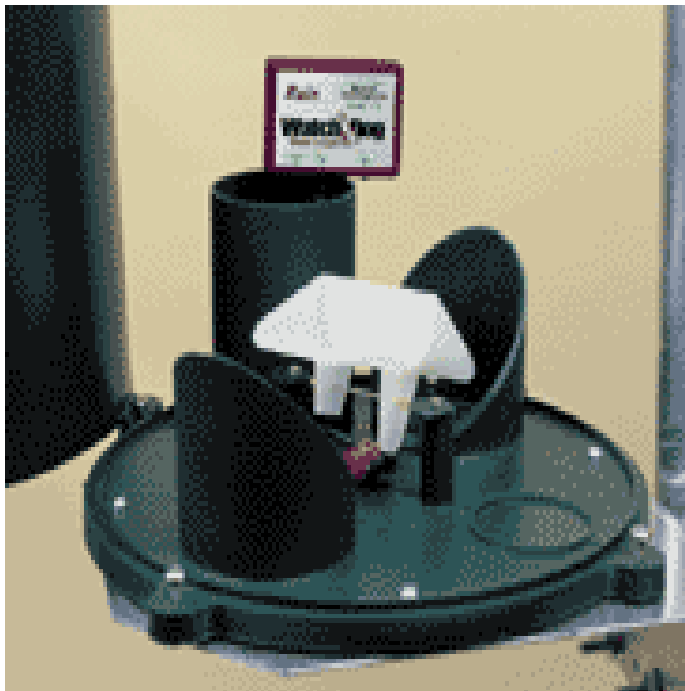


# DATALOGGING RAIN GAUGE

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**CATALOG # 3554WD**

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***Spectrum***  
***Technologies, Inc.***

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This manual will familiarize you with the features and operation of your new Datalogging Rain Gauge. Please read this manual thoroughly before using your instrument. For customer support, or to place an order, call Spectrum Technologies, Inc. at (800)248-8873 or (815) 436-4440 between 7:30 am and 5:30 p.m. CST, FAX at (815) 436-4460, or E-Mail at [info@specmeters.com](mailto:info@specmeters.com).

Spectrum Technologies, Inc at 23839 W Andrew Rd.  
Plainfield, IL 60544

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## GENERAL OVERVIEW

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Thank you for purchasing a Spectrum Datalogging Rain Gauge. With proper installation and care, it will give you years of accurate and reliable measurements. This instruction manual takes you through the procedures required to set up and use the Datalogging Rain Gauge. Read it thoroughly to insure proper and effective use of the sensor.

This rain collector measures rainfall in 1/100th inch increments. The self-emptying, tipping bucket design is accurate and reliable. The rain collector will be accurate to  $\pm 2\%$  with rainfall of 2.5" per hour.

Use SpecWare software to program the WatchDog to log rainfall. Measurements can be recorded in metric or US units. Refer to the SpecWare User's Guide for detailed launch and/or readout instructions.

## DATALOGGER

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### Specifications:

Event type: Tip (relay contact opening)

Event intervals: 1, 5, 10, 15, 30, 60 and 120 minutes.

Memory capacity: 7000 intervals with a maximum of 2.55" per interval

Battery: CR2032 (replace every year)

The datalogger records rain activity over time when connected to a tipping-bucket type rain collector. The logger records accumulated rainfall during each interval (maximum of 2.55" per interval). The flashing red LED light blinks every 2 seconds to confirm logger operation.

The datalogger is enclosed in a storage cavity under the collector cone (see cover illustration). To access the logger, loosen the four screws which secure the cone to the base. Rotate the cone from the base until the screws are free from the latches and separate the cone from the base. Remove the colored cap from the cylindrical cavity and remove the datalogger. Connect the 9-pin connector to the serial port of your computer and plug the interface cable into the logger. The User's Guide for SpecWare software contains instructions for "launching" and downloading data from the logger.

The datalogger may be disconnected from the right-angle pin in the rain-collector at any time.

## INSTALLATION AND MAINTENANCE

When choosing a location for your rain collector, keep the following in mind:

- Mount the collector on a 1" - 1.25" mast (pipe) using the u-bolts. Make sure the collector is level when positioning the mast mount. Use a bubble level to check that the collector's base is level.
- The gauge contains a magnet-operated switch which may not operate correctly if you mount the rain collector on or near any object which attracts a magnet.
- Choose an easily accessible location for normal cleaning that is far from trees and other sources of pollen or debris.

The rain gauge must be located in an open area.

For greatest accuracy, you should thoroughly clean the rain collector at least once or twice a year. Your gauge should be cleaned using a mild detergent on the dipper and respraying with "Elmer's Slide-all". This teflon spray can be obtained at your local hardware store.

Inspect the sensors frequently to make certain the sensors are still level and clear of obstructions.

Note: Disconnect the logger from the rain collector to avoid any inadvertent counts on the logger when cleaning.

## BATTERY REPLACEMENT

The datalogger is powered by a 3 Volt CR2032 battery. It is user replaceable and can be purchased locally. Other battery numbers that may be substituted for a CR2032 are BR2032 or DL2032. We recommend changing the battery every year.

To replace the battery:

1. Remove the logger from the storage cavity and unplug the 2.5 mm sensor cable.
2. Remove the screw on the back cover of the datalogger and remove the back cover.
3. Slide the battery out of the battery holder.
4. Insert a new CR2032 battery positive side up.
5. Replace cover and tighten cover screw.

The logger is ready to be relaunched if the LED briefly illuminates following battery installation. After being relaunched with the SpecWare Software, the LED light will resume blinking.

Insert a flat-edged screwdriver completely underneath old battery. Gently lift edge of battery over casing lip and slide battery out. Slide new battery into battery casing.



# **WARRANTY**

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The Datalogging Rain Gauge is warranted to be free from defects in materials and workmanship for a period of 1 year from the date of original purchase. During the warranty period, Spectrum will, at its option, either repair or replace products that prove to be defective. This warranty is void if the product has been damaged by customer error or negligence, or if there has been an unauthorized modification.

## **Returning Products to Spectrum**

Before returning a failed unit, you must obtain a Returned Goods Authorization (RGA) number from Spectrum. You must ship the product(s), properly packaged against further damage, back to Spectrum (at your expense) with the RGA number marked clearly on the outside of the package. Spectrum is not responsible for any package that is returned without a valid RGA number or for the loss of the package by any shipping company.

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