Audix Systems,
Station Road,
Wenden,
Saffron Walden,
Essex,
CB11 4LG.
Telephone: +44(0)1799 540888
Facsimile: +44(0)1799 541618
www.tycosafetyproducts-europe.com
www.audixsystems.co.uk

alpha
Configuration Suite V1.4 Manual

Revision History

Issue	Modifications	Date
1.0	Initial Draft	14/7/99
1.1	Initial Update	26/7/99
1.2	Update for Configuration Suite V1.4	03/4/00

DISCLAIMER

This manual contains information that is correct to the best of Audix Systems knowledge. It is intended to be a guide and should be used as such. It should not be considered as a sole source of technical instruction, replacing good technical judgement, since all possible situations cannot be anticipated. If there are any doubts as to exact installation, configuration and/or use, call Audix Systems at +44 (0)1799 540888

ACKNOWLEDGEMENTS

Technical Support

In the unlikely event of you having problems with the *alpha* configuration suite please contact our Customer Services Department.

Audix Systems
Station Road
Wenden
Saffron Walden
CB11 4LG
Tel 01799 540888
Fax 01799 541618
Website www.tycosafetyproducts-europe.com

alpha Configurations using a PC

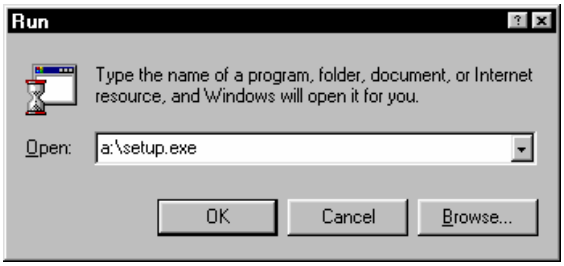
The *alpha* is configured by a simple ASCII text file. This file can be downloaded to the *alpha* and uploaded to the configuration PC for analysis and modifications.

When configuring the *alpha* using the Windows *alpha* configuration suite, the generation of the ASCII text file is done for you. The configuration suite also checks the configurations for errors. It is possible to edit the file using a simple text editor such as notepad, but caution should be taken as the configuration will not be checked for errors, and this could cause the *alpha* to not operate as desired.

Installing the *alpha* configuration suite

The *alpha* configuration suite is designed to operate in a Microsoft Windows 95/98 environment.

Insert the installation disk. Select “Run” on the “Start Menu”
Within the box type a:\setup.exe, then Click on the “Ok” box.

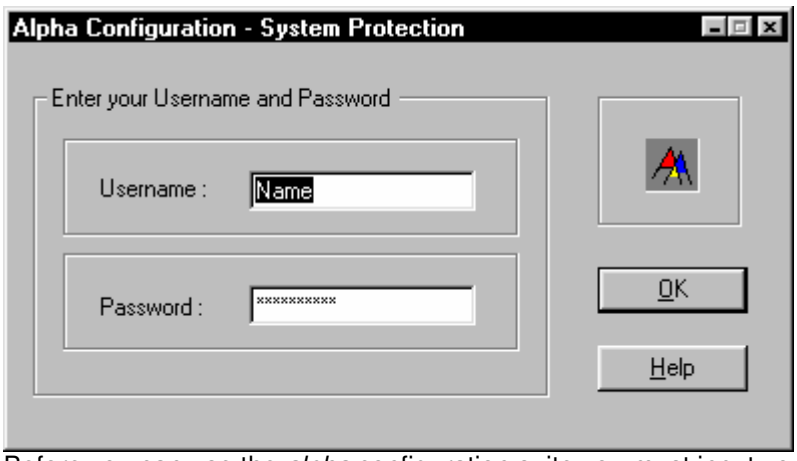


Follow the menus on screen to complete installation.

Running the *alpha* configuration suite.

Click on the *alpha* configuration suite Icon to start the program.

System Protection



Before you can use the *alpha* configuration suite you must input your Username and Password then press OK. The passwords are common for both the software suite and user access from the front panel of the *alpha*.

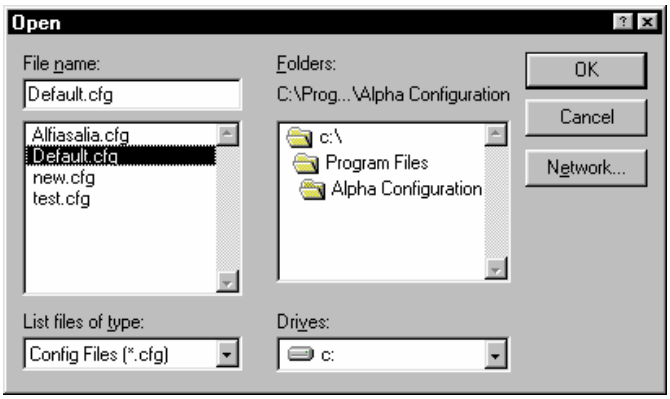
The Configuration PC will now try to communicate with the *alpha*

If it fails to connect with the *alpha* you will get the following display.

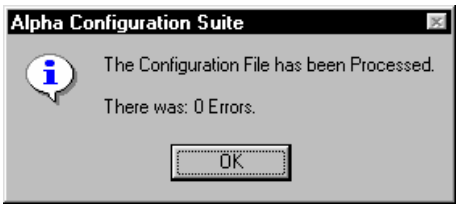
The Configuration Suite can be used Off-line, This enable configurations to be produced and edited off-site before downloading to the *alpha*.

Before you can use the Configuration suite you will need to either open an existing configuration, create a new one or up-load the configuration resident in the *alpha.*

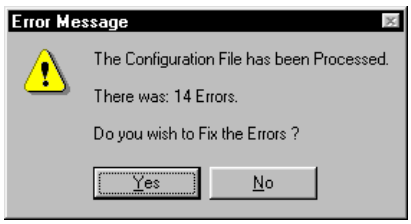
To open an existing configuration, simply select File-Open and select from the list of configurations the file required.



The *alpha* configuration suite automatically checks the configuration for errors when loading. If the configuration is Ok you will get the following message.

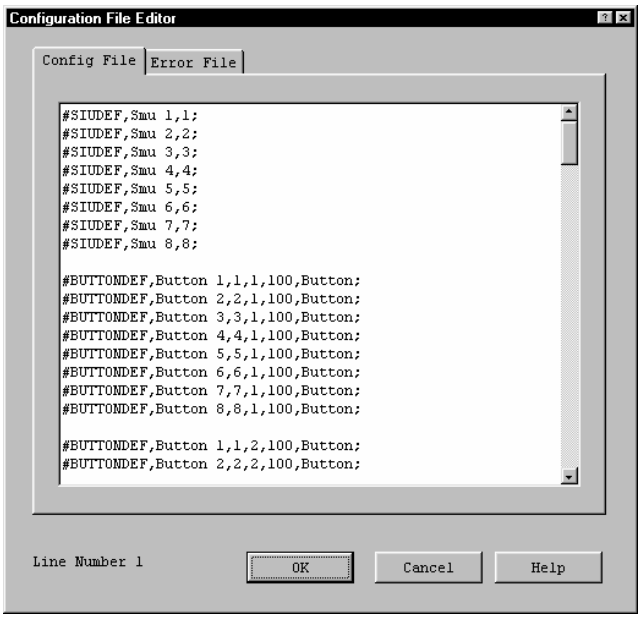


If the configuration has errors you will see the following box appear. Click on the OK button to check the errors in the configuration.

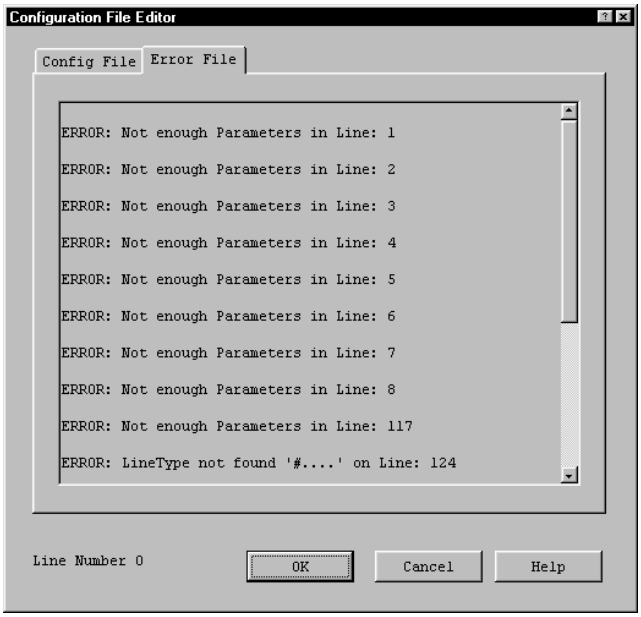


The Configuration File Editor shows the ASCII text file that has been generated by the configuration. The file can simply be edited here.

