

WinFrog Device Group:	COUNTER
Device Name/Model:	BOHLEN1 Counter
Device Manufacturer:	
Device Data String(s) Output to WinFrog:	
WinFrog Data String(s) Output to Device:	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxEastingxNorthingxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxKP
WinFrog Data Item(s) and their RAW record:	DATA OUTPUT 450 COUNT 492

DEVICE DESCRIPTION:

This driver receives cable data from the Bohlen counter and outputs grid position and KP data to the counter.

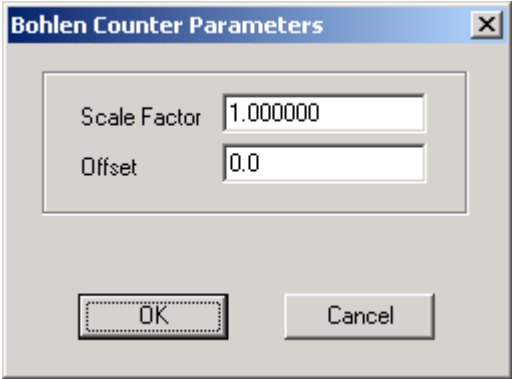
DEVICE CONFIGURATION INSTRUCTIONS

WINFROG I/O DEVICES > EDIT I/O:

Serial
Configurable Parameters
A dialog appears in which to change the name of the device if desired.

WINFROG I/O DEVICES > CONFIGURE DEVICE:

This device must be configured at the I/O Device window level. In the I/O Devices window, click the device name to select it, then right-click and select Configure Device. The Bohlen Counter Parameters dialog box appears, as seen below.



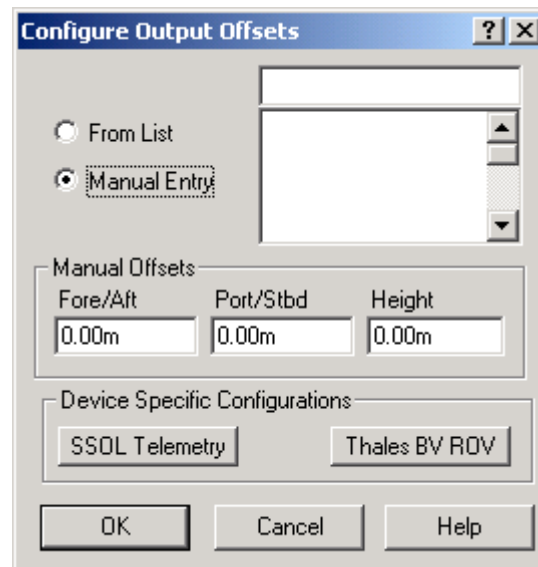
If you determine that the incoming cable count is incorrect, possibly due to a mis-calibration of the counter itself, a compensating Scale Factor can be entered here. This can also be used to convert incoming units to the desired units. Also an offset value can be entered in the appropriate dialog and this value will added to the result of the raw cable count and the scale factor.

WINFROG VEHICLE > CONFIGURE VEHICLE DEVICES > DEVICE DATA ITEM > EDIT:

Adding the BOHLEN1 Counter device creates two data items: DATA OUTPUT and COUNT. Once the data items have been added to the vehicle, they must be edited to suit the application.

Data item: COUNTER, BOHLEN1Counter, DATA OUTPUT

The data item can be added to multiple vehicles (e.g. primary and secondary positioning vehicles). When the DATA OUTPUT data item is edited from the Configure Vehicle Devices dialog box, the Configure Output Offsets dialog box appears. The content of the dialog box is based on the offsets attached to the vehicle in question.



Configure Output Offsets:

Normally the position that is to be output will be the position of the CRP of vehicle. However, if another position is required, the offset to be applied to the output position for the DATA OUTPUT data item can either be taken from the list of vessel offsets or a manual offset entry can be input. Select the appropriate radio button (From List or Manual Entry). The offset can now be highlighted from the list, or if Manual Entry is chosen, the offset values can be input. The position data output will now be referenced to the offset location chosen.

Device Specific Configurations:

The SSOL Telemetry and Thales BV ROV options are not used for this device.

Data item: COUNTER, BOHLEN1Counter, COUNT

Highlight the COUNTER, BOHLEN1Counter, COUNT data item in the vehicle's device list and click the Edit button to open the Configure Counter dialog box.

