



ELECTRO-OPTICAL PRODUCTS CORP.

P.O. BOX 650441 . FRESH MEADOWS, NY 11365 . TEL: (718) 997-8100 . FAX: (718) 997-8102 . www.EOPC.com

AUTOMATIC GAIN CONTROL DRIVER (AGC)

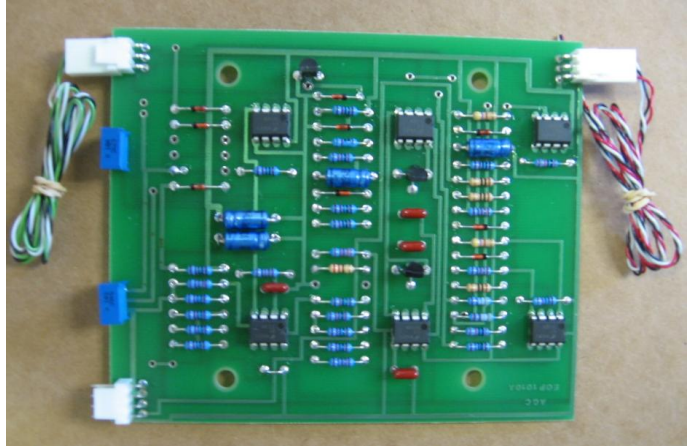
DESCRIPTION:

The AGC driver, a feedback amplifier, operates a broad range of resonant optical scanners and resonant optical choppers at their natural frequency. The AGC Driver has an Automatic Gain Control circuit, which automatically regulates the motion amplitude of the resonant device.

It improves amplitude stability by approximately 10 times compared to the unregulated drivers and provides precise control for a wide temperature range:

CONTROLS:

- Both sine wave and TTL level square wave are provided as reference signals.
- A trimpot control permits the user to adjust the phase of the reference signals with respect to the position of the mirror or the vane. The adjustable range is 180°
- A second trimpot provides amplitude adjustment in the range of 20% to 100% of the full amplitude.



CONFIGURATIONS:

The AGC type driver is available as:

A cased driver, 5.3"x5.3"x2", operating from a line voltage of 110Vac or 220Vac. (AGC-110 or AGC-220)

A board level driver requiring an external +/-12V to +/-15V dc power supply. (AGC-PC)

The AGC driver is available with the following options:

Model AGC: A feedback amplifier which regulates the motion amplitude of the resonant device.

Model AGC-VC: A feedback amplifier. An external input voltage controls the amplitude of the resonant device.

Model AGC-EXT: A feedback amplifier controls the resonant frequency of the device, set by an external clock input.

SPECIFICATIONS:

Input Voltage: +/-12V to +/-15V dc, 0.3 Amp Max. for the AGC Driver

110V ac to 220V ac, 10W for **AGC-110 and AGC-220.**

Frequency range: 5 Hz to 20 kHz Amplitude regulation: 0.01% or better typical (depending on temperature range)

Amplitude adjustment range: 20% to 100% of full amplitude

Reference output: Sine and TTL level square wave

Sine wave only, can be set as a position output, for the **AGC-EXT.**

Phase adjustment range: 180°

Clock input: TTL, sine or square wave input, from +/-1V min to +/-10V max into 10K ohm, for the **AGC-EXT.**

Voltage control input: 0V to 5Vdc input into 10K ohm, for the **AGC-VC.**