

KUDOS IQ Shoebox Enclosure


Operator's Manual

© August 2000

Snell & Wilcox Ltd, Durford Mill, Petersfield, Hampshire, GU31 5AZ, United Kingdom.
Tel: +44(0) 1730 821188. Fax: +44(0) 1730 821199.

Safety Warnings

Always ensure that the unit is properly earthed and power connections correctly made.

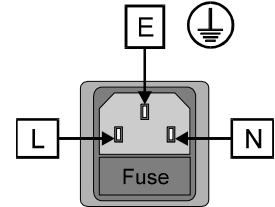
This equipment shall be supplied from a power system providing a **PROTECTIVE EARTH**  connection and having a neutral connection which can be reliably identified.

The power terminals of the IEC mains input connector on the rear panel are identified as shown below:

E = Protective Earth Conductor

N = Neutral Conductor

L = Live Conductor



Power cable supplied for countries other than the USA

The equipment is normally shipped with a power cable with a standard IEC moulded free socket on one end and a standard IEC moulded plug on the other. If you are required to remove the moulded mains supply plug, dispose of the plug immediately in a safe manner. The colour code for the lead is as follows:

GREEN/YELLOW lead connected to E (Protective Earth Conductor)

BLUE lead connected to N (Neutral Conductor)

BROWN lead connected to L (Live Conductor)

Power cable supplied for the USA

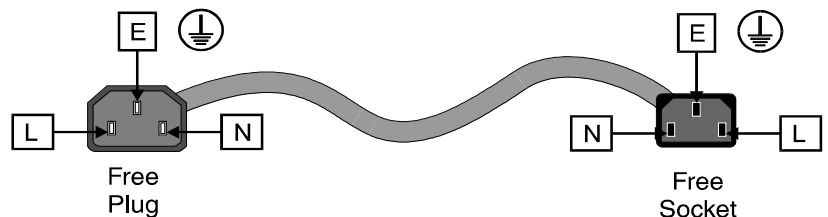
The equipment is shipped with a power cord with a standard IEC moulded free socket on one end and a standard 3-pin plug on the other. If you are required to remove the moulded mains supply plug, dispose of the plug immediately in a safe manner. The colour code for the lead is as follows:

GREEN lead connected to E (Protective Earth Conductor)

WHITE lead connected to N (Neutral Conductor)

BLACK lead connected to L (Live Conductor)

The terminals of the IEC mains supply lead are identified as shown opposite:



Note that for equipment that is not fitted with a mains power switch, to comply with BS60950 Clauses 1.7.2 and 2.6.9, the power outlet supplying power to the unit should be close to the unit and easily accessible.



Warnings

Voltages within this unit can be lethal under certain circumstances. Where power is required to be connected to the unit during servicing great care must be taken to avoid contact with these voltages.

Maintenance should only be carried out by suitably qualified personnel.

No part of this publication may be transmitted or reproduced in any form or by any means, electronic or mechanical, including photocopy, recording or any information storage and retrieval system, without permission being granted, in writing, by the publishers or their authorised agents.

EMC Standards



This unit conforms to the following standards:

Electromagnetic **Compatibility-Generic Immunity Standard BS EN 55103-2 : 1997**

Electromagnetic Compatibility Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use Part 2. Immunity

Electromagnetic **Compatibility-Generic Emission Standard BS EN 55103-1 : 1997**

Electromagnetic Compatibility Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use Part 1. Emission

This equipment conforms to the EMC requirements for, and is intended for use in,

either

The commercial and light industrial environment (including, for example, theatres) E2

or

The controlled EMC environment (for example purpose-built broadcasting or recording studios), and the rural outdoor environment (far away from railways, transmitters, overhead power lines, etc.) E4

EMC Performance Information

Peak mains inrush current following a 5 second mains interruption = A

Performance effects noted in susceptibility tests or restrictions on cable lengths (resulting from failure to meet certain requirements of the standard).

Blar blar Blar blar Blar blar

Safety Standards

This unit conforms to EN60065:1992 as amended by amendment A1(May 1993) and amendment A2 (March 1994). Specification for safety of technology equipment, including electrical business equipment.

EMC Performance of Cables and Connectors

Snell & Wilcox products are designed to meet or exceed the requirements of the appropriate European EMC standards. In order to achieve this performance in real installations it is essential to use cables and connectors with good EMC characteristics.

All signal connections (including remote control connections) shall be made with screened cables terminated in connectors having a metal shell. The cable screen shall have a large-area contact with the metal shell.

COAXIAL CABLES

Coaxial cables connections (particularly serial digital video connections) shall be made with high-quality double-screened coaxial cables such as Belden 8281 or BBC type PSF1/2M.

D-TYPE CONNECTORS

D-type connectors shall have metal shells making good RF contact with the cable screen. Connectors having "dimples" which improve the contact between the plug and socket shells, are recommended.

CAUTION: These servicing instructions are for use by qualified personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the Operating Instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

Table of Contents

SECTION

1	Introduction	
	Description	1.1
	Features	1.2
2	Specifications	2.1
3	Installation	
	Power Connections	3.1
	Rear Panel Connections	3.1
	Internal Settings	3.2
4	Operation	
	1U Active Control Panel	4.1
	Operation from Power-up	4.3
	The Set-Up Menu	4.5
	Control System Overview	4.14
	Remote Control Interface Menu System	4.15

Packing List

The unit is supplied in a dedicated packing carton provided by the manufacturer and should not be accepted if delivered in inferior or unauthorised materials. Carefully unpack the carton and check for any shipping damage or shortages.

Any shortages or damage should be reported to the supplier immediately.

Enclosures:

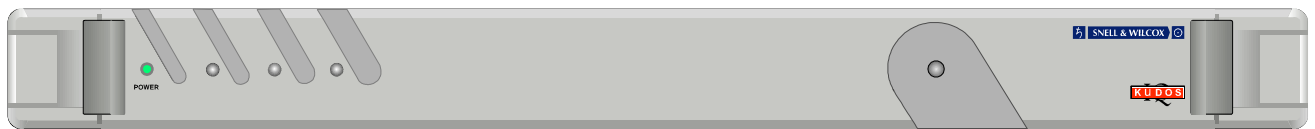
- Shoebox Mainframe
- Power cable
- Operator's Handbook

Description

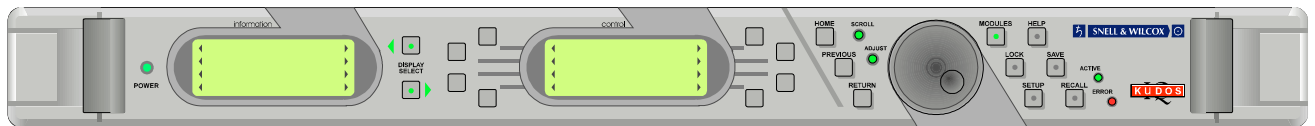
The Kudos IQ front panel Shoebox enclosure is 1 RU size, but only 1/3rd the depth of a standard 1 RU enclosure. It is designed for control desk mounting and acts as a remote control front panel for RollCall™ network control when fitted with an active front panel.

This unit can also be used to connect a PC to the RollCall™ 75 Ω BNC network and as semi-portable unit in engineering maintenance applications.

Shoebox fitted with a passive front panel



Shoebox fitted with an active front panel



Rear panel view



Features

- 1 RU size, but only 1/3rd normal depth for control desk mounting.
- Remote mounted front panel for RollCall™ network control
- Can also be used to connect a PC to the RollCall™ 75 Ω BNC network
- Can be used as a semi-portable unit in engineering maintenance applications.

