

WinFrog Device Group:	COUNTER
Device Name/Model:	Red Lion APOLLO IMA
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 INP 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 Note WinFrog only requires the count the other values will be displayed in the I/O device window if received.
WinFrog Data String(s) Output to Device:	WinFrog sends no commands to the IMA.
WinFrog Data Type(s) and their RAW record	COUNT 492

DEVICE DESCRIPTION:

It is expected that the Red Lion IMA is outputting data caused by the print request. To cause this to happen, install a jumper between the print request terminal and common (terminals 8 to 5). The data is sent in **RS232 current loop** on terminals 13 (source) and 9 (Return). A current loop converter will be required.

This counter is usually used as a slave counter that just repeats what another Red Lion sends it.

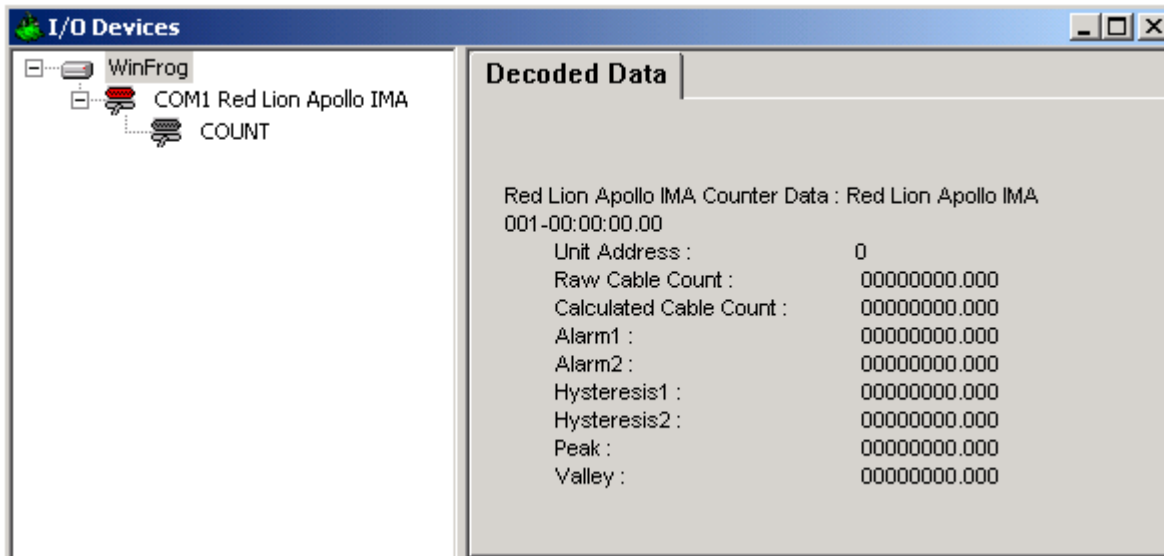
DEVICE CONFIGURATION INSTRUCTIONS:

WINFROG I/O DEVICES > EDIT I/O:

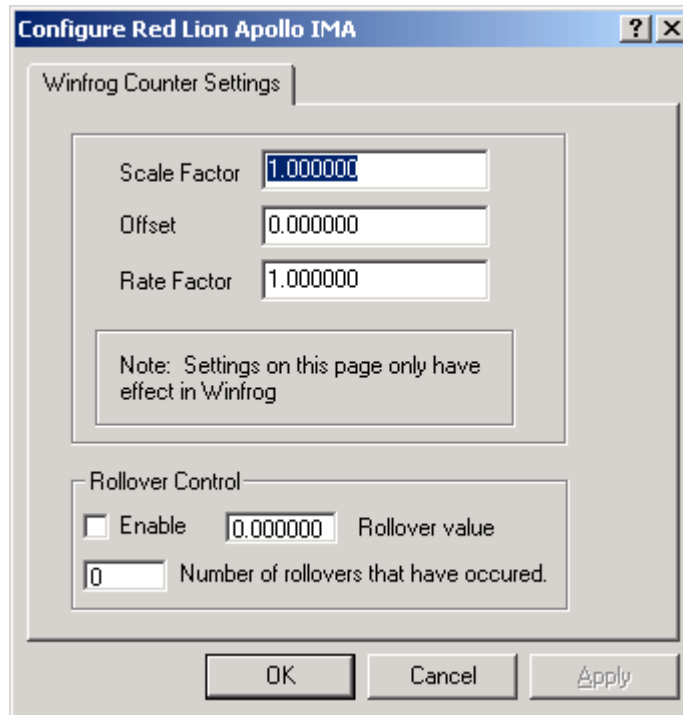
Baud Rate: (Adjustable) 9600
Bits Per Character: 7
Stop Bits: 1
Parity: ODD

WINFROG I/O DEVICES > CONFIGURE DEVICE:

The Red Lion Apollo IMA device is added to WinFrog from the COUNTER device group. Adding a Red Lion Apollo IMA device to WinFrog creates one data item: Count. Refer to the *I/O Devices* figure below.



