

**7535-001**  
**IRIG-B Distribution Amplifier**  
*User Manual*

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Part Number 1162-5000-0050  
Manual Revision A (2.0)  
September 2006

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# **SPECTRACOM LIMITED WARRANTY**

## **LIMITED WARRANTY**

Spectracom warrants each new product manufactured and sold by it to be free from defects in software, material, workmanship, and construction, except for batteries, fuses, or other material normally consumed in operation that may be contained therein AND AS NOTED BELOW, for five years after shipment to the original purchaser (which period is referred to as the "warranty period"). This warranty shall not apply if the product is used contrary to the instructions in its manual or is otherwise subjected to misuse, abnormal operations, accident, lightning or transient surge, repairs or modifications not performed by Spectracom.

**The GPS receiver is warranted for one year from date of shipment and subject to the exceptions listed above. The power adaptor, if supplied, is warranted for one year from date of shipment and subject to the exceptions listed above.**

THE ANALOG CLOCKS ARE WARRANTED FOR ONE YEAR FROM DATE OF SHIPMENT AND SUBJECT TO THE EXCEPTIONS LISTED ABOVE.

THE TIMECODE READER/GENERATORS ARE WARRANTED FOR ONE YEAR FROM DATE OF SHIPMENT AND SUBJECT TO THE EXCEPTIONS LISTED ABOVE.

The Rubidium oscillator, if supplied, is warranted for two years from date of shipment and subject to the exceptions listed above.

All other items and pieces of equipment not specified above, including the antenna unit, antenna surge suppressor and antenna pre-amplifier are warranted for 5 years, subject to the exceptions listed above.

## **WARRANTY CLAIMS**

Spectracom's obligation under this warranty is limited to in-factory service and repair, at Spectracom's option, of the product or the component thereof, which is found to be defective. If in Spectracom's judgment the defective condition in a Spectracom product is for a cause listed above for which Spectracom is not responsible, Spectracom will make the repairs or replacement of components and charge its then current price, which buyer agrees to pay.

Spectracom shall not have any warranty obligations if the procedure for warranty claims is not followed. Users must notify Spectracom of the claim with full information as to the claimed defect. Spectracom products shall not be returned unless a return authorization number is issued by Spectracom.

Spectracom products must be returned with the description of the claimed defect and identification of the individual to be contacted if additional information is needed. Spectracom products must be returned properly packed with transportation charges prepaid.

**Shipping expense:** Expenses incurred for shipping Spectracom products to and from Spectracom (including international customs fees) shall be paid for by the customer, with the following exception. For customers located within the United States, any product repaired by Spectracom under a "warranty repair" will be shipped back to the customer at Spectracom's expense unless special/faster delivery is requested by customer.

Spectracom highly recommends that prior to returning equipment for service work, our technical support department be contacted to provide trouble shooting assistance while the equipment is still installed. If equipment is returned without first contacting the support department and "no problems are found" during the repair work, an evaluation fee may be charged.

EXCEPT FOR THE LIMITED WARRANTY STATED ABOVE, SPECTRACOM DISCLAIMS ALL WARRANTIES OF ANY KIND WITH REGARD TO SPECTRACOM PRODUCTS OR OTHER MATERIALS PROVIDED BY SPECTRACOM, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

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## **EXTENDED WARRANTY COVERAGE**

Extended warranties can be purchased for additional periods beyond the standard five-year warranty. Contact Spectracom no later than the last year of the standard five-year warranty for extended coverage.



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## 1 Introduction

This manual provides comprehensive information on the specifications for and operation of the Spectracom Model 7535-001 1x4 Quad IRIG-B Distribution Amplifier. The Model 7535-001 is a 1x4 Quad IRIG-B Distribution Amplifier. Each input differential channel is routed to four BNC output connectors. Every output signal is buffered individually with a unity gain amplifier. This architecture allows four IRIG-B loads to be connected to a single input channel.