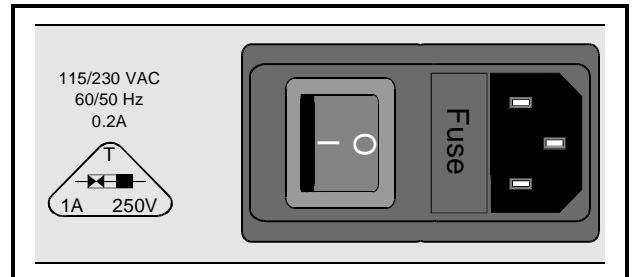
Installation

POWER CONNECTIONS

This is the mains power connector suitable for a standard IEC type power cable and contains a 1 A(T) 250 V fuse. If a plug is fitted to the cable a fuse of 5A (Fast) should be installed.

The Power On/Off switch is an integral part of this connector assembly.

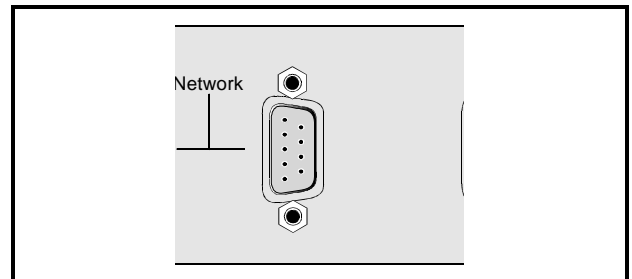
Power ON will be indicated by the illumination of the LED on the front panel.



NETWORK CONNECTOR

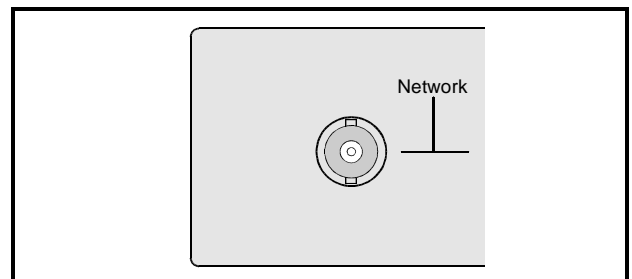
This 9 pin 'D' connector on the rear panel allows the unit to be connected to the RollCall™ 485 network communications system. This connector may also be used as a RS422 port.

The RS485 communications may be at up to 2.5 Mbit/s (high speed) and the RS422 at standard low speed.



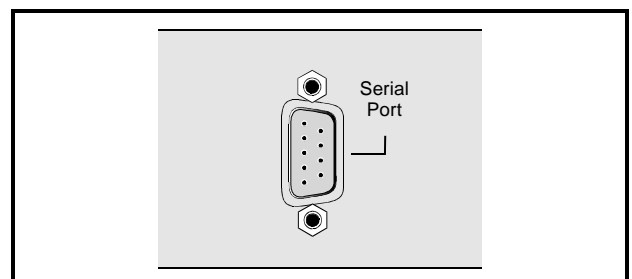
BNC CONNECTOR

This single BNC connector allows the unit to be connected to the RollCall™ network communications system.



SERIAL PORT

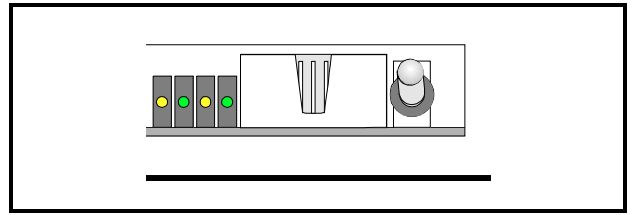
This 9 pin 'D' connector on the rear panel allows the unit to be connected to an RS422 network communications system.



Installation

FRONT PANEL CONNECTOR

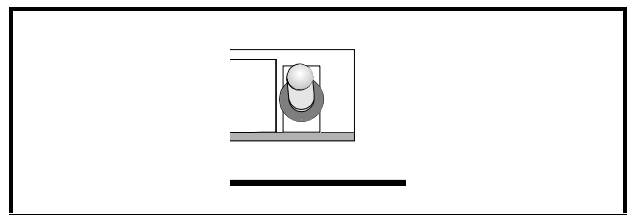
When an active control panel is fitted to the unit, this connector carries the communication signals between the mainframe and the front panel.



COMMUNICATIONS MODE SWITCH

This toggle switch allows the type of communication signal used for the rear panel network 'D' connector, to be selected.

The switch should be in the UP position to use RollCall™485 and in the DOWN position to use RS422(PC) interface signals.



HEX SWITCHES

Both of these switches are used to define the Unit Address code for the equipment. They are only read at power-up.

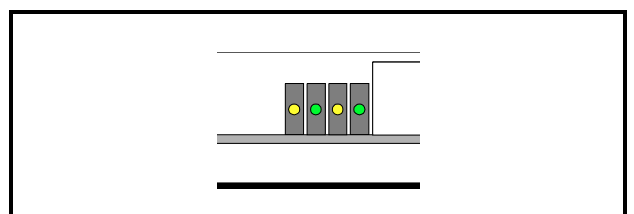
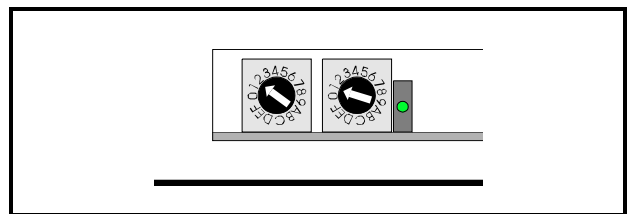
Position `0' on the left hand switch will disable the RollCall™ function on the unit; all other positions on these switches may be used to set the Unit Address code in Hex. (Left hand switch 1 to f, right hand switch 0 to f)

If a code is already in use the RollCall™ receive and transmit LED's will flash alternately at a 1 second rate. The unit must then be powered-down, the code reset and the unit powered-up again.

Note that in a RollCall™ segment, all units must have different unit address codes. For more information see RollCall™ section.

LED INDICATORS

The left hand green LED will be illuminated when the PSU is operating. The next yellow LED indicates that the unit is receiving RollCall™ commands. The next green LED indicates that the unit is transmitting RollCall™ commands. The next yellow LED indicates that the unit is receiving RS422 commands. The next green LED indicates that the unit is transmitting RS422 commands.



Specifications

Features

Inputs/Outputs

RollCall™ Remote Control	BNC connector
RS485 Remote Control	9-pin D connector
RS422 Remote Control	9-pin D connector

Active Front Panel Controls

Dedicated Push Buttons for:

- Home
- Previous
- Return
- Modules
- Lock
- Setup
- Save
- Recall
- Display Select
- Menu Text Select
- Spinwheel for menu control

Preset Controls

Unit address code set switches
Communications mode switch

Preset Control Ranges

Unit address code set switches	2 Hex switches 0 to f
Communications mode switch	Select RollCall™ 485 or RS422 interface

Power

Input Voltage Range	115 / 230 V 60/50 Hz
Input Current	0.2 A
Input Connector	IEC320 Fused 1 A(T) 250 V
Power Switch	Located on rear panel
Power Consumption	20 VA maximum

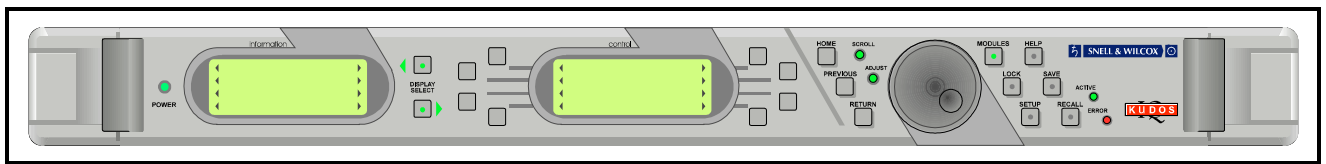
EMC Performance Information

Environment	Commercial and light industrial E2
Peak Mains Inrush Current following a 5 second mains interruption	4 A
Performance Information	Rollcall coaxial remote control network connection, immunity to common-mode AF interference (EN 55103-2 immunity phenomenon I5): This connection is unsuitable for use with cables longer than 10 m

Mechanical

Temperature Range	0 to 40° C operating, -30 to +75° storage
Case Type	1U rack mounting steel case
Dimensions	483 mm x 198 mm x 44.4 mm (w,d,h)
Weight	approximately 1 kg.

