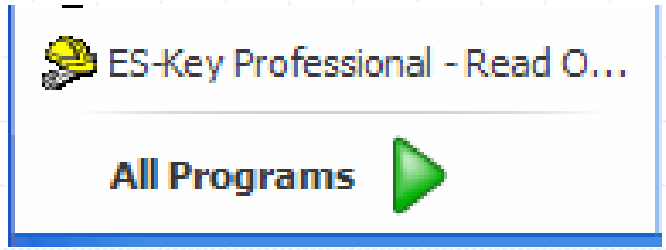
Class1

Ocala, FL

1-800-533-3569

ES-Key Pro

ES-Key

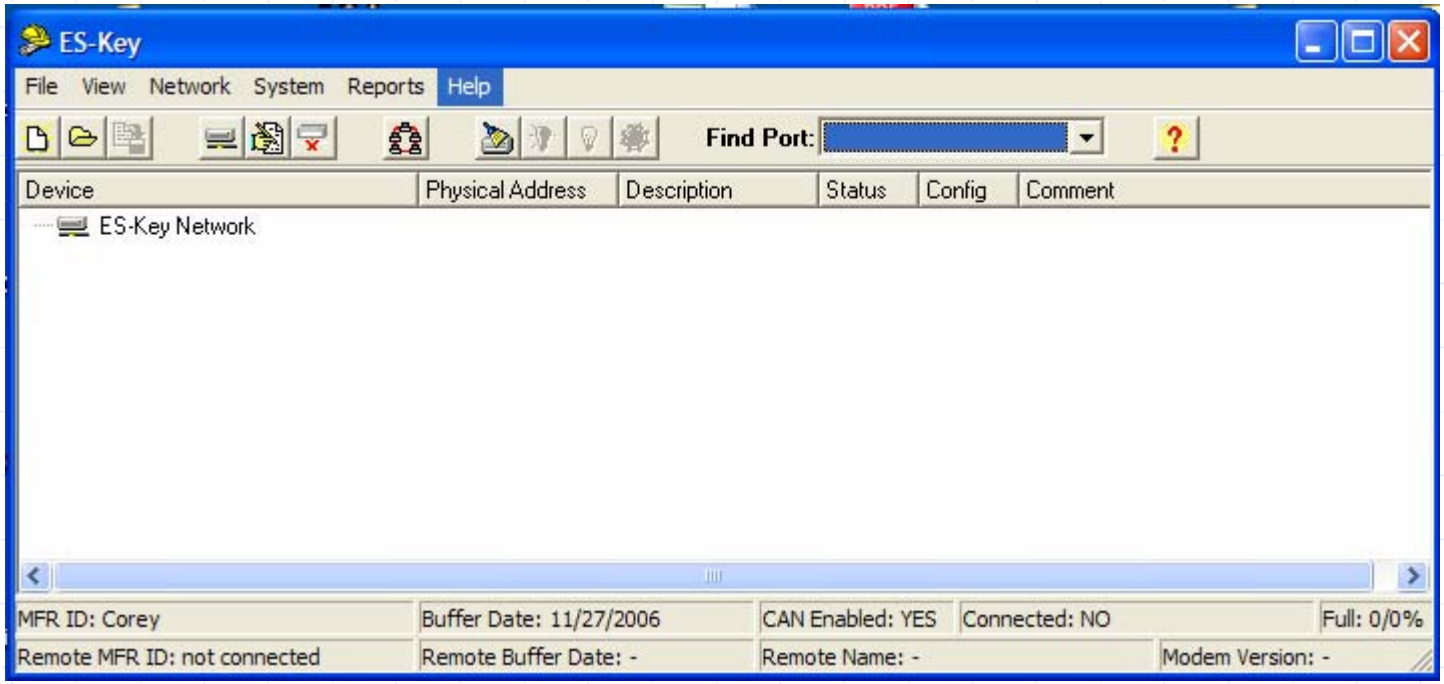


ES-Key Pro Software can be started with the desktop Icon or from the Start Menu

Disclaimer ES-Key

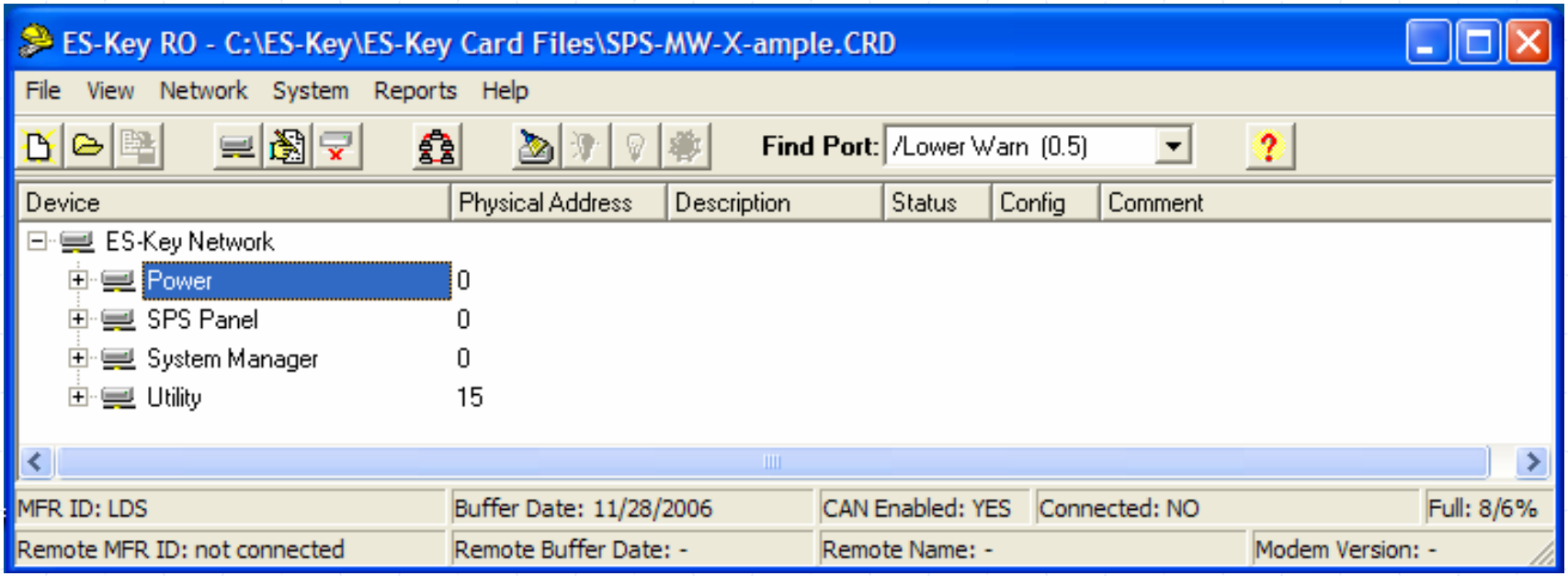
The software has a Warning Message that must be agreed to before the software will actually run.

