

WinFrog Device Group:	COUNTER
Device Name/Model:	CsgsCounter
Device Manufacturer:	
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:

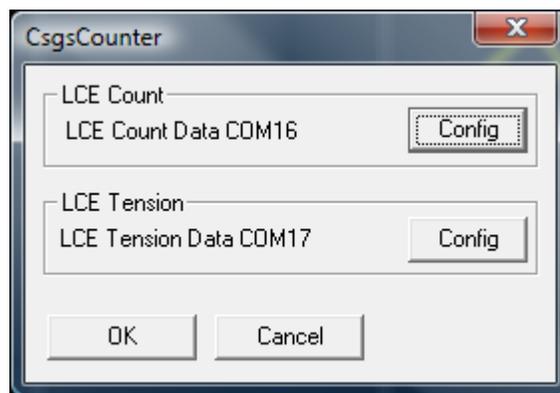
The CsgsCounter device reads cable count directly from the source on a COM port. The tension source is expected to be a DGH A/D convertor (current type) and WinFrog sends it commands to read the data. Both values are assumed to be for telephone cable and assigned to channel 1.

DEVICE CONFIGURATION INSTRUCTIONS

WINFROG I/O DEVICES > EDIT I/O:

Serial
Configurable Parameters

This device requires two com ports, one for Cable Count and one for tension. When the CsgsCounter device is added to WinFrog, the I/O dialog box opens as seen below.



Click the Config button for each one of the data types to open the standard Device I/O Parameters dialogs. Enter the I/O parameters for each data type and exit with OK.

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 and A/D Parameters dialog box appears, as seen below.

Counter and A/D Parameters

Counter

Scale Factor

Offset

Use Second Count in Telegram

Tension

	Amp (mA)	Tension (Lbs)
Lower	<input type="text" value="4.0"/>	<input type="text" value="0.0"/>
Upper	<input type="text" value="20.0"/>	<input type="text" value="50000.0"/>

Scaler

Tension = Delta Tension * (Obs value *
Scaler - Lower Amperage) /
Delta Amperage

Delta = Upper - Lower

OK Cancel

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 in the Counter section. Also, an offset value can be entered in the appropriate field. These offset values will be added after the observed value is scaled.

In the Tension section, enter the Lower and Upper limits for both the current and tension expected. Note: certain DGH current D to A convertors have a lower level of 4 rather than 0. A Scalar value can be entered to convert the incoming units to the desired units. It is advisable to check with the personnel responsible for the operation of the CsgsCounter in order to determine the expected limits and units for the data. The tension data is calculated based on the formula as shown in the above dialog box.

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

Adding the CsgsCounter 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, CsgsCounter, COUNT

Highlight the COUNTER, CsgsCounter, 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

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. It contains several sections for configuration:

- Choose Reference Counter to Modify:** A dropdown menu showing 'Counter# 1'.
- Direction:** A button labeled 'Up / Down'.
- Set Specific Cable Count:** A text input field containing '1000' and a 'SET' button.
- Set Counter Scale:** A text input field containing '1.0000000'.
- New Counter Scale from Cable Count:** A text input field containing '0.0' and a 'SET' button.
- Set Counter Offset:** A text input field containing '0.0' 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.

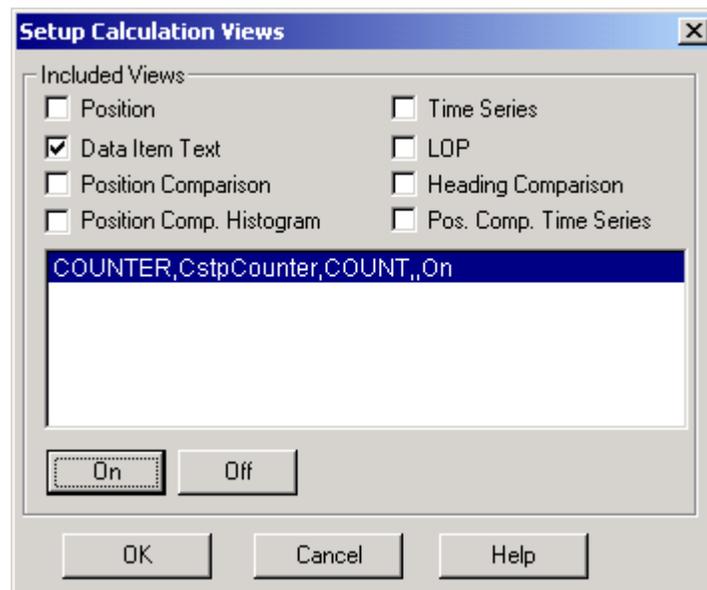
This tab is used in conjunction with a Calculations window to maintain up to five reference counts based on the Channel One (cable) count. These reference counts are not used for any real-time calculations and are not logged to any file; they are intended for reference purposes only.

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. The results of this configuration are typically viewed in a Calculations window.