This data item configuration dialog has two tabs, Reference Counters and Real-Time Navigation Updates.

The screenshot shows the 'Configure Counter' dialog box with the 'Reference Counters' tab selected. The dialog has a title bar with a question mark and a close button. Below the title bar are two tabs: 'Reference Counters' (selected) and 'Real-Time Navigation Updates'. The main area contains several sections:

- Choose Reference Counter to Modify:** A dropdown menu showing 'Counter #1' and a 'Direction' button with 'Up / Down' text.
- Set Specific Cable Count:** A text input field containing '3817.2' and a 'SET' button.
- Set Counter Scale:** A text input field containing '1.0000000' and a 'New Counter Scale from Cable Count' section with a text input field containing '3817.2' and a 'SET' button.
- Set Counter Offset:** A text input field containing '-1606.3' and a 'SET' button.
- Counter Name:** A text input field containing 'Counter #1' and a 'SET' button.

At the bottom of the dialog are 'OK' and 'Cancel' buttons.

Reference Counters

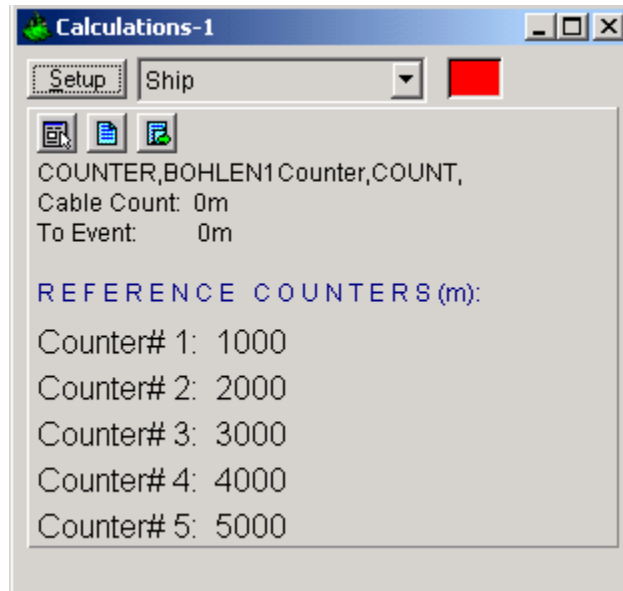
The items on this tab are used in conjunction with the Calculations window to maintain up to five reference counts based on the Channel One (cable) count. These reference counts are not used for any real-time calculations and are not logged to any file; they are intended for reference purposes only.

One common use for the Reference Counters tab is to have a 'count down' between cable body deployment. This is accomplished by entering the cable spans between

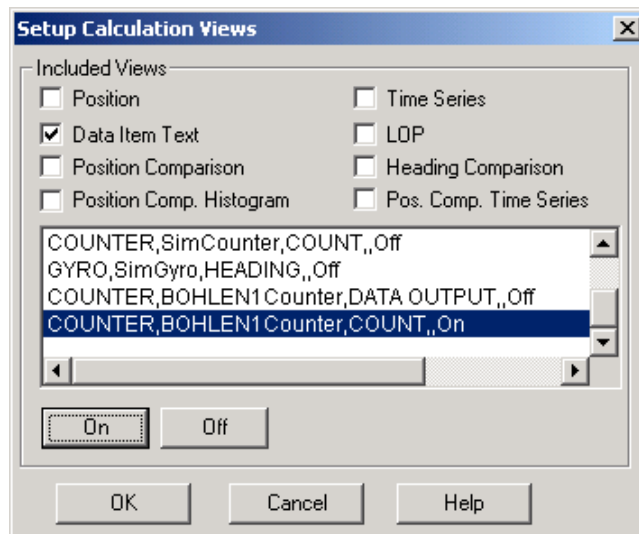
cable bodies in the 'Set Specific Cable Count' dialog(s), selecting the 'Direction' as 'Down' and exiting with OK when the first cable body is launched.

View and configure the Calculations window (shown below) by completing the following steps.


Note: To view the reference counts, the COUNT data item must be attached to the vehicle.



1. From the WinFrog View menu select the Calculations item to open the Calculations window.
2. In the Calculations window click the Setup button to open the Setup Calculations dialog shown below.