Start-Screen ES-Key



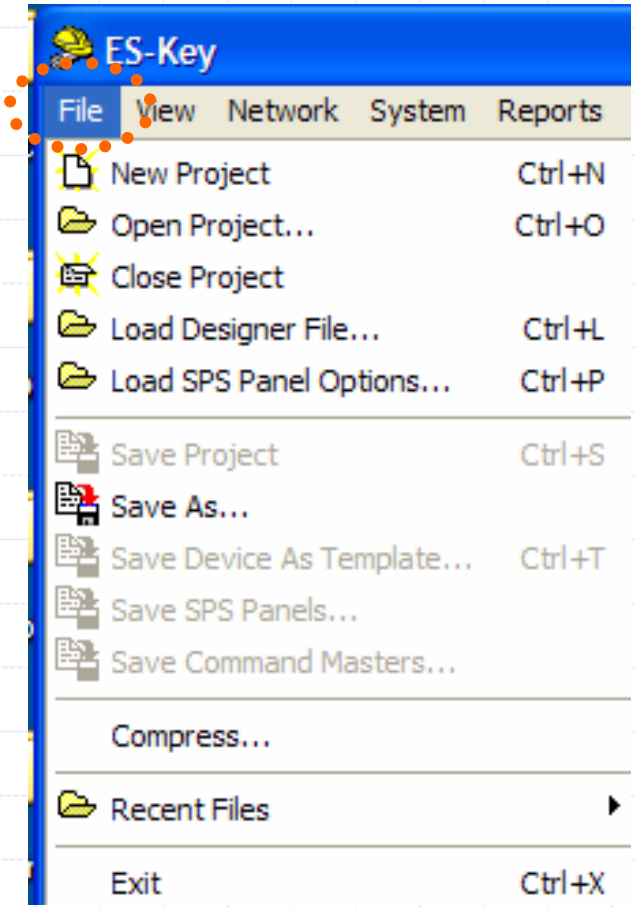
The first screen displayed will be empty unless a previously saved file is loaded.

Orientation ES-Key



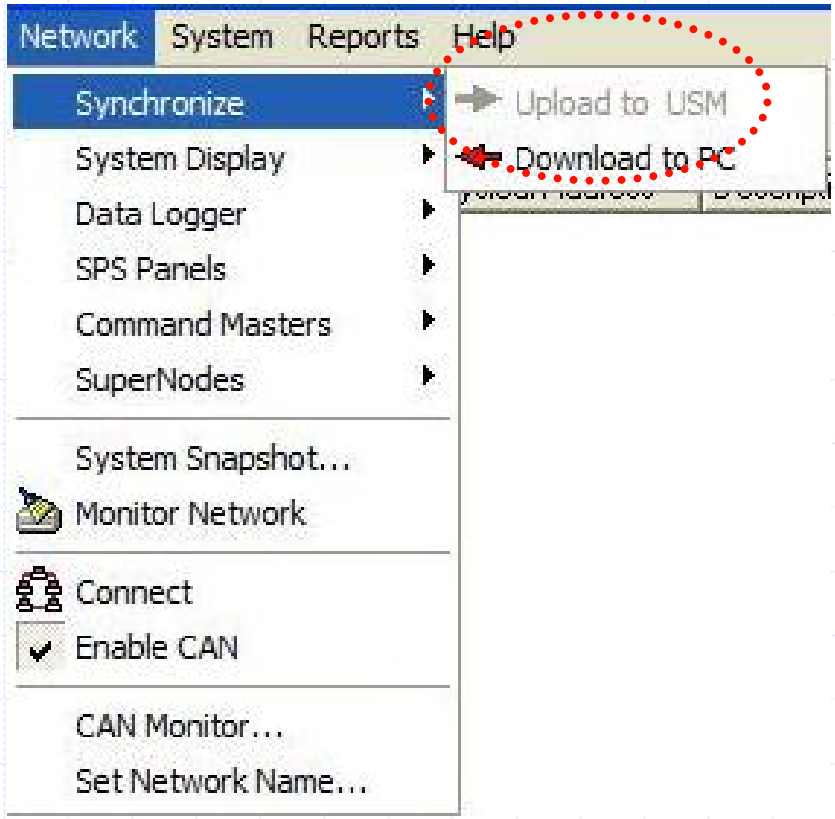
The following slides will discuss the various menus available to the user.

File Menu ES-Key



The File drop down menu allows saving and loading of card files and projects

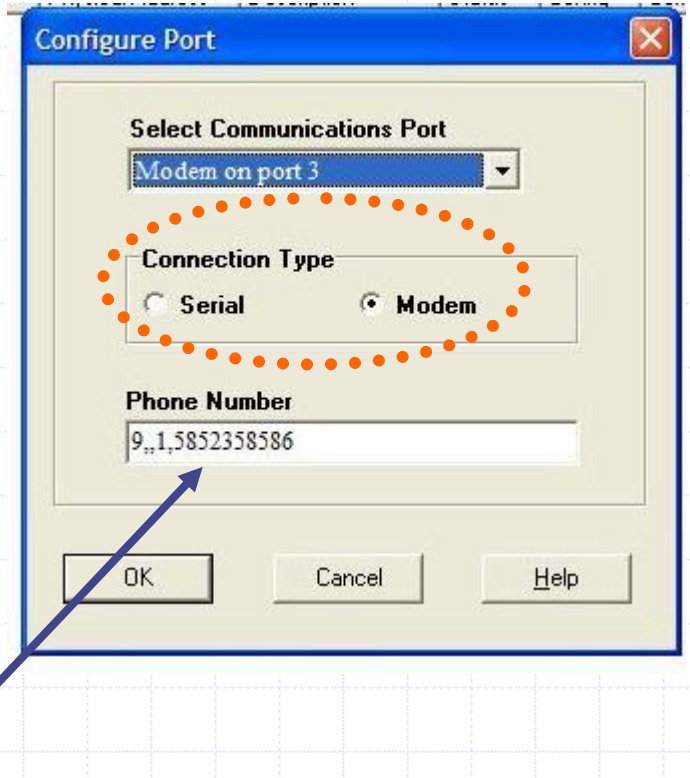
Network Menu ES-Key

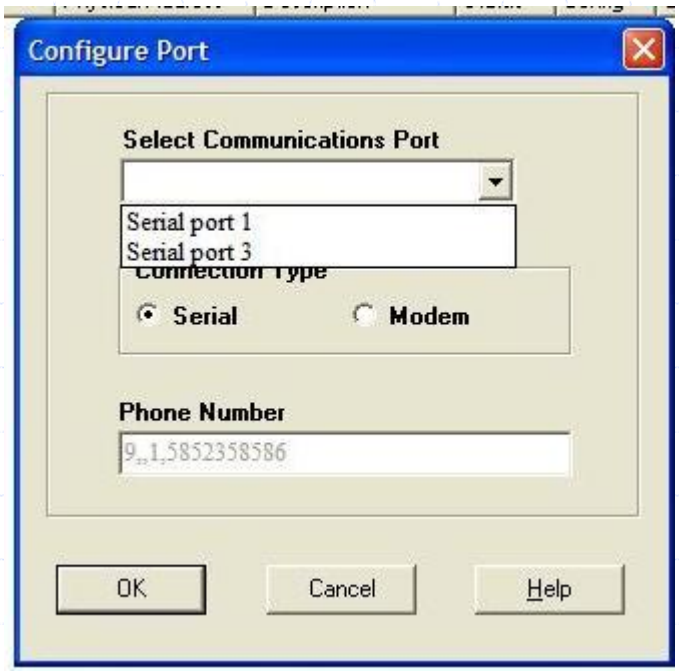


- The Network Menu provides access to the C.A.N. Bus
- Note: Upload is greyed out....

