



AGC Driver Drive Electronics

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. (e.g.: AGC-15)

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

The AGC driver is available in the following configurations:

Model AGC-15: A feedback amplifier which regulates the motion amplitude of the resonant device.

Model AGC-VC: A feedback amplifier to control the scan amplitude set by an external voltage input.

Model AGC-EXT: A feedback amplifier to control the resonant frequency set by an external clock input.

Model AGC-110: A feedback amplifier operating from a line voltage of 110V ac

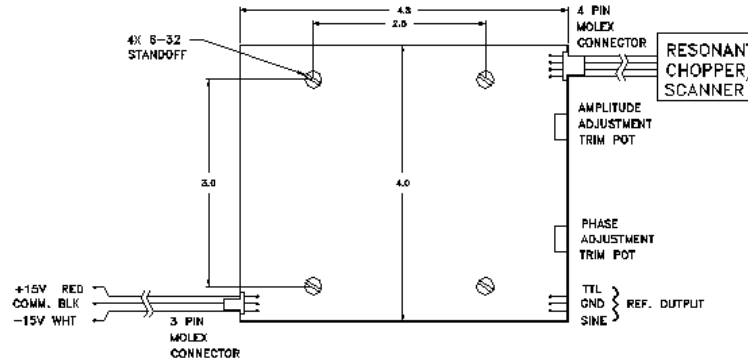
Model AGC-220: A feedback amplifier operating from a line voltage of 220V ac

SPECIFICATIONS

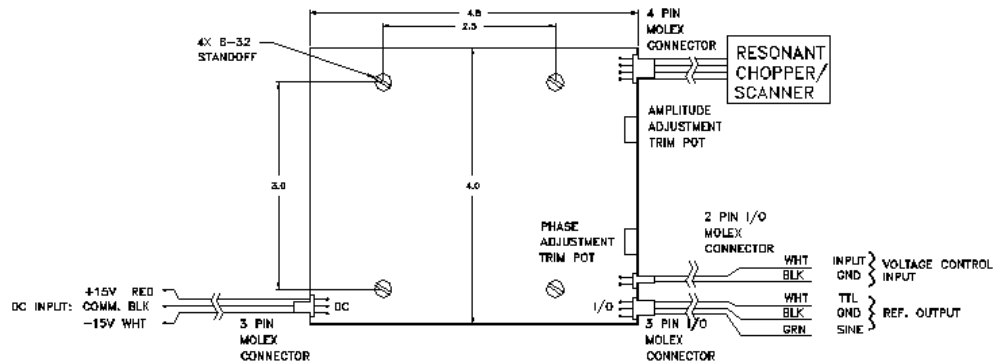
Input Voltage	+/-12V to +/-15V dc, 0.3 Amp Max. for the AGC-15 , 110V ac to 220V ac, 10W for AGC-110 and AGC-220 .
Frequency range	5 Hz to 20 kHz
Amplitude regulation	0.01% or better typical (depending on temperature range)
Amplitude adjustment range	20% to 100% of full amplitude
Reference output	Sine and TTL level square wave Sine wave only, can be set as a position output, for the AGC-15-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-15-EXT . Voltage control input: 0V to 5Vdc input into 10K ohm, for the AGC-15-VC .



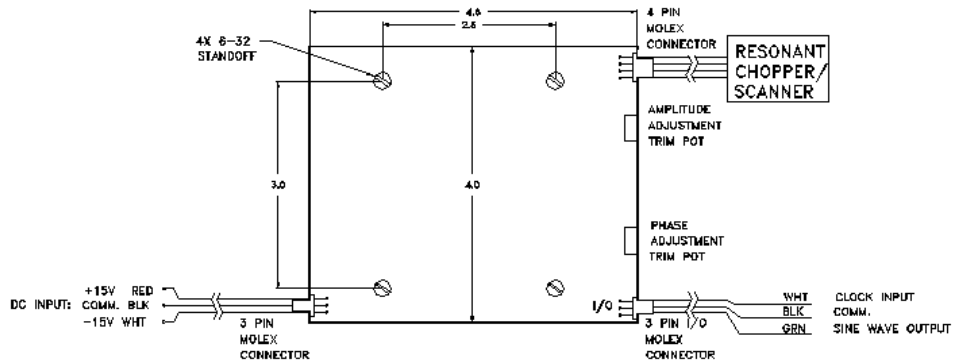
AGC-15PC HOOK UP DIAGRAM:



AGC-VC-PC HOOK UP DIAGRAM:



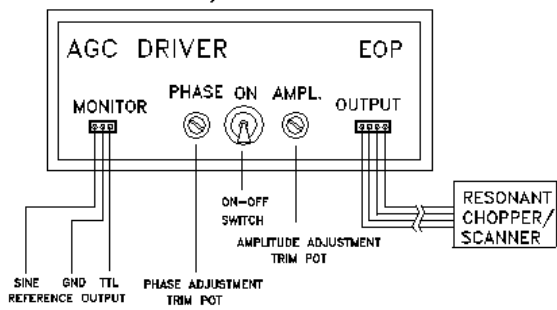
AGC-EXT-PC HOOK UP DIAGRAM:



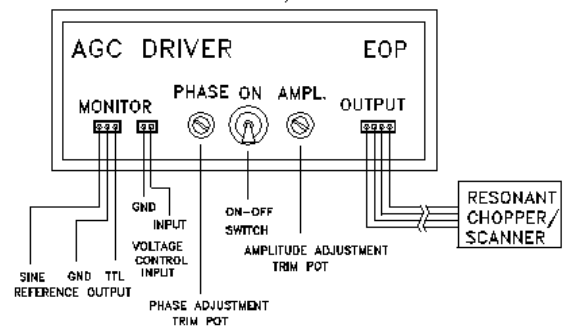
DIMENSIONS ARE IN INCHES
METRIC MOUNTING OPTIONAL

FRONT PANEL CONTROLS:

AGC-110/220:



AGC-VC-110/220:



NOTE: THE POWER SUPPLY CONNECTIONS ARE: RED +15V, BLK COMM. AND WHT -15V