Operation



1U ACTIVE CONTROL PANEL

GENERAL INFORMATION

Modules may be controlled by means of a local, front control panel, by a similar panel at a remote location or a computer interface. Communication is via a wired network system called RollCall™ and many units may be controlled.

THE CONTROL PANEL

All operational parameters and selections are made using a system of menus displayed in two LCD windows.

Menus are selected by push buttons and further menu selections made by rotating a spinwheel and pressing a push button.

The spinwheel also allows continuously variable parameters, (where applicable) to be adjusted and the settings seen in the LCD window.

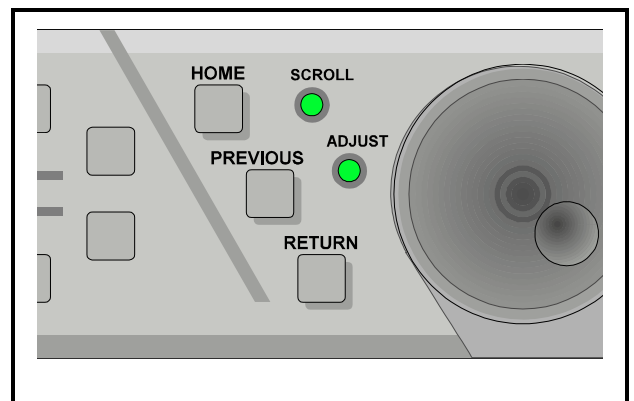
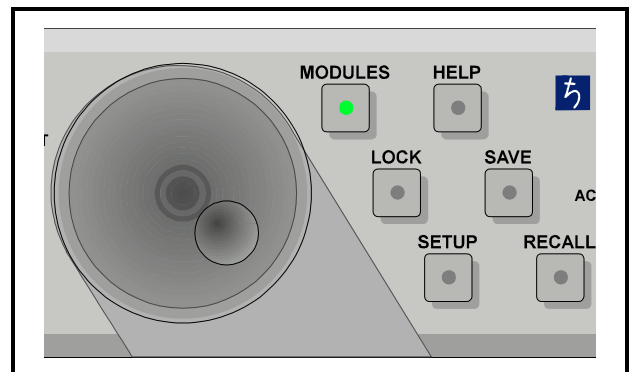
Various specific operations may be achieved by operating dedicated push buttons.

The Menu System

The system may be considered structured as a set of menus and sub-menus which are displayed in the Control window. The Information window will display the current status of the controlled module and other information messages. (e.g. error comments, warnings etc.)

The **Control** display contains the names of the lower-level menus which may be scrolled through using the spinwheel.

The sub-menu may be then be selected by pressing the push button adjacent to the arrowhead in the text line of the menu name.



This sub-menu will then be displayed in the window and will have the option of selecting another sub-menu in the same manner, or allow the adjustment of a particular parameter.

Pressing the **Home** button will display the **Select Menu** in the control window from any position in the menu hierarchy.

The **Previous** button allows a return to the last menu that was changed. Up to 20 changed menus may be retraced using this function.

The **Return** button will allow access to the previously selected upper-level menu.

Note that the spinwheel will only be operative when the **Scroll** green LED is illuminated, indicating that a menu with more than four text lines is being displayed. Operating the spinwheel then allows the other text lines to be displayed.

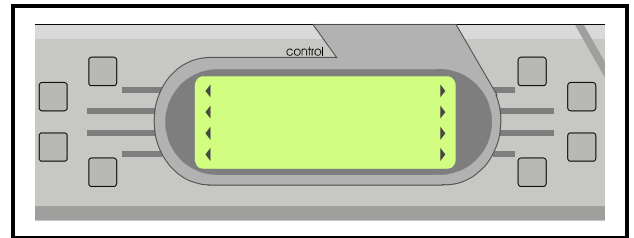
When illuminated the **Adjust** LED indicates that parameters of the selected module may be adjusted.

THE LCD DISPLAY WINDOWS

CONTROL Window

The **Control** window displays all Selection Menus and sub-menus.

The selection is made by pressing the button adjacent to the required item.



SYMBOLS

Symbols used in this window have the following meanings:



These symbols, to the right or left of text indicate that the item may be selected. Pressing the button adjacent to this symbol selects the menu item.

...

When three dots (periods) follow an item it indicates that more sub-menus are available under this item.

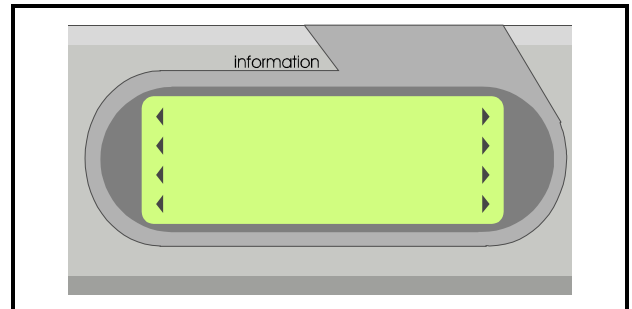
INFORMATION Window

The Information window has four lines of text indicating current selections and various information messages.

Note that some units will overwrite the information window indication with their own messages. Under these conditions the control panel will only be able to write to the information window when the unit has been disconnected.

The first line will contain the name of the unit which is currently being controlled.

The second, third and fourth lines provide information



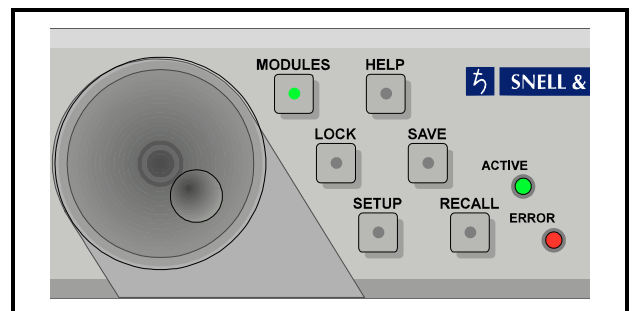
OVERVIEW

The control panel allows access to modules in the following sequence:

Access to unit, then access to the gateway module of a unit, which in turn allows access to a particular module which then allows module functions to be controlled.

Alternatively the control panel allows direct access to stand-alone units.

The Roll Call system can operate over 15 networks, 240 nodes per network and 64 nodes per segment.



OPERATION FROM POWER-UP

On power-up the control window will display:

No Active Module

Modules: X=Number of modules connected to the system

The MODULES button should then be pressed and will become illuminated. A list of locations and their status (see SYMBOLS) will then be displayed in a list.

Pressing the button adjacent to the gateway symbol (or stand-alone unit) reveals the list of locations followed by a list of modules at that location.

To connect the desired module press the button next to the right hand arrowhead. The main menu for that module will then be displayed in the CONTROL window and the module will be connected to the control panel.

The INFORMATION window will now display the name of the module and the status/settings of that module.

For details of the module sub-menus available, reference should be made to the operators manual for that particular module.

To disconnect the module press the MODULES button again and the CONTROL display will show the module name followed by a illuminated lamp symbol (this indicates that the module is connected)

Selecting this symbol will disconnect the module and when the MODULES button is pressed again the display will show the module name and the right hand arrowhead without an intervening symbol indicating that the module is disconnected.

LED INDICATORS

The green LED indicator on the front panel marked POWER will be illuminated when the unit is powered-up.

The LED marked ACTIVE will be illuminated when the front panel is connected to and communicating with a unit.

