AVTECH ELECTROSYSTEMS LTD.

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INSTRUCTIONS

MODEL AV-110 PULSE AMPLIFIER

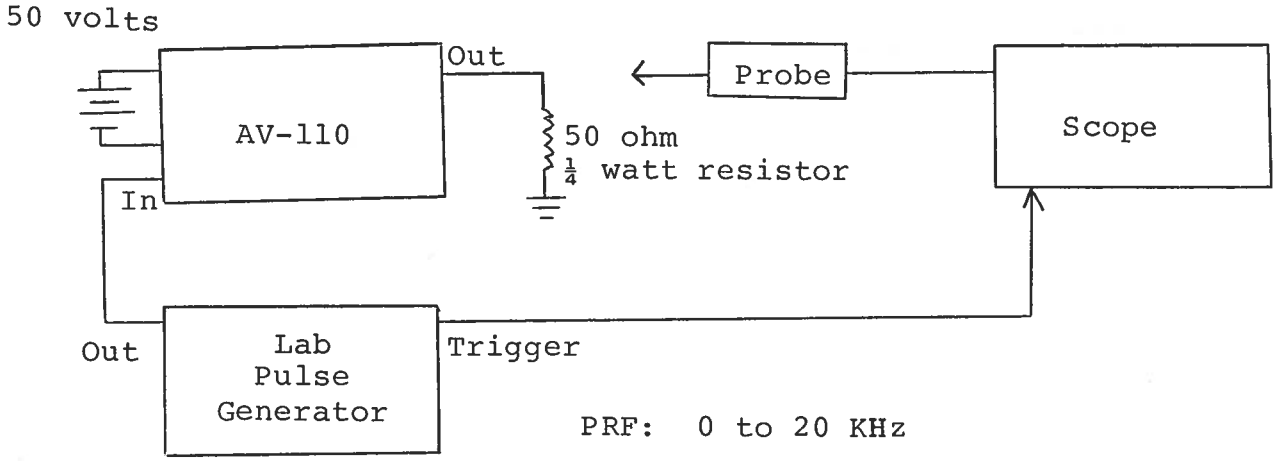
S.N.:

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 dissembled, 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-110 PULSE AMPLIFIER

TEST ARRANGEMENT



PRF: 0 to 20 KHz

PW: 0 to 1.0 usec

Amplitude: 0 to +20 volts (see Note 2)

Z_{OUT}: $\leq$50 ohms

General Operating Instructions

1) The AV-110 pulse amplifier is designed to operate with a load of 50 ohms or higher. WARNING: The AV-110 is not short circuit proof and may fail if the output load is shorted or significantly less than 50 ohms.

2) The AV-110 may fail if the input drive amplitude exceeds +20 volts.

3) The input pulse width may exceed 1.0 usec but at the expense of increased output droop.

4) The AV-110 requires a trigger source impedance of 50 ohms or less. If source impedance is higher than fifty ohms, the output droop will increase.

PULSE AMPLIFIER MODEL AV-110

The Model AV-110 pulse amplifier is designed to be used with 50 ohm pulse generators to provide a high-level output of the following form to a 50 ohm load:

$$V_{OUT} = 2\ V_{IN} - 1.8$$

V_{IN} Values in the range of +1 to +20 volts produce outputs in the range of +0.2 to +38.2 volts. The basic specifications are as follows:

Output amplitude: (to 50 ohm)	$V_{OUT} = 2\ V_{IN} - 1.8$ V_{OUT} (max.) = 40 volts
Pulse width:	0.1 to 1.0 usec. equals input pulse width
Rise and fall time:	$\leq$ 25 nsec
Input impedance:	50 ohm
Output impedance:	< 50 ohm
Overshoot:	Less than 2%
Droop:	Less than 2% for PW = 1.0 usec
PRF:	0 to 20 KHz
Prime power:	+50V DC, 50 mA (max.)
Input and Output Connectors:	BNC
Dimensions (inches)	2.25 x 1.35 x 1.13
Weight:	0.5 lb
Chassis Material:	Cast aluminum, blue enamel

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File: c:\INSTRUCT\AV-\110.DOC
Note: File not adjusted