



SID JNR Utility

(Version 2.0)

Operator Manual

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## Description

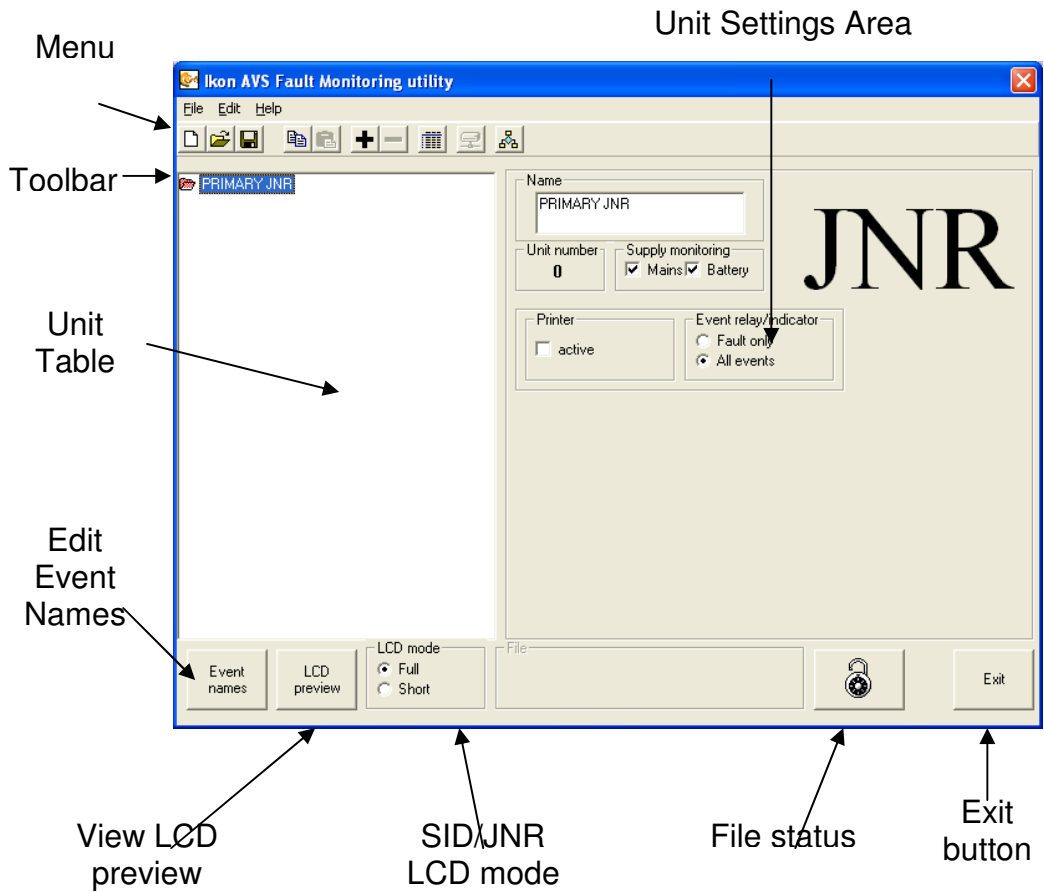
The SID/JNR utility provides the following facilities

- Configure the operation of SID or JNR event system monitors
- Set the clock of SID or JNR
- Configure ECM and NTO units in the event monitoring system.

It will operate on an IBM compatible PC running Window 2000 or Windows XP, with Internet Explorer version 4 or greater.

To configure units a spare RS232 “comm.” port is required. It can be used with a USB port provided a suitable USB – RS232 converter is used.

# Main Window



## Menu

### File

- New  
Creates a new empty project.
- Open  
Opens an existing project for viewing and/or editing.
- Save  
Saves the current project.
- Save as  
Saves the current project to a new file name.
- Exit  
Closes SID/JNR utility

### Edit

- Insert unit  
Adds a new unit to the project, these can be.
  - DRS Digital interface unit, provides 24 opto coupled event inputs.
  - ECM Eight channel monitor, which monitors eight speaker channels and also provides 4 event inputs.
  - JNR Junior 32 unit event monitor.
  - NTO (DRC/EOL) Interface between fibre optic event system and RS422 EOL DRC units.
  - NTO (Intellivox) Interface to Intellivox speaker RS422 system
  - SID 250 unit event monitor
  - EOL Eight channel speaker monitor (RS422 network)
  - DRC providing 24 opto coupled event inputs (RS422 network)
- Delete unit  
Removes the current unit from the project.
- Copy Unit  
Copies the current unit to a temporary store.
- Paste Unit  
Adds a unit from the temporary storage area to the project.