3. In the Setup Calculations dialog select the Data Item Text checkbox. Then turn on the COUNT data item by selecting the COUNT data item from the list and click the On button.
4. Click OK.

Once the Calculations window has been opened and configured the five reference counters can be modified using the Reference Counters page of the Configure Counter dialog. (Note: the Configure Counter dialog can be directly accessed from the Calculations window by clicking the  icon in the Calculations window.)

The Reference Counter page allows the reference counters to be modified in a number of ways, as described below. Start by selecting the reference counter you want to modify from the drop down list box at the top of the page.

Direction

When the *Up/Down* button is not depressed the reference count will increase if the input cable count increases and decrease if the input cable count decreases. When the *Up/Down* button is depressed the reference count will decrease if the input cable count increases and increase if the input cable count decreases.

Set Specific Cable Count

To set the reference counter to a specific cable count, enter the desired value in the edit field then click the *Set* button. When the Configure Counter dialog OK button is then clicked the desired reference counter value will be set to the entered value. This value will then continue to increment or decrement based on the input cable count and the current settings for the reference count.

Set Counter Scale

To change the scale at which the reference count will increment or decrement relative to the input cable count, enter the desired scale factor into the scale field. Leave the *New Counter Scale from Cable Count* value at its present value to apply the scale from the current point onward. Enter in a count value into the *New Counter Scale from Cable Count* field to apply the scale from a previous count value onward. Once the desired scale factor and count value is entered, click the *Set* button and then click the *OK* button.

Set Counter Offset

To set an offset from the input cable count to the reference count, enter the desired value into the Set Counter Offset field, click the *Set* button and then click the *OK* button. This value will be added to the input cable count.

Counter Name

To change the reference counter name, enter the desired name into the *Counter Name* field. Click the *Set* button and then the *OK* button to enter the change.

Real-Time Navigation Updates

The screenshot shows a 'Configure Counter' dialog box with two tabs: 'Reference Counters' and 'Real-Time Navigation Updates'. The 'Real-Time Navigation Updates' tab is active. It contains the following sections:

- Interval:** A text box containing '1.0 s' and a label 'Enter Raw Data File Logging Interval in Seconds, 0=All Data'.
- Channel 1 (Telephone / Power Cable):** A group box containing three checkboxes: 'Cable Count' (checked), 'Payout Speed' (unchecked), and 'Tension' (checked).
- Channel 2 (Tow Cable):** A group box containing three checkboxes: 'Cable Count' (unchecked), 'Payout Speed' (unchecked), and 'Tension' (unchecked).
- Channels 3,4,5 Tension:** A group box containing three checkboxes: 'LCE Tension (Channel 3)' (unchecked), 'CDE 1 Tension (Channel 4)' (unchecked), and 'CDE 2 Tension (Channel 5)' (unchecked).
- General:** A group box containing two checkboxes: 'Distance to Event' (unchecked) and 'Cable Angle' (unchecked).

At the bottom of the dialog are 'OK' and 'Cancel' buttons.

This page enables/disables certain data from this device to be passed to the vehicle. Unlike the Reference Counters tab, data from the Real-Time Navigation Updates tab can be logged to the raw files if this data item is associated with a vehicle. This allows the vehicle to have more than one COUNT without one conflicting with the other. One COUNTER device may provide the telephone cable count while the other provides the tow count. If a checkbox is selected (checked) the data value will be passed to the vehicle. For example, if the *Cable Count* checkbox is selected in the *Channel 1* section then the cable count from the input device will be passed to the vehicles channel 1 count.

It is important to note that if the data string from the counter device does not contain certain data types (count, tension or speed), these options should not be selected

from this page. Selecting an option for which there is no data in the string causes WinFrog to assign a zero in the selected field and it may result in valid data from other sources being overwritten with zeroes.

The *Interval* section sets the data logging interval used when the “With Events” Logging Control option is selected (refer to chapter 10 of the WinFrog User’s Guide for more information).

TELGRAM SPECIFICATION:

xxxxxxxxxxxxxxxxxxxxxxxxEastingxNorthingxxxxxxxxxxxxxxxxxxxxxxxxKP

The x’s in the output telegram are present because the telegram must be a fixed length.