The LED marked ERROR will flash to indicate that errors have occurred.

Note that if an attempt is made to access data that does not exist, this will be recognised as an ERROR.

Pressing the HELP button will display the nature of the error(s).

If the HELP button indicator is also flashing, pressing this button will display a list of the errors in the control window.

Pressing the button adjacent to the error message will clear the error message if the error no longer exists.

Note that the ERROR LED will continue to flash until all the error messages have been cleared.

DEDICATED PUSH BUTTONS

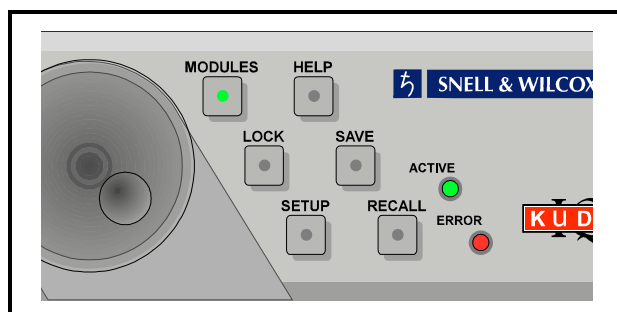
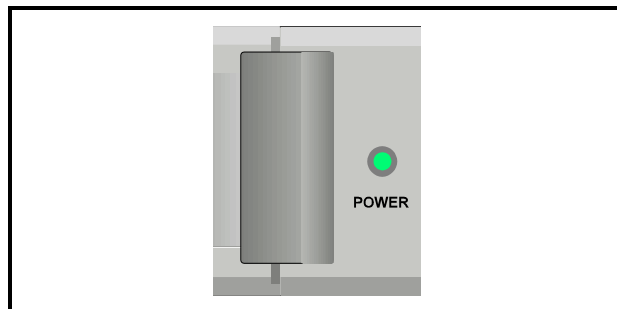
Various specific operations may be carried out by using these push buttons.

When pressed the button LED will become illuminated, indicating that the function is active. Pressing the button again deactivates the function and the button LED will turn off.

MODULES

When pressed and becomes illuminated, this button displays in the CONTROL window a list of the modules that are available to be connected to the control panel.

The list shows the name of the module and the connection condition (connected or not connected) by means of symbols.



The symbols used are shown below:



This symbol represents a gateway.



This indicates that the unit is currently connected to this control panel. Pressing the adjacent button will disconnect the unit from the control panel.



This indicates that this unit is currently connected to and locked by another control panel.



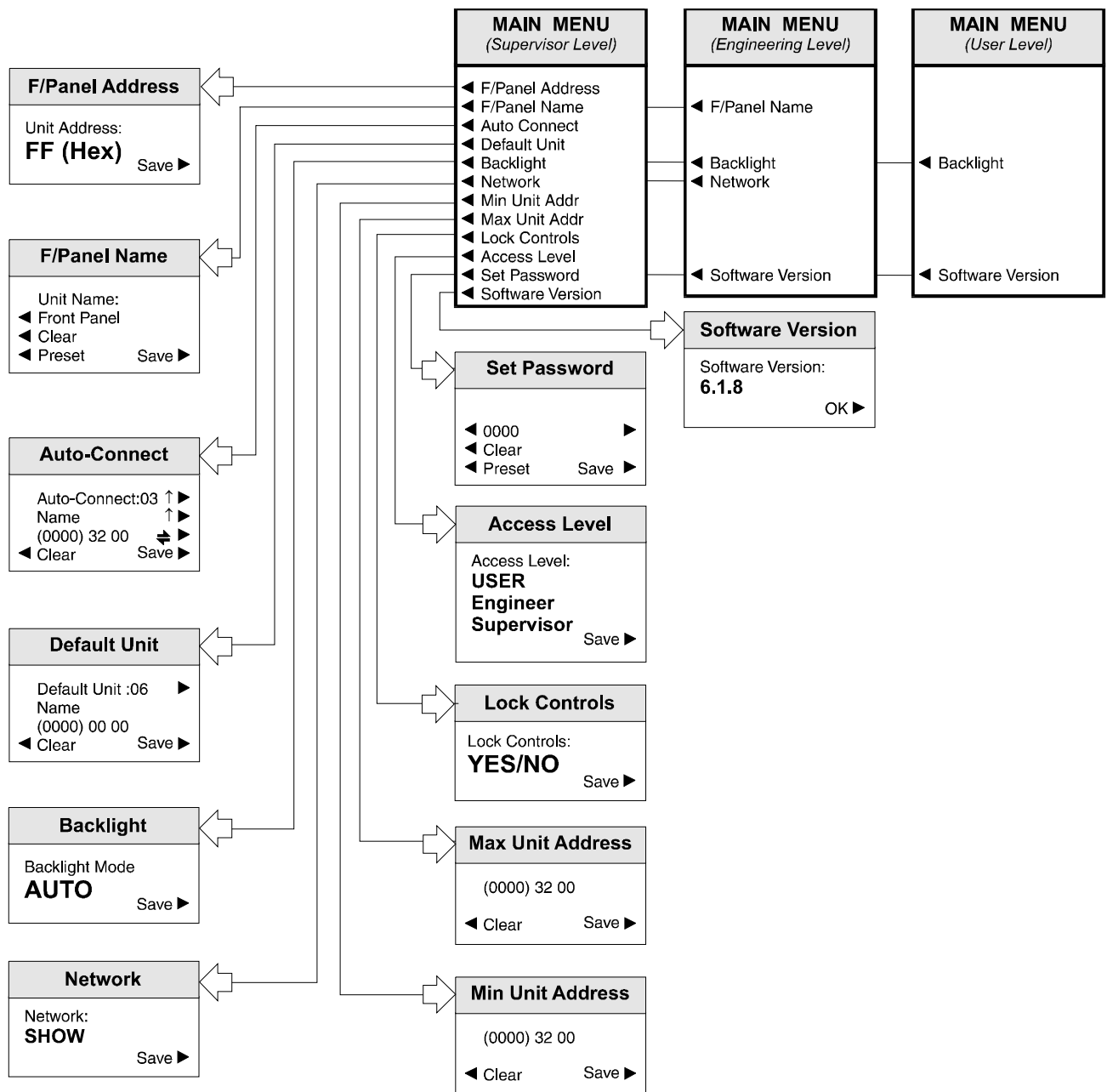
This shows that the unit is in the standby mode. (i.e. currently not active but locked by this control panel)



This represents a bridge connection



This represents a Computer



Setup Menu System
(Software Version 6.1.8 onwards)

SETUP MENU

(For Software Version 6.1.8 onwards; for previous version V6.0.7 see page 8, for versions previous to V6.0.7 see page 13)

Changes for Software Version 6.1.8

Lock Controls item added to main menu in Supervisor level with a sub-menu showing YES/NO dialogue box added.

Lock Controls

This item allows the front panel to be locked-out such that it is inoperative. This function can only be entered in the Supervisor access mode.

To set this function, enter at Supervisor level, select the **Lock Controls** item to reveal the dialogue box.

Select either YES or NO and save.

The function is now set.