### Tools

- View LCD preview  
Displays the LCD preview window.
- View Event names  
Displays the event names window
- Set unit  
Displays the unit download unit.











### Help

- About  
Displays the version number of this utility.

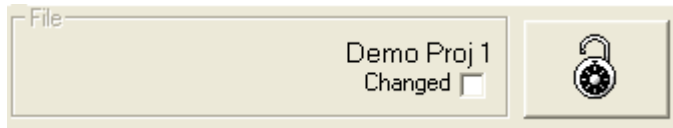
## Toolbar



The toolbar buttons provide the following functions

-  Creates a new empty project.
-  Opens an existing project for viewing and/or editing.
-  Saves the current project.
-  Copies the current unit to a temporary store
-  Adds a unit from the temporary storage area to the project.
-  Adds a new unit to the project. On selecting this a drop down menu will appear showing all that units that can be added to the project. (see insert unit in “Menu”)
-  Removes the current unit from the project.
-  Allows the assignment of faults into set groups for reporting to a GUI or IBMS.
-  Displays the Unit download window.
-  Opens a set of configuration utilities as a drop down menu.

## File status area



This area displays the following information is displayed.

- The current project file name.
- The Changed box is checked when the current project contains unsaved changes.
- The “padlock” indicates whether the current project is locked for editing



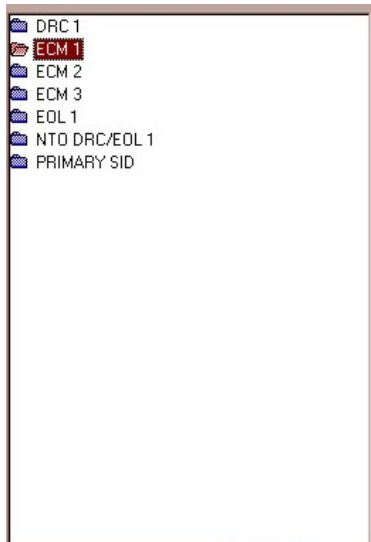
= Unlocked. When unlocked the project settings can be edited. To lock a project, click the padlock and then enter a password for the project.



= Locked. When locked the project settings cannot be edited. To unlock a project click the “padlock” and enter the password that was set when the project was originally locked.

## Unit Table

Displays all units in the project. Clicking on a unit will make that unit the current unit and the unit setting area will display the settings for that unit. Clicking on the current unit allows editing of the units name.



## Unit Setting area

This displays the individual settings for the current unit. The actual data displayed is dependent on the type of unit.

Unit type

The unit type is always displayed in the upper right corner of the area.

### *Common setting*

A screenshot of the 'Unit Setting area' showing common settings. It includes a text box for 'Name' containing 'PRIMARY JNR', a 'Unit number' field with the value '0', and a 'Supply monitoring' section with two checked checkboxes: 'Mains' and 'Battery'.

The Upper left section is the same for all units and contains

- The unit name, this can be edited here or in the unit table.
- The unit number is used to identify each unit on the network. It is automatically generated by the utility and cannot be edited. Units on the fibre optic network will be automatically assigned their unit number when the unit is configured. Units using the EOL/DRC RS422 network required the operator to set this number on the bit switches internal to the unit.
- Units on the fibre optic network using dual supplies can be configured to report the individual supply status. When checked the supply status monitoring is enabled. For EOL and DRC supply monitoring is not available.



## SID/JNR Settings



Printer

active

Event relay/indicator

Fault only

All events

These are

- Check the printer active box if a printer is connected to SID/JNR printer port.
- When Event relay/indicator is set to “Fault only” the event relay will actuate only when a fault is detected by SID/JNR. When “All events” is selected the event relay will operate when a fault occurring or clearing is detected.

## ECM Settings

Contains the following

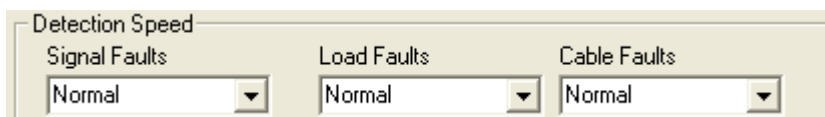
### Setting selector



Speak 1-2 Speak 3-4 Speak 5-6 Speak 7-8 Event ins

Selects which section of the ECM configuration is displayed and available for editing. Speak 1-2, 3-4 etc. displays the setting for a pair of speaker inputs. Event ins displays the event input setting.

