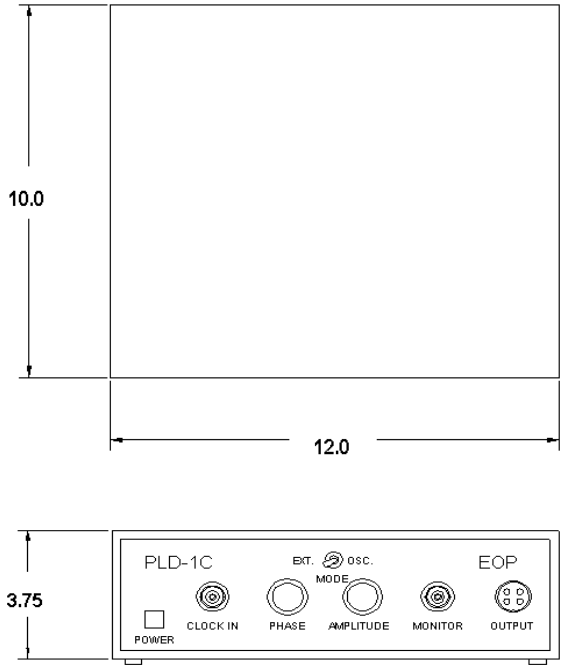
The **PLD-1C-110** or **PLD-1C-220** driver is a boxed driver for 110V or 220V (please specify). The driver has front panel controls for amplitude and phase and internal power supplies. The dimensions of the cased driver are:
12" × 10" × 3.8"

The **PLD-1C-110/220** is a boxed driver with a selector switch for operating from a line voltage of 110Vac or 220Vac.
The **PLD-1C-PC** driver is a printed circuit board level driver which requires an external +/-15V DC power supply.

CLOCK REQUIREMENTS	
EXTERNAL CLOCK STABILITY	+/-50 PPM
EXTERNAL CLOCK ACCURACY	100 PPM

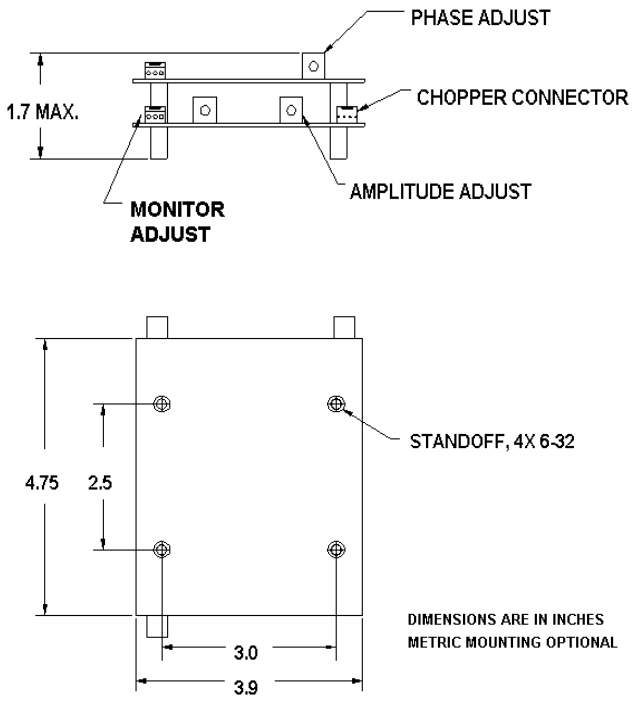
FRONT PANEL CONTROLS	
POWER	Power switch to turn the drive "ON"
CLOCK IN(PUT)	External clock input (TTL or sine wave), BNC connector
LOCKED MODE	The chopper vanes are phase locked to the clock signal
OSCILLATOR MODE	The chopper is self oscillating at its resonant frequency (not locked to the clock input)
PHASE CONTROL POT	Phase adjustment of the chopper vanes in relationship to the clock, +/-45°C min.
POSITION MONITOR	Vanes position output, BNC connector
AMPLITUDE CONTROL	Chopping amplitude adjustment POT
OUTPUT	Output connector to interconnect to the chopper

SPECIFICATIONS	
Frequency range	10 Hz to 6 kHz
External clock signal	TTL level, sine or square wave (1V PTP to 20V PTP)
External clock stability	+/-50 PPM
Chopper's amplitude stability	0.01% or better (not locked to the clock input)
Position monitor	Analog position output, +/-5V max. 1 KOhm max load
Phase adjustment range	+/-45° min.
Phase stability	0.01%
Phase relationship	Factory set to customer's specifications
Operating temperature range	Room temperature only
Power input	110V ac or 220V ac, 50-60 Hz, 20W



PLD-1C OUTLINE DRAWING

PLD-1C-PC OUTLINE DRAWING



ORDERING INFORMATION:

A) <u>CHOPPER INFORMATION:</u>

TYPE [CH-XX]; DUTY CYCLE [%]; VANE [B=bright or D=dark]; FREQUENCY [Hz]

Example: PART NO. CH10-90D-825. *This part number specifies the model CH-10 chopper, with 90% duty cycle, dark vanes and an 825 Hz operating frequency.*

B) <u>DRIVER INFORMATION:</u>

Customer's specifications

Special pricing for OEM applications.

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