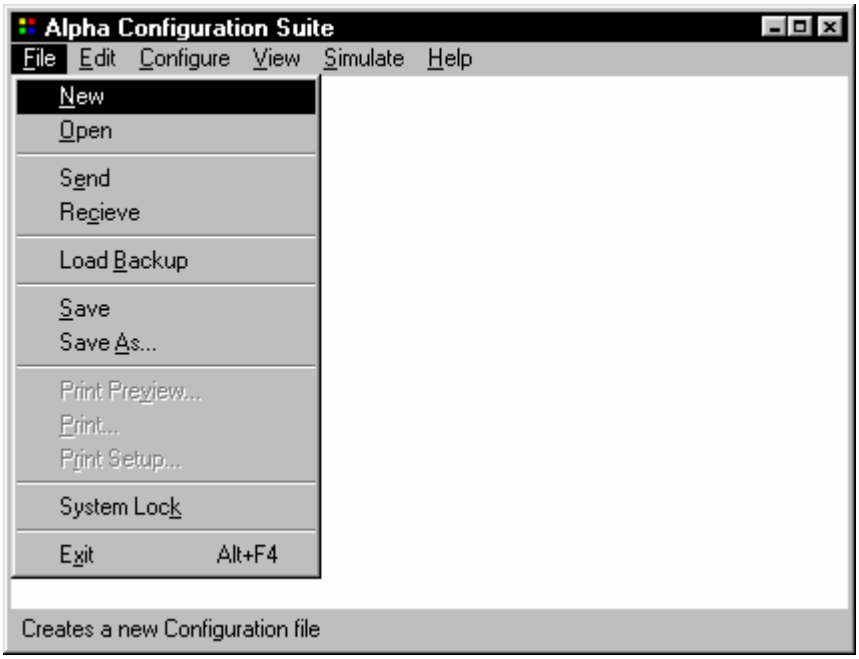
Fix the errors and press OK. If there are still errors the error box will shown again stating the amount of errors. Re edit the file again until



Clicking on the Error File Tab shows all of the error currently in the configuration, It gives the problem and line in the configuration that contains the error.

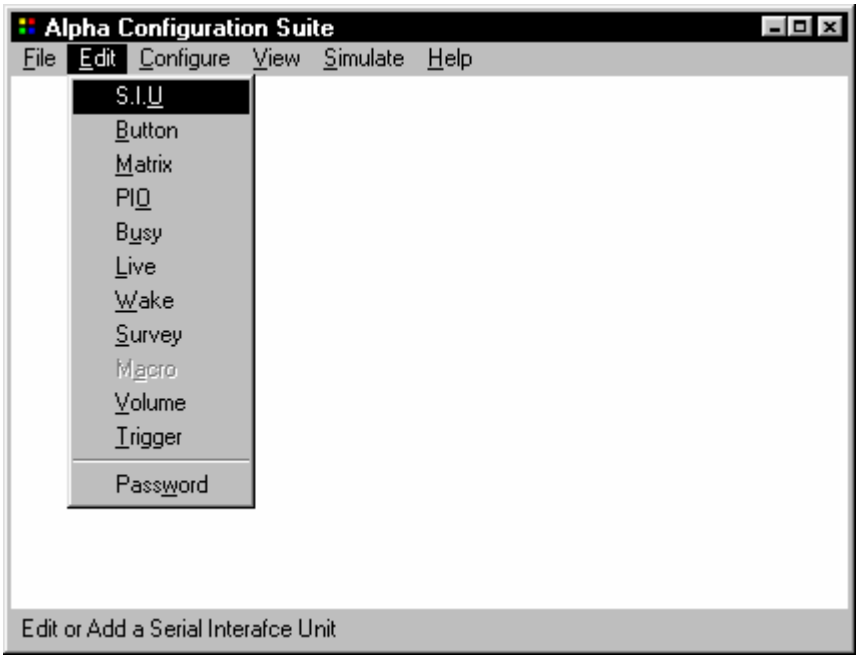


File Menu



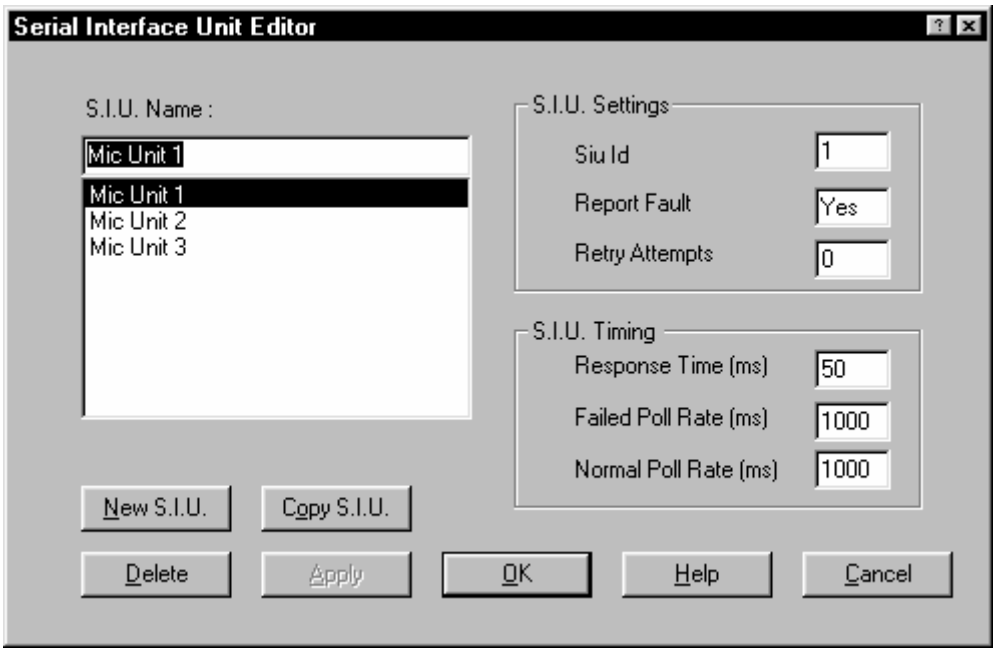
New	Selecting this will generate a new configuration
Open	Selecting this will open an existing configuration
Send	This will transfer the current open configuration from the PC to the *alpha* via the serial link
Receive	This will upload the current configuration operating within the *alpha* to the PC via the serial link for viewing and editing in the configuration suite.
Load Backup	The configuration suite automatically saves a backup of each configuration. If necessary you can load this backup to reverse any changes to the open configuration.
Save	Save the current open configuration
Save As…	Saves the current configuration under a different name
System Lock	Enables the system lock, preventing unauthorized users from editing the open configuration. Simply re-enter your user password to continue editing.
Exit	Exit from the *alpha* configuration Suite

Edit Menu



S.I.U	Add or Edit A Serial Interface Unit
Button	Edit a Button on an SIU
Matrix	Configure Inputs and Outputs to the Matrix
PIO	Configure Parallel I/O
Busy	Configure Busy Outputs
Live	Configure Live Outputs
Wake	Configure Wake up Signaling to amplifiers
Survey	Set up 20kHz Critical path testing signal sources.
Macro	Not yet implemented
Volume (now in Configure Menu “Input Level”)	Volume and EQ settings for each input to the matrix
Trigger (now in Configure Menu)	Configure SIU buttons to trigger an I/O line
Password	Configure User Passwords

Edit SIU



SIU Name	Each mic unit can be given a unit name.
SIU ID	Each Mic unit must have a unique ID.
Report Faults	The mic unit can be configured to report any communications faults to the FMS system.
Retry Attempts	Sets the amount of communications retries to a failed mic unit.
Response Time	Set the time limit that the *alpha* waits for a reply from a polled mic unit
Failed Poll Rate	Sets the frequency at which the mic unit is attempted to be polled by the *alpha* after a comms failed
Normal Poll Rate	Sets the frequency at which the *alpha* communicates with the mic unit
Normal Poll Rate	Sets the frequency at which the *alpha* communicates with the mic unit
ProtoCol	Leave Set to 0
Button Qty	Unused

To Create a new SIU Press the New SIU button and configure as required.

If you need to add an SIU and it is similar to an existing SIU, using the Copy SIU may be quicker to configure.

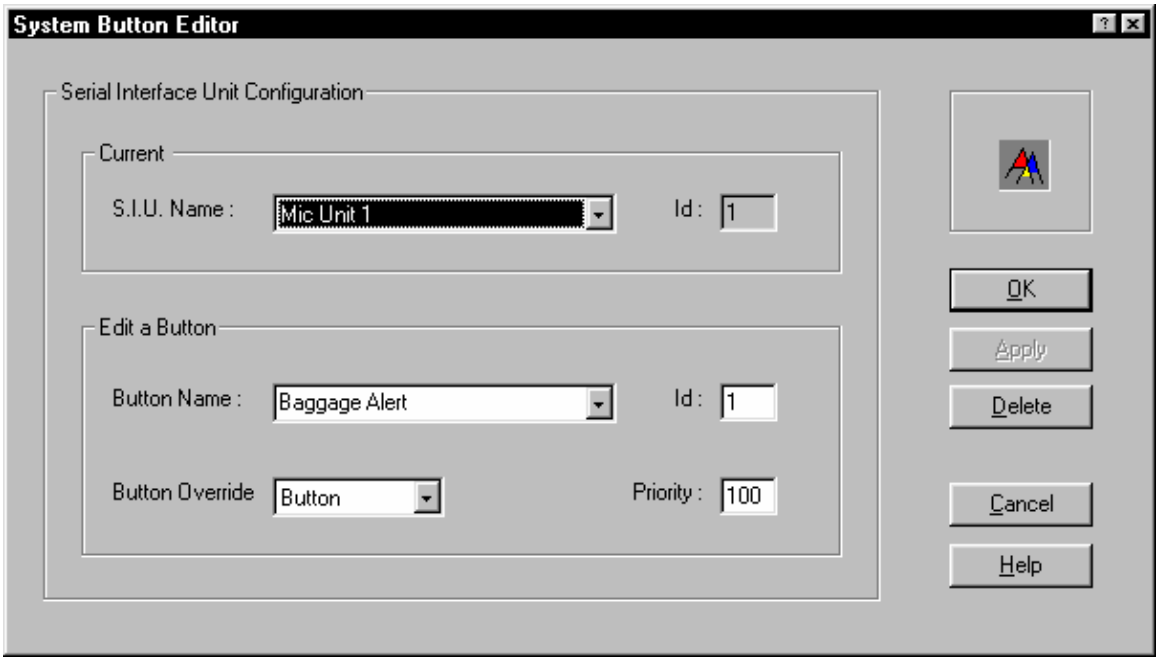
Press Apply to make the changes, and Ok to accept the Changes

To Delete the properties press delete, and then Ok to accept the Changes

To Ignore the changes press Cancel

For Help press Help.

