WinFrog Device Group:	**COUNTER**
Device Name/Model:	**Siemens LCE**
Device Manufacturer:	Norddeutsche Seekabelwerke GmbH & Co. KG Postal Address: P.O. Box 14 64, 26944 Nordenham, Germany Office Address: Kabelstrasse 9-11, 26954 Nordenham, Germany Telephone. +49 (4731) 82-1000 Telefax: +49 (4731) 82-1301 Website: www.nsw.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 PLOWDATA 490

DEVICE DESCRIPTION:

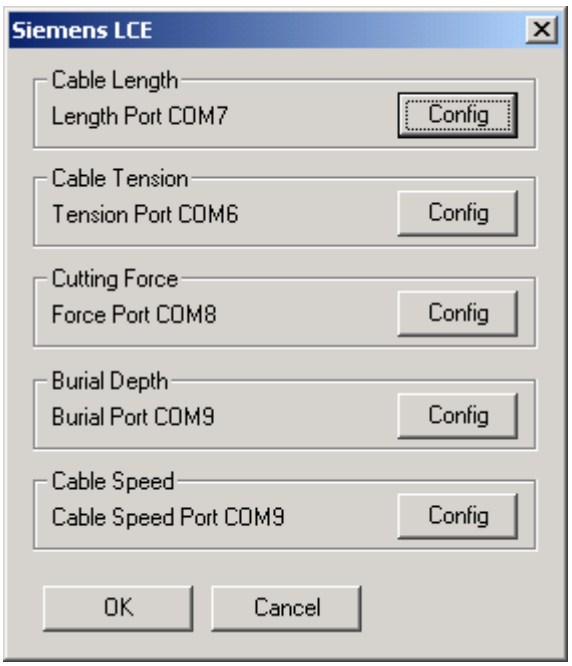
This device is designed to read telephone cable count, speed and tension data, as well as the cutting force and burial depth data from the Siemens LCE counter.

DEVICE CONFIGURATION INSTRUCTIONS

WINFROG I/O DEVICES > EDIT I/O:

Serial
Configurable Parameters

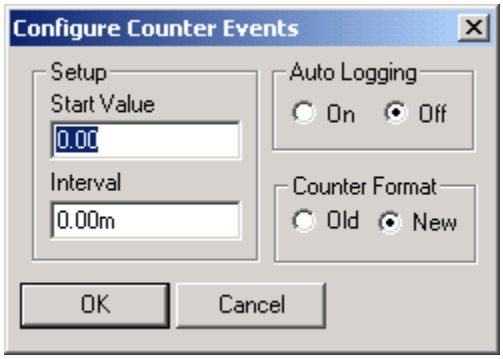
This device requires five com ports, one each for Cable Count, Cable Speed, Cable Tension, Cutting Force and Burial Depth data. When the Siemens LCE device is added to WinFrog, the Siemens LCE dialog box opens as seen below.



Click the Config button for each one of the data types to open the standard Device I/O Parameters windows. 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 Configure Counter Events dialog box appears, as seen below.



This dialog box is used to configure automatic eventing based on cable count. In the Setup section enter the cable count value at which to start the automatic eventing. Also enter the desired cable count interval at which to take the automatic events. In the Auto Logging section selecting the On option and exiting with OK initiates the automatic eventing. If there is any doubt as to the Counter Format to be used, consult with the personnel in charge of operating the Siemens LCE counter.

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

Adding the Siemens LCE device creates two data items: COUNT and PLOWDATA. Once the data items have been added to the vehicle, they must be edited to suit the application.

