

*Integrated Treatment Systems, LLC*

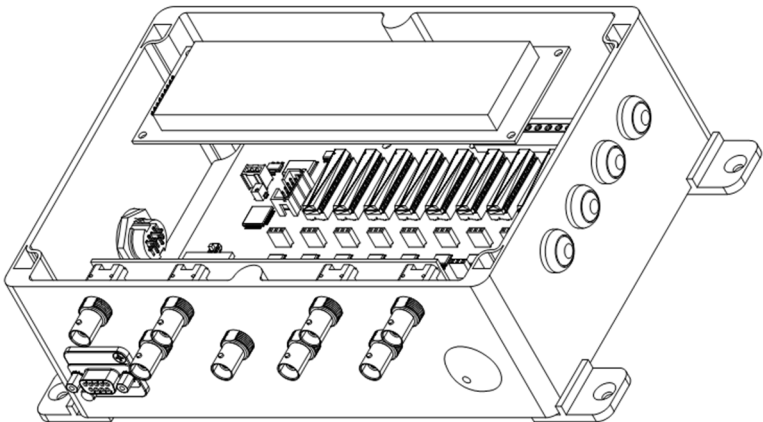


*WaterFeature8™*

*A-Series*

*Sensor Interface System*

QUICK START GUIDE



JUNE 2022

## Disclaimer

The *WaterFeature8*<sup>™</sup> Sensor Interface System is a multiparameter water quality monitoring device. It may also perform as part of a PID control loop when connected to a third-party PLC system. *It is good engineering practice to consider how critical each piece of hardware is to the control loop system, and to plan for and design appropriate fail-safe hardware and/or procedures accordingly. Integrated Treatment Systems, LLC is not responsible for process disruption due to hardware or firmware failure.*

This Quick Start Guide includes brief instructions for getting your Atlas Scientific powered *WaterFeature8* up and running with as little paper waste as possible. Please refer to the complete User Manual, downloadable at [www.intreatsys.com/downloads](http://www.intreatsys.com/downloads), for more information.

**Install the included CR2025 battery if you want to retain clock settings when the unit is powered off. Align the battery with the PLUS (+) side facing the “+” symbol on the PCB silk screen. With the edge of the battery, gently pry “out” on the metal battery holder tab and slide the battery into the socket. Exercise care to avoid bending the metal retaining tab on the battery holder.** The Real Time Clock will work without the battery, but it will not retain date/time settings if the power is turned off.

## 1 EZO Circuit SETUP

When you first install Atlas Scientific, LLC EZO<sup>®</sup> circuits in the *WaterFeature8* you will likely see some junk on the screen, or some channels may not be correctly reading. These EZOs must be set up to function with the *WaterFeature8* unit.

There are three ways to set up Atlas Scientific EZO circuits to function with the *WaterFeature8* system:

1. Using the AutoConfig function available on firmware v1.02 and later,
2. Manually using a terminal emulator and serial converter,
3. Using the built-in Remote State function.

This Quick Start Guide describes the first method of EZO programming; the **AutoConfig** function.

Programming an EZO circuit will NOT overwrite existing calibration that has been previously programmed into the EZO memory.

EZO circuits must be in UART mode to be visible to the *WaterFeature8* system. EZO circuits are shipped from the Atlas Scientific factory in UART mode by default, however, it is possible to accidentally change an EZO mode from UART to I2C, and if this occurs, the EZO must be manually changed back to UART before **Autoconfig** will be able to read the EZO. Refer to Atlas Scientific's EZO circuit documentation for more information regarding the "factory" command and modes of operation.

## Automatic Configuration

The firmware version shipped with this *WaterFeature8* system includes the **AutoConfig** EZO circuit programming function which works with all *WaterFeature8* compatible EZO circuits to provide a hassle-free method of programming factory default installed EZO circuits without a terminal emulator or serial communications device.

To run the Automatic Configuration feature:

From the Home Screen, press **Set-->** [SW4] (Switch 4 is the bottom button on the right-hand side of the enclosure) to enter the **Settings** menu tree. Browse the menus to find AutoConfig by pressing **System-->** [SW1], then **NEXT-->** [SW3], and finally **AutoConfig-->** [SW2].

Before AutoConfig runs the system displays the following menu:

```
WaterFeature8 EZO AutoConfiguration
Function Initiated
Press CONFIRM to Continue  Confirm-->
                             BACK-->
```

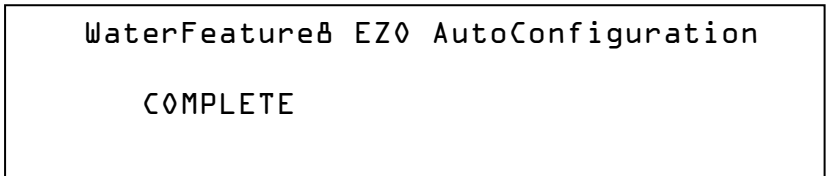
Pressing **BACK-->** [SW4] immediately returns to the **System 2** menu.

