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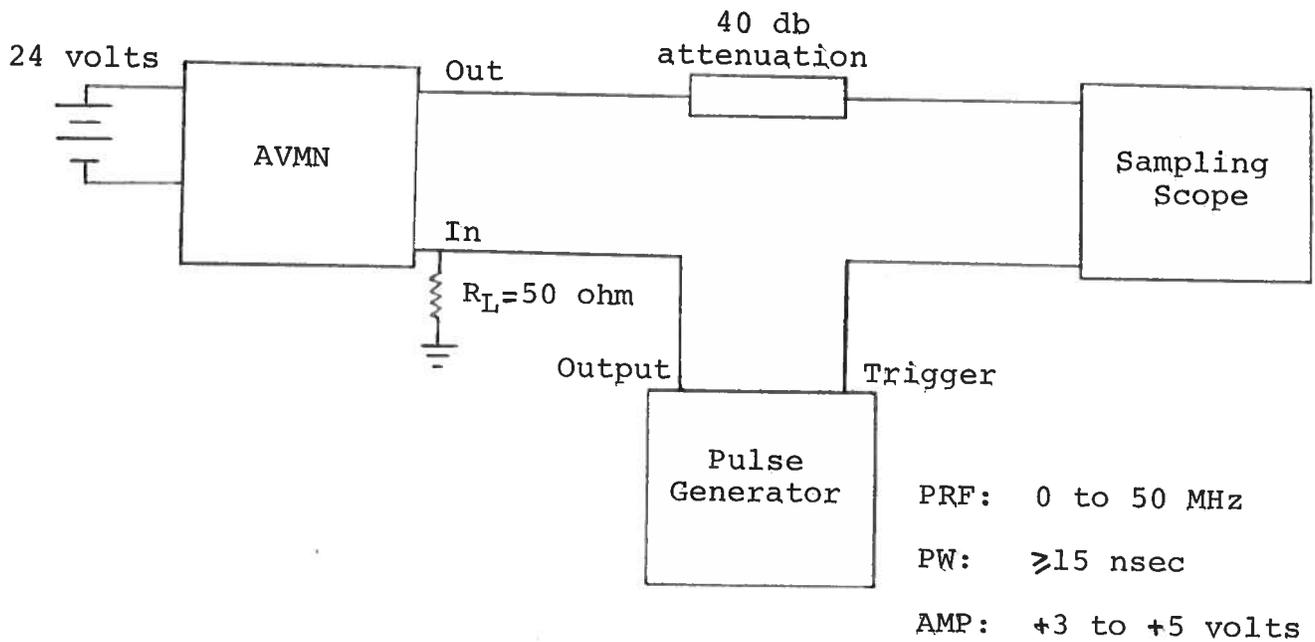
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INSTRUCTIONS

MODEL AVMN PULSE GENERATOR

S.N. :

MODEL AVMN PULSE GENERATOR TEST ARRANGEMENT



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.*
- 4) When testing using a general purpose 50 ohm laboratory pulse generator as the input trigger signal source, the input signal should be applied via a 50 ohm feed-through load or alternatively, the input to the AVMN unit should be shunted with a 50 ohm resistor. This will prevent reflection (and degradation of the input pulse waveform) caused by the high impedance at the IN port. However, when triggering from a TTL source, no 50 ohm feed-through load or resistor is necessary but lead length should be as short as possible. High-speed TTL Schottky logic is recommended for the driving circuitry.
- 5) The input trigger pulse width should be greater than 15 nsec and less than one half of the pulse repetition frequency period. The unit triggers on the leading edge of the input trigger signal.
- 6) The output pulse width is controlled by means of the one-turn potentiometer (PW). The pot should initially be set maximum clockwise and the pulse width adjusted using an oscilloscope.
- 7) The output pulse amplitude is controlled by means of the one-turn potentiometer (AMP). The pulse width may change by several nanoseconds as the output amplitude is reduced from maximum to minimum. Therefore it is convenient to first set the desired amplitude and then set the desired pulse width. Rotation of the PW pot causes the position of the falling edge of the pulse to change.
- 8) Some properties of the output pulse may change as a function of the amplitude pot setting. For some demanding applications, it may be desirable to use a combination of external attenuators and the amplitude pot to achieve the desired output amplitude.
- 9) The AVMN output pulse position or delay can be varied for up to 5 nsec by means of the delay (DELAY) control. Rotating the delay control clockwise increases the delay. If the full 5 nsec delay cannot be achieved then

the input pulse width should be increased by a few nanoseconds. (option).

- * The stability of the display on some sampling scopes is very sensitive to this delay, particularly at high PRF (eg. 10 to 50 MHz). If necessary, consult your sample scope instructions manual for the proper triggering method.
- 10) WARNING: Model AVMN may fail if triggered at a PRF greater than 50.0 MHz.
- 11) The Model AVMN pulse generator can withstand an infinite VSWR on the output port.
- 12) The AVMN unit requires a maximum prime input power of about 12 watts. It is therefore strongly recommended that the unit be heatsunk in order to maintain a moderate chassis temperature.
- 13) To DC offset the output pulse connect a DC power supply set to the required DC offset value to the terminals marked D.S. The maximum attainable DC offset voltage is 50 volts.

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The first part of the report deals with the general situation in the country. It is noted that the economy is still in a state of stagnation and that the government has failed to implement the necessary reforms. The report also mentions that the political situation is unstable and that there is a risk of a military takeover.

The second part of the report discusses the social and economic conditions of the population. It is stated that the majority of the population is living in poverty and that there is a high level of unemployment. The report also notes that the government has failed to provide adequate social services and that the health care system is in a state of collapse.

The third part of the report deals with the international situation. It is noted that the country is isolated and that it has no allies. The report also mentions that the international community has failed to take any action to address the human rights abuses in the country.

The fourth part of the report discusses the future prospects of the country. It is stated that the country has a long way to go and that it will require a complete overhaul of its political and economic systems. The report also notes that the population is disillusioned and that they are looking for a leader who can bring about change.