| WinFrog Device Group:	EVENT
Device Name/Model:	CLOSURE (Serial)
Device Manufacturer:	
Device Data String(s) Output to WinFrog:	
WinFrog Data String(s) Output to Device:	Outputs an RTS closure
WinFrog Data Item(s) and their RAW record:	CLOSURE NONE

DEVICE DESCRIPTION:

This is a driver designed to output an RTS closure pulse, on the specified com port, when an event occurs in WinFrog. In addition specifically formatted data strings can be output. The data string output format and interval is configurable.

DEVICE CONFIGURATION INSTRUCTIONS

WINFROG I/O DEVICES > EDIT I/O:
Serial
Configurable Parameters
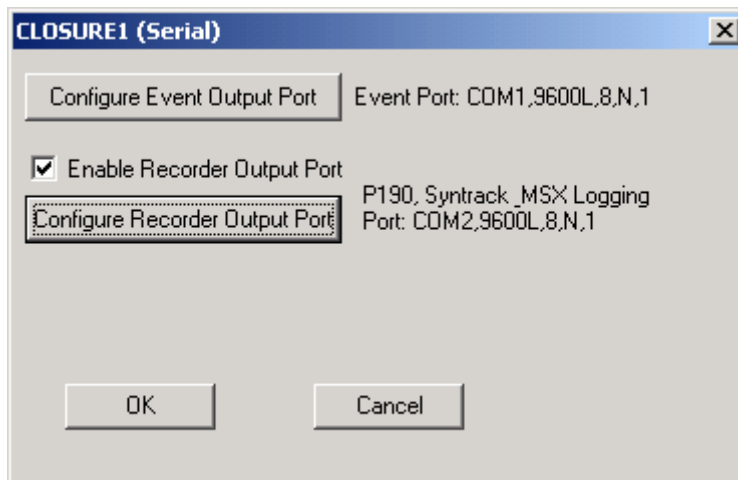
For the Configure Event Output Port option, you must configure the I/O parameters for the com port that is to be used to output the closure generated by WinFrog. Click this button to open the standard Device I/O Parameters dialog box.

This device requires the use of a second com port for several of the available formats in order to output data to the Recorder. To configure the secondary output port you must first select the Enable Recorder Output Port checkbox and then click the Configure Recorder Output Port button. A standard Device I/O Parameters dialog opens. Configure the I/O parameters to match those of the input port on the Recorder.

Note that only the P190, Syntrack and MSX logging formats require the use of a second com port to output data strings. For the other formats any data strings output are output on the same port as the closure pulse.

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 Config Output String dialog box appears, as seen below.
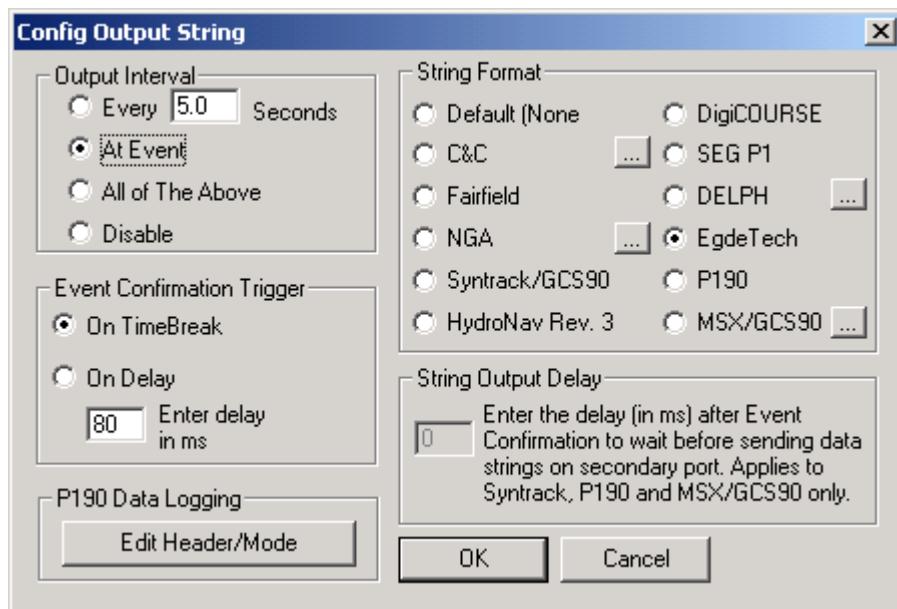
In the Output Interval section you can configure the interval for WinFrog to output data. The interval can be set to a specified time or to coincide with WinFrog's automatic events or both. The output of the data string can also be disabled.

