



digital keying modular  
interface audio  
converters analogue video

# REMIN-D-E

1U remote control panel  
for use with an Ethernet network

# USER MANUAL



# Contents

<b>1</b>	<b>Introduction</b>	<b>3</b>
<b>2</b>	<b>Hardware installation</b>	<b>4</b>
2.1	Connection details	4
2.2	Controls	4
	The panel start up displays	4
	Menu tree	5
	Setup menu	5
	Scanning for frames	7
	Manual frame selection	8
	Status menu	8
<b>3</b>	<b>Controlling frames and cards</b>	<b>9</b>
	Selecting different modules	10
	Node numbers	12
	Navigating the display	12
<b>4</b>	<b>Trouble shooting</b>	<b>13</b>
	Fault finding guide	13
	Frequently asked questions	13
<b>5</b>	<b>Specification</b>	<b>14</b>
<b>6</b>	<b>Appendix 1</b>	<b>15</b>
	Setting up and connecting via the Ethernet	15
	Changing the IP Address	15
	Adding a frame serial number	17
	Naming	18

Updating software

18

# 1 Introduction

The REMIND-E is a 1U remote control panel that can control any number of Crystal Vision Ethernet enabled frames over an Ethernet network allowing the operator to effortlessly select the frame they wish to control.

REMIND-E is able to apply custom frame names to help the user identify the frame being communicated with. It is also possible to connect multiple control panels allowing any frame to be controlled from a number of locations.

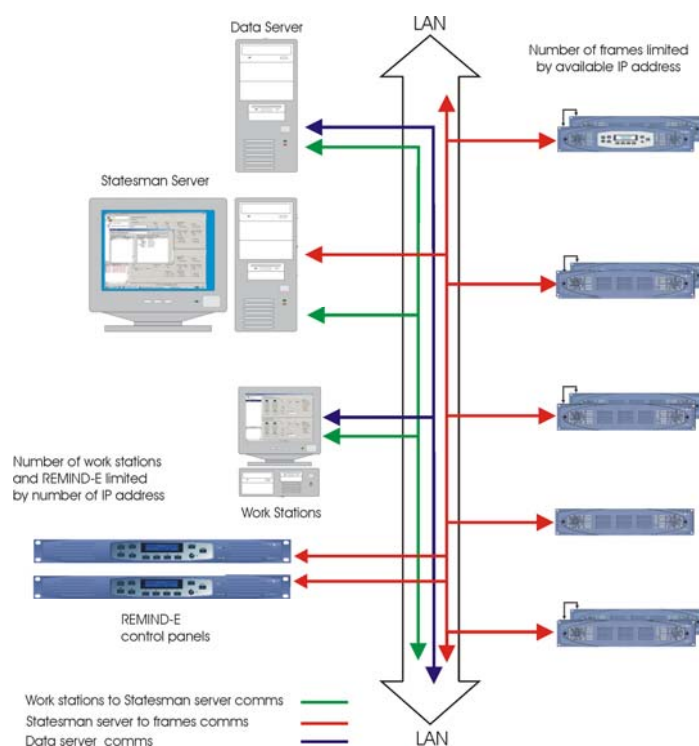
Simultaneous front panel control alongside Statesman CPU control is also possible.



*REMIND-E*

The main features are as follows:

- User friendly
- Connection by standard CAT5 patch cable.
- Multiple REMIND-E control panels used on a single system
- Number of frame controllable only limited by available IP addresses
- Ideal alternative to PC control.



## 2 Hardware installation

### 2.1 Connection details

The REMIND-E only requires two connections, the IEEE mains (plug supplied) and a CAT5 patch cable to the local area network servicing the frames to be controlled.



*REMIND-E rear view*

### 2.2 Controls

The REMIND-E has a two-line 20-character display, a rotary control and a number of push switches some which have internal LEDs which will be illuminated to indicate an active switch.

#### The panel start up displays

At power up all seven key LEDs will illuminate and after a brief delay the display will enter the home menu.



*The REMIND-E panel control menu*

The REMIND-E has four sub menus which are reached by way of the four soft keys F1-4. The rotary control is used to scroll within a menu and input data. The further dedicated keys are largely used once the panel is in control of a frame.