### Detection Speed



Detection Speed

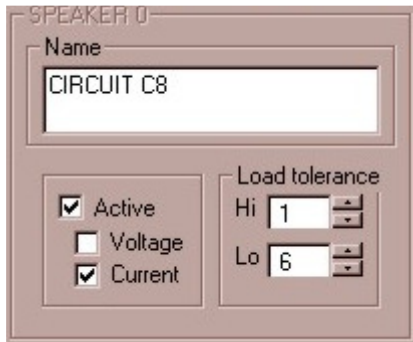
Signal Faults Load Faults Cable Faults

Normal Normal Normal

The speed of the units response to detected faults can be tailored to suit individual situations. By default Normal is selected. The available options are:-

Test Mode	Fast response to changes to allow fast testing.
Fast & Quick	Use for fast reporting of occurring & cleaning faults.
Normal	The usual ‘medium’ response setting.
Slow & Ultra Slow	For circuits susceptible to variation, normally temperature.

## Speaker setting



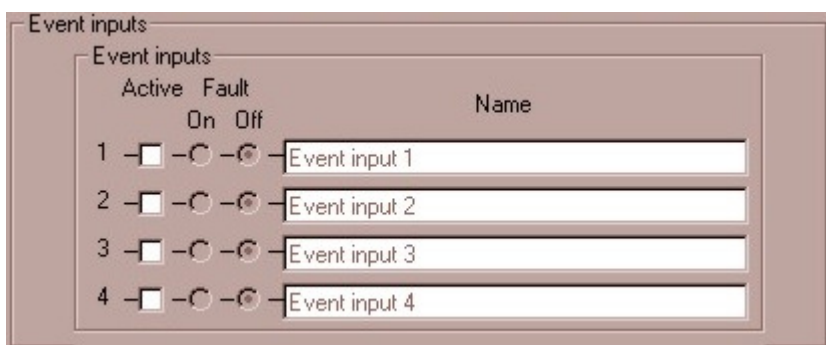
Displays the operating mode and details of each speaker input. These are

- Name. This is name that SID/JNR will display for this speaker input in any event reporting and can be changed as desired.

**Advise. Keep to 16 characters max for JNR and 20 characters for SID.**

- Active. When checked the speaker input will be used by the fault monitoring system. When unchecked the input is excluded from the fault reporting.
- Voltage/current. Select the type of monitoring used by the input, see the ECM manual for details.
- Load tolerance. Sets the tolerance of load detection. They should not be changed without consultations with Ikon AVS Ltd.

## Event input settings



Displays the operating mode and details of each event input. These are

- Name. This is name that SID/JNR will display for this event input in any event reporting.

**Advise. Keep to 16 characters max for JNR and 20 characters for SID.**

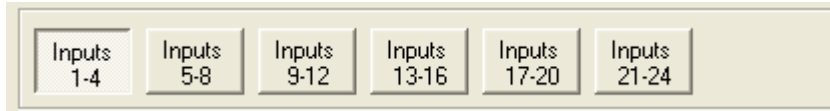
- Active. When checked the event input will be used by the fault monitoring system. When unchecked the input is excluded from the fault reporting.

- Fault On/Off. When On is selected the system will report a fault when then event input opto is powered. When Off is selected the fault condition is reported when the event opto is unpowered.

## DRS Settings

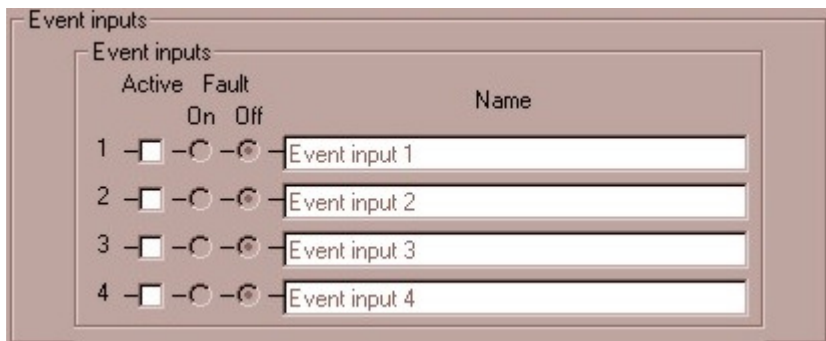
Contains the following

### Setting selector



Selects which section of the DRS configuration is displayed and available for editing.