Com Port

ES-Key

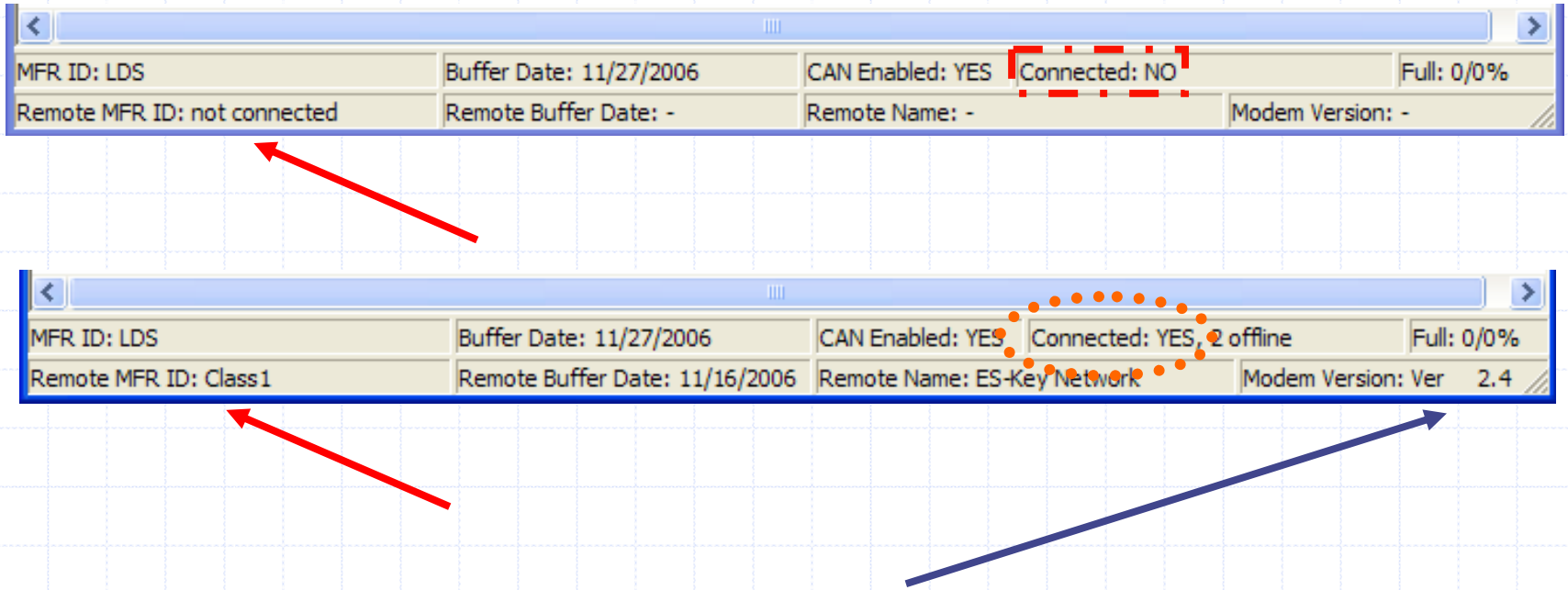




- The communications port must be configured for serial or modem.
- If set to modem, this is where the phone number is entered.

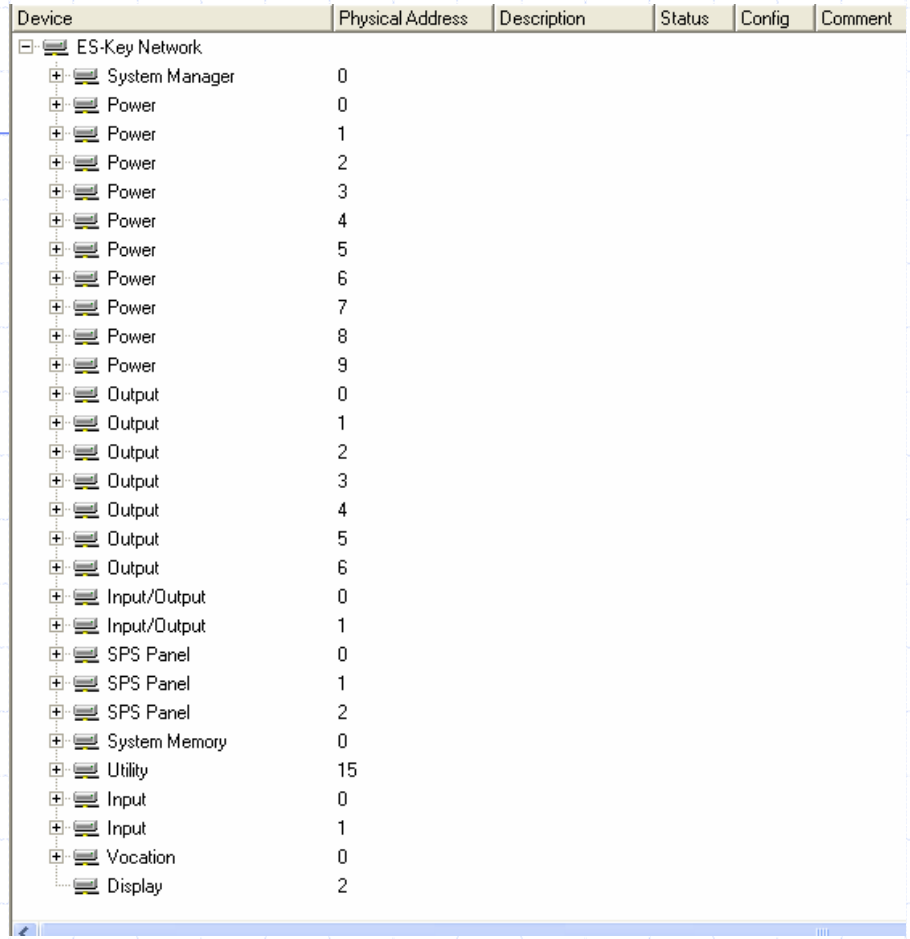
Connection Status

ES-Key



Status Bar provides connection information

Main Window ES-Key



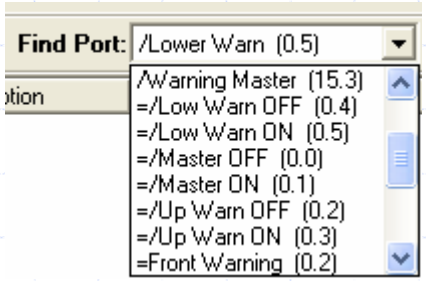
The Main Window shows devices that are in the system including their addresses.

