| WinFrog Device Group:	COUNTER
Device Name/Model:	Red Lion Legend LGD
Device Manufacturer:	**Red Lion Controls** 20 Willow Springs Circle York, PA 17402 Phone: +1 (717) 767-6511 Fax: +1 (717) 764-0839
Device Data String(s) Output to WinFrog:	u CNT count<CR><LF> u RT rate<CR><LF> u P1 preset1<CR><LF> u P2 preset2<CR><LF> u SFC scale factor count<CR><LF> u SFR scale factor rate<CR><LF> u PEK peak<CR><LF> u VAL valley<CR><LF> u CLD counter load<CR><LF> u E error<CR><LF> where u is the unit address
WinFrog Data String(s) Output to Device:	If the counter has a non-zero address the following will be prefixed with Nx where x is the address. To interrogate for count and rate: TE* TH* To Reset: RO* RE* R1* R2* RI* RJ* To change values: Vonew CLD value* Venew count value* Vanew P1 value* Vbnew P2 value* Vdnew SFR value* To Request data: TA* TB* TC* TD* TI* TJ* TO*
WinFrog .raw Data Record Type(s):	COUNT: Type 492

DEVICE DESCRIPTION:

Counter that supplies cable count and cable speed. WinFrog will not allow you to change the count scale factor (i.e. the calibration setting in the counter itself). This value should be set up when the counter is first programmed. If the value is incorrect it can be sent to the Legend using HyperTerminal. The end result of all the count scaling must be that WinFrog receives/computes meters.

DEVICE CONFIGURATION INSTRUCTIONS:

Baud Rate: 9600
Bits Per Character: 8
Stop Bits: 1
Parity: None

WINFROG I/O DEVICES > CONFIG OPTIONS:

The device configuration dialog is shown below. There are two tabs, the first one to scale the count readings within WinFrog and the second is to set the device address, reset and change values within the counter and to establish roll over control.
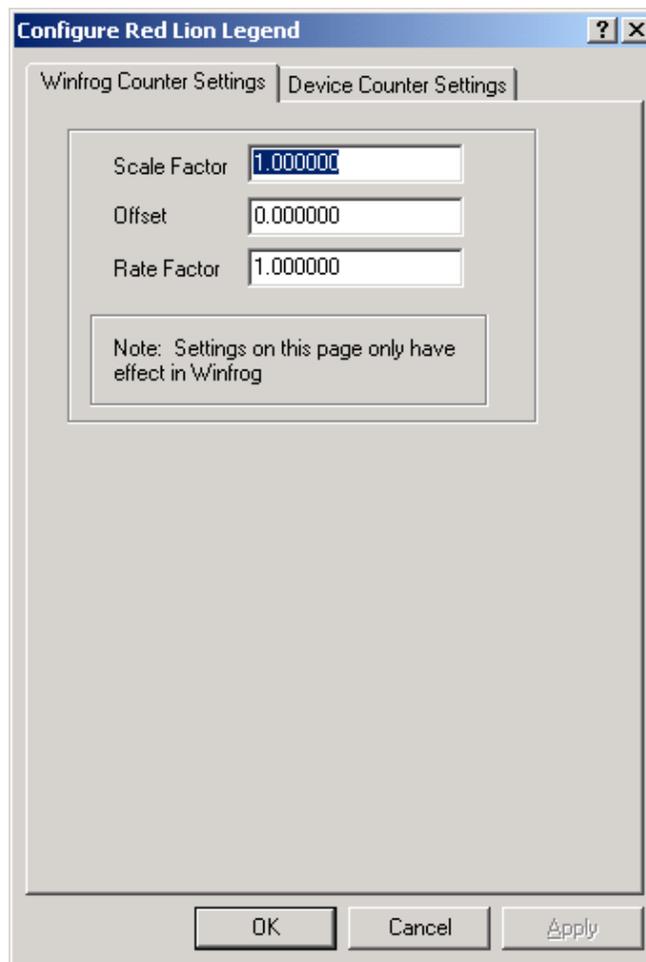
WinFrog Counter Settings Tab

These values are retained within WinFrog; they are not sent to the counter.

Scale Factor:

The value from the counter (including any rollover) is multiplied by this number. The result must be meters.

Offset:

This offset is added to the result of the multiplication above. This value must be in meters.

Rate Factor:

The rate value from the counter is multiplied by this number. The result must be meters/minute.

Device Counter Settings Tab

Unlike the WinFrog Counter Settings tab, commands entered in the Device Counter Settings tab <u>are</u> sent to the counter.

Unit Address:
Enter this unit's address in the box provided. Enter 0 if this is the only unit connected to this port. If 0 is entered the address is not included with any output command telegrams. If it is included then all outgoing telegrams will have this address included with the telegram. Currently WinFrog does not support the decoding of data from more than one Legend on the same port, i.e. all data is assumed to be from one counter. (See the Legend Manual).