### Event input settings



Displays the operating mode and details of each event input. These are

- Name. This is name that SID/JNR will display for this event input in any event reporting.

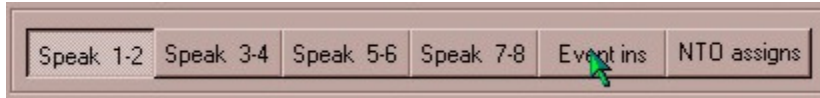
**Advise. Keep to 16 characters max for JNR and 20 characters for SID.**

- Active. When checked the event input will be used by the fault monitoring system. When unchecked the input is excluded from the fault reporting.
- Fault On/Off. When On is selected the system will report a fault when then event input opto is powered. When Off is selected the fault condition is reported when the event opto is unpowered.

## EOL Setting

Contains

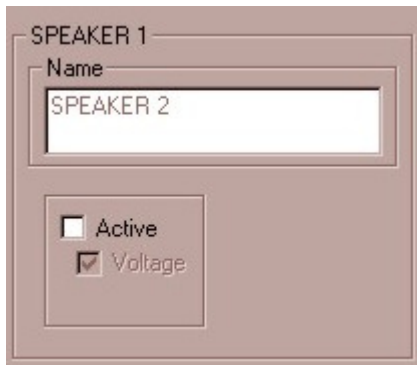
### Setting selector



Selects which section of the EOL configuration is displayed and available for editing. These are

- Speak 1-2, 3-4 etc. displays the setting for a pair of speaker inputs.
- Event ins displays the event input setting.
- NTO assigns displays the NTO assignment window (see below)

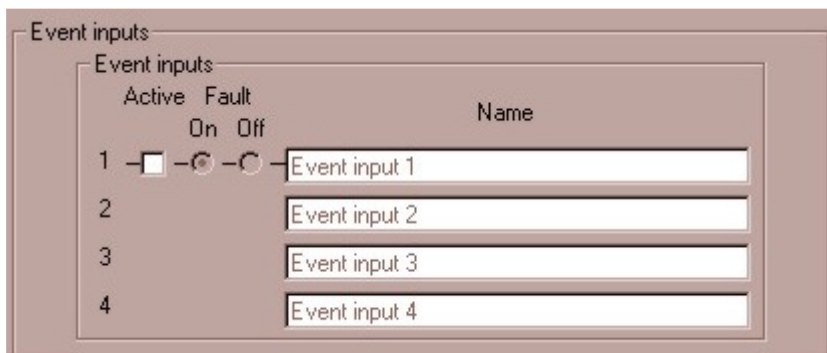
### Speaker Settings



Displays the operating mode and details of each speaker input. These are

- Name. This is name that SID/JNR will display for this speaker input in any event reporting.
- Active. When checked the speaker input will be used by the fault monitoring system. When unchecked the input is excluded from the fault reporting. The EOL only provides voltage monitoring.

### Event input settings

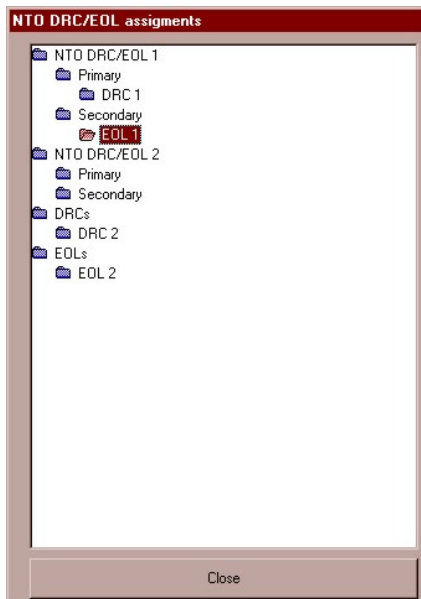


Displays the operating mode and details of the event inputs. These are

- Name. This is name that SID/JNR will display for this event input in any event reporting.
- Active. When checked all the event inputs will be used by the fault monitoring system. When unchecked all the inputs are excluded from the fault reporting. This relates to ALL four inputs.
- Fault On/Off. When On is selected the system will report a fault when then event input opto is powered. When Off is selected the fault condition is reported when the event opto is unpowered. Again the settings are for all four inputs.

### DRC/EOL assigns

Displays the NTO assignment window.