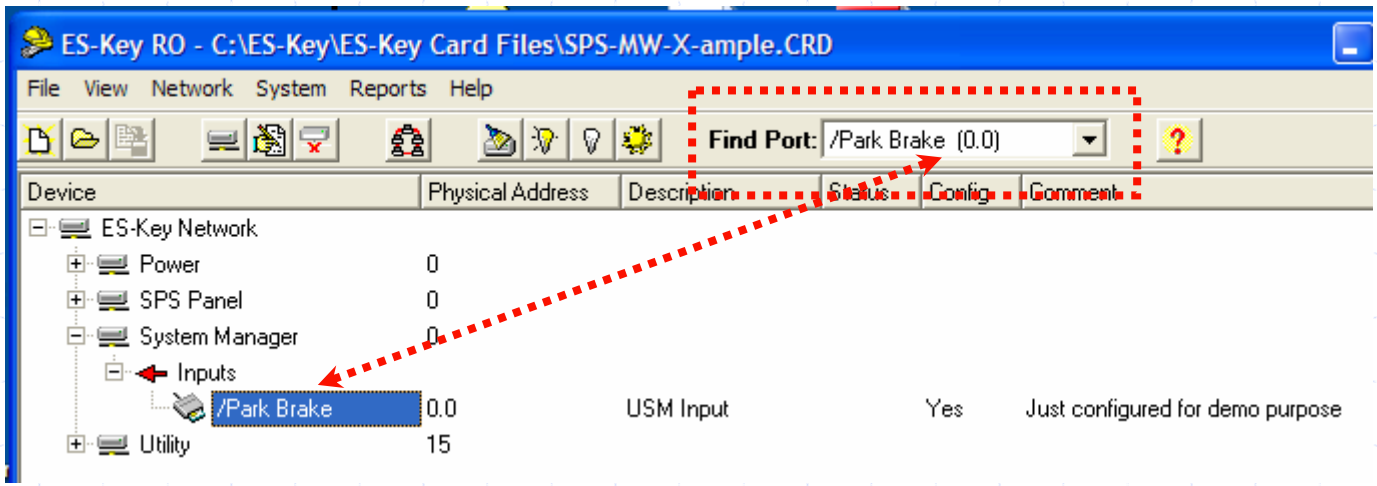
Devices and I/O ES-Key

Device	Physical Address	Description	Status	Config	Comment
ES-Key Network					
Power	0				
Outputs					
=Upper Wrng LGT	0.0	PDM Output		Yes	Will operate with the Upper Warning Switch and Master Warning switch thru Multiplex Switch Power ON
=Lowr Wrng LGT	0.1	PDM Output		Yes	Will operate with the Lower Warning Switch and Master Warning switch thru Multiplex Switch Power
=Front Warning	0.2	PDM Output		Yes	Configured to operate with the Master Switch thru SETTINGS (Staged) and multiplexed to Lower warning S
=Rear Warning	0.3	PDM Output		Yes	Configured to operate with the Master Switch thru SETTINGS (Stage) and multiplexed to Upper warning Sv
SPS Panel	0				
Inputs					
Off Master	0.0	SPS Input		No	
Master Warning	0.1	SPS Input		No	Classic Rocker will be used as a Master Warning Switch
OFF Up Warn	0.2	SPS Input		No	
/Upper Warn	0.3	SPS Input		Yes	
OFF Low Warn	0.4	SPS Input		No	
/Lower Warn	0.5	SPS Input		Yes	
Outputs					
System Manager	0				
Inputs					
/Park Brake	0.0	USM Input		Yes	Just configured for demo purpose
Utility	15				
Outputs					
/Scene Mode	15.2	UTL Output		Yes	Active with Park Brake and used in the Settings Window (Load Management)
/Warning Master	15.3	UTL Output		Yes	Active with the Master Switch and used for Stage in the Settings Panel

The Main Window Provides basic circuit information about modules, Inputs, Outputs and Configuration Status along with any notes if present

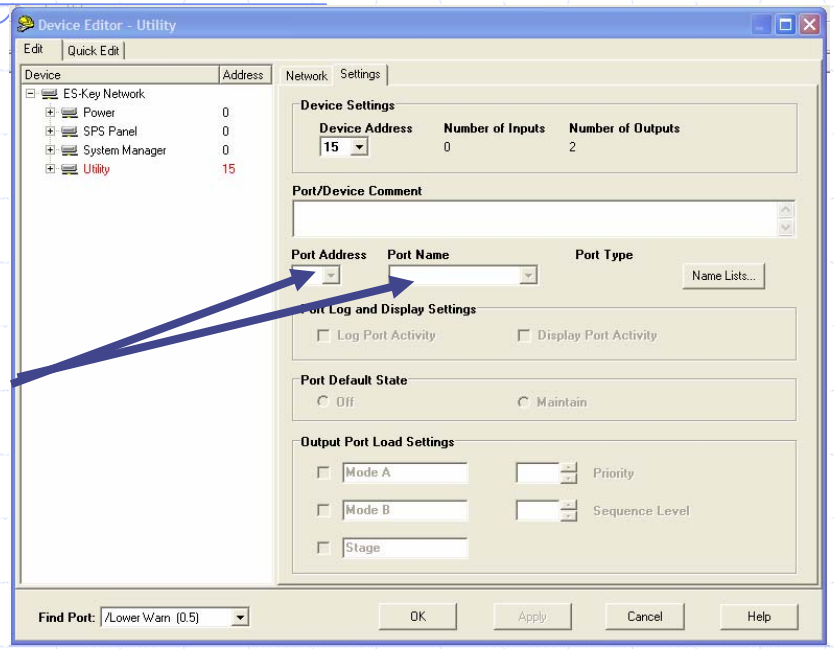
Find Port ES-Key

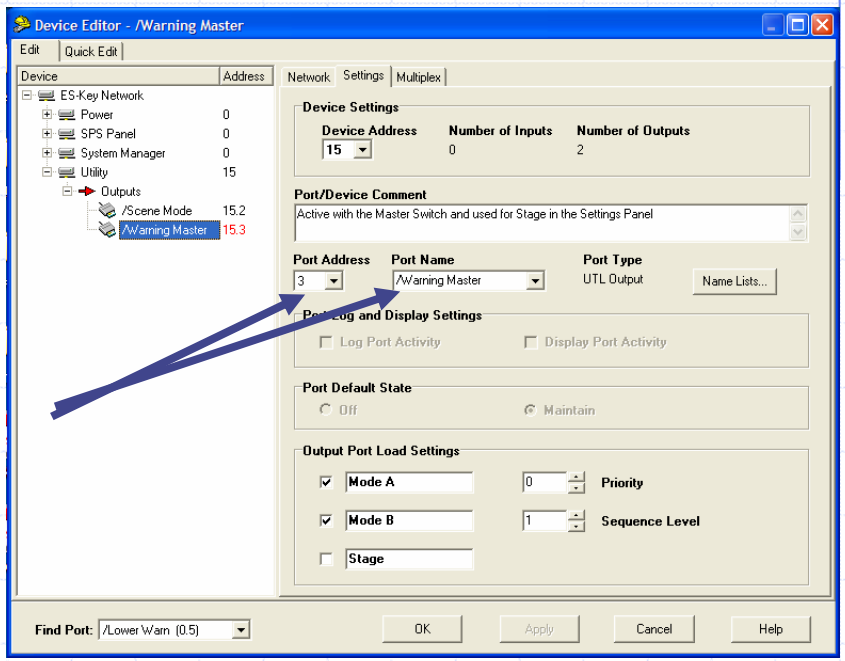




A utility called Find Port is available from the Main Window. Any port in the system can be located and selected here. It is then highlighted for easy identification.

