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INSTRUCTIONS

MODEL AVX-SP-3-USA
4-WAY POWER DIVIDER
WITH 60 ps RISE TIMES
FOR PULSE WIDTHS TO 10 ns

SERIAL NUMBER: _____

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

TECHNICAL SUPPORT

Phone: 888-670-8729 (USA & Canada) or +1-613-686-6675 (Intl)

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Manual Reference: /files/server1/officefiles/instructword/avx-sp/AVX-SP-3-USA,ed1.odt.
Last modified February 29, 2024.
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INTRODUCTION

Model AVX-SP-3-USA is a four-way power divider with 60 ps rise time, capable of handling pulse widths of up to 10 ns. It is intended for use with the Avtech AVN-4A-C-P-AC01-AT pulse generator.

For proper operation, all four outputs **MUST** be terminated with 50 Ohms, even if some of the outputs are not actually used.

Each output will have a voltage amplitude of approximately one-third of the input amplitude.

SPECIFICATIONS

Model number: AVX-SP-3-USA

Description: Customized 4-way power divider.
On each output, $V_{OUT} \approx V_{IN} / 3$.
For use with the AVN-4A-C-P-AC01-AT pulse generator.

Rise Time: ≤ 60 ps

Minimum Pulse Width: 200 ps

Maximum Pulse Width: 10 ns

Size: 6 x 12 x 20 cm

Connectors: SMA

Input Connector: on one 6 x 12 face

Output Connectors: 4 connectors on the opposing 6 x 12 face

REGULATORY NOTES

FCC PART 18

This device complies with part 18 of the FCC rules for non-consumer industrial, scientific and medical (ISM) equipment.

This instrument is enclosed in a rugged metal chassis and uses a filtered power entry module (where applicable). The main output signal is provided on a shielded connector that is intended to be used with shielded coaxial cabling and a shielded load. Under these conditions, the interference potential of this instrument is low.

If interference is observed, check that appropriate well-shielded cabling is used on the output connectors. Contact Avtech (info@avtechpulse.com) for advice if you are unsure of the most appropriate cabling. Also, check that your load is adequately shielded. It may be necessary to enclose the load in a metal enclosure.

If any of the connectors on the instrument are unused, they should be covered with shielded metal "dust caps" to reduce the interference potential.

This instrument does not normally require regular maintenance to minimize interference potential. However, if loose hardware or connectors are noted, they should be tightened. Contact Avtech (info@avtechpulse.com) if you require assistance.

EC DECLARATION OF CONFORMITY



We Avtech Electrosystems Ltd.
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declare that this pulse generator meets the intent of Directive 2004/108/EG for Electromagnetic Compatibility. Compliance pertains to the following specifications as listed in the official Journal of the European Communities:

EN 50081-1 Emission

EN 50082-1 Immunity

and that this pulse generator meets the intent of the Low Voltage Directive 72/23/EEC as amended by 93/68/EEC. Compliance pertains to the following specifications as listed in the official Journal of the European Communities:

EN 61010-1:2001 Safety requirements for electrical equipment for measurement, control, and laboratory use

DIRECTIVE 2002/95/EC (RoHS)

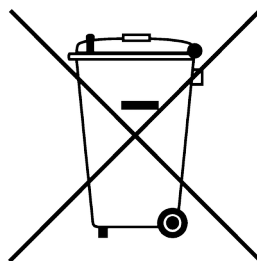
This instrument is exempt from Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the Restriction of the use of certain Hazardous Substances (RoHS) in electrical and electronic equipment. Specifically, Avtech instruments are considered "Monitoring and control instruments" (Category 9) as defined in Annex 1A of Directive 2002/96/EC. The Directive 2002/95/EC only applies to Directive 2002/96/EC categories 1-7 and 10, as stated in the "Article 2 - Scope" section of Directive 2002/95/EC.

DIRECTIVE 2002/96/EC (WEEE)

European customers who have purchased this equipment directly from Avtech will have completed a "WEEE Responsibility Agreement" form, accepting responsibility for WEEE compliance (as mandated in Directive 2002/96/EC of the European Union and local laws) on behalf of the customer, as provided for under Article 9 of Directive 2002/96/EC.

Customers who have purchased Avtech equipment through local representatives should consult with the representative to determine who has responsibility for WEEE compliance. Normally, such responsibilities will lie with the representative, unless other arrangements (under Article 9) have been made.

Requirements for WEEE compliance may include registration of products with local governments, reporting of recycling activities to local governments, and financing of recycling activities.



CONTROLS



The one input and four output SMA connectors are located on opposite ends of the module, as shown above.

For proper operation, all four outputs **MUST** be terminated with 50 Ohms, even if some of the outputs are not actually used.

Each output will have a voltage amplitude of approximately one-third of the input amplitude.