Edit Button



SIU Name	Select the SIU of which you wish to edit the button configuration
Button Name	Selects The button you wish to configure
Button ID	Indicated the ID number of the selected button
Button Override	Select for the button to be overriden by either another zone or another button
Button Priority	Each button can be configured to have its own priority.

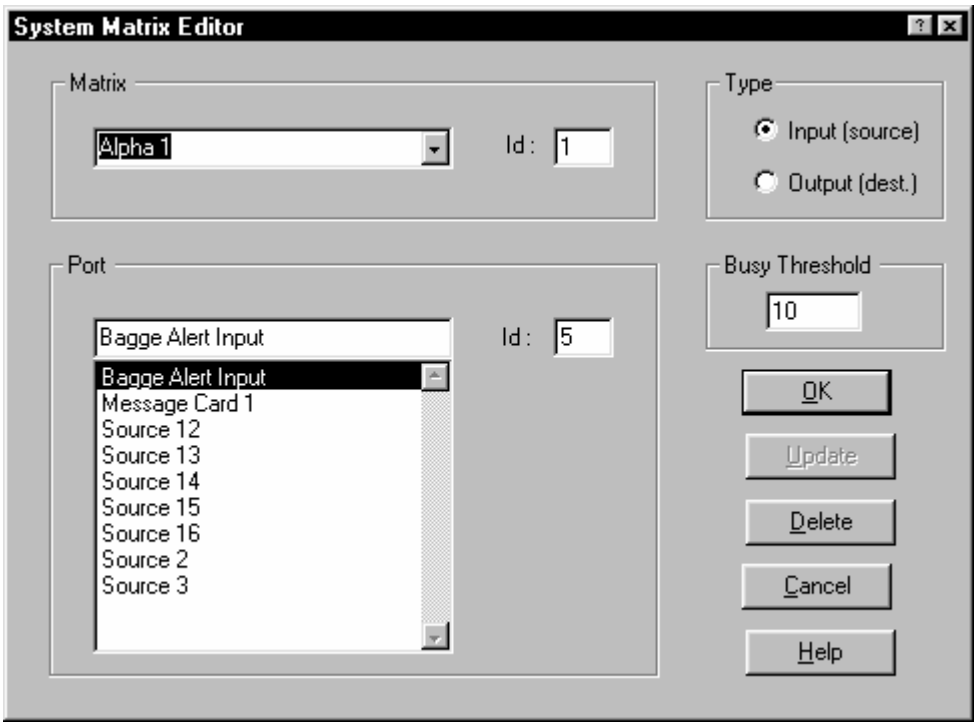
Press Apply to make the changes, and Ok to accept the Changes

To Delete the properties press delete, and then Ok to accept the Changes

To Ignore the changes press Cancel

For Help press Help.

Edit Matrix



Matrix Name	This allows you to name each of you matrices
Matrix ID	Indicates the unique ID number
Port Name	Each Input and Output can be given a unique name.
Port ID	This will indicate the physical ID of each input or output
Type	Select Input or Output to switch between I/O types
Busy Threshold	Sets the threshold at which the input or output will give a Busy output indication

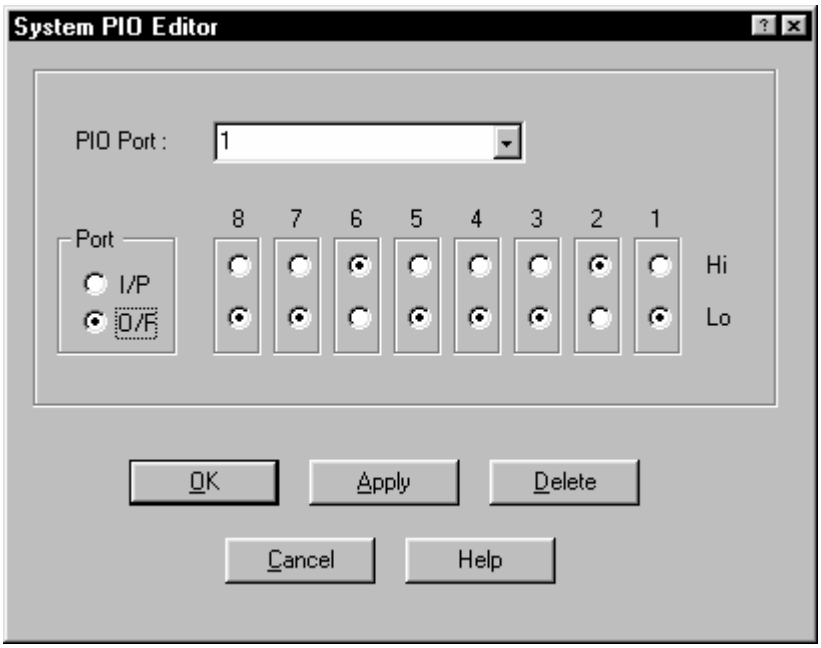
Press Update to make the changes, and Ok to accept the Changes

To Delete the properties press delete, and then Ok to accept the Changes

To Ignore the changes press Cancel

For Help press Help.

Edit PIO (Parallel Input/Output)



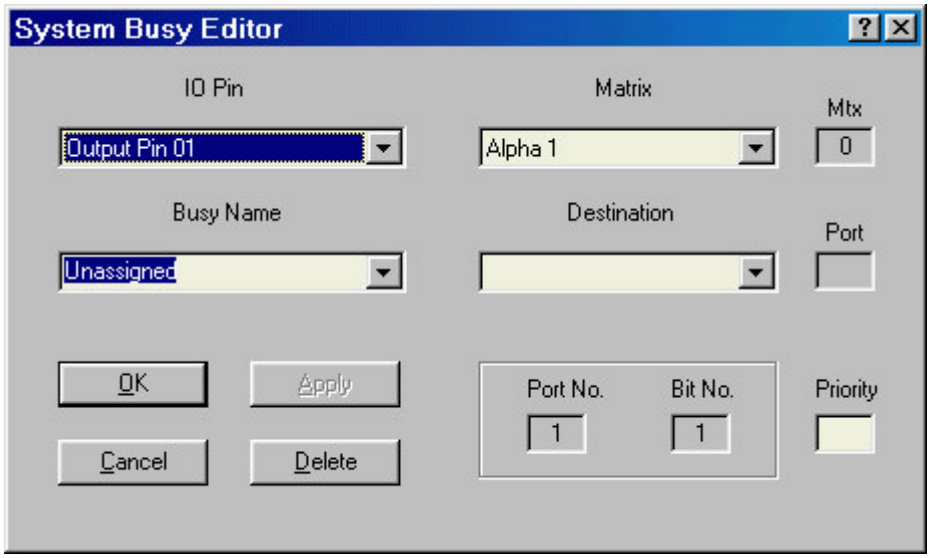
PIO Port	Select either 1 or 2 for first or second bank of 8 I/O points.
Port	Selects IO type you wish to edit (input or Output)
8 - 1	Enable you to select the status of any input or output to be Active Hi or Active Low

Press Apply to make the changes, and Ok to accept the Changes

To Delete the properties press delete, and then Ok to accept the Changes

To Ignore the changes press Cancel

Edit Busy



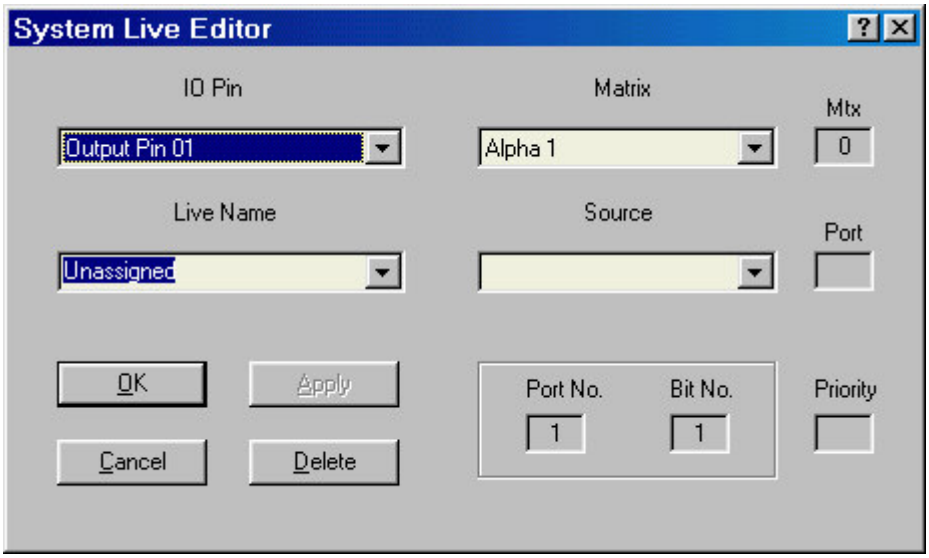
Busy	Name of the Busy control signal
Destination Name	Matrix Name
Destination Button	Selects a button you require to generate a busy output
IO Pin Number	Selects the Output you wish to trigger as a result of a busy being generated
Priority	Sets the priority of the busy output