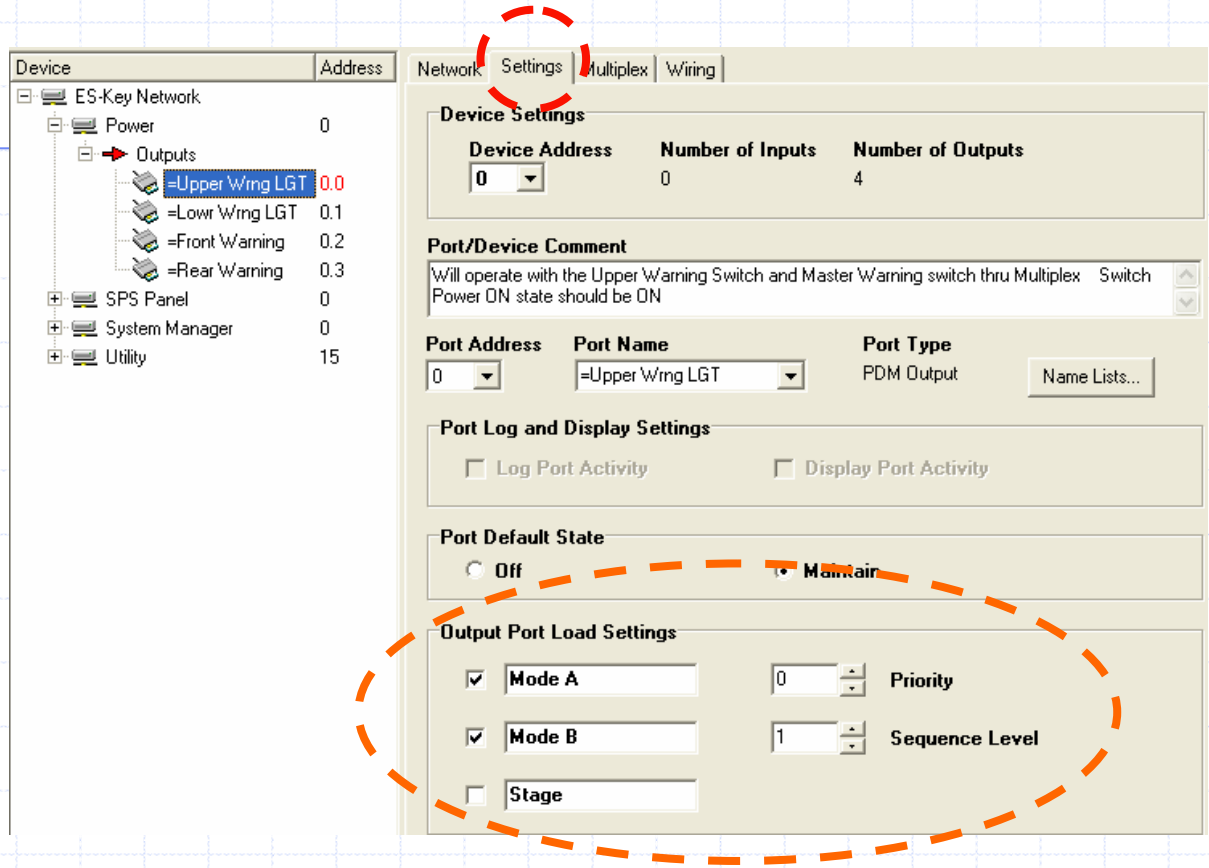
Editor Window ES-Key





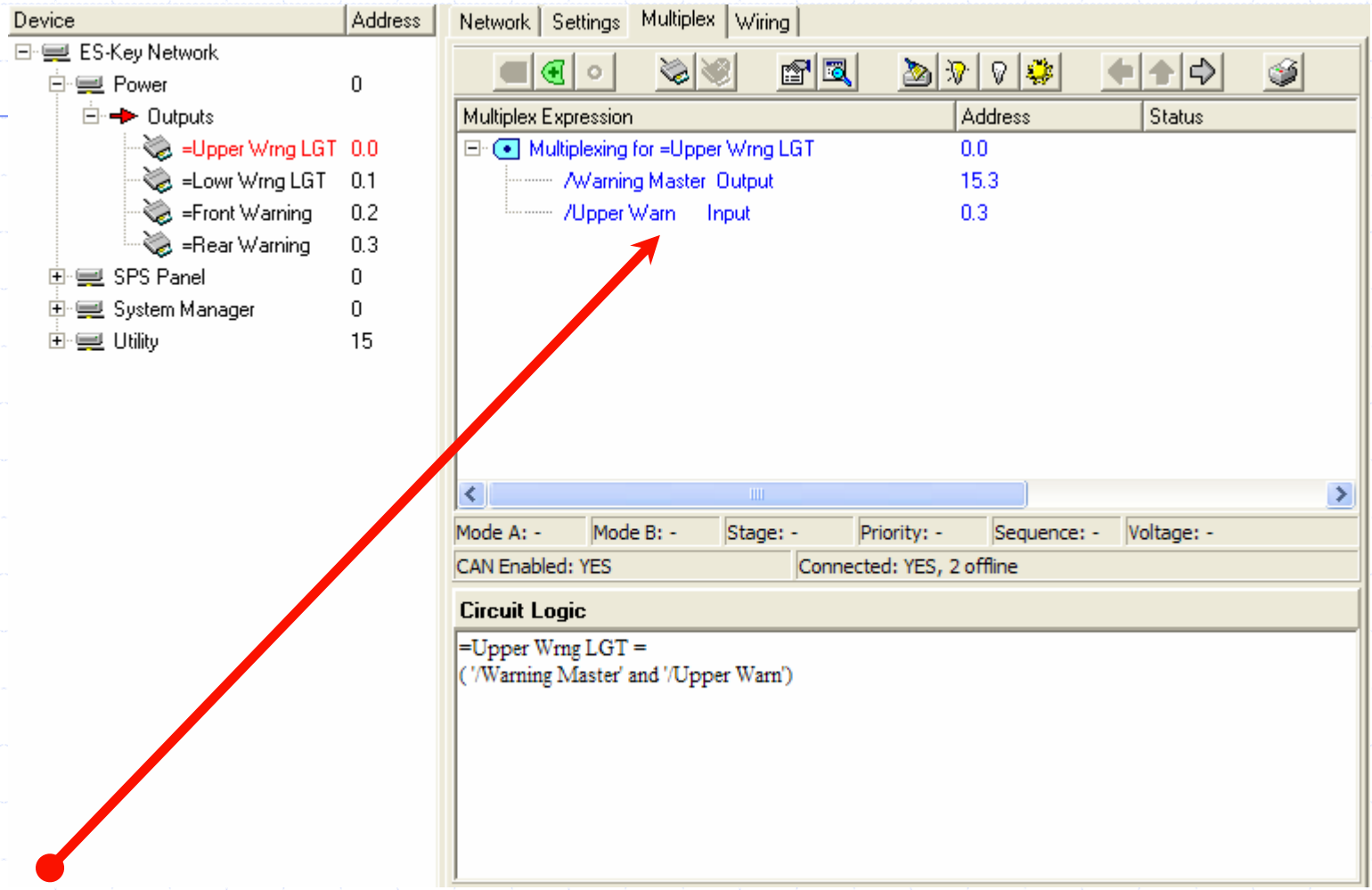
The Editor Screen is where each input and output is configured. They can be named, the port number assigned and even the module address can be changed.

