



AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS
SINCE 1975

□ P.O. BOX 265
OGDENSBURG, NY
U.S.A. 13669-0265
TEL: (315) 472-5270
FAX: (613) 226-2802

TEL: 1-800-265-6681
FAX: 1-800-561-1970
U.S.A. & CANADA

e-mail: info@avtechpulse.com

✕ BOX 5120 STN. F
OTTAWA, ONTARIO
CANADA K2C 3H4
TEL: (613) 226-5772
FAX: (613) 226-2802

INSTRUCTIONS

MODEL AV-141A-PS AMPLIFIER

S.N. :

WARRANTY

Avtech Electrosystems Ltd. warrants products of its manufacture to be free from defects in material and workmanship under conditions of normal use. If, within one year after delivery to the original owner, and after prepaid return by the original owner, this Avtech product is found to be defective, Avtech shall at its option repair or replace said defective item. This warranty does not apply to units which have been disassembled, modified or subjected to conditions exceeding the applicable specifications or ratings. This warranty is the extent of the obligation or liability assumed by Avtech with respect to this product and no other warranty or guarantee is either expressed or implied.

Model AV-141A-PS
(for serial numbers greater than 6500)

General Instructions

The Model AV-141A-PS amplifier is designed to amplify bipolar nanosecond rise time baseband pulses in the pulse width range of about 0.5 ns and higher and CW signals in the frequency range of DC to 2500 MHz. The basic specifications for the unit are as follows:

Gain:	> 20 dB
Peak output voltage:	±0.3 Volt
Rise time:	< 0.2 ns
Impedance level:	50 Ohms nominal
Bandwidth:	DC to 2500 MHz
Input VSWR:	< 2.0:1
Output VSWR:	< 2.0:1
Max. noise figure:	10 dB
Prime power:	120/240 Volts, 50-60 Hz
Connectors:	SMA
Size:	4" x 8" x 12"

Notes:

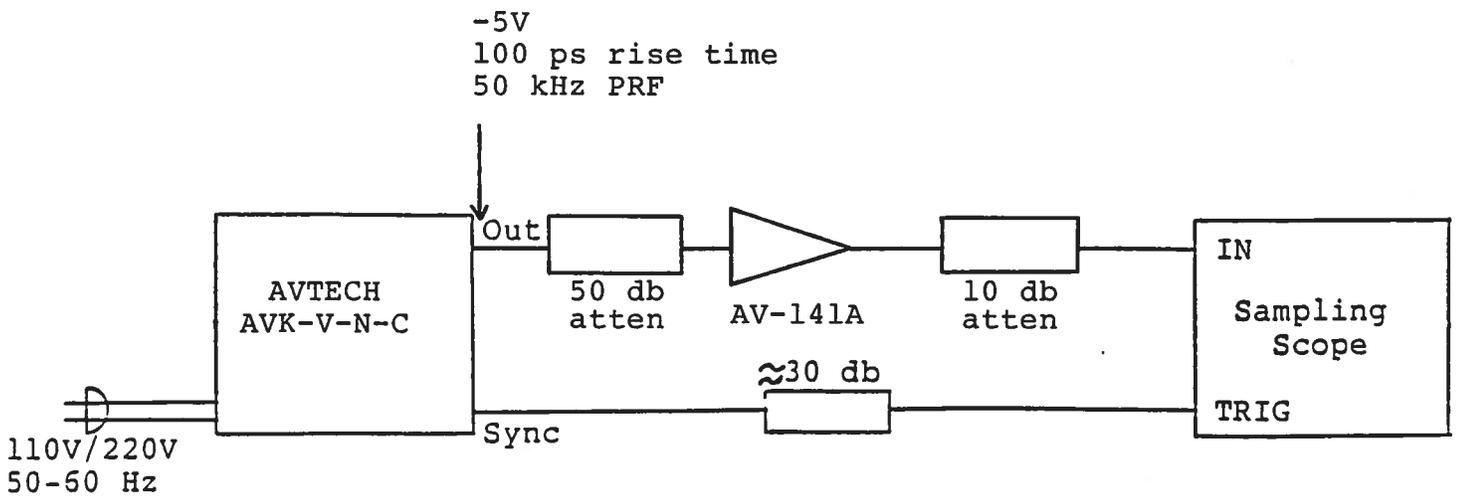
- 1) The operation of this unit was checked using the arrangement shown in Fig. 1.
- 2) The output DC offset is controlled by the 10 turn pot (OS) on the output end of the amplifier module. The DC offset may require several minutes to attain its final steady state value after the prime power is first applied. The amplifier module may be accessed by removing the four Phillips screws on the rear panel and then sliding the top cover back and off.
- 3) Units having SN higher than 6500 may exhibit significant lower frequency (< 100 kHz) noise or low-level baseband oscillations. This noise may be eliminated by placing microwave quality DC blocking capacitor in series with the output (approx. 0.01 to 0.1 ufd).
- 4) For additional assistance:

Tel: (613) 226-5772

Fax: (613) 226-2802

Fig. 1

AMPLIFIER TEST ARRANGEMENT



Jan. 3/96

Disk: AV-

Name: 141APS.INS

File saved in word as of Oct 24/97

File: C:\INSTRUCT\AV-\141APS.DOC

Note: File adjusted in word