Press Apply to make the changes, and Ok to accept the Changes

To Delete the properties press delete, and then Ok to accept the Changes

To Ignore the changes press Cancel

Edit Live



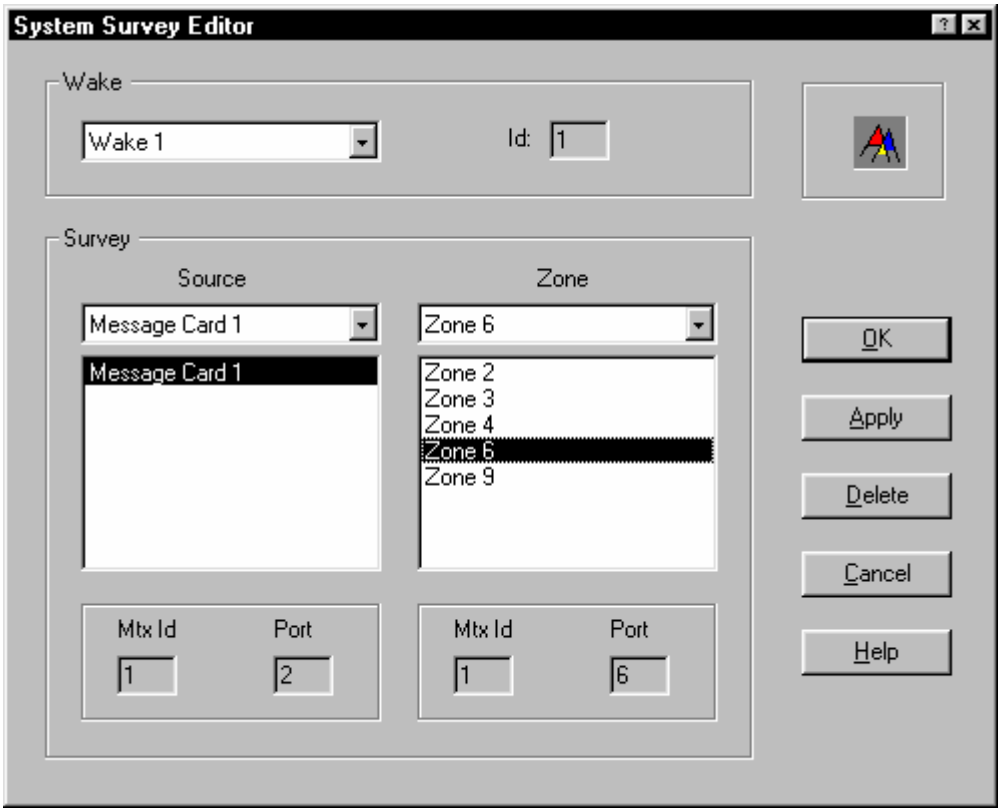
Live	Give each Live output used a unique name.
Source	Select the input, which will generate the Live output. State matrix number and audio source within that matrix.
IO Pin	Select I/O pin to operate for the Live output.

Press Apply to make the changes, and Ok to accept the Changes

To Delete the properties press delete, and then Ok to accept the Changes

To Ignore the changes press Cancel

Edit Survey



Wake Name	Name of the Wake Up signal to operate before the broadcasting the 20kHz surveillance tone.
Survey Source	Select the source unit that will generate the surveillance tone.
Survey Zone	Add the zones the surveillance is required to cover.

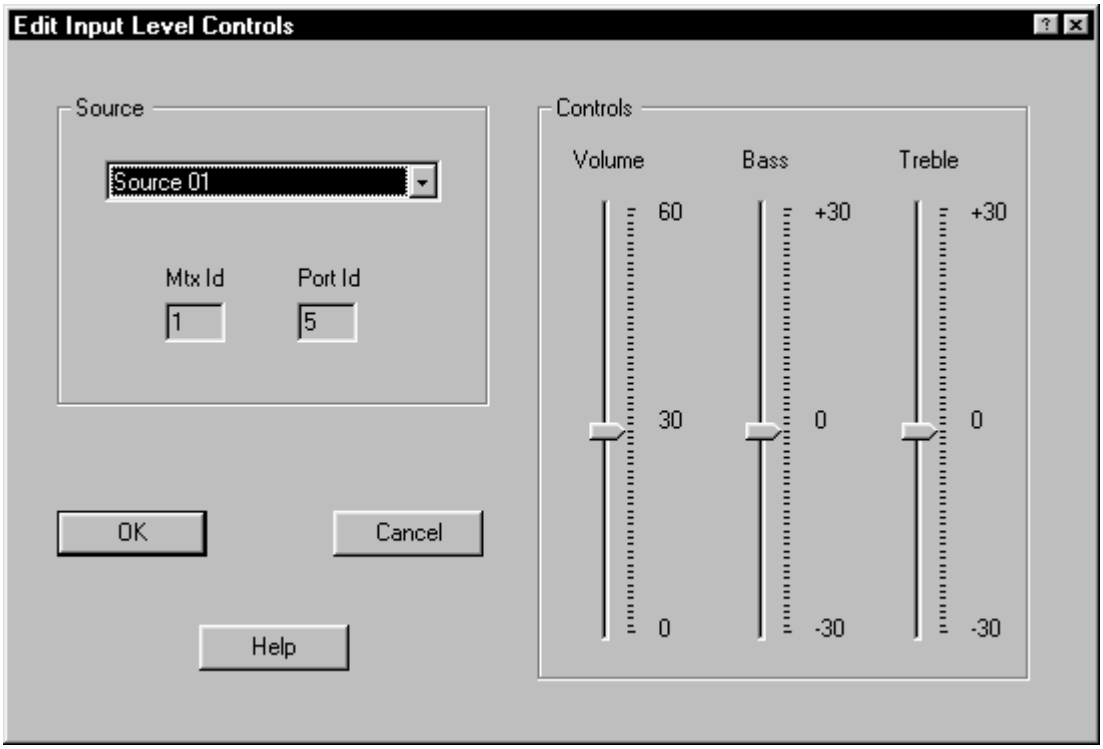
Press Apply to make the changes, and Ok to accept the Changes

To Delete the properties press delete, and then Ok to accept the Changes

To Ignore the changes press Cancel

For Help press Help.

Edit Volume (Configure Input Levels)

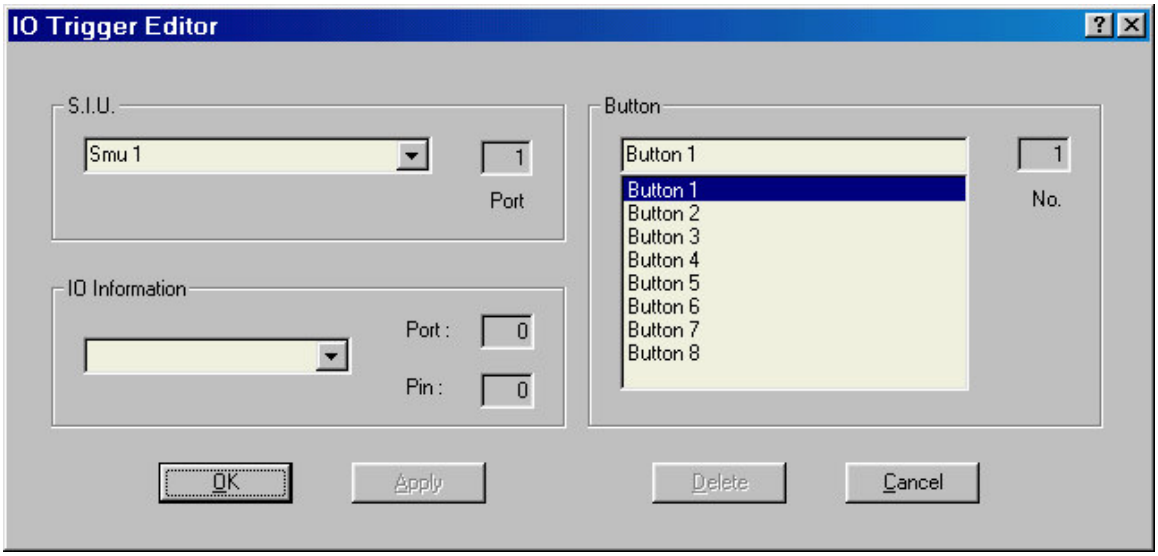


Source	Selects the audio source input to modify
Controls	Set the individual Volume and EQ levels of the selected audio input

To accept the changes you have make press

To ignore the changes press Cancel

Edit Trigger (Configure Trigger)



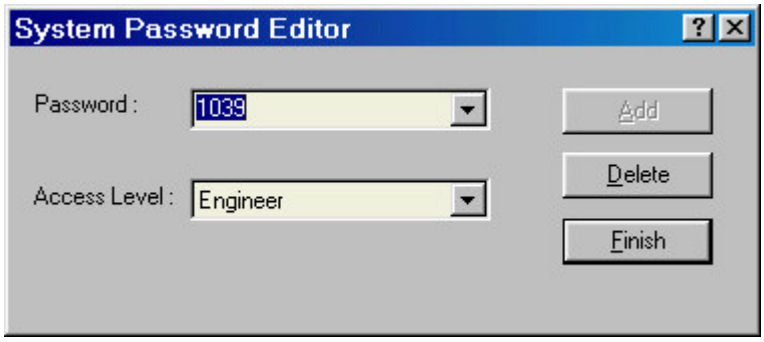
SIU Name	Select the SIU that will generate the trigger
Button	Select the button which will cause the trigger
IO Information	Select the I/O pin you wish to be triggered, you need to state port number and pin

Press Apply to make the changes, and Ok to accept the Changes

To Ignore the changes press Cancel

For Help press Help.