Data item: COUNTER, Siemens LCE, COUNT

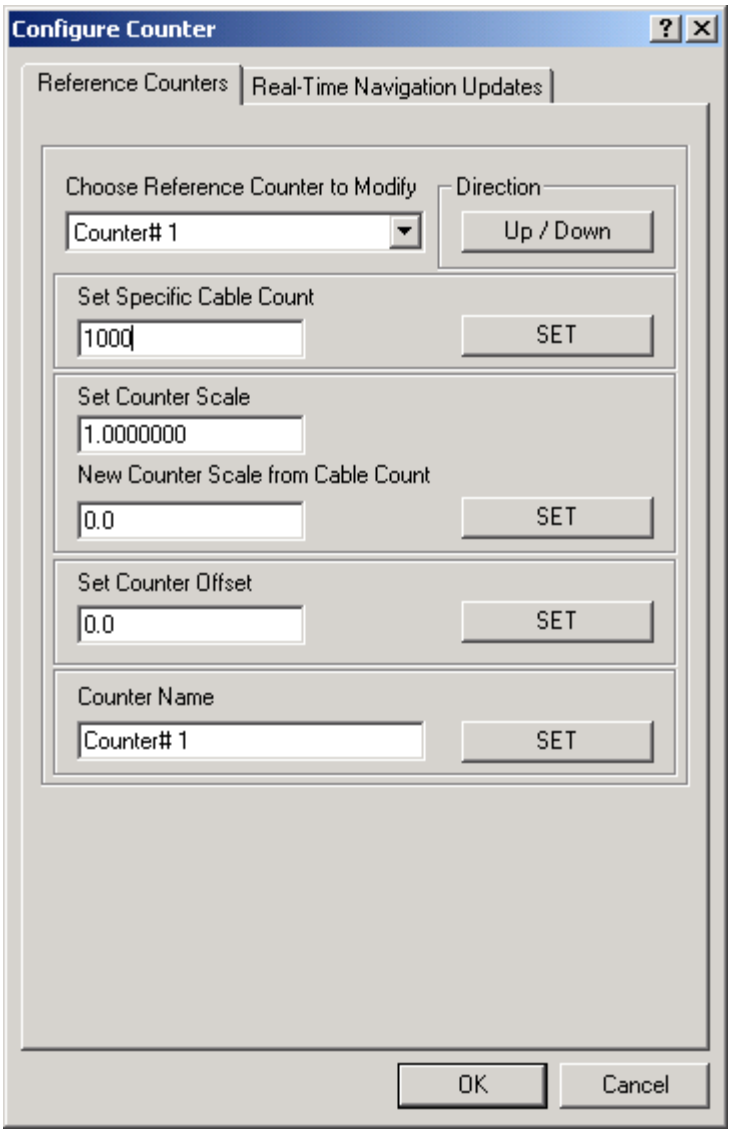
Highlighting the COUNTER, Siemens LCE, COUNT data item in the vehicle's device list and clicking on Edit opens the Configure Counter dialog box.

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

Reference Counters Page

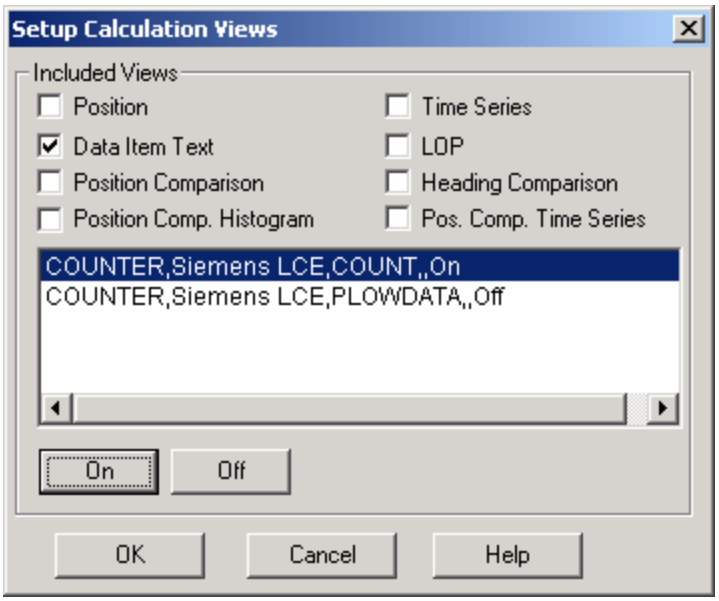
This page (shown below) is used in conjunction with a Calculations window to maintain up to five reference counts based on the Channel One (cable) count. These reference counts are not used for any real-time calculations and are not logged to any file; they are intended for reference purposes only.