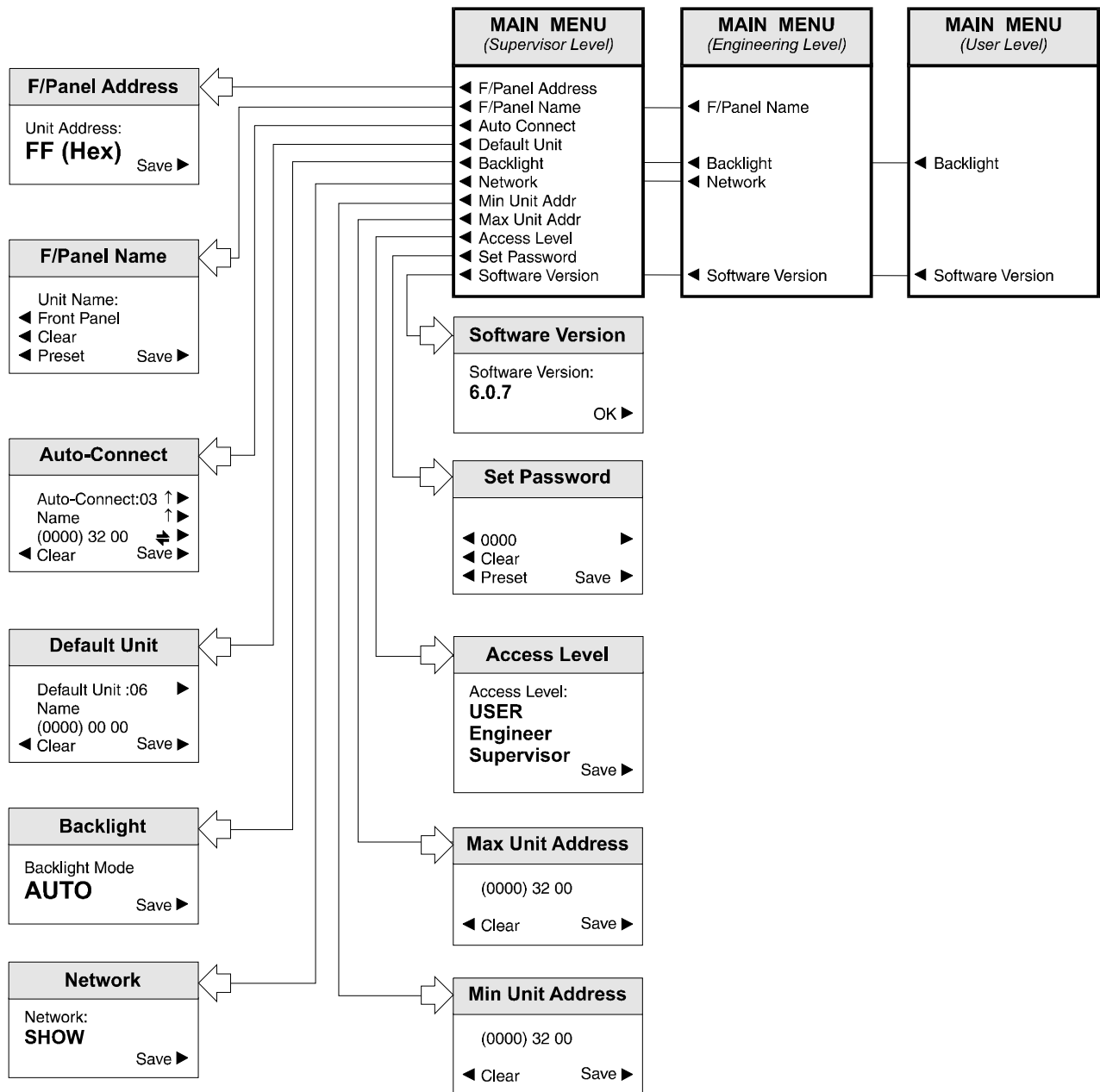
Note that if this function is set to

Lock Controls: YES

and the unit is powered-up, the message

Front Panel Locked by Supervisor!

will appear.



Setup Menu System
 (Software Version 6..0.7 onwards)

SETUP

(For Software Version 6.0.7; for previous versions see page 4.13)

Pressing this button displays a list of front panel options in the CONTROL window. Examples of these are shown in the 'Setup Menu System' drawing on the previous page.

Changes for Software Version 6.0.7

1. *Program Keys* function deleted from main menu
2. Items added to main menu:
 - Min Unit Addr
 - Max Unit Addr
 - Set Password
3. Three levels of access are provided: User, Engineer and Supervisor, with password protection. Each access level allows a particular set of sub-menus to be accessed.

SETUP Sub-Menus

These are selected by pressing the button adjacent to the desired function.

Note that all these sub-menus include a SAVE function which is used to save particular settings. If the changed settings do not need to be saved use the RETURN function to return to the previous menu; this action will abandon any changes and revert to the previously saved settings.

F/Panel Address

The address of this control panel will be displayed as a 2-digit hexadecimal code.

Note that the code 0,0 effectively switches the unit off from the network. The codes 0,1 to 0,F inclusive are reserved for bridge addresses. Codes 1,0 to F,F inclusive are available to the user.

The address code is user defined in the range 1,0 to F,F and is set by rotating the spinwheel to the desired code and selecting the SAVE function.

F/Panel Name

The control panel may be given a name using this function (e.g. Edit Suite, Studio 2 etc.) The maximum number of characters, including spaces, is 19 and may consist of letters and numbers (ASCII Characters)

To edit the name press either the left or right hand button adjacent to the arrows for the centre text line until the character to be changed is flashing. (In the picture opposite this is the letter E) Using the spinwheel, scroll through to the character required and then, using the left and right hand buttons, select the next character; the other characters may be changed in the same way.

When the name has been set to that required press the SAVE function to save the name. Note that to remove a character and leave a clear space in the text line the **Clear** function (above Preset) should be used. The **Preset** function returns the text to the original data.

Auto Connect

The Auto Connect menu allows a number of units to be automatically connected to the control panel at power-up.

Up to 16 units may be designated in this way by assigning a number to them. (00 to 15)

Note that these numbers are also used to assign the default unit .

The units in this list are (on power-up) in the standby mode and although not currently active are locked to this control panel and may not be controlled by any other panel.

The unit name (second text line of the control window display) may be displayed by scrolling through the list using the button adjacent to the \leftarrow arrow.

The network address of the unit is shown in the third text line as three sets of hexadecimal codes.

The first set is the network address, the second set is the physical unit address and the third set is the port address. Each set of these codes may be selected (the set will be shown enclosed in brackets) by pressing the button adjacent to this line.

The code may then be changed using the spinwheel.

The code may be reset to 0000 00 00 by pressing the clear button. This action also removes the unit name from the display and inserts a ? symbol indicating that no unit will be connected to this session.

The Auto Connect set-up may be saved by pressing either the dedicated front panel Save button or by pressing the button adjacent to the Save display text.

Default Unit

On power-up the default unit will be automatically connected, its menus retrieved and will be ready for active control.

To define the default unit select Default Unit. Press the button adjacent to the default text arrowhead until the desired number is reached. (This number is the number assigned to a particular unit in the Auto Connect set-up) The name of this unit will appear in the second line of text.

Select Save to save this setting.

The Clear selection sets the default unit to 'None'

Note that if no units have been assigned numbers in the Auto Connect set-up a ? will appear in the second line of text. Also when the numbers are selected (in rotation) the word 'None' will appear after Default Unit when the number 15 is exceeded. This confirms that no units have been assigned a number.

Note that only one unit may be designated as the default unit.

BackLight

Selecting this function allows the backlighting of the display windows to be set, by rotating the spinwheel, to the following modes:

OFF

Backlight always Off. Use this mode where ambient light level is high.

ON

Backlight always On. Use this mode where ambient light level is low to improve text visibility.

AUTO

Backlight will normally be On but will default to Off after 2 minutes. The backlight will return to Auto On whenever any front panel control is operated.

Press the button adjacent to the Save text to save the backlight mode.

Network

This function allows the front panel to be 'hidden' from the network system. In the Hide mode this front panel will not appear in the Module List displayed on other control panels in the system.

SHOW

This front panel will appear in the Module List of other control panels.

HIDE

This front panel will not appear in the Module List of other control panels.

Min/Max Unit Addr

The front panel can only hold a maximum of 200 addresses. The Min and Max Unit Addr (Address) function allows a range of addresses to be configured for partial use of the network.