Password

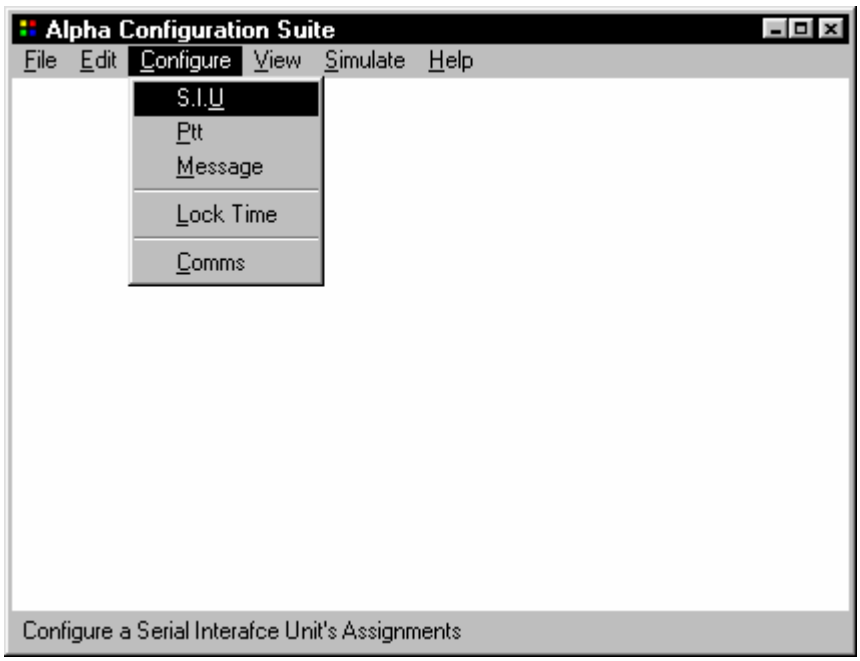


Password	Input a Password
Access Level	Select the level of Access. Passer-by, User, Engineer or Superuser.

Press Add to add a user, Press Finish to accept the Changes

Press Delete to remove a user, and then Finish to accept the Changes

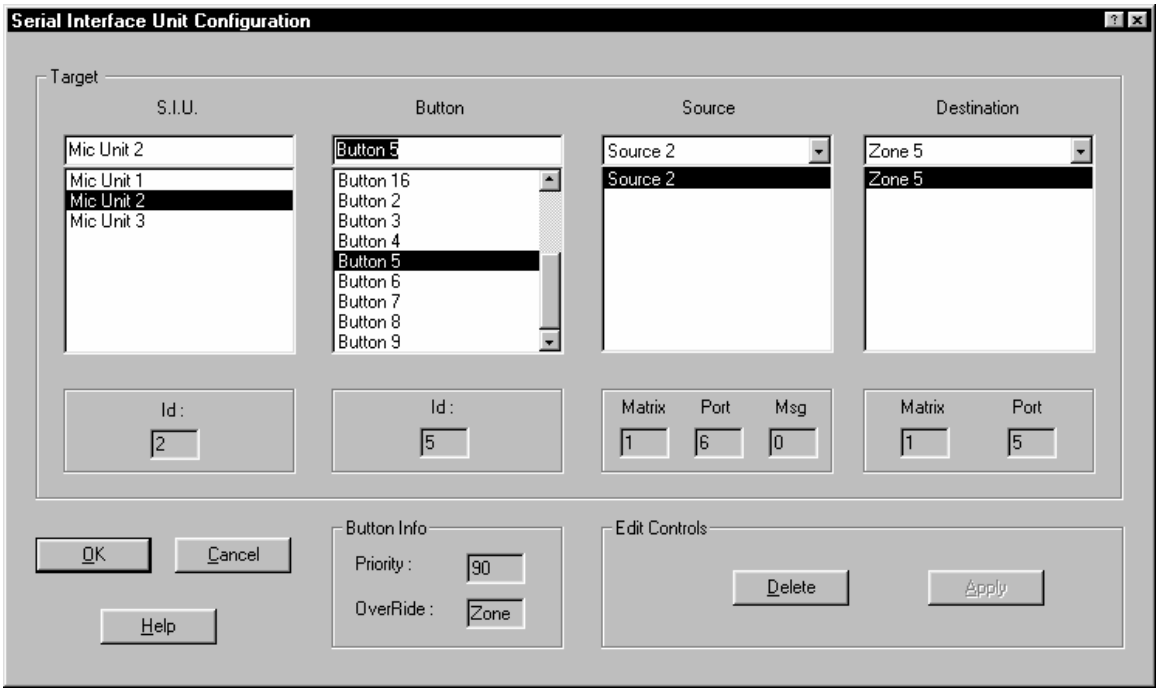
Configure Menu (Now has Trigger & Input Level)



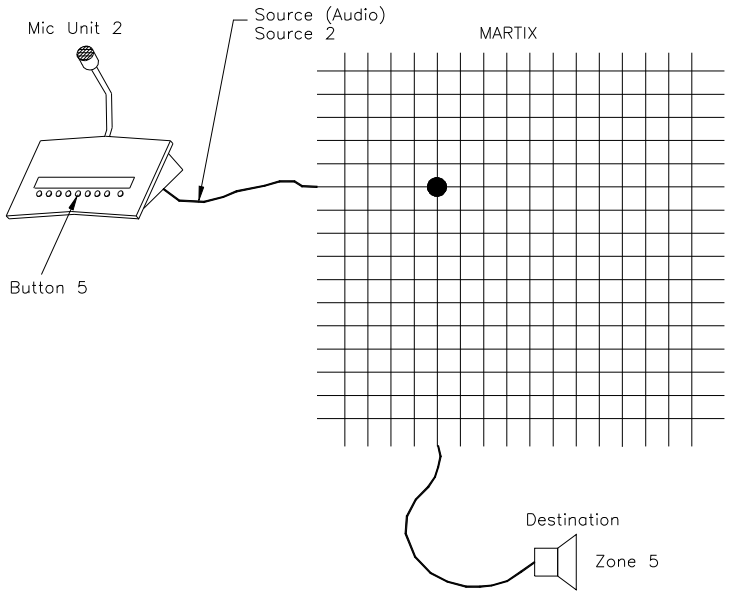
S.I.U	Configure the Serial Interface Unit's Assignments
Ptt	Configure Ptt's inputs to the *alpha*
Message	Configure the message cards of the *alpha*
Lock Time	Adjust the settings of the screen lock.
Comms	Configure the Comms settings of the configuration PC

