

## FLSC-AMP-A Preamplifier and Signal Conditioner for Magnetic Pick-ups

OPERATOR'S  
MANUAL

M1945/N/0603



### General Description

The FLSC-AMP-A Signal Conditioner will amplify low level signals from magnetic pick-up sensors, such as a turbine meter or paddlewheel sensor, to an amplified high level square wave pulse output proportional in amplitude to the power supply powering the module. This output will drive any **NEWPORT®** flow ratemeter, counter, controller or pulse input data acquisition board.

### Unpacking

Remove the Packing List and verify that you have received all equipment. If you have any questions about the shipment, please call the Customer Service Department.

When you receive the shipment, inspect the container and equipment for any signs of damage. Note any evidence of rough handling in transit. Immediately report any damage to the shipping agent.

#### NOTE

The carrier will not honor any claims unless all shipping material is saved for their examination. After examining and removing contents, save packing material in the event reshipment is necessary.

The following items are supplied in the box:

- FLSC-AMP-A Signal Conditioner
- Operator's Manual

### Hookup (Refer to Figure 1)

For electrical connections, the terminal strip will accommodate up to a 14 gauge wire. 18-20 gauge is recommended.

Note: The signal lines from the magnetic pick-up should be shielded and kept less than ten feet and away from relays, solenoids, or other sources of electrical noise. The signal shield should be connected to power/common. The module output is recommended to make long distance runs.

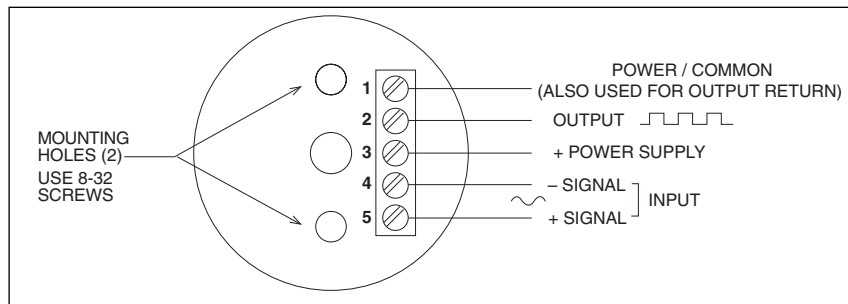


Figure 1. Terminal Connections

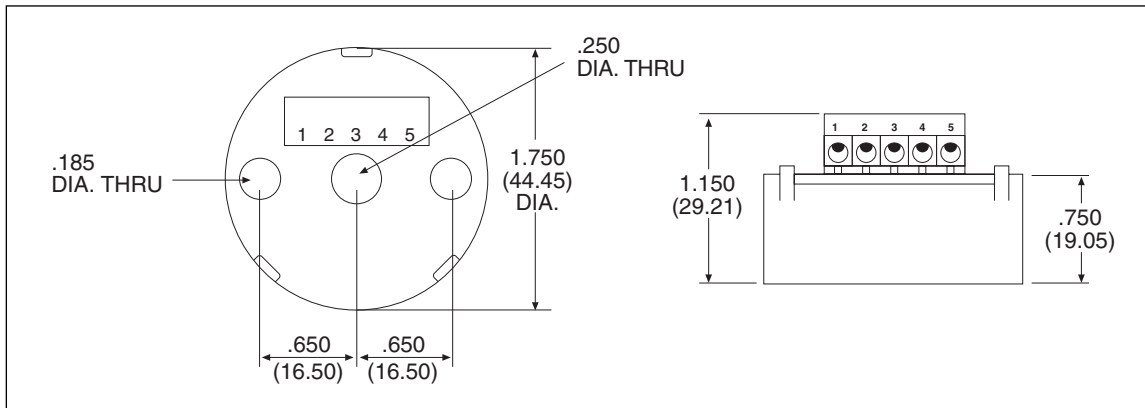
### Mounting

The FLSC-AMP-A module may be mounted using the screw holes provided in the molded housing. Double-sided tape, Velcro, or glue may also be used to secure the module in place. The FLSC-AMP-A module can also be snap track mounted using an adapter plate.