One common use for the Reference Counters page 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.

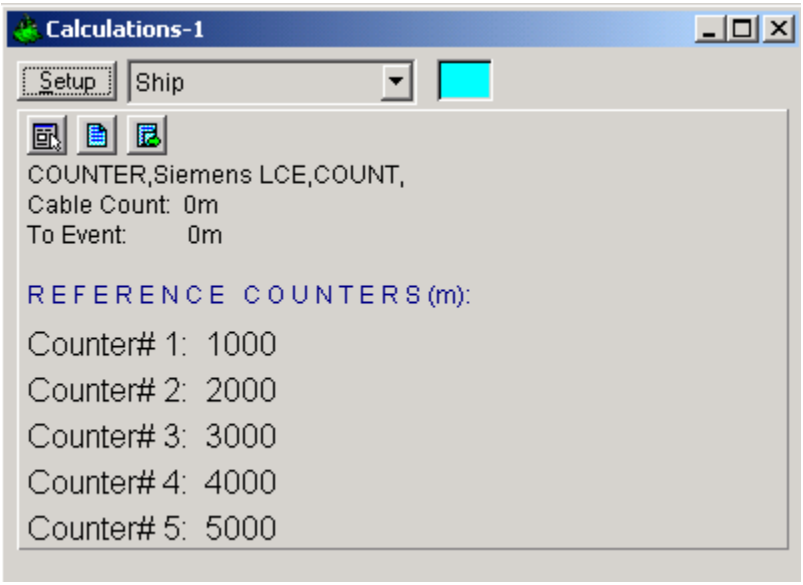


View and configure the Calculations window (shown below) by completing the following steps.
Note: To view the reference counts the COUNT data item must be attached to the vehicle.

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 box shown below.



3. In the Setup Calculation Views window 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 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 to be modified 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.

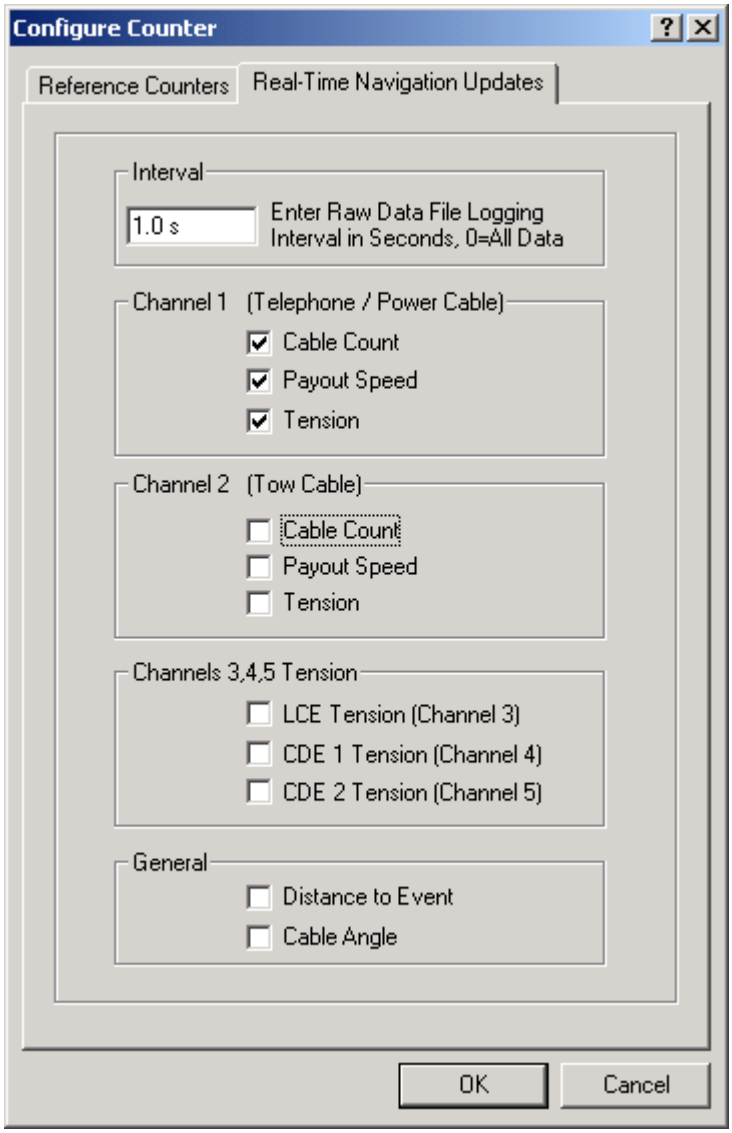
Set Specific Cable Count
To set the reference counter to a specific cable count, enter the desired value in the edit field then click the *Set* button. When the Configure Counter dialog OK button is then clicked, the desired reference counter value will be set to the entered value. This value will then 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 Page