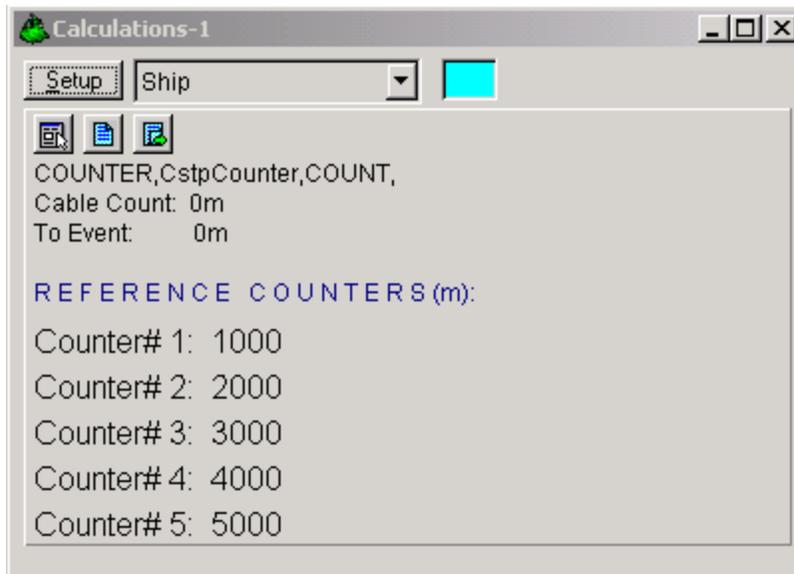
View and configure the Calculations window (shown below) by completing the following steps.

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

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 box shown below.



3. In the Setup Calculation Views 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 and the Calculations window opens as seen below.



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 to be modified from the dropdown 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.

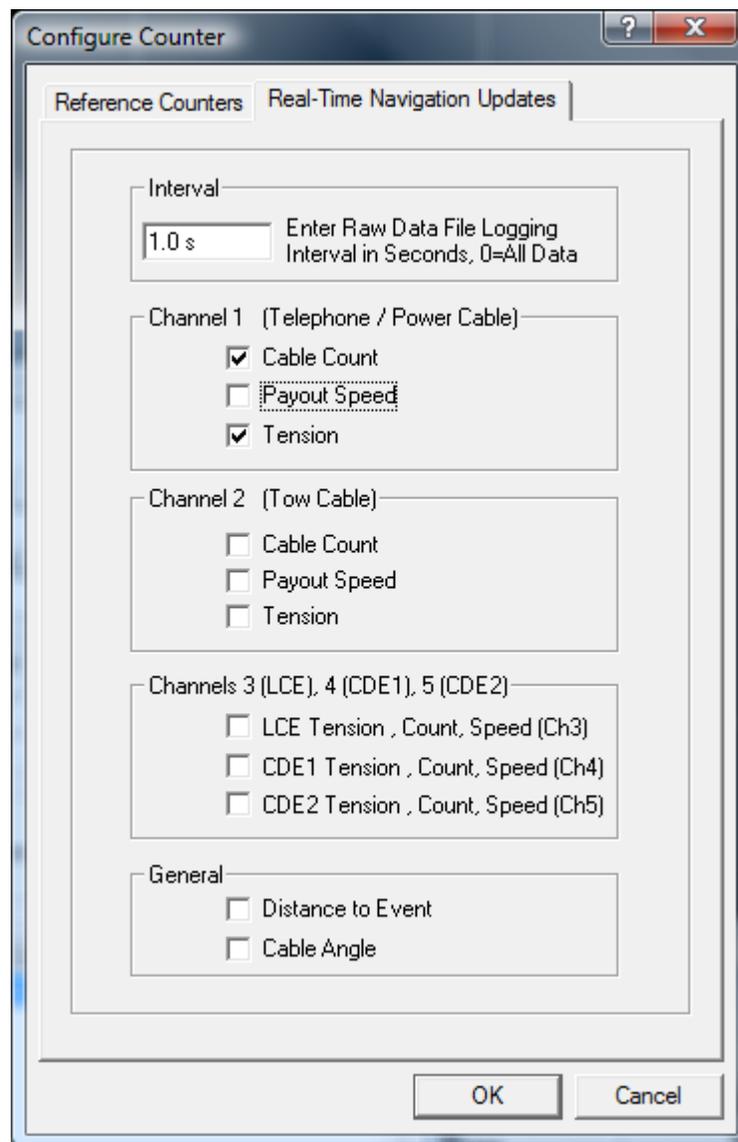
Set Counter Offset

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 Page



This page enables/disables certain data from this device to be passed to the vehicle (although it will still be logged). 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 counter device 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. Also if the counter device is not providing the data for the particular channel then these options should also **not** be selected. 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.

In the case of this device it can only supply cable count and tension for channel 1 telephone cable. So all of the options for channels 2, 3, 4, and 5 **not** be selected.

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