Port Settings ES-Key



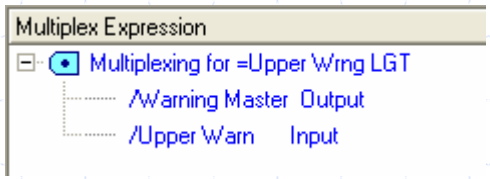
- Settings Tab (Window) Address – Port – Name – Output Default
- Load Management (Master – Scene – Response – Priority – Sequence)
- Comments (Notes to clarify operation)

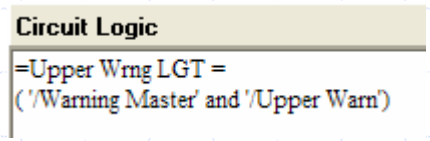
Port Multiplexing ES-Key



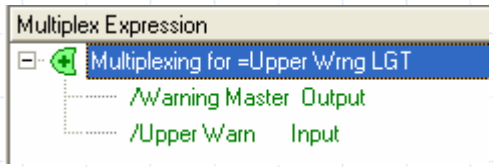
This window provides the multiplexing expression (Circuit (Port) Operation)

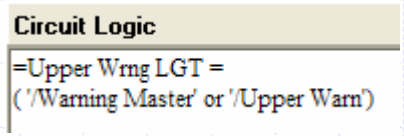
System Logic ES-Key



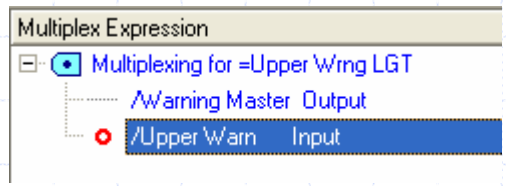


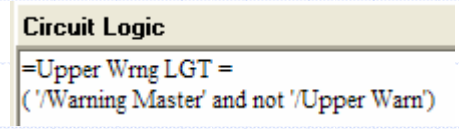
AND Logic





OR Logic

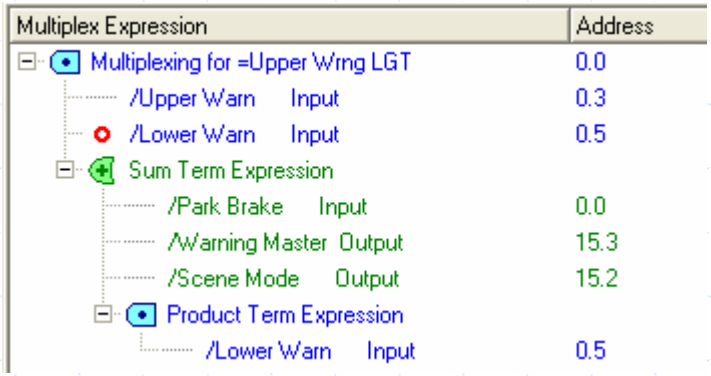




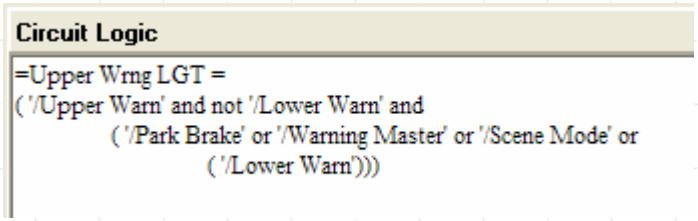
NOT Logic

The ES-Key System uses very simple logic to set-up circuit operation.

Complex Logic? ES-Key



Multiplex Expression		Address
Multiplexing for =Upper Wrng LGT		0.0
/Upper Warn	Input	0.3
/Lower Warn	Input	0.5
Sum Term Expression		
/Park Brake	Input	0.0
/Warning Master	Output	15.3
/Scene Mode	Output	15.2
Product Term Expression		
/Lower Warn	Input	0.5



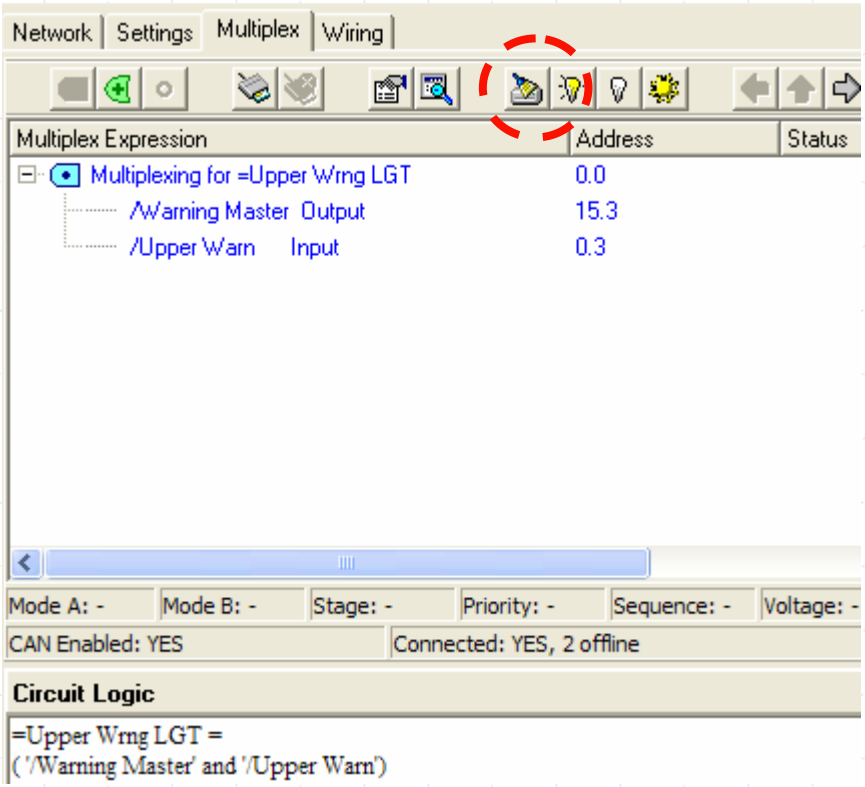
Circuit Logic

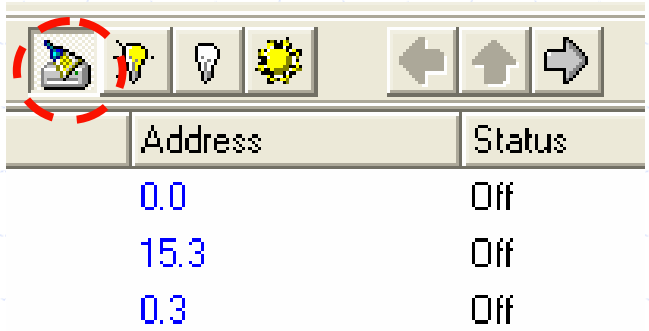
```
=Upper Wrng LGT =
( '/Upper Warn' and not '/Lower Warn' and
        ( '/Park Brake' or '/Warning Master' or '/Scene Mode' or
                ( '/Lower Warn')))
```

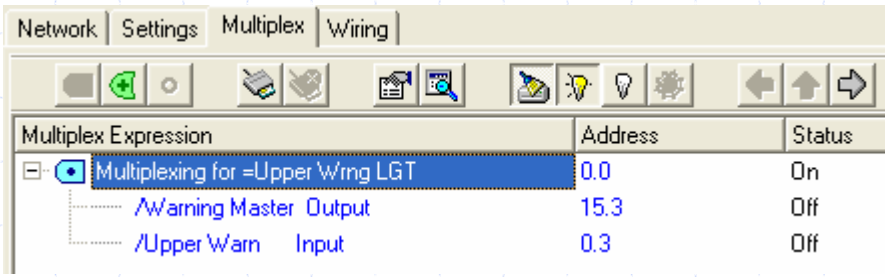
Circuit Logic may be combined to create more complex conditions of operation.