This window allows the operator to define which DRC/EOL is physically connected to which NTO input. The upper section displays the list of NTOs on the system. Each NTO contains two RS422 networks. The lower section of the list contains the DRCs and EOLs that are not currently assigned to an NTO RS422 network.. To assign a unit to a network connection click and drag the EOL/DRC name onto a NTO network name. The close button will close the window.

### DRC settings

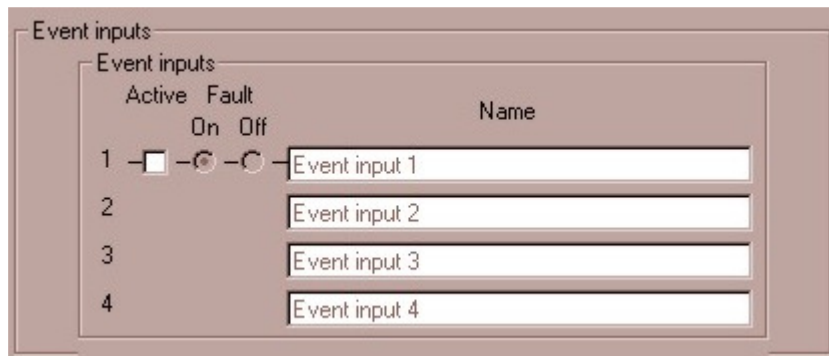
These are

### Setting selector



Selects which section of the ECM configuration is displayed and available for editing. Inputs 1-4, 5-8 etc. displays the setting for each group of four event inputs. NTO assigns displays the NTO assignment window (see below)

## Event input settings

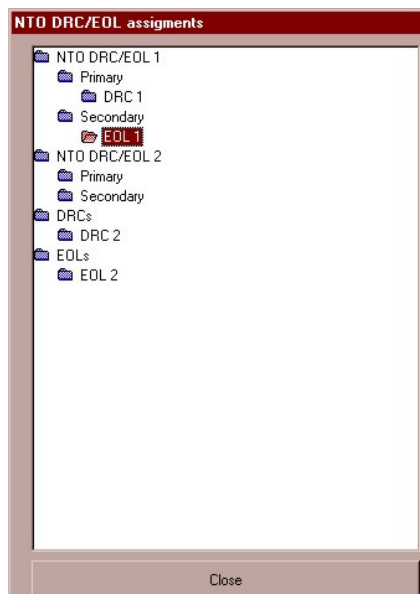


Displays the operating mode and details of the event inputs. These are

- Name. This is name that SID/JNR will display for this event input in any event reporting.
- Active. When checked all the event inputs will be used by the fault monitoring system. When unchecked all the inputs are excluded from the fault reporting. This relates to ALL four inputs.
- Fault On/Off. When On is selected the system will report a fault when then event input opto is powered. When Off is selected the fault condition is reported when the event opto is unpowered. Again the settings are for all four inputs.

## DRC/EOL assigns

Displays the NTO assignment window.

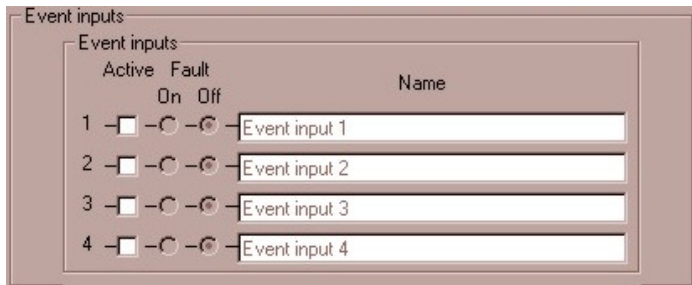


This window allows the operator to define which DRC/EOL is physically connected to which NTO input. The upper section displays the list of NTOs on the system. Each NTO contains two RS422 networks. The lower section of the list

contains the DRCs and EOLs that are not currently assigned to an NTO RS422 network.. To assign a unit to a network connection click and drag the EOL/DRC name onto a NTO network name. The close button will close the window.

## ***NTO (DRC/EOL) settings***

### **Event inputs**

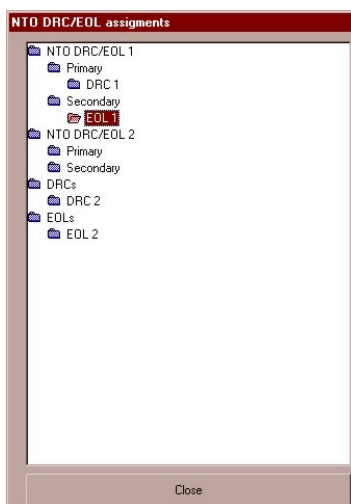


Displays the operating mode and details of each event input. These are

- Name. This is name that SID/JNR will display for this event input in any event reporting.
- Active. When checked the event input will be used by the fault monitoring system. When unchecked the input is excluded from the fault reporting.
- Fault On/Off. When On is selected the system will report a fault when then event input opto is powered. When Off is selected the fault condition is reported when the event opto is unpowered.