Configure SIU

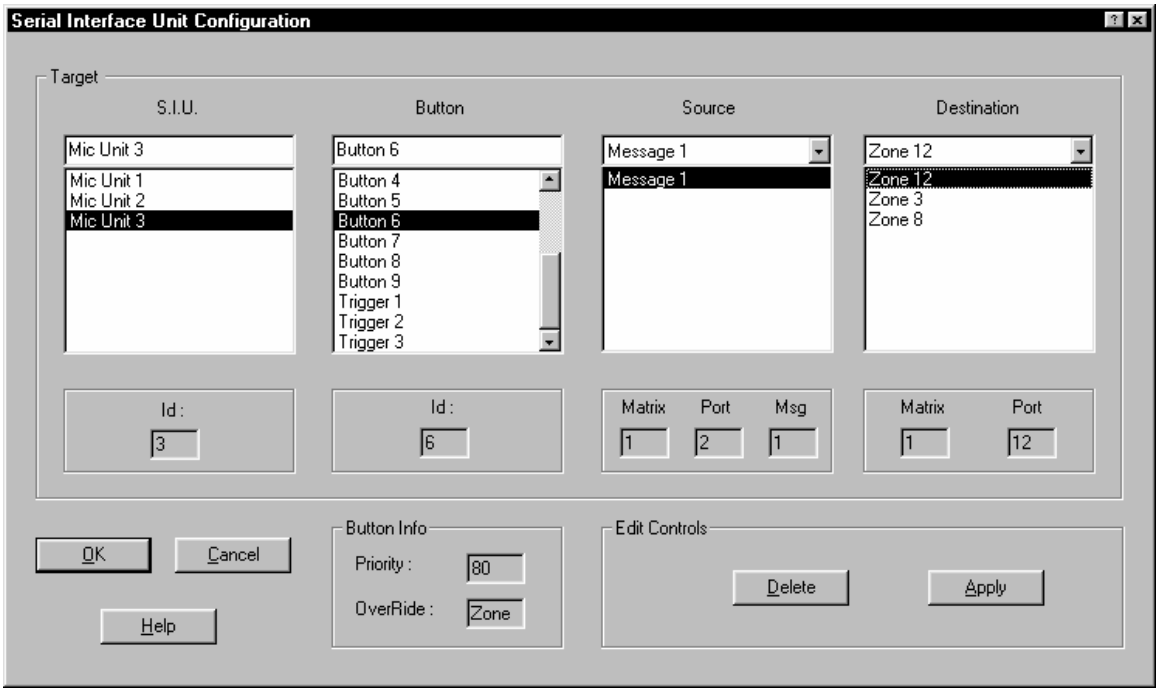
Example 1



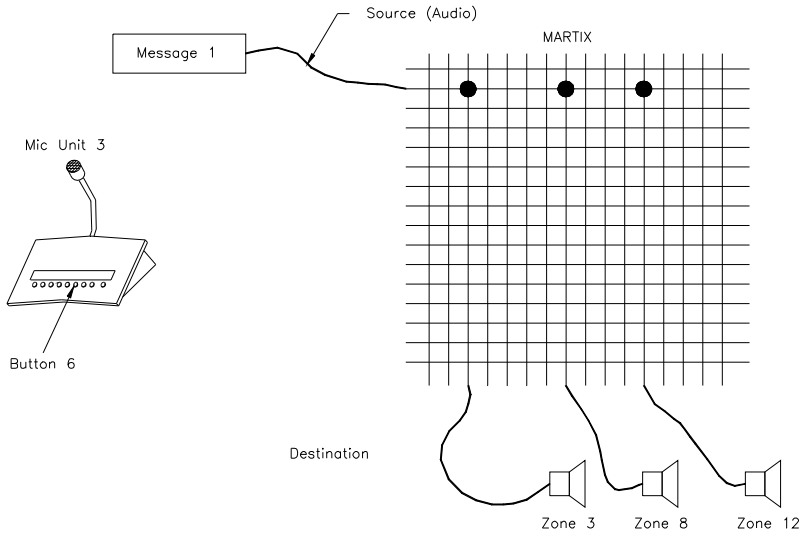
This example shows the Routing of a microphone Audio Source to its Destination, dependant upon a button selection on a specific SIU. Shown below is how the above configuration would work in practice.



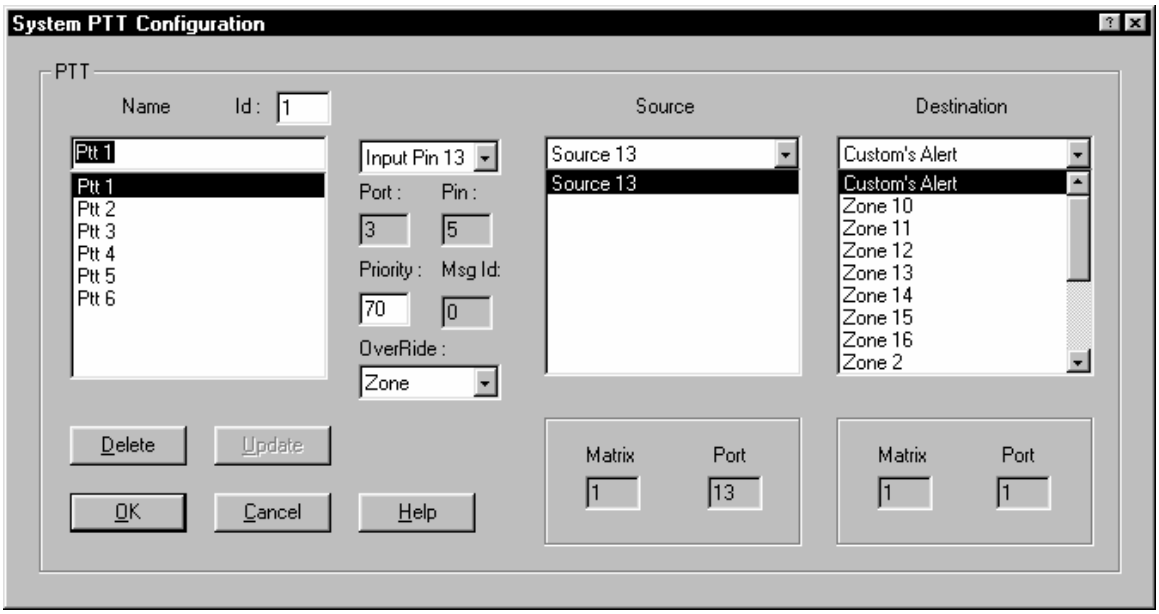
Example 2



This example shows the Routing of a message as the audio source to multiple destinations dependant upon a button selection on a specific SIU. Shown below is how the above configuration would work in practice



Configure PTT



PTT Name	Name of PTT signals
Input Pin Number	Set up the input pin that will be used for the PTT signal.
Source	Source input you wish to route
Destination	Destination you require your source input to be routed to.
Priority	Sets the priority of the PTT signal
OverRide	Configures the PTT to be either overriden by another button or a complete Zone.

This Setup screen is used primarily to configure the operation of the SMU 1 microphones. This pre configures the source and destination routing for when the PTT button is pressed. The PTT is not limited to this, it could also be configured to accept any closing or opening contact e.g. from a fire panel and route a source, e.g. an Evacuation message to a destination.

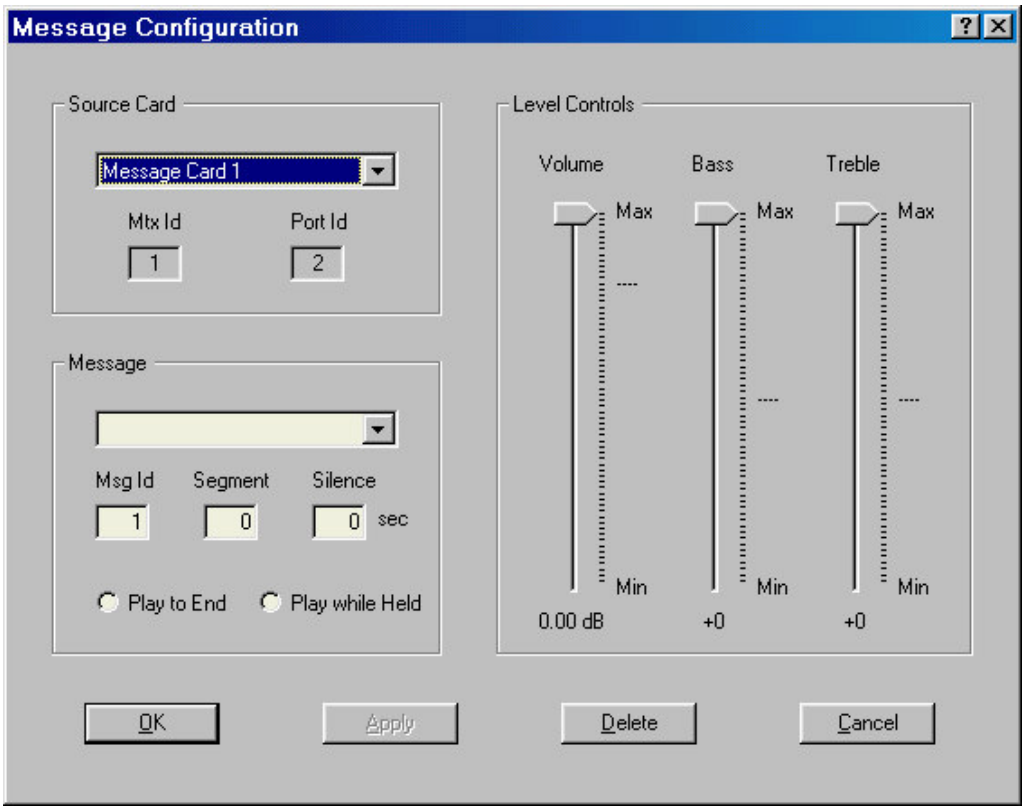
Press Update to make the changes, and Ok to accept the Changes

To Delete the properties press delete, and then Ok to accept the Changes

To Ignore the changes press Cancel

For Help press Help.

Configure Message



Message Source	Select the source message card 1,2, or 3
Message Name	You can give each message a informative name
Message Id	Each message has a unique Id, shown here.
Segment	Each D776 Message card is split into 10 segments. Select here the segment in which the message is held.
Silence	Allows you to configure a fixed length of silence after a message.
Playback type	Each message has the option of either playing the whole message to the end when the button has been pressed and released or only playing the message while the button is held
Level Controls	The sliders provide Volume and EQ controls on a per message biases. There is also a volume control for the 20kHz surveillance tone.

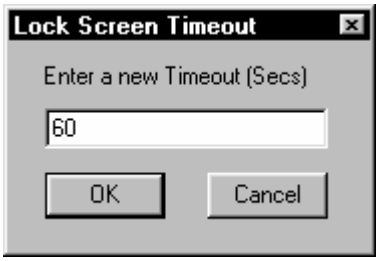
Press Apply to make the changes, and Ok to accept the Changes

To Delete the properties press delete, and then Ok to accept the Changes

To Ignore the changes press Cancel

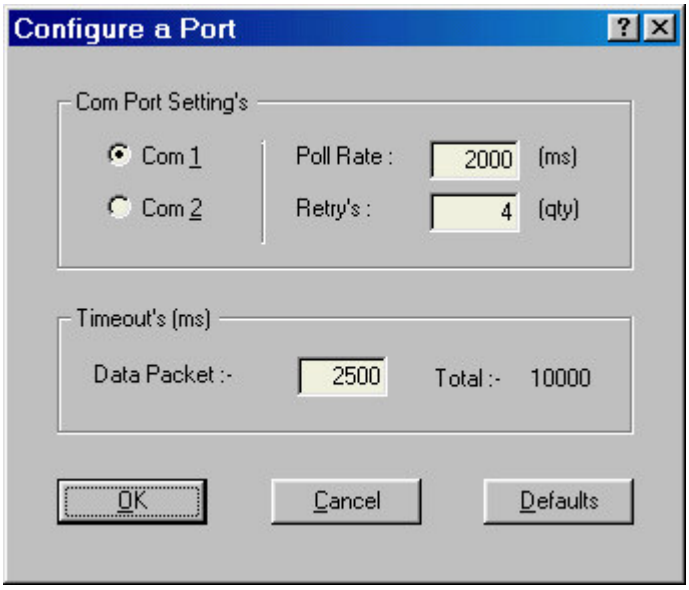
For Help press Help.