## Specifications

Power:	8 to 24 Vdc
Input Frequency:	10 Hz to 10 KHz
Input Voltage:	Sinusoidal 500mV p-p to 50V p-p
Input Impedance:	10 K ohms
Output:	100 mA sink max. with 4.7K internal pull-up resistor
Temperature Range:	-10 to 60°C
Weight:	1 oz.

## Dimensions



For immediate technical or application assistance please call:

**1-800-6397678®**  
**1-800-NEWPORT**

Newport Electronics, Inc.  
2229 South Yale Street • Santa Ana, CA • 92704 • U.S.A.  
TEL: (714) 540-4914 • FAX: (203) 968-7311  
Toll Free: 1-800-639-7678 • www.newportUS.com • e-mail: info@newportUS.com  
ISO 9001 Certified

Newport Technologies, Inc.  
976 Bergar • Laval (Quebec) • H7L 5A1 • Canada  
TEL: (514) 335-3183 • FAX: (514) 856-6886  
Toll Free: 1-800-639-7678 • www.newport.ca • e-mail: info@newport.ca

Newport Electronics, Ltd.  
One Omega Drive • River Bend Technology Centre  
Northbank, Ilam • Manchester M44 5BD • United Kingdom  
Tel: +44 161 777 6611 • FAX: +44 161 777 6622  
Toll Free: 0800 488 488 • www.newportuk.co.uk • e-mail: sales@newportuk.co.uk

Newport Electronics B.V.  
Postbus 8034 • 1180 LA Amstelveen • The Netherlands  
TEL: +31 20 3472121 • FAX: +31 20 6434643  
Toll Free: 0800 0993344 • www.newport.nl • e-mail: info@newport.nl

Newport Electronics spol s.r.o.  
Frystatska 184, 733 01 Karviná • Czech Republic  
TEL: +420 59 6311899 • FAX: +420 59 6311114  
Toll Free: 0800-1-66342 • www.newport.cz • e-mail: info@newport.cz

Newport Electronics GmbH  
Daimlerstrasse 26 • D-75392 Deckenpfronn • Germany  
TEL: 49 7056 9398-0 • FAX: 49 7056 9398-29  
Toll Free: 0800 / 6397678 • www.newport.de • e-mail: sales@newport.de

Newport Electronique S.A.R.L.  
11, rue Jacques Cartier • 78280 Guyancourt • France  
TEL: +33 1 61 37 29 00 • FAX: +33 1 30 57 54 27  
Toll Free: 0800 466 342 • www.newport.fr • e-mail: sales@newport.fr

Mexico and Latin America  
FAX: 001 (203) 359-7807  
En Español: 001 (203) 359-7803

NEWPORTnet™ On-Line Service www.newportUS.com	Internet e-mail info@newportUS.com
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⚠ This device is marked with the international caution symbol. It is important to read the Setup Guide before installing or commissioning this device as it contains important information relating to safety and EMC.

### Warranty/Disclaimer

NEWPORT ELECTRONICS, INC. warrants this unit to be free of defects in materials and workmanship for a period of one (1) year from date of purchase. In addition to NEWPORT's standard warranty period, NEWPORT ELECTRONICS will extend the warranty period for one (1) additional year if the warranty card enclosed with each instrument is returned to NEWPORT.

If the unit should malfunction, it must be returned to the factory for evaluation. NEWPORT's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by NEWPORT, if the unit is found to be defective it will be repaired or replaced at no charge. NEWPORT's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of being damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of NEWPORT's control. Components which wear are not warranted, including but not limited to contact points, fuses, and triacs.

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**CONDITIONS:** Equipment sold by NEWPORT is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, NEWPORT assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and additionally, purchaser will indemnify NEWPORT and hold NEWPORT harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

### Return Requests/Inquiries

Direct all warranty and repair requests/inquiries to the NEWPORT Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO NEWPORT, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM NEWPORT'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting NEWPORT:

1. P.O. number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult NEWPORT for current repair charges. Have the following information available BEFORE contacting NEWPORT:

1. P.O. number to cover the COST of the repair,
2. Model and serial number of product, and
3. Repair instructions and/or specific problems relative to the product.

NEWPORT's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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