Notes: For the output string format of DELPH, the output interval can only be set to coincide with WinFrog's automatic events. The other option of output interval will be grayed out when the DELPH format is selected.

The Event Confirmation Trigger section deals the fact that WinFrog will wait to actually log the event data to the disk. The On TimeBreak option instructs WinFrog to wait for a confirmation pulse from the firing device before recording the event time and data. If the

On delay option is selected, WinFrog will wait the specified amount of time, entered in milliseconds, before recording the event data to the disk.

In the String Format section you select the format of the data string to be output by WinFrog. Several of the formats require additional configuration and are discussed below.

In the String Output Delay section you can enter a delay, in milliseconds, to have WinFrog wait after the reception of the Event Confirmation pulse, before sending the data string on the secondary port. This option only applies to the P190, Syntrack and MSX formats which require the use of a second com port as discussed above.
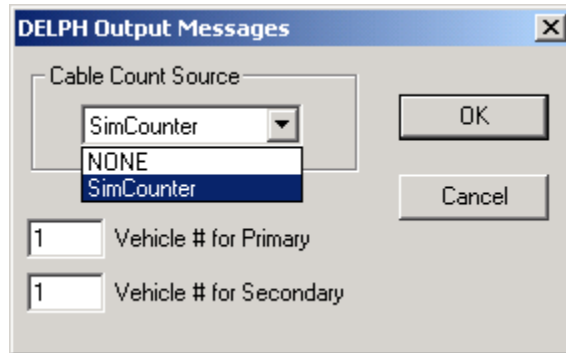
C&C
Click the configure button, , to open the C&C Output Messages dialog box seen below.
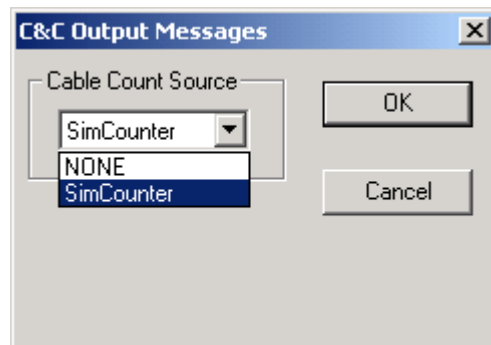
Select the appropriate Cable Count Source from the dropdown list. The cable count data is included in the output string.

DELPH

Click the configure button, ..., to open the DELPH Output Messages dialog box seen below.

Select the appropriate Cable Count Source from the dropdown list. The cable count data is included in the output string.
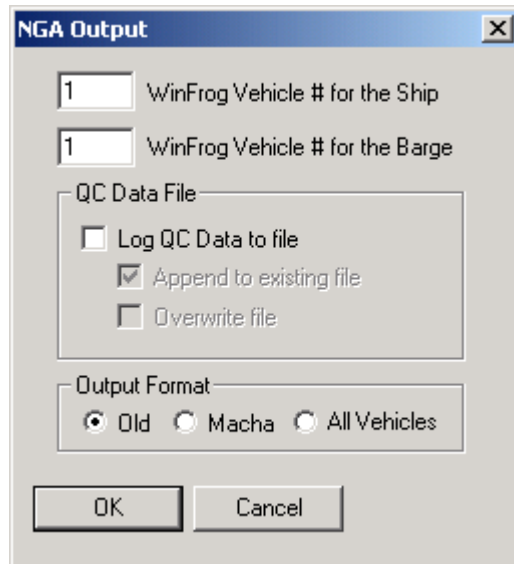
Each vehicle must be assigned a number that corresponds to the order in which the vehicles appear in WinFrog's Vehicle List (to view the Vehicle List, click the Vehicle Text window to make it the active window then right-click and select the Configure Vehicles option). For example, if the project involved the use of a ship and a barge and the barge appears first in the Vehicle List then the barge would be assigned the number 1 and the ship would be assigned the number 2.

