



Pulse Scaling Assistant

For HOBOWare® Pro Software

User's Guide

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About Data Assistants

Data assistants are plug-in utilities for HOBOWare Pro. They let you create new data series by combining data recorded by the logger with additional data that you enter before you display the plot. If your logger or datafile contains data that supports a data assistant, you will see a Data Assistants section at the bottom of the Plot Setup dialog. Select an assistant and click **Process** to continue. Some Data Assistants are also available when launching the logger. For information about installing and managing data assistants, refer to the following page at the Onset web site:

<http://www.onsetcomp.com/dataAssistants>

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Introduction

The Pulse Scaling Assistant converts a data series from a compatible sensor to some other measurement when you enter a raw value and its corresponding measurement value. The conversion must be based on a linear relationship. Nonlinear scaling is not supported.

This assistant can be run from the **Launch** window (Pre-set Parameters) or from the **Plot Setup** dialog. If you run the assistant from the **Plot Setup** dialog, you must run the assistant each time you read out the logger or open a datafile.

Supported Sensors

This assistant is available for the following sensors:

- S-UCA-xxxx and S-UCC-xxxx Electronic Switch Pulse Input Adapter
- S-UCB-xxxx and S-UCD-xxxx Contact Closure Pulse Input Adapter
- Raw Pulse sensors connected to the HOBO 4-Channel Pulse Input Data Logger (UX120-017x)

Other Types of Scaling

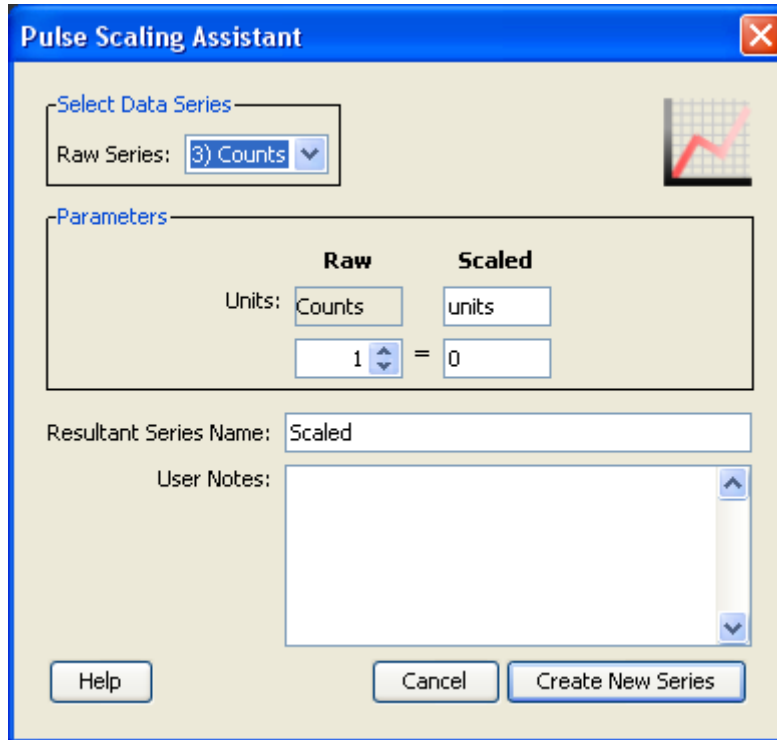
There are also other types of scaling available within HOBOWare Pro that may apply to your configuration:

- FlexSmart™ modules are set up for scaling prior to launch, as part of the module configuration process. (Consult the *HOBOWare User's Guide* for details.)
- The Linear Scaling Assistant is similar to the Pulse Scaling Assistant, but has slightly different input options and is compatible with a different group of sensors. (Consult the *Linear Scaling Assistant User's Guide* for details.)

Using the Pulse Scaling Assistant

1. **At launch time:** Using a logger with a sensor that supports scaling at launch time, click the Launch icon on the toolbar. Click the Scaling button. Double click the assistant name or select the assistant and click the Create button.
2. **At plot setup:** Read out a logger or open a file that supports pulse scaling. Select the Pulse Scaling Assistant and click the Process button.








3. In the Pulse Scaling Assistant dialog, choose the data series you want to convert from the Raw Series drop-down list.



The Pulse Scaling Assistant dialog box is shown. It has a title bar with a close button. The main area is divided into two sections: 'Select Data Series' and 'Parameters'. In the 'Select Data Series' section, there is a 'Raw Series' drop-down menu currently set to '3) Counts'. In the 'Parameters' section, there are two columns: 'Raw' and 'Scaled'. Under 'Raw', the 'Units' are 'Counts' and the value is '1'. Under 'Scaled', the units are 'units' and the value is '0'. Below these columns is a 'Resultant Series Name' field set to 'Scaled' and a 'User Notes' text area. At the bottom are three buttons: 'Help', 'Cancel', and 'Create New Series'.

4. In the Scaled column of the Parameters panel, enter the units name for the scaled series and enter a scaled value in the Scaled box to correspond with the number in the Raw box. These numbers establish the relationship between the raw and scaled values.
5. In the Resultant Series Name field, keep the default name or type a new one.
6. Type any User Notes concerning the series you are creating (optional).
7. Click the Create New Series button.
8. If you ran the assistant from the Launch window, the Scaling button displays the number of newly created series. If using this assistant while plotting, the new series is listed and selected in the Plot Setup dialog. Click the Plot button to display the series.
9. The scaled series will appear in the plot immediately or when you read out the logger if configuring this at launch time. The settings for the scaled series are listed in the Details pane of the plot:

Details

- ▼  Series: Rain, Inches
 - ▶  Logger Info
 - ▶  Deployment Info
 - ▶  Series Statistics
 - ▼  Pulse Scaling Parameters
 -  1 Count = 0.010 Inches
 - ▼  User Notes
 - Rainfall in Field 3

Available Filters

After the plot is displayed, you may apply filters to the scaled series as you would for any other series in HOBOWare Pro. In addition to the minimum, maximum, and average filters that are available for most series, the scaled pulse series allows you to create a new series showing totals over a period of time.

Software Updates

If you have an Internet connection, HOBOWare Pro can periodically ask if you would like it to check the Onset website for software updates. This includes updates to your data assistants.

The default is to check once per week, but you can configure HOBOWare Pro to check daily or monthly. In Preferences, go to the General pane. **Check for HOBOWare updates** is located under the Startup heading.

You may check for updates manually at any time. Choose **Check for Updates** from the Help menu.