The Red Lion Apollo IMA device must be configured at the I/O Devices level. In the I/O Devices window, highlight the Red Lion Apollo IMA device, right-click and select Configure Device. The Configure Red Lion Apollo IMA dialog box will appear, as seen below.



This dialog box is used to scale the count readings within WinFrog and to establish roll over control. These values are retained within WinFrog; they are not sent to the counter.

Scale Factor:

The value read 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: Not used.

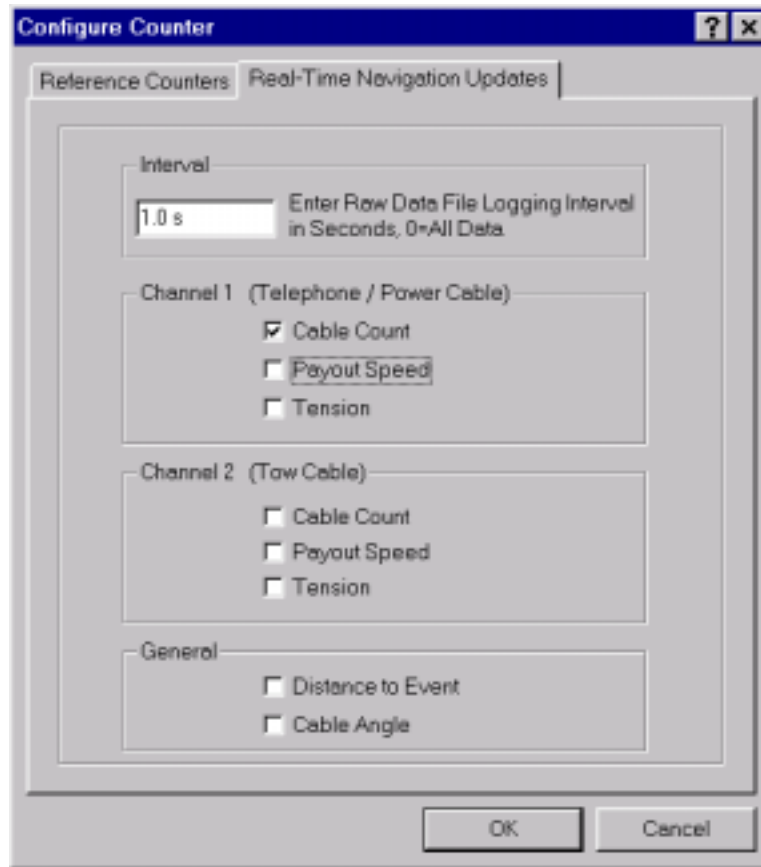
Rollover Control:

For some cable lays, the IMA does not carry sufficient significant digits to count the whole route. When the IMA reaches a certain value it will roll over and continue counting from zero. 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 number entered as the roll over value. WinFrog keeps track of the number of rollovers that have occurred. It also handles the situation if reeling in and the counter reads less than zero. In this case the number of rollovers will not change because the counter actually outputs negative numbers. You are restricted to zero rollovers when reeling in, i.e. one cannot reel in more cable than the rollover value.

The rollover value must be obtained from the cable operators on the ship.

WINFROG VEHICLE > CONFIGURE VEHICLE-DEVICES > DEVICE > EDIT:

The **Red Lion Apollo IMA COUNT** data item must be edited once it is added to a vehicle's device list. Highlight the **COUNTER, Red Lion Apollo IMA, COUNT** data item in the vehicle's device list, then click the **Edit** button. The **Configure Counter** dialog box appears as seen below.



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 value that is obtained here is the count, which is placed into channel one. If another counter is attached to this vessel (say to obtain tension), one must uncheck channel one count at the other counter. If this is not done, the other device will overwrite the count value from this device.

Similarly, uncheck all remaining values, as this counter does not read them. See above. You can control the amount of data written to the raw file by changing the value in the interval box.