NGA

Click the configure button, ![...], to open the NGA Output dialog box seen below.
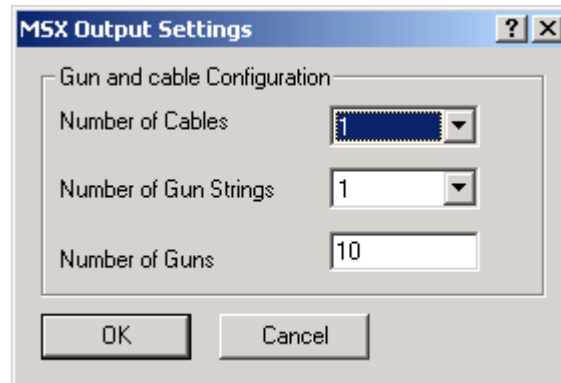

Each vehicle must be assigned a number that corresponds to the order in which the vehicles appear in WinFrog's Vehicle List (to view the Vehicle List, click the Vehicle Text window to make it the active window then right-click and select the Configure Vehicles option). For example, if the project involved the use of a ship and a barge and the barge appears first in the Vehicle List then the barge would be assigned the number 1 and the ship would be assigned the number 2.

You also have the option to log QC Data. Selecting this option will create a file with the three letter extension .ESQ. The name of the file created will default to the same as the Event File name assigned during the setup for automatic events. The *.ESQ file will also be stored in the same working directory as specified for the Event File. For this reason you have the option to either append to or overwrite the existing .ESQ file. There are three output options available, Old, Macha and All Vehicles. The data included in each string for each format is detailed in the Telegram Specification section below.

MSX/GCS90

Click the configure button, [...], to open the MSX Output Settings dialog box seen below.

MSX Output Settings

Gun and cable Configuration

Number of Cables   1 ▼

Number of Gun Strings   1 ▼

Number of Guns   10

OK   Cancel

You must specify the number of cables with receivers/hydrophones, as well as the number of Gun Strings (arrays) from the dropdown lists. You must also enter the number of guns per string.