### **DRC/EOL assigns**

Displays the NTO assignment window.



This window allows the operator to define which DRC/EOL is physically connected to which NTO input. The upper section displays the list of NTOs on the system. Each NTO contains two RS422 networks. The lower section of the list contains the DRCs and EOLs that are not currently assigned to an NTO RS422 network. To assign a unit to a network connection click and drag the EOL/DRC name onto a NTO network name. The close button will close the window.

## Event names window

This is displayed by clicking

- Event names button on the main window
- View event names under the tools menu.
- Event names button on the LCD preview window

It displays the event names table. These are the names used by SID/JNR to report each type of event. Changing these will affect the entire event reporting globally across the system.

Common events	Speaker events	NTO RS422 ports
Battery supply state	Signal states	Unit problem
BATTERY FAILURE	SIGNAL FAILURE	INTERNAL PROBLEM
BATTERY RECOVERED	SIGNAL RECOVERED	INTERNAL OK
Mains supply state	Load states	Primary RS422
MAINS FAILED	LOAD FAILURE	PRI RS422 FAULT
MAINS RECOVERED	LOAD RECOVERED	PRI RS422 OK
Primary fibre state	Cable states	Secondary RS422
PRI FIBRE FAILED	CABLE FAILURE	SEC RS422 FAULT
PRI FIBRE OK	CABLE RECOVERED	SEC RS422 OK
Secondary fibre state		Unit faults
SEC FIBRE FAILED		Calibration
SEC FIBRE OK		CALIB REQUIRED
Unit reply state		CALIBRATED
FAILED TO REPLY		Event input events
REPLIED		FAULT OCCURRED
		FAULT CLEARED

LCD preview      Close

### Event names

Most of the event name are self explanatory. Each event type has two names one for the fault occurring and the other for the fault clearing. They are

- Common Events (ECM, NTO, SID or JNR)
  - Battery supply state. Reports the state of units 24v input.
  - Mains supply state. Reports the state of the units 230V ac input.
  - Primary fibre state.
  - Secondary fibre state.
  - Unit reply state is used if a unit fails to report on the network.
- Speaker states (ECMs and EOLs)
  - Signal failure, i.e. the input cannot detect normal signal or 20kHz test tone.
  - Load failure, i.e. the detected speaker load has changed from calibrated values.
  - Cable states, i.e. a speaker cable has failed.



- NTO RS422 ports
  - Unit problems, i.e. a unit on the RS422 network has failed to reply
  - Primary RS422, i.e. the NTO primary RS422 port or cabling has failed.
  - Secondary RS422, i.e. the NTO secondary RS422 port or cabling has failed.
- Unit faults (ECM)
  - Calibration, an ECM has an uncalibrated input
- Event input events (ECM, EOL, DRC or NTO)
  - A fault has occurred or cleared on an event input.

### ***LCD preview***

Displays the LCD preview window (See below)

### ***Close***

Closes the event names window.

## **LCD mode**

If “Full” is selected SID/JNR will include the unit name in all event reporting, if “short” is selected the unit name will not be used in event reporting of speaker and event inputs. In “short” mode it is essential that each speaker and event input has a unique name.

## LCD preview window

This is displayed by clicking

- LCD preview button on the main window
- View LCD preview under the tools menu.
- LCD preview on the event names window.

It displays a preview of how SID/JNR will display an event on its LCD display. It is only available when the project is unlocked.

Clicking on a unit or input name will cause the LCD preview window to display a preview of that event as will be shown on the SID/JNR LCD.

Clicking on a unit name will display



The event description line can then be changed to display an actual name by clicking on one of the unit common event names (battery, mains fibre etc.) in the event names window.

Clicking an unit input name will display



The event description line can then be changed to display an actual name by clicking on one of the unit input event names (load, cable event input etc.) in the event names window.

### ***Display as unit***

If any text is displayed in yellow on a black background the SID/JNR display will “scroll“ the event by rotating the lines of text, this can be previewed by clicking the “Display as unit” button.