This page enables/disables certain data from this device to be passed to the vehicle. Unlike the Reference Counters page, data from the Real-Time Navigation Updates page 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.

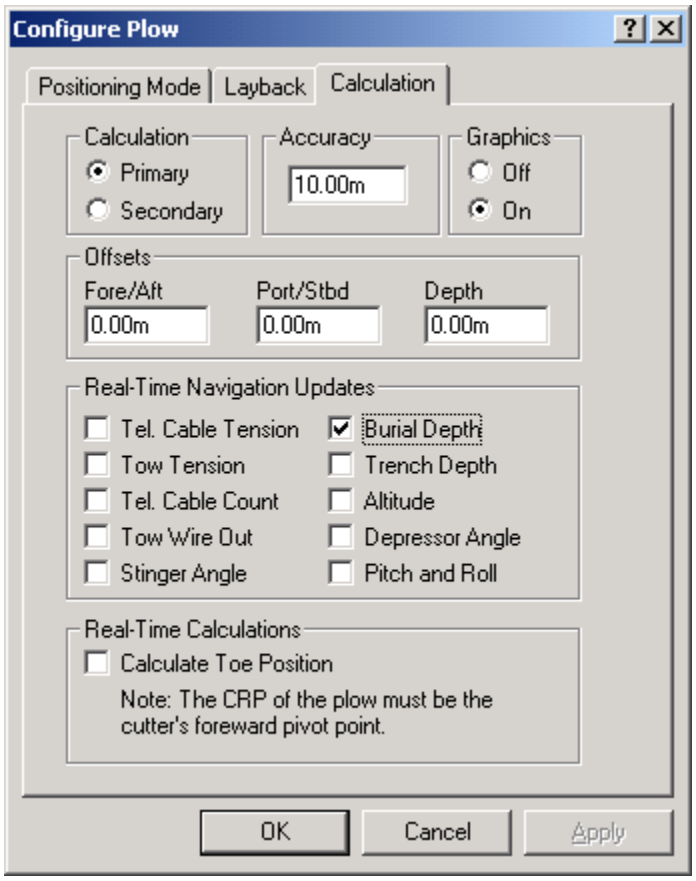
It is important to note that if the data string from the counter device does not contain certain data types (count, tension or speed), these options should not be selected from this page. Selecting an option for which there is no data in the string causes

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).

Data item: COUNTER, Siemens LCE, PLOWDATA

This data item is used to read burial depth data. It is not used to calculate a layback position so the Positioning Mode and Layback tabs have no application.



Calculation tab

Calculation

Primary – when selected, the layback described above will be used to calculate this vehicle's position, which will be assigned to it. However, since this data item is only used to read burial depth data set this option to Secondary.

Secondary – when selected, this device will not determine this vehicle's position. This will allow WinFrog to read and record the burial depth data.

Accuracy
Not used by this device.

Graphics
Not used by this device.

Offsets
Not used by this device.

Real-Time Navigation Updates
The only option that should be selected from this section is the burial depth option. The operator should only select the checkboxes for data output by the device, as leaving these checkboxes selected causes data to be assigned to the vehicle. If the device does not output a particular type of data, 0 will be assigned for each item left selected and this may cause values from other devices to be overwritten.

Real-Time Calculations
Calculate Toe Position – Not used by this device.