WinFrog Device Group:	COUNTER
Device Name/Model:	CTC Dowty
Device Manufacturer:	Precision Handling Systems Wobaston Road Wolverhampton West Midlands England Tel : +44 (0) 1902 575600 Fax : +44 (0) 1902 575655 Email: marketing@jcl-phs.com
Device Data String(s) Output to WinFrog:	
WinFrog Data String(s) Output to Device:	
WinFrog Data Item(s) and their RAW record:	COUNT 492

DEVICE DESCRIPTION:

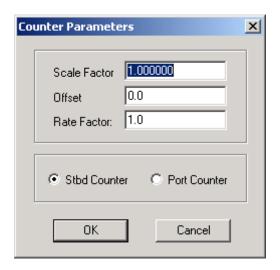This driver reads the cable count, tension and cable speed from the Dowty Counter device.

DEVICE CONFIGURATION INSTRUCTIONS

WINFROG I/O DEVICES > EDIT I/O:
Serial
Configurable Parameters

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 Counter Parameters dialog box appears, as seen below.

If you determine 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 and cable payout rate factor can be entered in the appropriate fields. The payout rate factor works the same as the Scale Factor where you can compensate for a mis-calibration and/or convert the incoming units. You also have the option to switch between the Starboard and Port counters as required.
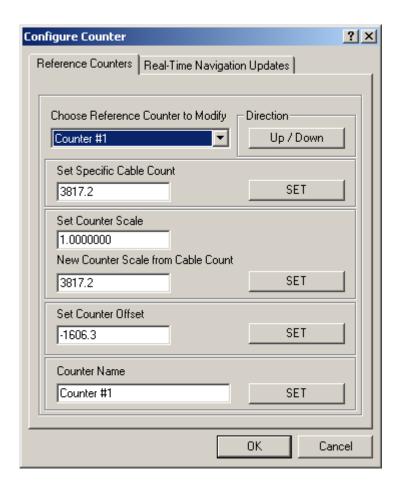
WINFROG VEHICLE > CONFIGURE VEHICLE DEVICES > DEVICE DATA ITEM > EDIT:

Adding the CTC Dowty device creates the COUNT data item. Once the data item has been added to the vehicle, it must be edited to suit the application.

Data item: COUNTER, CTC Dowty, COUNT

Highlight the COUNTER, CTC Dowty, 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.
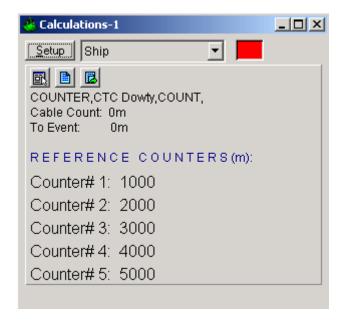
Reference Counters tab

This tab is 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.
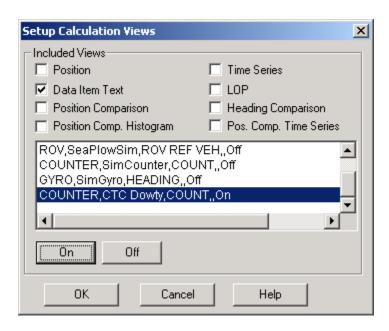
One common use for the Reference Counters tab is to have a 'count down' between cable body deployment. This is accomplished by entering the cable spans between cable bodies in the 'Set Specific Cable Count' field(s), selecting the 'Direction' as 'Down' and exiting with OK when the first cable body is 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 Calculation Views dialog shown below.

3. In the Setup Calculation Views dialog select the Data Item Text checkbox. Then to turn On the COUNT data item, select 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 tab 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 tab 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 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.
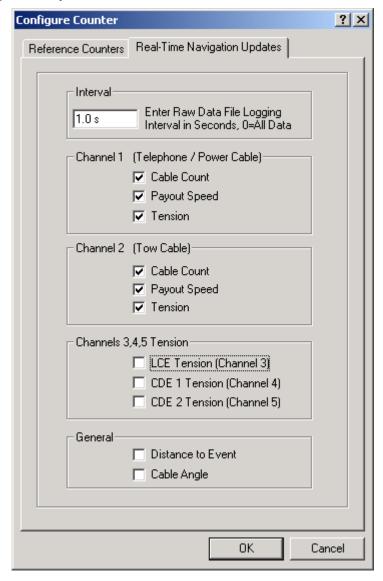
Set Counter Offset

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* and then the *OK* button to enter the change.

Real-Time Navigation Updates tab

This tab 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:

Field   Data

1        $LCES
2   timeStamp1 // time stamp in 10ms units
3   cableCount1 // Total LCE distance in cm /100 for m
4   tension1 // tension in KN
5   controlE1 // control L is LCE control (local), N is winfrog control, D is winfrog request control but not given
6   cableCount2 // a count
7   tension2 // a tension
8   controlE2 // control as above