P190

If the P190 format is used, then both the Header and Mode (2D or 3D) have to be configured. To accomplish this, click the Edit Header/Mode button (seen below) found the lower left hand corner of the Config Output String dialog box.
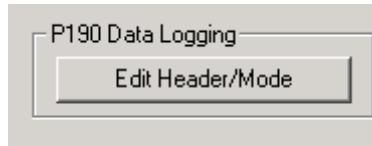
The Configure P190 Data Logging dialog box opens.
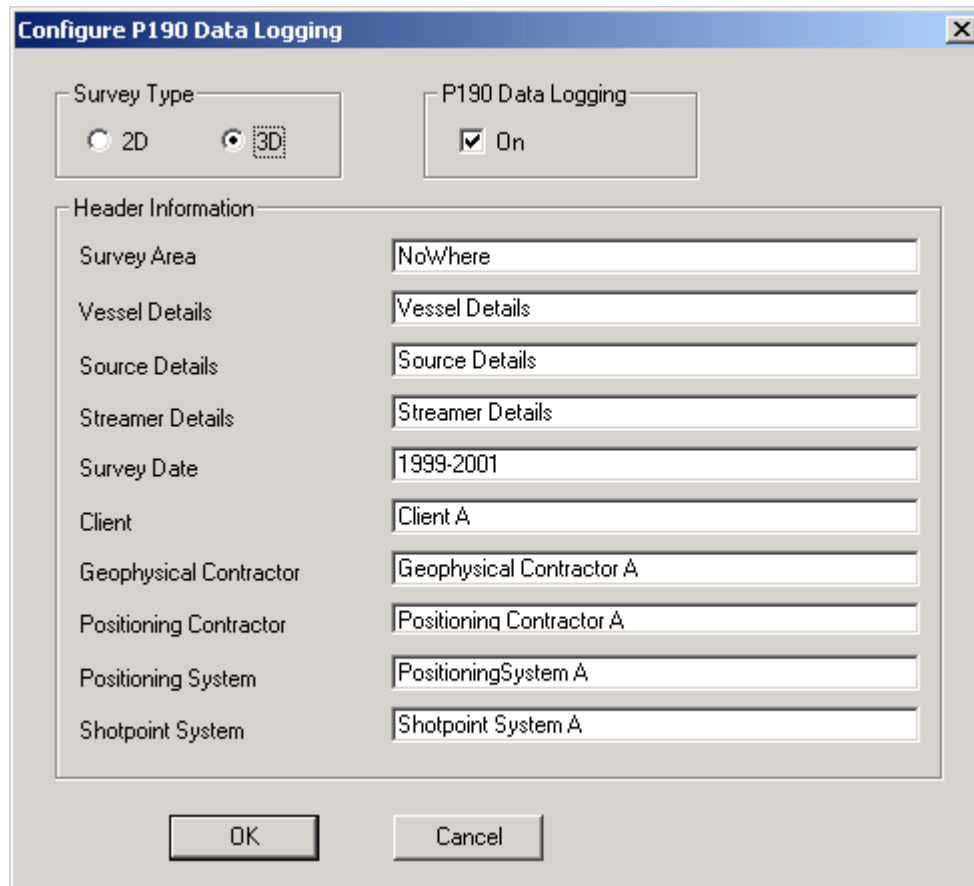
In this dialog box you must specify whether the current project is either a 2D or 3D shoot. You can also enter the Header information for inclusion in the final records. Selecting the P190 Data Logging option causes the data to be recorded, in the P190 format, in the project directory. The file created will have the .p19 extension.

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

Adding the Closure (Serial) device creates the CLOSURE data item.

Data item: EVENT, CLOSURE (Serial), CLOSURE

There are no Edit or configurations available for this data item. However, this data item must be added to the device list of a vehicle configured to generate events (Primary or Secondary Event Vehicle) in order for WinFrog to output the closure. Refer to Chapter 10 of the WinFrog User's Guide for details on designating a vehicle as the Primary or Secondary Event Vehicle as well as configuring events.

TELGRAM SPECIFICATION:

User Configurable

The following are the data string formats for the three options found in the NGA Output dialog box discussed on page 5 above.

OLD - "WFQC" LineName SP julDay shotTime shotLat shotLon shotHeight shotEast shotNorth shotDld shotOld shotErrorX shotErrorY FTest WTest rms latStd lonStd heightStd errEllipseA errEllipseB errEllipseTheta DGPSAge shipLat shipLon shipEast shipNorth shipAntHeight shipSpd shipGyro shipCmg waterDepth shotHDOP shotPDOP shotVDOP shotNumSvsUsed spare1 spare2

MACHA - ""WFQC" LineName SP julDay shotTime shotLat shotLon shotHeight shotEast shotNorth shotDld shotOld shotErrorX shotErrorY FTest WTest rms latStd lonStd heightStd errEllipseA errEllipseB errEllipseTheta DGPSAge shipLat shipLon shipEast shipNorth shipAntHeight shipSpd shipGyro shipCmg waterDepth shotHDOP shotPDOP shotVDOP shotNumSvsUsed spare1 spare2

ALL VEHICLES - "WFQC" LineName SP julDay year hour min sec

   followed by: shotLat shotLon shotHeight shotEast shotNorth shotDld shotOld shotErrorX shotErrorY FTest WTest rms latStd lonStd heightStd errEllipseA errEllipseB errEllipseTheta DGPSAge shipSpd shipGyro shipCmg waterDepth shotHDOP shotPDOP shotVDOP shotNumSvsUsed spare1 spare2

   this is repeated for each vehicle (ship and/or barge as designated by the operator in the NGA dialog box)