Configure Lock Time



Enter a Time for the Screen lock to activate, to prevent unauthorized users from using the configuration software.

Configure Communications

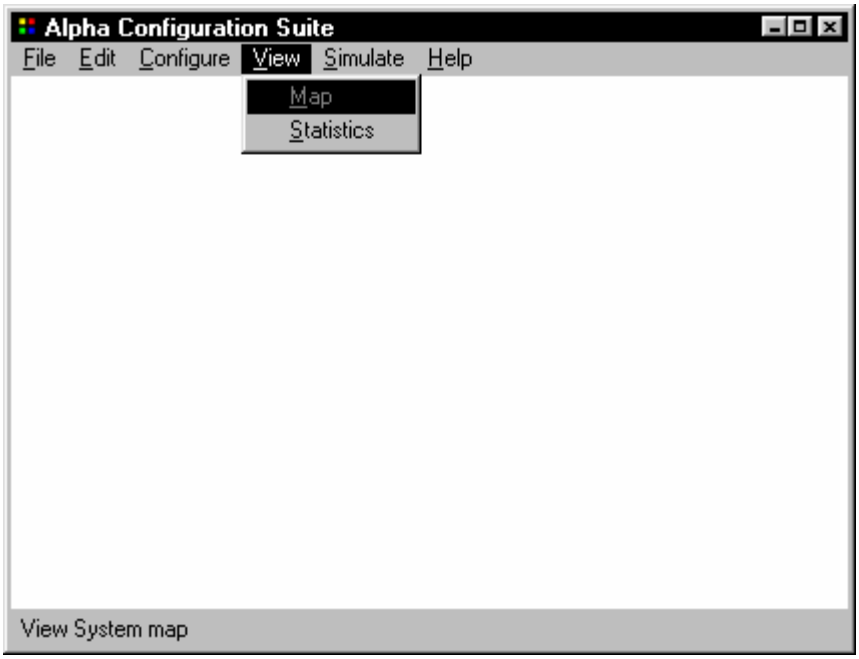


Port Settings	Select the communications Port of the Configuration PC you wish to use to communicate to the *alpha*
Poll	Frequency at which the *alpha* is sent messages (polled)
Retry	Configure the amount of time the PC will retry the communications before failing the link.
Data Packet	Time to wait for a response back from the *alpha* after proccess a packet
Default	Reset defaults

To keep any changes press Apply.

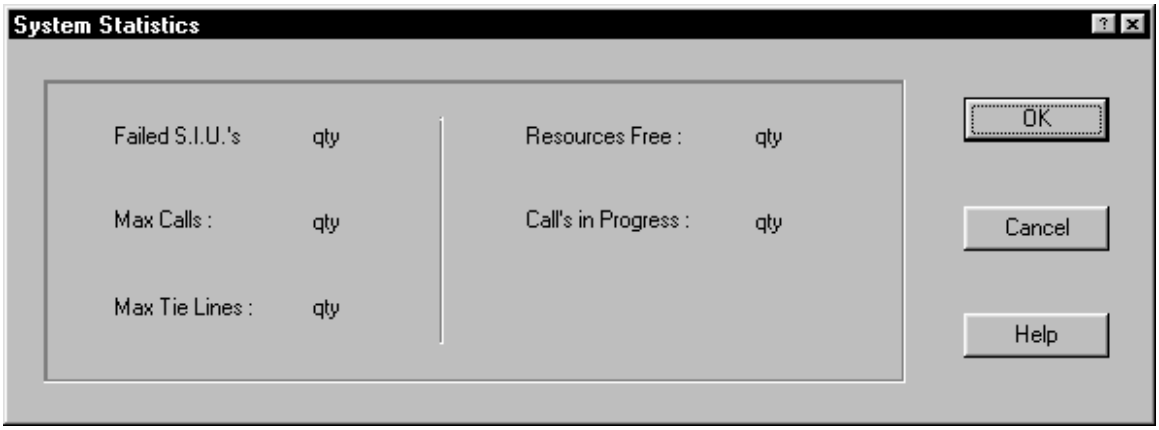
To discard the changes press cancel

View Menu (Inactive)

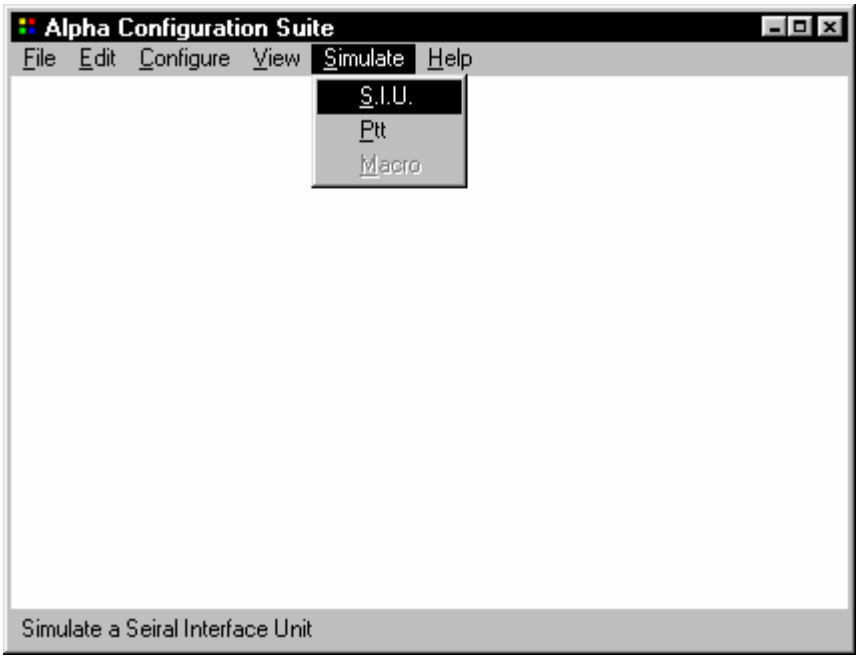


Map	Not yet implemented
Statistics	Shows the real time statistics of the *alpha* connected to the configuration PC

View Statistics (Inactive)

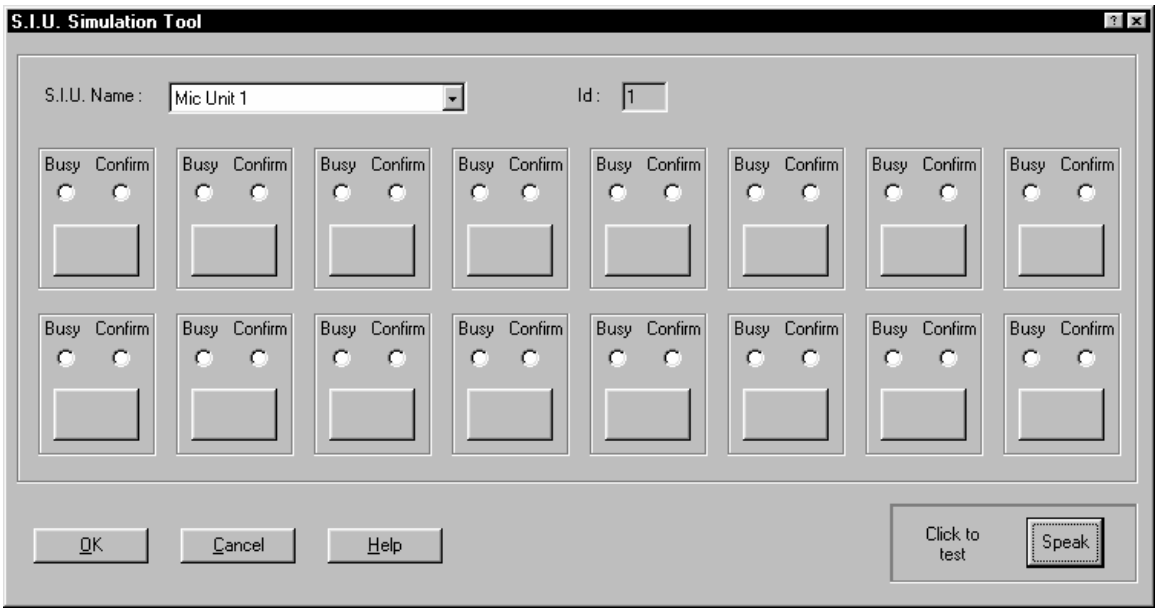


Simulate Menu (Inactive)



