WinFrog Device Group:	COUNTER
Device Name/Model:	Total Counter Device
Device Manufacturer:	
Device Data String(s) Output to WinFrog:	NONE
WinFrog Data String(s) Output to Device:	NONE
WinFrog Data Item(s) and their RAW record:	COUNT 492

#### **DEVICE DESCRIPTION:**

This is a driver designed to read counter data from other real time counter devices. It can combine various data from several sources into one 492 record in the raw files, as well as for use in real time situations. In other words, data from several counter devices already interfaced with WinFrog can be consolidated into this one single device. The data from the various devices will not be overwritten when using this device.

# **DEVICE CONFIGURATION INSTRUCTIONS**

# WINFROG I/O DEVICES > EDIT I/O:

Although this is not a network device, this device is assigned comm port 0 similar to network devices.

# 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 Total Counter Device dialog box appears, as seen below.

Configure	e Total Cou	nter Device				<u>?×</u>
Cha	nnel 2 (Tow \	Wire Data)   Channel 1 (Telep		nnel 3 💧	Channel	4
follow	wing informati mation will be - Channel 1	priate counter de on as well as the retrieved. Only is normally reser- is normally reser-	e data ch Channel ved for T	iannel from ( s 1 - 4 are a felephone c	which that vailable: able info.	-
Cable	e Count:	Device Name: SimCounter			Retrieve Info from Channe	
Cable	e Speed:	SimCounter		•	1	
Cable	e Tension:	SimCounter		T	1	
				OK	Can	cel

From the drop down list boxes on this dialog, the operator selects the devices from which each data type is to be taken. As mentioned on the dialog box, Channel 1 is typically used for telephone cable, Channel 2 for Tow cable and Channels 3 and 4 are available for data from other counter devices. This dialog is particularly useful in situations where one counter device only provides the cable count while another provides cable tension and so on.

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

Adding the TotalCounterDevice 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, TotalCounterDevice, COUNT

Highlighting the COUNTER, TotalCounterDevice, 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 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 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.

Configure Counter	<u>? ×</u>			
Reference Counters Real-Time Navigation Updates				
Choose Reference Counter to Modify Directi				
Counter#1	p / Down			
Set Specific Cable Count 1000.0	SET			
Set Counter Scale 1.0000000				
New Counter Scale from Cable Count 1000.0	SET			
Set Counter Offset	SET			
Counter Name Counter# 1	SET			
OK	Cancel			

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.

Setup Calculation Views	×
Included Views	
Position	🗖 Time Series
🔽 Data Item Text	LOP
Position Comparison	Heading Comparison
🦳 Position Comp. Histogram	🦳 Pos. Comp. Time Series
On Off	
OK Cance	I Help

- 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.

👶 Calculations-1	
Setup CSGL	
COUNTER,TotalCounterDevice,COUNT, Cable Count: 0m To Event: 0m	
REFERENCE COUNTERS(m):	
Counter# 1: 1000	
Counter# 2: 2000	
Counter# 3: 3000	
Counter# 4: 4000	
Counter# 5: 5000	

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* 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.

Configure Counter		? ×
Reference Counters	Real-Time Navigation Updates	
_ Interval		
1.0 s	Enter Raw Data File Logging Interval in Seconds, 0=All Data	
Channel 1	(Telephone / Power Cable)	
	🔽 Cable Count	
	Payout Speed	
	Tension	
Channel 2	(Tow Cable)	
	🔽 Cable Count	
	Payout Speed	
	Tension	
Channels 3	3,4,5 Tension	
	CE Tension (Channel 3)	
	CDE 1 Tension (Channel 4)	
	CDE 2 Tension (Channel 5)	
General-		
	Distance to Event	
	Cable Angle	
	ок с	ancel

#### 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.

Generally speaking, for other devices, it is important to note that if the data string from a 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. However, with the TotalCounterDevice each type of data (count, speed and/or tension) is specified, both source and destination, in the Configure Total Counter Device dialog box as described above. The data read by this device will not overwrite the data from the original source devices.

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).