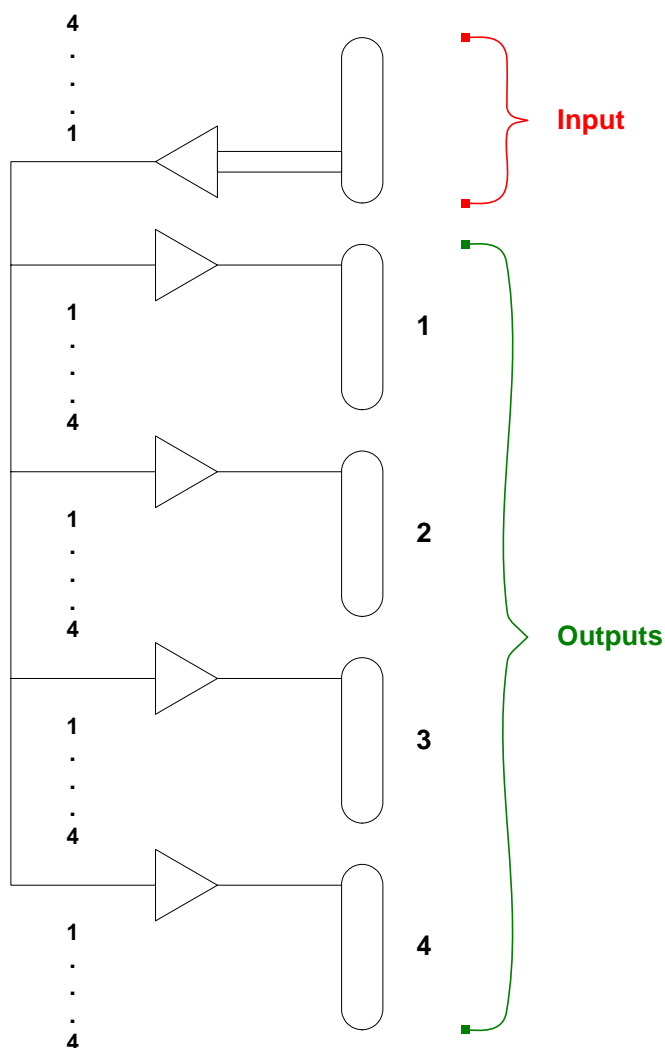
### Front View



### Rear View



**Figure 1-1: Spectracom IRIG-B Distribution Amplifier**



Because each output is buffered, the disruption of one output does not affect the other outputs of the channel, e.g., if Channel 2, Output 2 were shorted, Channel 2 on Outputs 1, 3 & 4 would not be effected.

Each signal channel accepts single-ended or differential input signals.

Each output is single-ended and buffered, capable of supplying up to 80mA current at full output. Outputs are also short-circuit protected.

Spectracom can supply input and output cables for your application. Please contact us for information and pricing. Contact information can be found on the back cover of this manual.

**Figure 1-2: Inputs and Outputs**

## 1.1 Inventory

Before installing the GPS Optic Isolator, please verify that all material ordered has been received. If there is a discrepancy, please contact Spectracom Customer Service at US 585.321.5800.

<b>Item</b>	<b>Quantity</b>	<b>Description</b>
1	1	Operation & Maintenance Manual
2	1	7535-001 IRIG-B Distribution Amplifier



## 1.2 Inspection and Support

Unpack the equipment and inspect it for damage. If any equipment has been damaged in transit, please contact Spectracom Customer Service at US 585.321.5800.

If any problems occur during installation and configuration of your Spectracom product, please contact Spectracom Technical Support at US 585.321.5823 or US 585.321.5824.

**CAUTION:**

*Electronic equipment is sensitive to Electrostatic Discharge (ESD). Observe all ESD precautions and safeguards when handling the IRIG-B Distribution Amplifier.*

**NOTE:** If equipment is returned to Spectracom, it must be shipped in its original packing material. Save all packaging material for this purpose.



## 2 Specifications

- Meets IEEE Standard 1344-1995 for IRIG B
- 1 to 6 volts peak-to-peak output with standard 1 kHz carrier
- Buffered signals good to minimum of 75 meters
- Nominal gain of  $1.00 \pm 0.01$
- Separate channels with 4 buffered outputs each channel
- Each output short circuit protected- can't affect other outputs
- BNC input and output connectors
- Packaged in 1U 19" rack 1.75" high by 10" deep
- No fans or cooling slots— closed to the environment
- 115 VAC 60 Hz 16 Watts

### 2.1.1 Power

The power connector and power switch are on the rear. When power is on and correctly connected, the power indicator is illuminated. If the indicator is not illuminated, **disconnect the power**, ensure the correct power is available, and check the fuse. Power requirements are:

Input Voltage	Frequency	Fuse	Power
100 – 120 VAC	50 – 60 Hz	0.5 A 250V	15 Watts maximum



### **3 Driver Support**

Please contact your sales representative for information about Spectracom's bus-level timing board driver support for Windows, Linux, VxWorks, and a variety of other platforms. You may also visit our website at [www.spectracomcorp.com](http://www.spectracomcorp.com) to download datasheets and manuals.





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