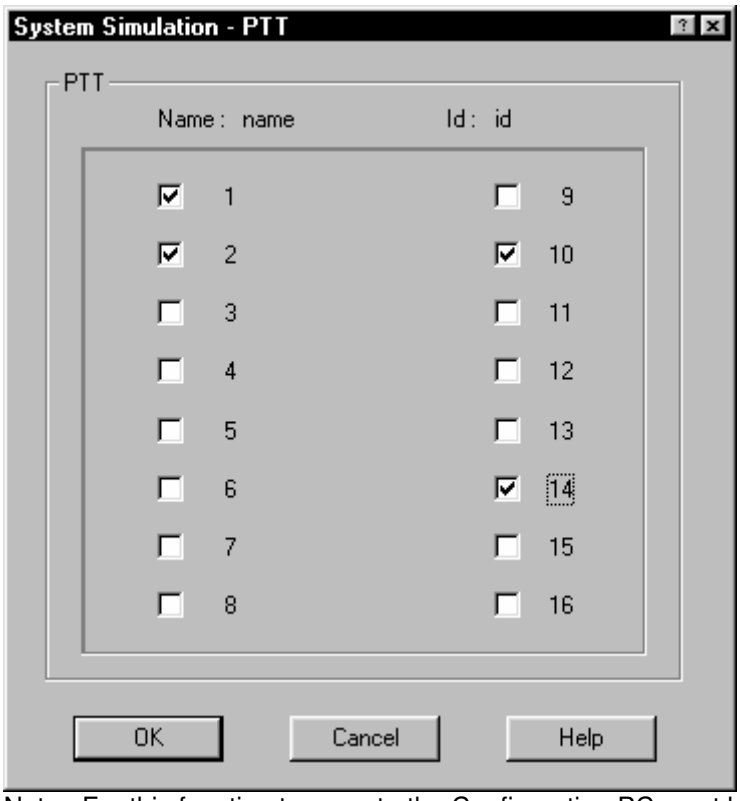
S.I.U	Simulate a Serial Interface Unit
Ptt	Simulate the PTT control
Macro	Not Yet Implemented

Simulate SIU (Inactive)



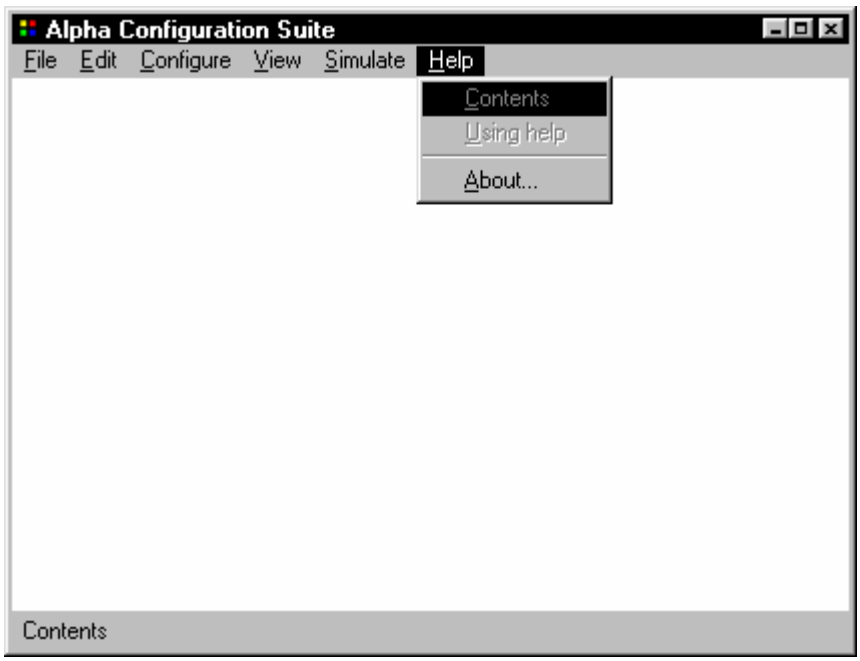
Note: For this function to operate the Configuration PC must be connected to the *alpha* via the serial link.
This allows you to simulate the operation of any of the SIU's configured on the *alpha*. This enable you perform full system testing without having to wire up all the SIU's.

Simulate PTT (Inactive)



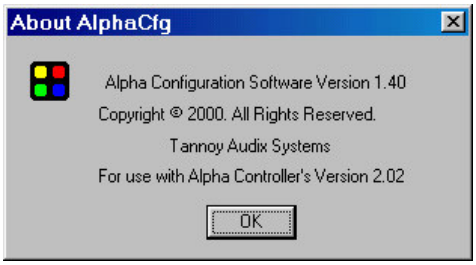
Note: For this function to operate the Configuration PC must be connected to the *alpha* via the serial link.
This allows you to simulate the operation of any of the PTT input configured on the *alpha*. This enable you perform full system testing without having to wire up all the PTT inputs.

Help Menu



Contents	Unavialable
Using Help	Unavialable
About…	Shows version and issue of configuration software

About



Instruction Definitions

SIU

#SIU,a,b,c,d,e,f,g,h,i;
a – SIU Number (1 to 8)
b – Button Number (1 to 16)
c – Source Matrix (1)
d – Source Port (1 –16)
e – Destination Matrix (0 or 1)
f – Destination Port (0 to 16)
g – Button Priority (1 to 255)
h – Override (Zone or Button)
i – Message Id Number (0 to 30)

Note:
If the destination port is set to zero, then the button has been configured to select a message. Other buttons can be configured on the same SIU to route this selected message to the different destination zones.

INPUT Definition

#INPUT,a,b,c,d,e,f,g,h,i,j;
a – Input Number (1 to 16)
b – Input Port Number (3 or 4)
c – Input Bit Number (1 to 8)
d – Source Matrix (1)
e – Source Port (1 to 16)
f – Destination Matrix (0 or 1)
g – Destination Port (1 to 16)
h – Priority (0 to 255)
i – Override (Zone or Button)
j – Message Id Number (0 to 30)

SIU Definition

#SIUDEF,a,b,c,d,e,f,g;
a – SIU Name
b – SIU Number (1 to 8)
c – SIU Fault Reporting (Fault Reporting On = 1, Fault Reporting Off = 0)
d – SIU Communications Retries (1 to 16)
e – SIU Communications Response Timeout (1 to 1000)msec
f - SIU Fail Poll Rate (1000 to 3000)msec
g - SIU Normal Poll Rate (1 to 1000)msec

Input Definition

#INPUTDEF,a,b;
a – Input Name
b – Input Number (1 to 16)

PMCV Push Button Definition

#BUTTONDEF,a,b,c,d,e;
a – Button Name
b – Button Number (1 to 16)
c – SIU Number (1 to 8)
d – Button Priority (0 to 255)
e – Override (Zone or Button)

Input Source Definition

#SOURCEDEF,a,b,c,d,e,f;
a - Input source type (Message Card or Source)
b – Matrix Number (1)
c – Input Port Number (1 to 16)
d – Input Volume Level (0 to 63)
e - Input Bass EQ Level (0 to 63)
f – Input Treble EQ Level (0 to 63)

The user selects must select the type of input either message card or source (typically a PMCV). The matrix number relates to the network address of the *alpha*. The input port number is the port the input is physically connected to. Each source can also be configured with individual Volume and EQ settings.

Output Zone Definition

#ZONEDEF,a,b,c;
a – Zone Name
b – Matrix Number (1)
c – Audio Output Channel Number (1 to 16)

Matrix Definition

#MATRIXDEF,a,b,c;
a – Matrix Name
b – Matrix Reference Number (1)
c - Busy Threshold (1 to 255)

Trigger Definition

#TRIGGER,a,b,c,d;
a – I/O Port Number (1 to 4)
b – I/O Pin Number (1 to 8)
c – SIU Number (1 to 16)
d – Button Number (1 to 96)

Parallel I/O Definition

#PIO,a,b,c;
a – I/O Pin Number (1 to 4)
b – Select I/O type (Input or Output)
c – Selects Active High or Active Low Output. Bit Clear for Active High, Bit Set for Active Low.

Busy Definition

#BUSY,a,b,c,d,e,f;
a – Busy Signal Name
b – Busy Port Number (1 or 2)
c – Busy Bit Number (1 to 8)
d – Matrix Number (1)
e – Destination Port Number(1 to 16)
f – Busy Priority (0 – 255)

Live Definition

#LIVE,a,b,c,d,e;
a – Live Signal Name
b – Live Port Number (1 or 2)
c – Live Bit Number (1 to 8)
d – Matrix Number (1)
e – Source Port Number (1 to 16)

Wakeup Definition

#WAKE,a,b,c,d;
a - Wakeup Signal Name
b - Wakeup Id Number (1 to 16)
c - Wakeup Port Number (1 or 2)
d – Wakeup Bit Number (1 to 8)

Surveillance Definition

#SURVEY,a,b,c,d,e;
a – Wakeup Id Number (1 to 16)
b – Source Matrix (1)
c – Source Port (1 to 16)
d – Destination Matrix (1)
e – Destination Port (1 to 16)

Message Configuration

#MSGCFG,a,b,c,d,e,f,g,h,i,j,k;
a – Message Name
b – Message Id Number (0 to 30)
c – Source Matrix (1)
d – Source Port (1 to 16)
e – Message Segment Number (0 to 9)
f – Message Volume Level (0 to 63)
g - Message Bass EQ Level (0 to 63)
h – Message Treble EQ Level (0 to 63)
I – Surveillance Level (0 to 9)
j – Silence after end of Message (0 to 9) seconds
k – Mode, Message can be configured for ‘Play To End’( ) or ‘Play While Held’ ( )

Each message can be assigned a name, this is ignored by the *alpha*,