## HIGH VOLTAGE PIEZO DRIVER (model B)



## **FEATURES**

Single +24V DC Powered, 0-10V Analog Input High Voltage Amplifier

High Voltage Enable/Disable feature

Screw In Terminal Connectors, No Soldering Needed

Suitable for Capacitive Load like Piezo or Resistive Load

Mounting Slots

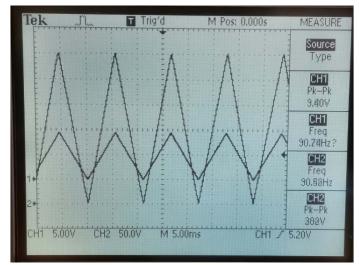
Active Cooling

All RoHS Components

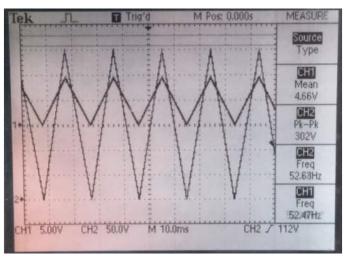
## **SPECIFICATIONS**

Power Supply+24VModulation InputAnalog Input 0-10V, offset adjustable, Max 90Hz, Sine Wave or Triangle Wave within max driving current limitVoltage Output0-300Vpk-pk (1.5% max offset)Max Output Current± 50 mACoolingActiveOperating Temperature-20 – 35 CDimensions71mm x 190mm x 155mmMax LoadWithin max current load limit, capacitive or resistiveBandwidth with resistive load8.5KHz 0-10V Sine wave Input/150Vpp Sine wave Output		
Voltage Output   0-300Vpk-pk (1.5% max offset)     Max Output Current   ± 50 mA     Cooling   Active     Operating Temperature   -20 – 35 C     Dimensions   71mm x 190mm x 155mm     Max Load   Within max current load limit, capacitive or resistive		+24V Analog Input 0-10V, offset adjustable, Max 90Hz, Sine Wave or
Max Output Current ± 50 mA   Cooling Active   Operating Temperature -20 – 35 C   Dimensions 71mm x 190mm x 155mm   Max Load Within max current load limit, capacitive or resistive		Triangle Wave within max driving current limit
Cooling Active   Operating Temperature -20 – 35 C   Dimensions 71mm x 190mm x 155mm   Max Load Within max current load limit, capacitive or resistive	Voltage Output	0-300Vpk-pk (1.5% max offset)
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Max Load Within max current load limit, capacitive or resistive	Operating Temperature	-20 – 35 C
	Dimensions	71mm x 190mm x 155mm
Bandwidth with resistive load 8.5KHz 0-10V Sine wave Input/150Vpp Sine wave Output	Max Load	Within max current load limit, capacitive or resistive
	Bandwidth with resistive load	8.5KHz 0-10V Sine wave Input/150Vpp Sine wave Output

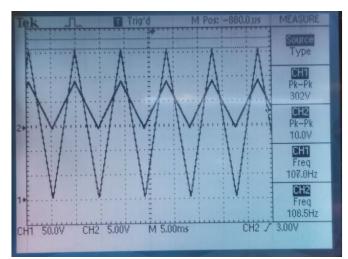
Sample Results:



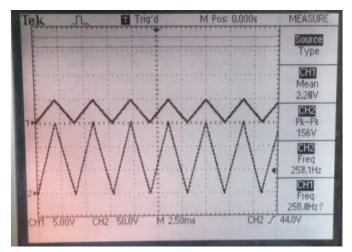
0.94 uF Capacitive Load with 90Hz Triangle Wave Input after 12 hours of running



1 uF Capacitive Load with 50Hz Triangle Wave Input after 12 hours of running



0.47 uF Capacitive Load with 107Hz Triangle Wave Input after 12 hours of running



1 uF Capacitive Load with 250Hz Triangle Wave Input, 150V Output

## Calculate Driving Current:

1. Modulate with Triangle Wave

 $I = \pm 2^{*}f^{*}C_{load}^{*}Vpk-pk$ 

For example, the max current for 90Hz triangle modulation on 0.94uF load, 300Vpk-pk equals:  $2*90*0.94e-6*300 = \pm 50mA$ 

SSI HV SERIES HIGH	VOLTAGE AMPLIFIER	11
WARNING: HIGH VOLTAGE ELECTRICAL SHOCK HAZARD DO NOT TOUCH OR WIRE WHEN ENERGIZED	SMART SENSING INSTRUMENTS MODEL 12043V3 SERIAL NO TIT MFG DATE 1/1/26	
AMP STATUS	ERMINAL	
a totato	2012222222	

PIN OUT SPECIFICATIONS(start from left to right)		
PIN1	+24VDC Power Supply, use PIN 2 PIN 3 as power return	
PIN4	EN: float or GND	
	DIS: +5V ~ +24V DC	
PIN6	Analog Input 0-10V, offset adjustable, Max 200Hz, Sine Wave	
	or Triangle Wave within max driving current limit	
PIN5 & PIN 7	GND	
PIN 9	HV Out	
PIN 10	HV Return	
PIN 8	No connection, leave unconnected	

Mating connector:



Amphenol Anytek 20020003-H101B01LF Quotation on order of large quantity: Email: <u>smartsensinginternational@gmail.com</u> Telephone: 978-494-0802 msg

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