The **Min Unit Addr** selection sets the minimum address.

The **Max Unit Addr** selection sets the maximum address.

The overall range of addresses is from 1 to 255.

Access Level

The setup of the active front panel may be accessed at various levels. At the highest level (Supervisor) access is allowed to all functions. This level may only be accessed by entering a password. At lower levels (User and Engineer) access is only allowed to a limited number of functions.

As supplied the unit will be in a temporary Supervisor mode with no password protected access levels.

From the main menu select **Set Password**

To enter the Supervisor level and set up a password proceed as follows:

1. Power-down the unit
2. Hold down the **Modules** button and power-up the unit. Continue to hold down the button for a few seconds while powering-up.
3. From the main menu select **Access Level**
4. Using the spinwheel, select **Supervisor** and press **Save**
5. From the main menu select **Set Password**
6. The default password will be 0000 To change the password select the line for digits 1, 2, 3 and 4, and using the spinwheel to select the desired characters. Press **Save**

The password has now been set.

Selection levels are:

USER	Provides access to basic user controls.
ENGINEER	Provides access to more controls than at user level but less than at supervisor level.
SUPERVISOR	Provides access to all available control functions.

To set up this function, rotate the spinwheel to the desired level and select Save.

Note that the number of control functions available at the various levels are set by the software/hardware of the module and are not user-adjustable.

Version

This shows the Software version number. Press OK to return to the previous menu.

SAVE

This button reveals a list of 8 memory locations and allows the address of the currently active module to be saved to one of these memory locations by pressing the button adjacent to the desired memory location number.

RECALL

This button reveals a list of 8 memory locations and allows the saved information to be recalled from one of the memory locations by pressing the button adjacent to the desired memory location number.

When selected the module will be reconnected without the need to select and connect via the modules list.

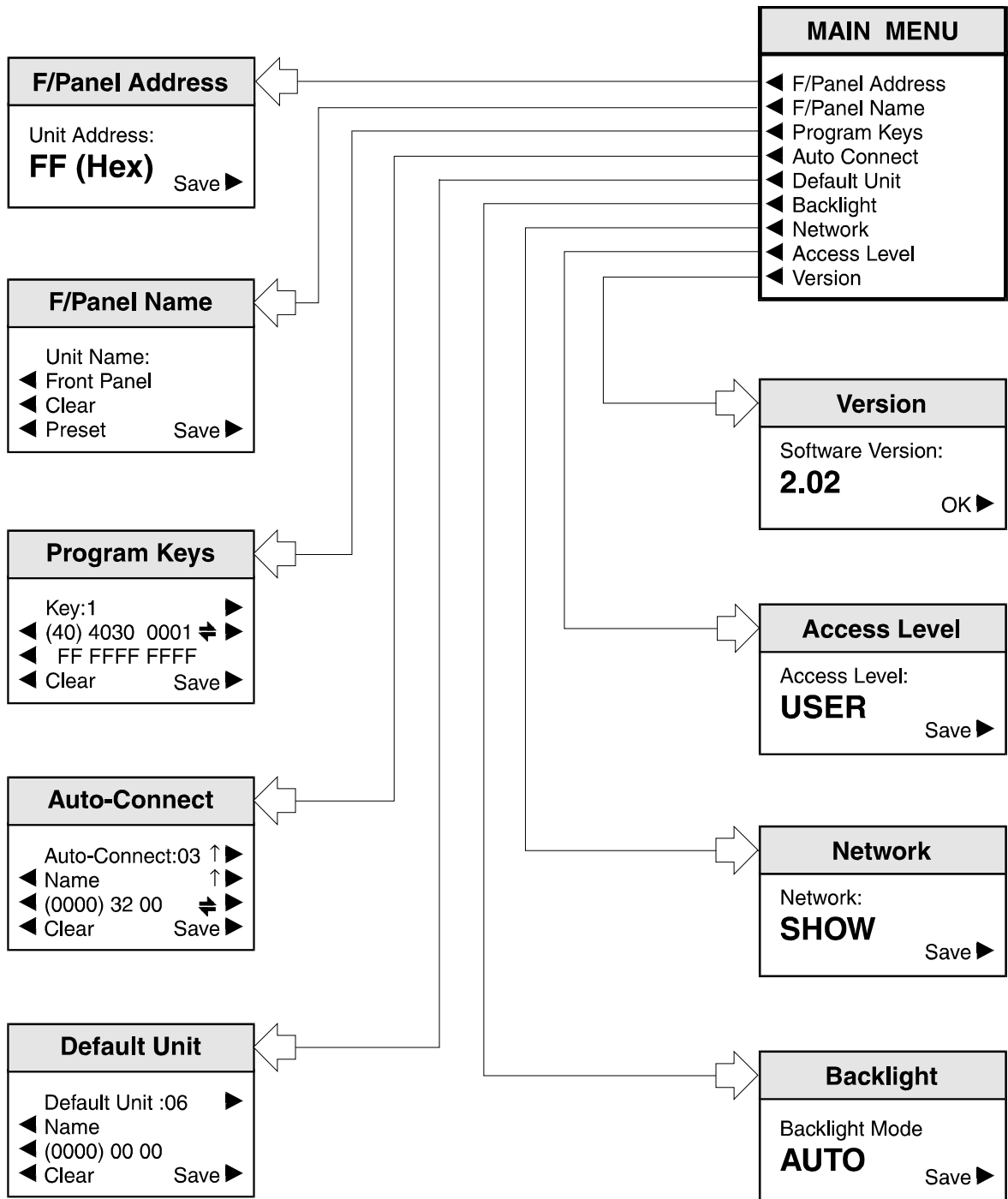
HELP

Pressing this button will display warnings in the windows when applicable.

If an error has occurred (ERROR indicator illuminated) a message will be displayed in the control window. Pushing the button adjacent to the error message will clear it from the list.

If there are no errors the window will display:

No Warnings



Setup Menu System

LOCK

Pressing this button enables a selected module to be locked or unlocked to the control panel. This function will only be available for a unit which is already connected to the front panel. Other modules may be still be connected to, and controlled by the control panel but when the system is powered-up the control panel will only lock to the designated default unit allocated in the Set-Up mode.

The name of the currently selected unit and the 'lock' status. i.e. whether the unit is locked or unlocked to this control panel, will be shown in the Information window.

If a unit is locked/unlocked to this control panel 'Lock/unlock' will appear after the units name in the information window. To change the lock press the Lock button; this will toggle the text from 'lock' to 'unlock'

The connection may then be saved to a memory location by pressing the SAVE button function.

SETUP

(For Software previous to Version 6.0.7; for later version V6.0.7 see page 4.8, for V6.1.8 see page 4.6)

Pressing this button displays a list of front panel options in the CONTROL window. Examples of these are shown in the 'Setup Menu System' drawing.

SETUP Sub-Menus

These are selected by pressing the button adjacent to the desired function.

Note that all these sub-menus include a SAVE function which is used to save particular settings. If the changed settings do not need to be saved use the RETURN function to return to the previous menu; this action will abandon any changes and revert to the previously saved settings.

F/Panel Address

The address of this control panel will be displayed as a 2-digit hexadecimal code.

Note that the code 0,0 effectively switches the unit off from the network. The codes 0,1 to 0,F inclusive are reserved for bridge addresses. Codes 1,0 to F,F inclusive are available to the user.

The address code is user defined in the range 1,0 to F,F and is set by rotating the spinwheel to the desired code and selecting the SAVE function.

F/Panel Name

The control panel may be given a name using this function (e.g. Edit Suite, Studio 2 etc.)

The maximum number of characters, including spaces, is 19 and may consist of letters and numbers (ASCII Characters)

To edit the name press either the left or right hand button adjacent to the arrows for the centre text line until the character to be changed is flashing.

