WinFrog Device Group:	COUNTER
Device Name/Model:	Etisalat_NIWA Counter CDE
Device Manufacturer:	For interfacing to the CDE (cable drum engine) on the C/S Niwa
Device Data String(s) Output to WinFrog:	See below
WinFrog Data String(s) Output to Device:	None
WinFrog Data Type(s) and their RAW record	COUNT 492

DEVICE DESCRIPTION:

The Etisalat_NIWA Counter CDE provides a cable speed, count and tension at about 1 Hz. The interface is RS232 serial. Unlike the LCE Etisalat counters this one does not provide control over the cable engine's speed.

Note: There are four Etisalat counters; two for the C/S NIWA, named Etisalat Counter, which uses the Parkburn LCE, and this one and two for the C/S Umm al Anber, named Etisalat Counter UAA, which uses a Fraser Hydraulic LCE, and Etisalat Counter CDE.

DEVICE CONFIGURATION INSTRUCTIONS:

WINFROG I/O DEVICES > EDIT I/O:

Baud Rate:(Adjustable) 9600Bits Per Character:8Stop Bits:1Parity:NONE

WINFROG I/O DEVICES > CONFIGURE DEVICE:

This device is added to WinFrog from the COUNTER device group and when added, creates one data item: COUNT.

This device must be configured at the I/O Devices level. In the I/O Devices window, highlight the **Etisalat_NIWA Counter CDE** device, right-click and select Configure Device. The **Etisalat NIWA Counter Configuration CDE** dialog box will appear, as seen below.

Etisalat NIWA Cou	Inter Configuration CDE	×
Communications-	Sum	ОК
Drum Selection	⊂Time Scale	Cancel
 Starboard 	C Tens of Milliseconds	Apply
Counter Control		
Counter Scale Fa	actor 1.000000	
Apply Scale from	CC 0.0	
Counter Offset	0.0	
Clear and res	et to (1,0,0)	

Communications

If you do not want WinFrog to check the checksum at the end of the telegram check this box. Some versions of the telegram contain an incorrect checksum.

Drum Selection

Select the correct drum in use. This data will be recorded in the prime channel location of the 492 raw data record. The other drum data, even if zero, will be recorded in the channel 3 location.

Time Scale

The time in the telegram is used to calculate the cable speed. This switch allows the operator to select the units of the time.

Counter Control

Scaling within WinFrog should only be used as a last resort. It is always better to have the cable engine output the correct cable count. Also, only the corrected cable count is recorded in the *.RAW files.

This scale factor can be applied along the entire length of cable or you can choose to apply the scale factor from a certain cable count onward. Enter the desired cable count from which to start applying the scale factor in the "Apply scale from CC" edit box. An offset can also be added to the cable count from the cable engine; scale is applied first, followed by the addition of the offset. All scale factor applications are accumulative, i.e., all previous scale factors entered are also applied. Only the last application is displayed when the dialog is opened.

To clear all scaling and offsets, select the Clear and reset (1,0,0) checkbox.

Care is required when entering values here, as applying a scale to the current cable count can result in a cable count jump that will adversely affect the cable model. If the cable model is running, apply new scale factor changes to the current count. You will not see an immediate change in the count. All entries should to be logged, as the INI and CFG files only record the accumulated effect of all the scale changes.

WINFROG VEHICLE > CONFIGURE VEHICLE-DEVICES > DEVICE > EDIT: The Etisalat_NIWA Counter CDE,COUNT data item must be edited once it is added to a vehicle's device list. Highlight the COUNTER, Etisalat_NIWA Counter CDE, COUNT data item in the vehicle's device list and click the Edit button. The Configure Counter dialog box appears as seen below.

Configure Counter		<u>? ×</u>
Reference Counters	Real-Time Navigation Updates	
Interval	— Enter Raw Data File Logging	
0.0 s	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	
	LCE Tension (Channel 3)	
	CDE 1 Tension (Channel 4)	
General	Distance to Event	
	Cable Angle	
	OK	Cancel

This dialog has two tabs. The first, **Reference Counters**, does not apply to this counter and should be left at the defaults. The second, **Real-Time Navigation Updates**, enables or disables this device's data from being passed to the vehicle. The three values available from this device are placed into channel one. (Channel one is reserved for product cable and is where the cable model looks for its required data.) If you want the other drum engine's data to be recorded check the LCT Tension (channel 3) box.

You can control the amount of data written to the raw file by changing the value in the interval box.

If another counter is attached to this vehicle you must place its data into another channel. If this is not done, the other device will overwrite the values from this device or visa versa. For example, if a tow winch counter and load cell is available, this same configuration dialog is used for that device's COUNT data item. Its data must be placed into channel two and all the other boxes left unchecked.

TELGRAM SPECIFICATION:

Sent by the cable machinery to WinFrog. If the header \$PDWA is not present the telegram will be rejected. \$PDWA, 30530,-2, 0,M, 0, 1,M*65

Field	Data
1	Header \$PDWA
2	Time in 10 millisecond or millisecond units.
3	Port CDE Cable count in metres
4	Port CDE Tension in kiloNewtons in kilonewtons
5	Port CDE Mode byte. M= manual always
6	Starboard CDE Cable count in metres
7	Starboard CDE Tension in kiloNewtons in kilonewtons
8	Starboard CDE Mode byte. M= manual always
9	*hh Asterisk delimiter followed by 2 character check sum.