AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS
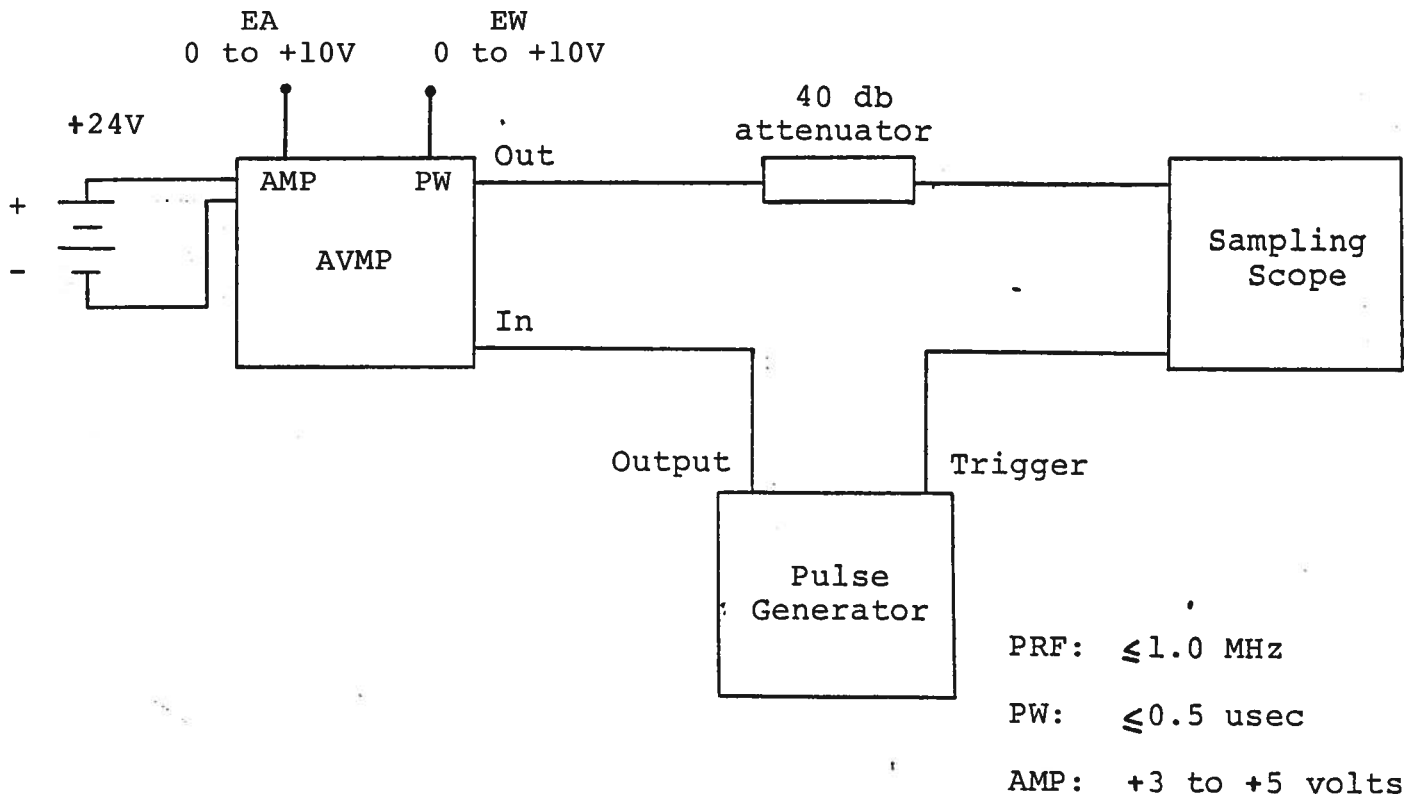### ENGINEERING · MANUFACTURING

INSTRUCTIONS

MODEL AVMP-EA-EW PULSE GENERATOR

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 AVMP   PULSE GENERATOR TEST ARRANGEMENT


```
         EA              EW
      0 to +10V       0 to +10V

+24V        |             |
            ●             ●
 +    ┌───────────────────────┐  Out      40 db
      │   AMP         PW       │──────── attenuator ────────┐
─────┤│                        │        ┌──────┐          ┌──────────┐
 +   ═│        AVMP            │────────┤      ├──────────┤ Sampling │
 −   ═│                        │                          │  Scope   │
      │                   In   │──────┐                   │          │
      └───────────────────────┘      │        ┌──────────┤          │
                                      │        │          └──────────┘
                              Output  │        │ Trigger
                                   ┌──┴────────┴──┐
                                   │              │
                                   │    Pulse     │
                                   │  Generator   │
                                   │              │        PRF:  ≤1.0 MHz
                                   └──────────────┘
                                                            PW:   ≤0.5 usec

                                                            AMP:  +3 to +5 volts
```

PRF: ≤1.0 MHz

PW: ≤0.5 usec

AMP: +3 to +5 volts

Notes:

1) The bandwidth capability of components and instruments used to display the pulse generator output signal (attenuators, cables, connectors, etc.) should exceed ten gigahertz.

2) The use of 40 db attenuator will insure a peak input signal to the sampling scope of less than one volt.

3) In general, the source pulse generator trigger delay control should be set in the 0.1 to 1.0 usec range. Other settings should be as shown in the above diagram.

4) The Model AVMP pulse generator can withstand an infinite VSWR on the output port.

5) WARNING: Model AVMP may fail if triggered at a PRF greater than 1.0 MHz.

6) The output pulse amplitude and pulse width are controlled by DC voltages (0 to +10V, $R_{IN} \geqslant 10K$) applied to the AMP and PW solder terminals (see Fig. 1).

7) To DC offset the output pulse at the AVMP output, connect a DC power supply set to the required DC offset value to the rear panel OS terminals.

8) The monitor output (-M) provides a 20 db attenuated coincident replica of the main output. (option).

10.02.86

– M
– OS