Using the spinwheel, scroll through to the character required and then, using the left and right hand buttons, select the next character; the other characters may be changed in the same way.

When the name has been set to that required press the SAVE function to save the name.

Note that to remove a character and leave a clear space in the text line the Clear function (above Preset) should be used.

The Preset function returns the text to the original data.

Program Keys

This function is not available to the user.

Auto Connect

The Auto Connect menu allows a number of units to be automatically connected to the control panel at power-up.

Up to 16 units may be designated in this way by assigning a number to them. (00 to 15)

Note that these numbers are also used to assign the default unit .

The units in this list are (on power-up) in the standby mode and although not currently active are locked to this control panel and may not be controlled by any other panel.

The unit name (second text line of the control window display) may be displayed by scrolling through the list using the button adjacent to the arrow.

The network address of the unit is shown in the third text line as three sets of hexadecimal codes.

The first set is the network address, the second set is the physical unit address and the third set is the port address. Each set of these codes may be selected (the set will be shown enclosed in brackets) by pressing the button adjacent to this line.

The code may then be changed using the spinwheel.

The code may be reset to 0000 00 00 by pressing the clear button. This action also removes the unit name from the display and inserts a ? symbol indicating that no unit will be connected to this session.

The Auto Connect set-up may be saved by pressing either the dedicated front panel Save button or by pressing the button adjacent to the Save display text.

Default Unit

On power-up the default unit will be automatically connected, its menus retrieved and will be ready for active control.

To define the default unit select Default Unit. Press the button adjacent to the default text arrowhead until the desired number is reached. (This number is the number assigned to a particular unit in the Auto Connect set-up) The name of this unit will appear in the second line of text.

Select Save to save this setting.

The Clear selection sets the default unit to 'None'

Note that if no units have been assigned numbers in the Auto Connect set-up a ? will appear in the second line of text. Also when the numbers are selected (in rotation) the word 'None' will appear after Default Unit when the number 15 is exceeded. This confirms that no units have been assigned a number.

Note that only one unit may be designated as the default unit.

BackLight

Selecting this function allows the backlighting of the display windows to set, by rotating the spinwheel, to the following modes:

OFF

Backlight always Off. Use this mode where ambient light level is high.

ON

Backlight always On. Use this mode where ambient light level is low to improve text visibility.

AUTO

Backlight will normally be On but will default to Off after 2 minutes.

The backlight will return to Auto On whenever any front panel control is operated.

Press the button adjacent to the Save text to save the backlight mode.

Network

This function allows the front panel to be 'hidden' from the network system. In the Hide mode this front panel will not appear in the Module List displayed on other control panels in the system.

SHOW

This front panel will appear in the Module List of other control panels.

HIDE

This front panel will not appear in the Module List of other control panels.

Access Level

The number of module functions and parameters that may be accessed and controlled by the front panel is set by the Access Level menu.

Some modules have a large number of variables which, under normal conditions, the user will not need to control whereas an engineer or supervisor will need to be able to control an increasing number of parameters.

Selection levels are:

USER Provides access to basic user controls.

ENGINEER Provides access to more controls than at user level but less than at supervisor level.

SUPERVISOR Provides access to all available control functions.

To set up this function rotate the spinwheel to the desired level and select Save.

Note that the number of control functions available at the various levels are set by the software/hardware of the module and are not user-adjustable.

Version

This shows the Software version number. Press OK to return to the previous menu.

SAVE

This button reveals a list of 8 memory locations and allows the address of the currently active module to be saved to one of these memory locations by pressing the button adjacent to the desired memory location number.

RECALL

This button reveals a list of 8 memory locations and allows the saved information to be recalled from one of the memory locations by pressing the button adjacent to the desired memory location number.

When selected the module will be reconnected without the need to select and connect via the modules list.

HELP

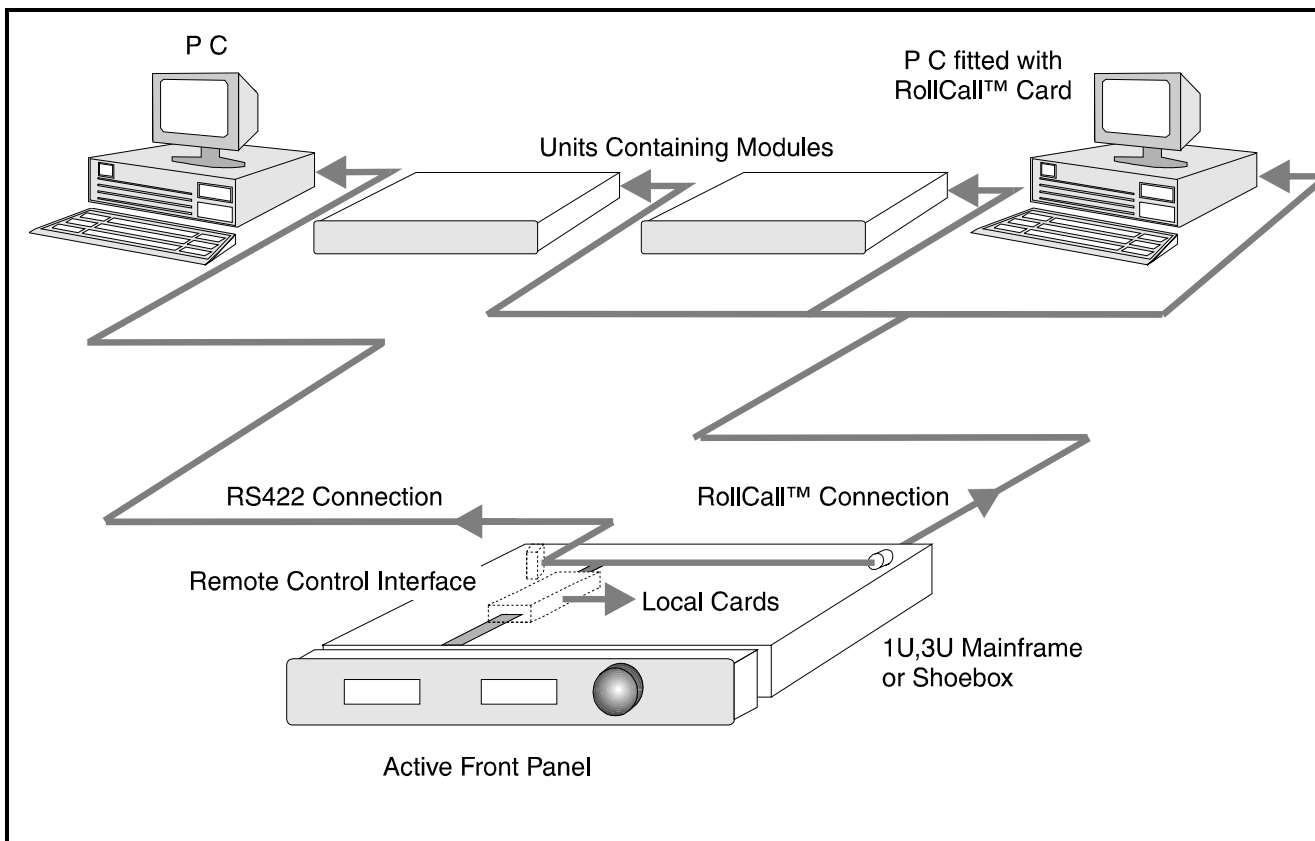
Pressing this button will display warnings in the windows when applicable.

If an error has occurred (ERROR indicator illuminated) a message will be displayed in the control window. Pushing the button adjacent to the error message will clear it from the list.

If there are no errors the window will display:

No Warnings

CONTROL SYSTEM OVERVIEW



The RollCall™ control system allows RollCall™ compatible modular cards fitted into 1U or 3U main frames and dedicated units, to be controlled by means of an active front panel (local or remote), a P. C. (fitted with a RollCall™ card) via the RollCall™ (a single coaxial cable) network or by a P.C. via an RS422 connection.