Live Status

ES-Key

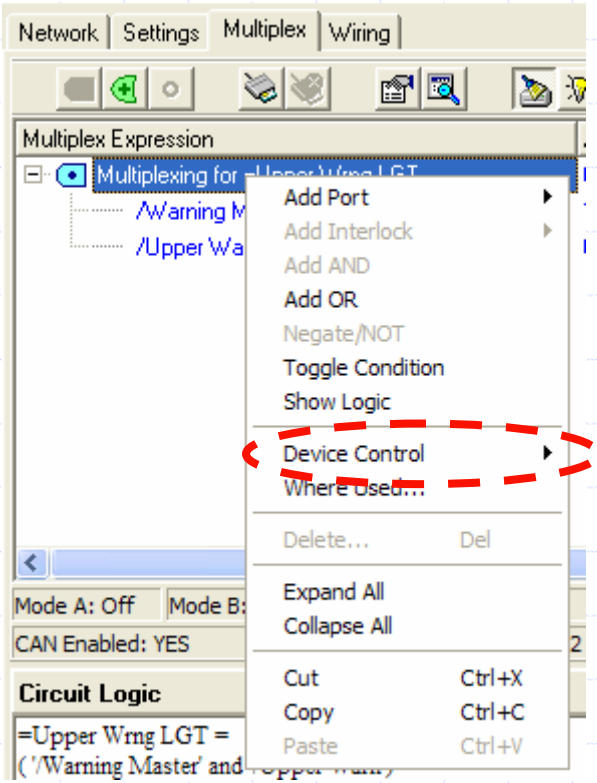


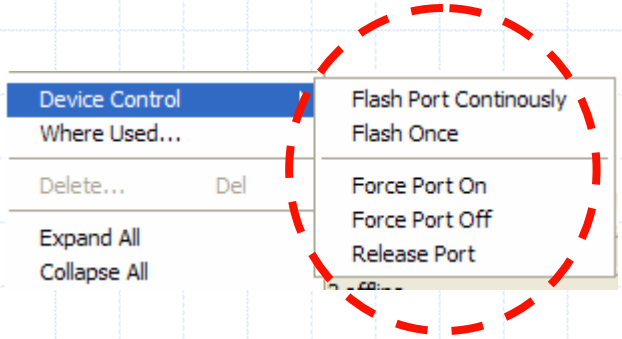




- The current status of the port can be displayed in this window
- The brush icon must be enabled to get this information
- The multiplex logic status is displayed here as well

Device Control ES-Key





Choice of port operation is available in this menu

It is important to release control of the circuit before proceeding with diagnostics in most cases

Control of the outputs and inputs is performed using the device control drop down menu

Output Control ES-Key

- Any Es-Key circuit can be split easily using device control.
- Force the output ON and if the load activates, the problem will be on the input side of the system.
- If the load does NOT turn ON, then the problem will be from that specific output on the Power Module through the ground of the load.

Input Control *ES-Key*

Force the Input ON and if the load activates, the problem is between switch common and the input module.

(Switch, Feed or connection to the Input Module)

If the load does NOT turn ON, then the problem is the input on the module.

NOTE: If multiple arguments are present, it will be necessary to activate those circuits also (either forced or physical)

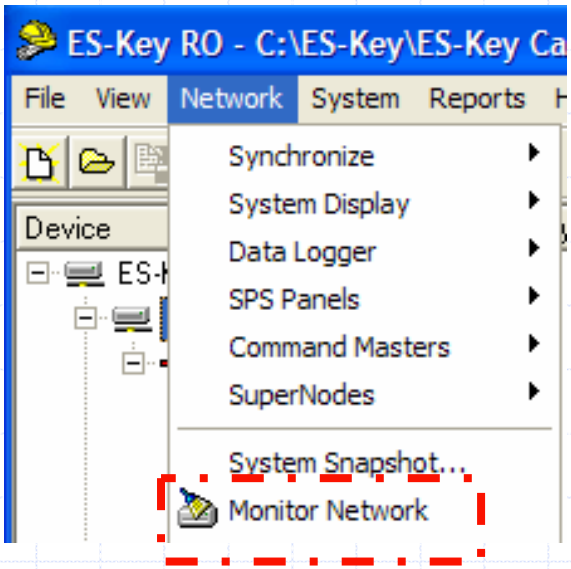
General ES-Key

Most problems can be diagnosed with the system.

The software should get you to within a few feet of the problem.

At that point, basic electrical troubleshooting will easily pin-point the problem.