Pressing **Confirm-->** [SW3] begins the AutoConfigure procedure and the *WaterFeature8* begins programming the EZO circuits it recognizes in the populated channels. While running, the following display is shown:

```
WaterFeature8 EZO AutoConfiguration
CONFIGURING EZOs.....
```

The AutoConfig function typically requires less than a few seconds to perform. Once complete, the following screen displays for 3 seconds:

After confirming a successful AutoConfiguration routine, the AutoConfig function automatically exits and the *WF8* system returns to the **System 2** menu. Press **BACK-->** [SW4] multiple times to return to the Home Screen (a.k.a. Main Menu).



If the EZO circuits do not appear on the Home Screen, the user should run AutoConfig again to see if this corrects the issue, otherwise Manual Configuration may be required. Faulty EZO circuits may not be recognized by the *WaterFeature8* system, and EZO circuits in a different mode (such as I2C) will not be visible to the *WaterFeature8* and are therefore not compatible with AutoConfigure or the rest of the *WaterFeature8* operating system. If this is the case, the EZOs will need to be manually programmed to UART mode and 9600 baud rate. See the Atlas Scientific datasheets for more information.

## 2 OTHER DETAILS

Now that the *WaterFeature8* is powered on and running, the system is relatively simple to navigate with the four pushbuttons included with the product.

The complete User Manual includes more detailed information regarding these topics:

- .. Installation specifics;
- .. EZO and Sensor Calibration;
- .. Temperature Compensation assignments;
- .. Data Recording;
- .. Local State and Remote State operating modes;
- .. System components and replacement parts;

.. Version history and EZO compatibility.

## Warranty Overview

The following activities will explicitly void this product's limited warranty which is printed on the next page:

- Failure to register your product with ITS. Visit [www.intreatsys.com/warranty](http://www.intreatsys.com/warranty) for product registration instructions;
- Soldering or de-soldering any component on the circuit board;
- Downloading or modifying the on-board firmware without express authorization and instruction from Integrated Treatment Systems, LLC;
- Wiring to the remote connection PROG header without use of an ITS approved TTL serial adapter;
- Placing the system in environments known to be hostile to printed circuit boards such as temperatures above 125 °F, extreme thermal shock, high humidity or otherwise moist environments, and vibrating or moving conditions.

You must register your device at [www.intreatsys.com/warranty](http://www.intreatsys.com/warranty) to obtain warranty coverage for this product.

Shipping expenses related to warranty work outside the contiguous 48 United States are not eligible for coverage or reimbursement.

## Contact Us

We are excited to continue developing universal, cost-effective solutions to solving water quality challenges and are looking forward to your suggestions to improve our products.

Feel free to contact us in any of the following ways:

Email: [custsomerservice@intreatsys.com](mailto:custsomerservice@intreatsys.com)

Web: <http://www.intreatsys.com/contact-its>

### 3 GUARANTEE/WARRANTY STATEMENT

This limited warranty is governed by and construed under the laws of the State of Iowa.

INTEGRATED TREATMENT SYSTEMS, LLC (ITS) WARRANTS ITS PRODUCTS AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP UNDER NORMAL USE FOR A PERIOD OF 1 YEAR FROM DATE OF SHIPMENT ("WARRANTY PERIOD"). IF A DEFECT ARISES AND A VALID CLAIM IS RECEIVED WITHIN THE WARRANTY PERIOD, ITS WILL, AT ITS OPTION AND TO THE EXTENT PERMITTED BY LAW, FOR ANY ITS MANUFACTURED DEVICES THAT ARE RETURNED AND CONFIRMED BY ITS TO BE NON-CONFORMING TO THE PRODUCT SPECIFICATIONS AND/OR THE APPLICABLE QUALITY AND ACCEPTABILITY STANDARDS, EITHER (I) REPLACE THE PRODUCT AT NO CHARGE OR (II) ISSUE A CREDIT EQUAL TO THE ORIGINAL PURCHASE PRICE OF THE PRODUCT. WHEN A PRODUCT IS EXCHANGED, ANY REPLACEMENT ITEM BECOMES THE CUSTOMER'S PROPERTY AND THE REPLACED ITEM BECOMES ITS' PROPERTY. WHEN A REFUND IS GIVEN, THE PRODUCT FOR WHICH THE REFUND IS PROVIDED MUST BE RETURNED TO ITS AND BECOMES ITS' PROPERTY. ITS WILL NOT ACCEPT LIABILITY FOR ANY COST IN ADDITION TO THE VALUE OF THE PRODUCT INCLUDING BUT NOT LIMITED TO COMPONENTS, LABOR, BUSINESS INTERRUPTIONS, PROCESS PERFORMANCE IMPACTS, AND ANY OTHER CONSEQUENTIAL DAMAGES OR LOSSES. ITS DISCLAIMS ANY OPEN-ENDED ACCEPTANCE OF LIABILITY FOR LOSSES BEYOND THE CONTROL OF ITS.

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Visit [www.intreatsys.com/wf8](http://www.intreatsys.com/wf8) for current product information, including the most recent user manual.

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