A Remote Control Inter-Face (RCIF) is used between the active front panel and the communication connectors and is housed in the mainframe or shoebox. (A shoebox is a small case containing a power supply and a RCIF which functions as a mainframe without modules)

The active front panel may communicate to either of the following:

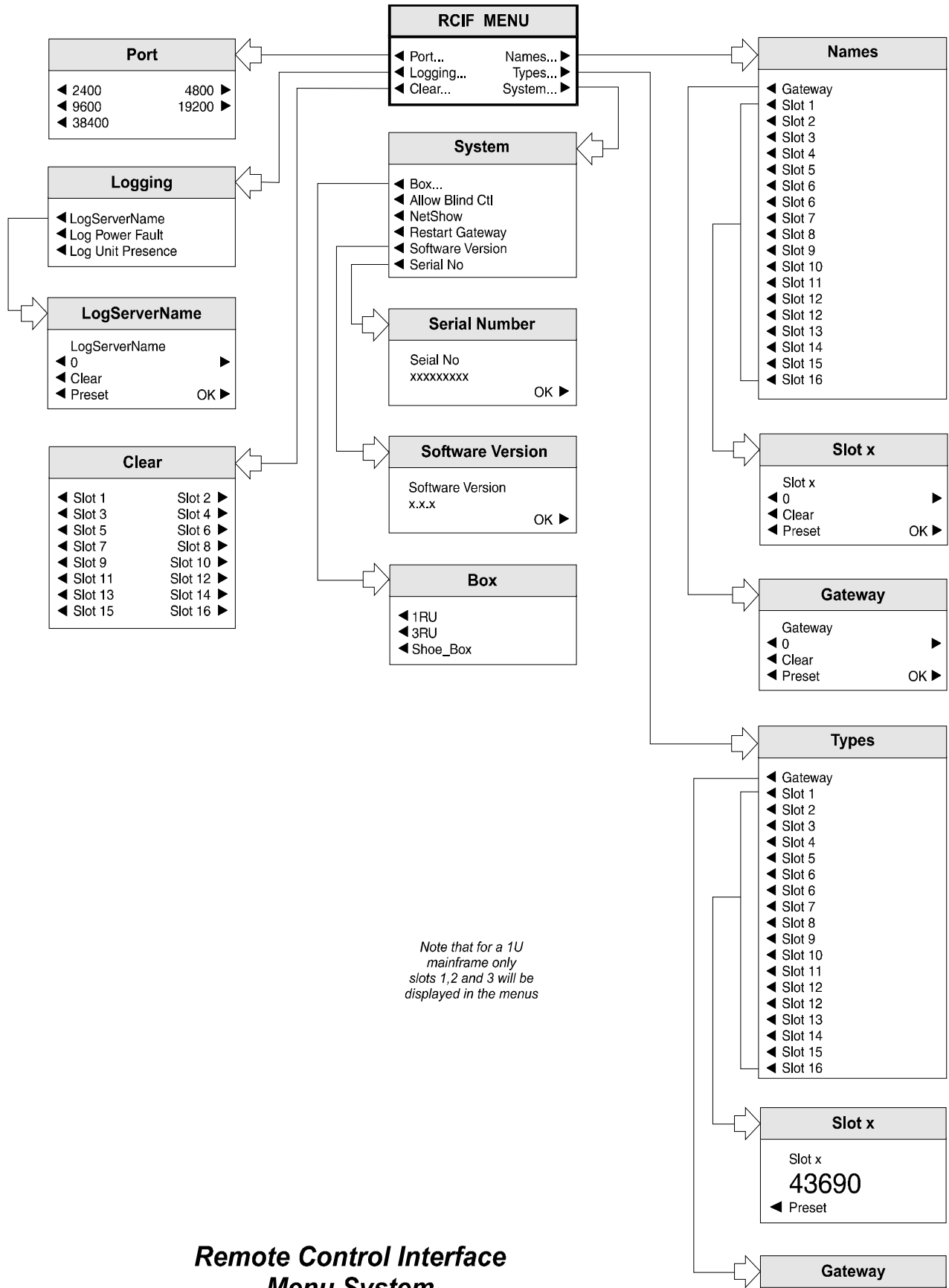
- Modular cards contained within the local mainframe
- The RollCall™ network (via BNC Connector)
- PC via 9-pin D connector for RS422 or RollCall™485

Operation uses a system of menus displayed in two LCD windows on the active front panel.

Menu items are selected by push buttons and further menu selections made by rotating a spinwheel and pressing a push button.

The spinwheel also allows continuously variable parameters, (where applicable) to be adjusted and the settings seen in the LCD window.

Modules may be accessed and controlled by activating the RCIF system, stepping into a list of modules and connecting to a particular module. The module may then be controlled by the active control device.



THE RCIF MENU SYSTEM (See drawing 'Remote Control Interface Menu System')

GENERAL INFORMATION

The RCIF Menu System allows access to setting of RCIF system parameters. All operational parameters and selections may then be made using a system of menus displayed in two LCD windows. Menus are selected by push buttons and further menu selections made by rotating a spinwheel and pressing a push button.

The spinwheel also allows continuously variable parameters, (where applicable) to be adjusted and the settings seen in the LCD window.

Various specific operations may also be achieved by operating dedicated push buttons.

RCIF MENU DETAILS

To access this menu level press the Modules button on the front panel. This will reveal a scrollable list of modules. Press the left-hand button adjacent to the desired module. The RCIF main menu will be revealed.

The main, or top level menu allows various sub-menus to be selected by pressing the button adjacent to the required text line.

Note that where a menu item is followed by three dots (...) this indicates that a further sub-menu may be selected.

Whenever a menu item is selected the parameters of that selection will be displayed in the Information window of the front panel. Where the selection is purely a mode selection and does not enable a sub-menu, the text will become reversed (white-on-black) indicating that the mode is active. If the mode is not available for selection the text will remain normal.

Port

This selection reveals the Serial Speed sub-menu which allows the speed of the serial communications data signal to be set.

Logging

If a logging device is attached to the RollCall™ network, certain information may be made available for logging.

The first item in the Logging sub-menu is 'Gateway' This selection allows information about the RCIF system to be logged.

All the other selections allow a particular slot to be selected and information relevant to the module fitted in that slot may be logged.

Names

This selection reveals a sub-menu containing a list of all slots available plus the RCIF.

Each of these items can be given a specific name. When the item is selected, the first character of will be in reversed flashing text; this character can then be changed by rotating the spinwheel. When the desired character is found the button to the left or right of the text line should be pressed and the next text character will be highlighted and available for changing. The buttons to the left and right of the text line may be used to select other characters.

To save the new text, press the OK button. It should be noted that this is the only way to save the new text as any other button function will return to another menu without modifying the original text.

Note that to remove a character and leave a clear space in the text line the Clear function (above Preset) should be used.

The Preset function returns the text to the type name of the module installed in the relevant slot.

Clear

This sub-menu allows a slot to be disconnected from a controlling unit. Select the desired slot and press the adjacent button. If the slot text appears as reversed text the disconnect was successful.

System

NetShow

This function allows a unit to be 'hidden' from the network system. Pressing the adjacent button will toggle the text from normal to reversed.

When the text shows as normal the previously selected unit will not appear in the Module List displayed on other control panels in the system. When the text is reversed the unit will appear in the Module List displayed on other control panels in the system.

Note that if a unit is 'hidden' and control is required the units address should be changed using the Hex switches on the Remote Control Interface card. When the unit address is changed the NetShow state will be found to be in reversed text and the unit will now be shown in the Module List.

Version

This reveals the version number of the software used in the RCIF. Press OK to return to the previous menu.