### ***Event names***


Displays the event names window.

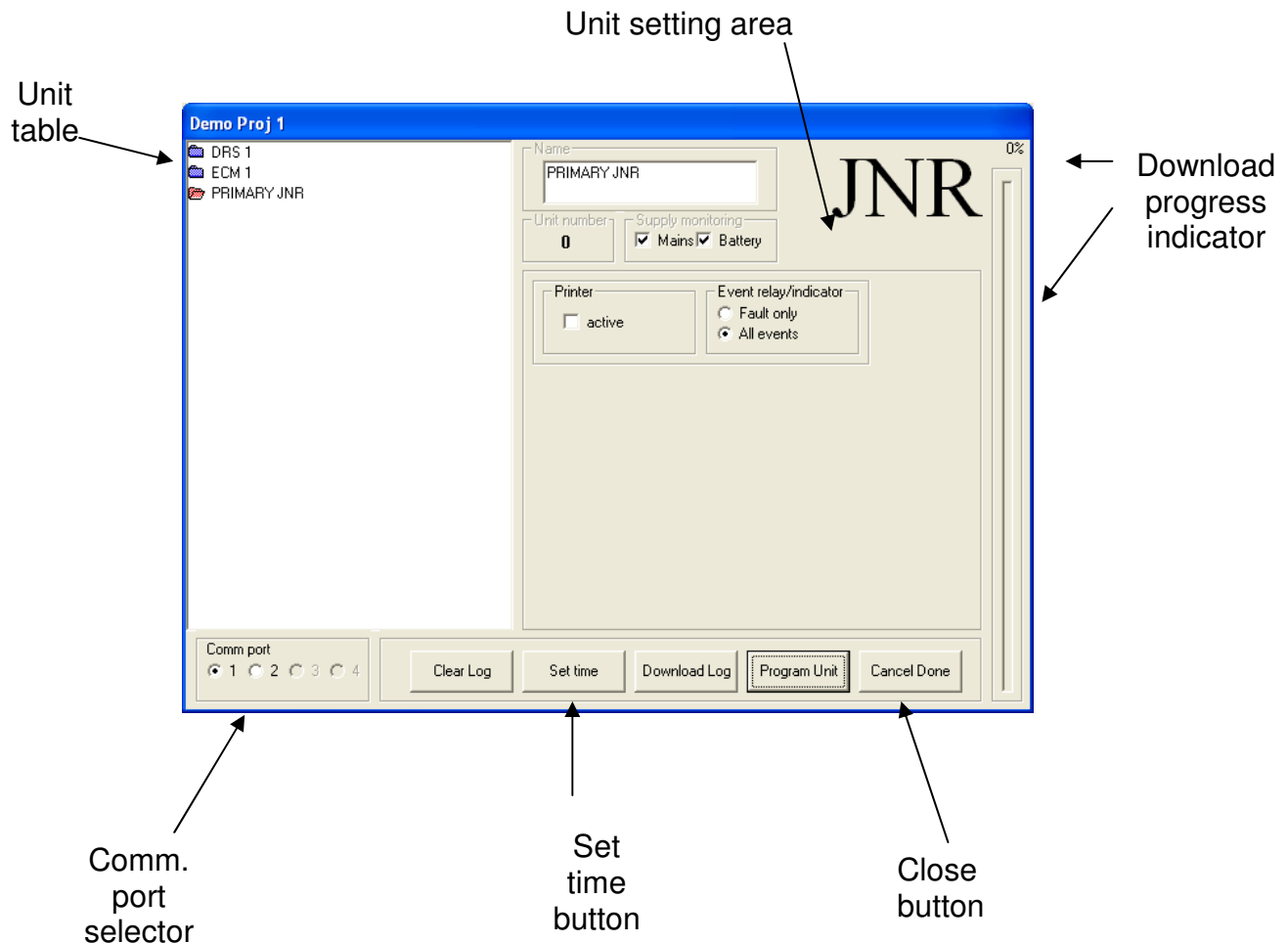
### ***Close***

Closes the LCD preview window.

## Unit Download window

This is only available when a project is locked and saved and is used to download a units settings from the PC to the unit. Clicking activates it.

- Set unit on the main window tools menu
-  On the main window toolbar.



