



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:

Model **AGC-PC**: a board level driver requiring an external +/-12V to +/-15V dc power supply.

Model **AGC-110** or Model **AGC-220**: a cased driver, 5.3"x5.3"x2", operating from a line voltage of 110V ac or 220V ac. (AGC-110 or AGC-220)

Model **AGC-110/220**: a cased driver 5.3"x5.3"x2", with a selector switch for operating from a line voltage of 110V ac or 220V ac.

Each of these drivers can be available in the following features:

-**VC**: A driver which regulates and controls the amplitude of the resonant device via external dc voltage (0 to 5V).

There is no additional cost for the added feature.

SPECIFICATIONS:

Input Voltage: +/-12V to +/-15V dc, 0.3 Amp max. for the **AGC-PC** Driver
110V ac or 220V ac, 10W for the **AGC-110** and the **AGC-220**.

Frequency range: 5 Hz to 20 kHz

Amplitude regulation: 0.01% or better typical (depending on temperature range)

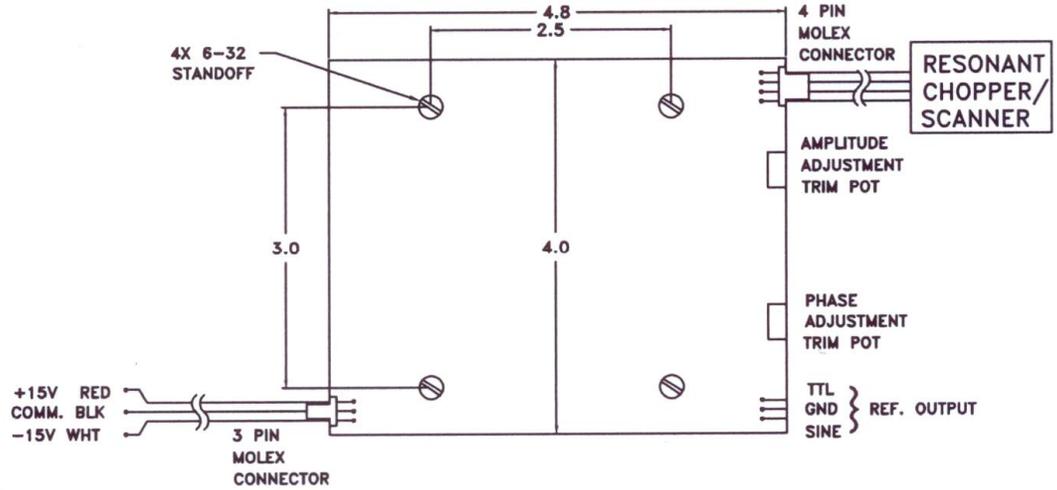
Amplitude adjustment range: 10% to 100% of full amplitude

Reference output: Sine and TTL level square wave

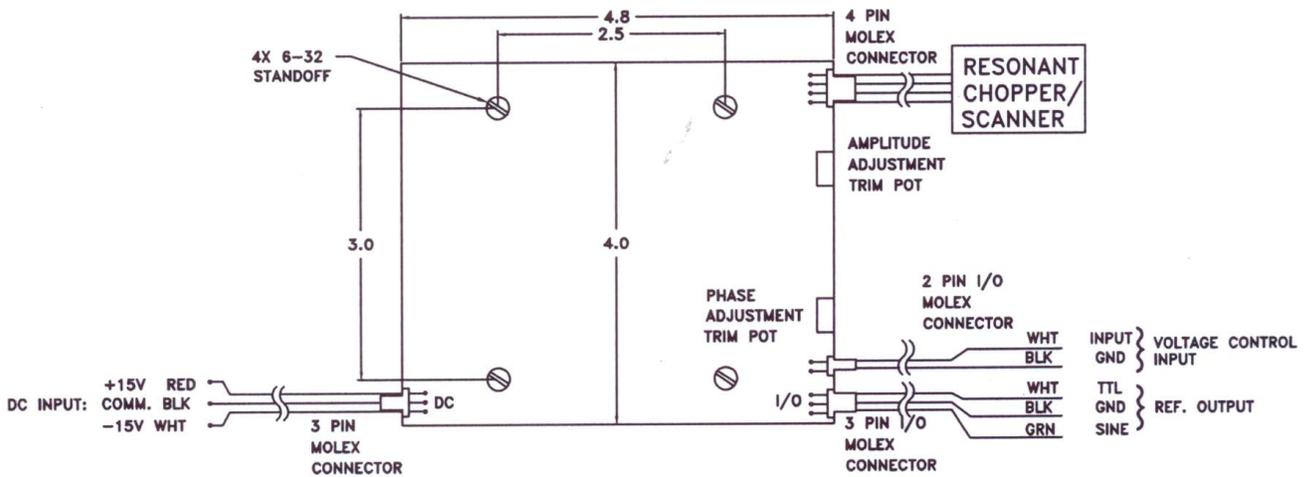
Phase adjustment range: 180°

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

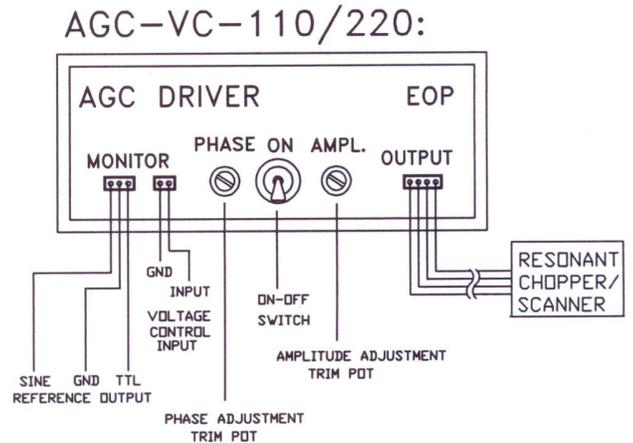
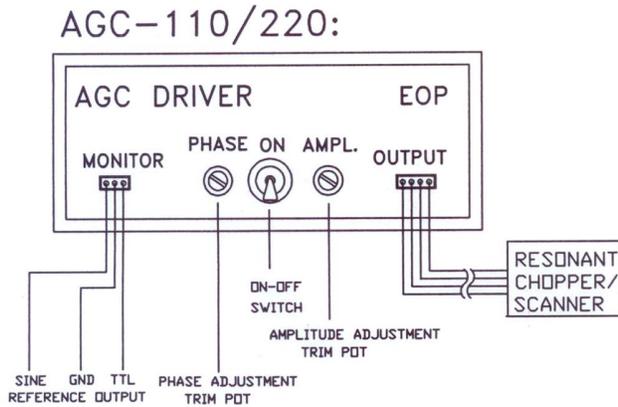
AGC-PC HOOK UP DIAGRAM:



AGC-VC-PC HOOK UP DIAGRAM:



FRONT PANEL CONTROLS:



DIMENSIONS ARE IN INCHES