Reset Value:
Selecting any of these will cause the appropriate reset command to be sent to the Legend.

Change Value:
Selecting any of these will cause the appropriate change command to be sent to the Legend along with the data provided in the box. The data entered into the box is sent as typed including leading and trailing zeros and any spaces. Check the Legend manual to determine the correct placement of the decimal point.

Rollover Control:
For some cable lays the Legend does not carry sufficient significant digits to count the whole route. When the Legend reaches a certain value (see the Legend manual) it can be programmed to continue counting from zero. This certain value (usually the maximum that the counter can count to) can be programmed into the "Preset 1" register. WinFrog can keep track of the total count if you enable the Rollover Control.

If enabled, WinFrog multiplies the number found in the "number of rollovers" box with the value read from the Preset 1 register then adds the current count from the counter. The Preset 1 value used is the value read from the counter that is also displayed next to the Enable checkbox. WinFrog will not use the value found in the box next to the change Preset 1. **Note:** the Legend must be programmed to use the Preset 1 value for this operation. WinFrog keeps track of the number of rollovers that have occurred. It also handles the situation if reeling in and the counter goes less than zero. In this case the number of rollovers will not change because the counter actually outputs negative numbers.

You can also set any initial value by entering the rollover number and changing the count value in the Legend.

The reset and change items that were selected are executed when the dialog is closed with OK. The resets are executed before the change commands after which all values are read from the counter. If you close the dialog with OK and no items are selected, the current values will be re-read from the counter.

When the device is first loaded all the values are read from the counter and displayed in the I/O Device window.

WINFROG VEHICLE TEXT WINDOW > CONFIGURE VEHICLE-DEVICES> DEVICE> EDIT OPTIONS:

Data item: **COUNTER, Red Lion Legend, COUNT**

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/disables data from this device to be passed to the vehicle. The only two values that are obtained here are count and rate, both of which are placed into channel one. All other values are set to zero. If another counter is used to obtain the telephone cable tension, which also needs to go into channel 1, you must uncheck channel one tension. If this is not done, the tension value here (0.) will be assigned to the vehicle overwriting the actual tension from the other device. Furthermore, on this same tab but for the other counter, you must uncheck the channel 1 cable count and speed because its values will overwrite those from this device.

Similarly uncheck all remaining values, as this counter does not read them. See below. You can control the amount of data written to the raw file by changing the value in the interval box.
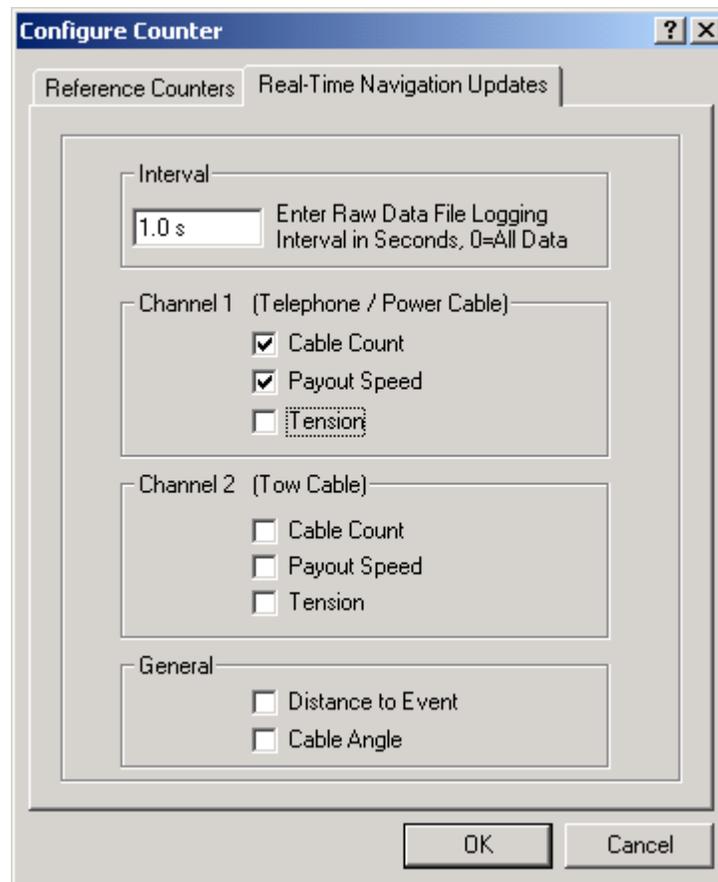
CONFIGURATION DETAILS:
See the Red Lion Legend Manual for configuration details for this device.