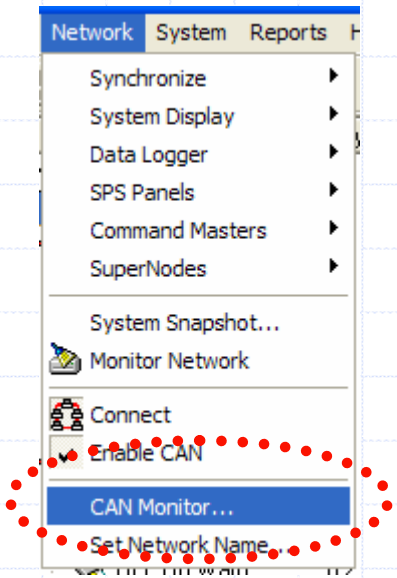
Network Monitor ES-Key

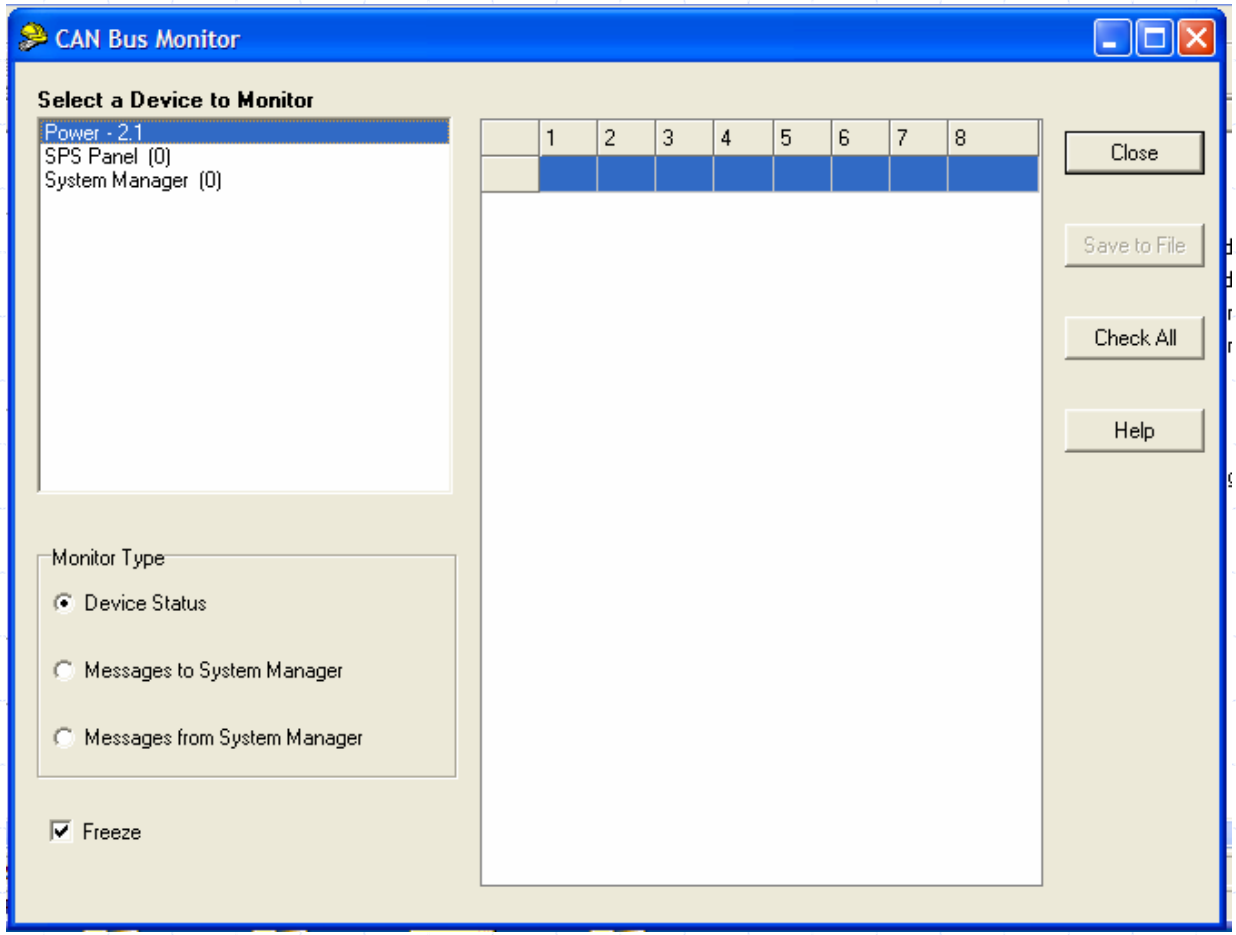


Device	Physical Address	Description	Status	Config
ES-Key Network				
Power	0			
Outputs				
=Upper Wrng LGT	0.0	PDM Output	Off	Yes
=Lower Wrng LGT	0.1	PDM Output	Off	Yes
=Front Warning	0.2	PDM Output	Off	Yes
=Rear Warning	0.3	PDM Output	Off	Yes
SPS Panel	0			
Inputs				
Off Master	0.0	SPS Input	Off	No
Master Warning	0.1	SPS Input	Off	Yes
OFF Up Warn	0.2	SPS Input	Off	No
/Upper Warn	0.3	SPS Input	Off	Yes
OFF Low Warn	0.4	SPS Input	Off	No
/Lower Warn	0.5	SPS Input	Off	Yes
Outputs				
System Manager	0			
Inputs				
/Park Brake	0.0	USM Input	Off	Yes
Utility	15			

The I/O status can be monitored through the Main Window Network Menu.

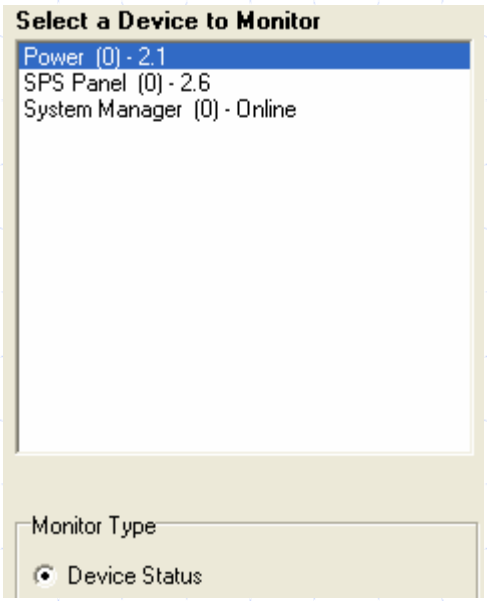
CAN Monitor ES-Key

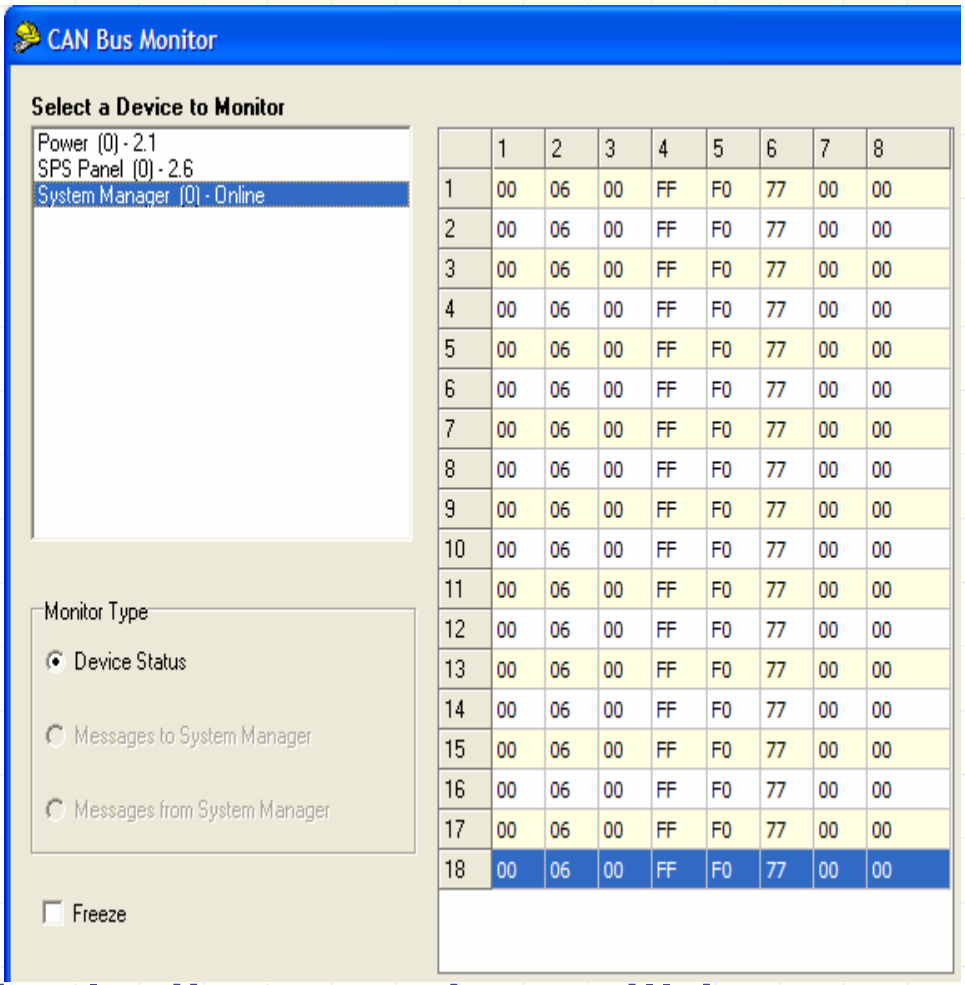




The Controller Area network has its own Monitor Screen accessed from the Network pull down menu.

C.A.N. Monitor ES-Key





The device status including version will be displayed and actual messages being parsed can also be monitored.

Purpose ES-Key

This presentation is designed to familiarize you with the software and suggest possible uses and procedures.

Specific questions about the database or apparatus can best be answered by the OEM.

General hardware or software questions can be answered by the OEM or Class1.

Wrapup

ES-Key

- Questions?
- Website Available
- http://www.es-key.com
- http://www.class1.com