

AVTECH ELECTROSYSTEMS LTD.

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

e-mail: info@avtechpulse.com http://www.avtechpulse.com P.O. BOX 5120 STN. F OTTAWA, ONTARIO CANADA K2C 3H4 TEL: (613) 226-5772 FAX: (613) 226-2802

INSTRUCTIONS

MODEL AVX-FD2-PS-IP1-205 FREQUENCY DIVIDER

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 assumed by Avtech with respect to this product and no other warranty or guarantee is either expressed or implied.

TECHNICAL SUPPORT

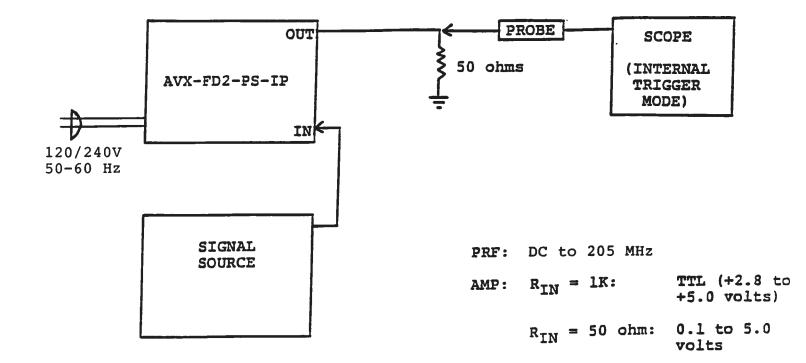
Phone: 613-226-5772 or 1-800-265-6681 Fax: 613-226-2802 or 1-800-561-1970

E-mail: info@avtechpulse.com
World Wide Web: http://www.avtechpulse.com

TABLE OF CONTENTS

| WARRANTY | 2 |
|----------------------------------|----|
| TABLE OF CONTENTS | 3 |
| FIG. 1: GENERAL TEST ARRANGEMENT | 4 |
| GENERAL OPERATING INSTRUCTIONS | 5 |
| FIG. 2: FRONT PANEL CONTROLS | 6 |
| FRONT PANEL CONTROLS | 7 |
| FIG. 3: BACK PANEL CONTROLS | 8 |
| BACK PANEL CONTROLS | 9 |
| PERFORMANCE CHECK SHEET | 10 |

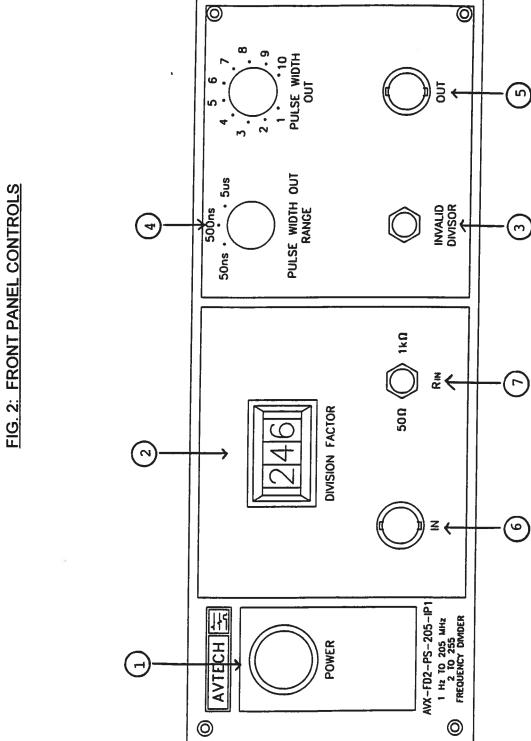
FIG. 1: GENERAL TEST ARRANGEMENT



GENERAL OPERATING INSTRUCTIONS

- (1) With the R_{IN} switch in the 1 K position, the input signal must be TTL (+2.8 to 5.0 volts). With the R_{IN} switch in the 50 Ohm position, the –IP option is functional and so the input may have a peak to peak amplitude in the range of 0.5 to 5.0 Volts (pulse or sine wave).
- (2) Take care to insure that the output pulse width is less than 0.5 of the period of the output pulse train.
- (3) The division factor is controlled by the front panel thumbwheel switch (and may be varied from 2 to 255). The INVALID DIVISOR light will indicate if the thumbwheel is set at division factor higher than 255.
- (4) The output amplitude is fixed at TTL levels and will drive an impedance as low as 50 Ohms.
- (5) The unit can be converted from 120 to 240V 50-60 Hz operation by adjusting the voltage selector card in the rear panel fused voltage selector-cable connector assembly.
- (6) For additional assistance:

Tel: 613-226-5772 Fax: 613-226-2802



FRONT PANEL CONTROLS

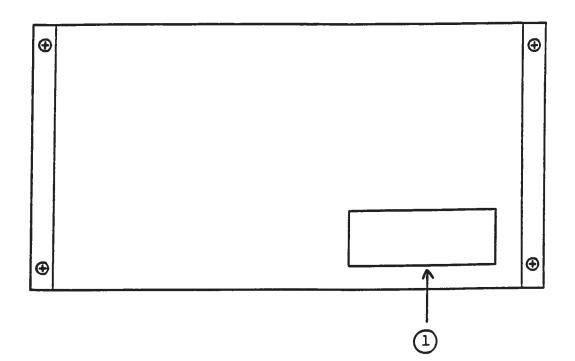
- (1) <u>ON-OFF Switch</u>. Applies prime power to all stages.
- (2) <u>DIVISION FACTOR</u>. Thumbwheel switch sets the division factor (2 to 255).
- (3) <u>INVALID DIVISOR</u>. This light will indicate if the division factor is set higher than 255.
- (4) <u>PULSE WIDTH</u>. Three position switch and one turn control controls output pulse width as follows:

RANGE 1 5 ns to 50 ns RANGE 2 50 ns to 500 ns RANGE 3 0.5 us to 5 us

The output pulse width must be less than one half of the period of the output PRF at (5).

- (5) <u>OUT</u>. BNC output connector provides +5 Volt pulses to 50 Ohms (or higher).
- (6) IN, R_{IN} . With the R_{IN} switch in the 1 K position, the
- input signal at (6) must be TTL (+2.8 to 5.0 Volts). With the R_{IN} switch in the 50 Ohm position, the –IP option is functional and so the input signal may have a peak to peak amplitude in the range of 0.5 to 5.0 Volts (pulse or sine wave).

FIG. 3: BACK PANEL CONTROLS



BACK PANEL CONTROLS

(1) <u>FUSED CONNECTOR, VOLTAGE SELECTOR</u>. The detachable power cord is connected at this point. In addition, the removable cord is adjusted to select the desired input operating voltage. The unit also contains the main power fuse. (0.5 A SB).

Feb 12/99

aux-fd/aux-fd2-p3-ip1-205.doc.