### **Unit table**

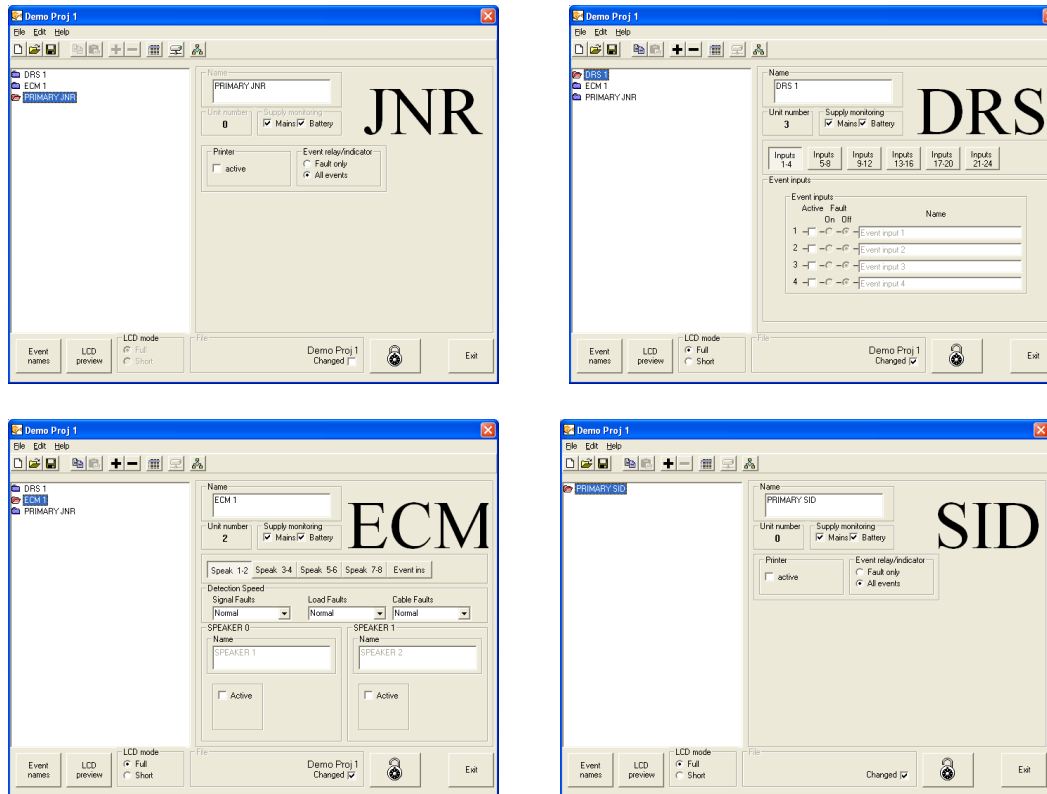
Displays all the units in the project. Select the unit to configure by selecting it from this list.

### **Comm. port selector**

Used to select the PC comm. (RS232) port that is connected to the unit being configured. The configuration port of the ECM, NTO, SID and JNR is located on the front panel of each unit.

## Unit setting area

Displays an abbreviated form of the current units settings, e.g.



For units that have more setting than can be displayed on a single “pane”, buttons are provided to select extra “panes” of data.

## Program Unit Button

Upload the selected program to the connected unit. **ENSURE YOU ARE SELECTED TO THE CORRECT UNIT BEFORE PROGRAMMING.**

## Set Time Button

This is only available for SID and JNR units. It permits setting of the time and date of the unit. When clicked it displays the set time/date window (see below)

## Clear Log

Clears the SID / JNR internal log. A log entry to confirm deletion is recorded.

## Download Log Button

Copies the log in a comma delimited XL format to the connected computer. Prompt for filename is given.

## ***Cancel / Done button***

Closes the unit download window

## **Configuration Settings**



This opens a sub menu allowing additional control of a SID or JNR.



Interrogates the connected unit to obtain the installed program.

Allows setting of SID / JNR Time

Allows clearing of the log.

## Notes

On a new project only JNR or SID units can be added.

If a project uses a SID unit all unit names can be up to 40 characters long and all event names are up to 20 characters long. If a JNR unit is used unit names are 32 characters and event names are 16 characters. Once defined a project cannot change from SID based to JNR based or visa-versa.

Once a JNR or SID is added to the project other units can be added.

EOL or DRC units can only be added after a NTO (DRC/EOL) unit is added.

If a new unit is added to the system both the new unit and SID/JNR will need to be configured.

If an inactive input on a unit is activated both the unit and SID/JNR will need to be configured

If an active input on a unit is made in active only the unit itself needs to be configured.

If a unit or unit input name is changed only SID/JNR needs to be reconfigured.