The four REMIND-E menus are:

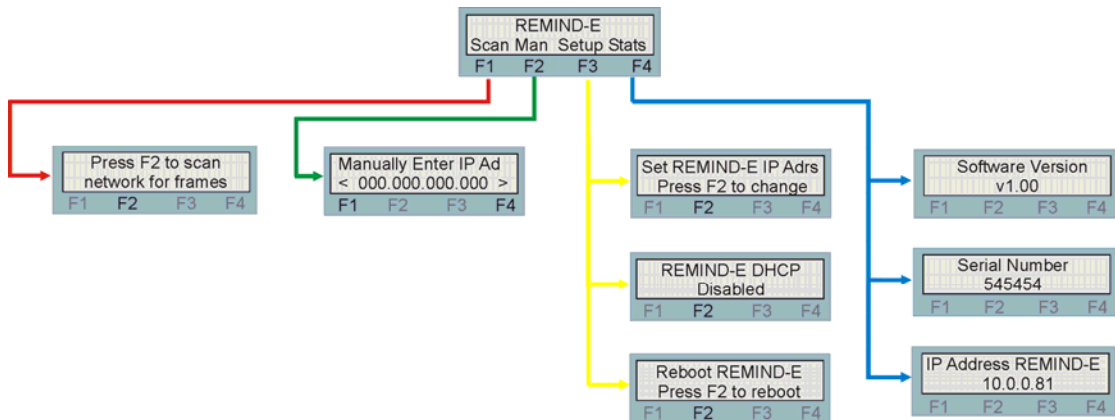
F1 – Scan (search for all frames connected to the local Ethernet).

F2 – Man (manually connect a frame with a known IP address).

F3 – Setup (manually set the REMIND-E IP address or select DHCP).

F4 – Stats (Serial number, software version and current IP address).

**Menu tree**



*Control panel menu*

**Setup menu**

On initial installation the IP address of the REMIND-E will be set to the IP address used by the Crystal Vision production department. It is likely this will need to be changed to prevent clashing with existing equipment such as a second REMIND-E or to one that is within the customers preferred range of addresses.

**Changing the REMIND-E IP address**

There are two ways of changing the IP address of REMIND-E. This can be done either manually or by enabling dynamic host configuration protocol (DHCP) if supported. Both methods are described below.

*Manual configuration*

From the home menu press the soft key F3 to enter the setup menu. Once in the setup menu, if necessary rotate the shaft control to display 'Set REMIND-E IP Adrs' and press the soft key F2, this will be indicated by the illuminated button LED.

If DHCP is enabled a warning message will appear in place of this menu and it will be necessary to disable DHCP before manually changing the IP address.

The following will be displayed.



*Changing the REMIND-E IP address*

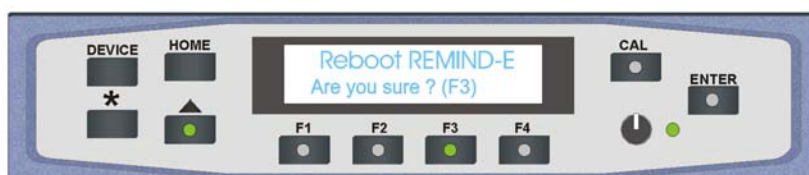
The new IP address is entered with the shaft control one digit at a time. The active digit is indicated by the \* which can be moved left or right using the F1 and F4 soft keys. Once the new address is complete press the ENTER key to accept the new address.

The display will now indicate that it is required to reboot the REMIND-E. This is necessary before the new IP address is actioned. Rotate the rotary shaft control to display the reboot menu and press soft key F2.



*REMIND-E Reboot menu*

Once the F2 soft key has been pressed you will be asked to confirm this action by pressing the F3 soft key.



*Confirm reboot message*

REMIND-E will now briefly indicate that it is rebooting after which the panel will blank before restarting in the home menu. To confirm that the new IP address is in place enter the Stats menu by pressing the F4 soft key and scroll the rotary shaft control to show the IP address status.

#### *Auto IP address configuration (DHCP mode)*

From the home menu press the soft key F3 to enter the setup menu. Once in the setup menu rotate the shaft control to display 'REMIND-E DHCP'.



*DHCP menu*



Soft key F2 LED will be illuminated. Pressing F2 will cause brackets to be inserted before and after the message and the ENTER soft key LED to illuminate. Rotating the rotary shaft control will change the message from <disabled> to <Enabled>.



*DHCP enable menu*

Press the ENTER soft key to confirm the selection. To enable DHCP mode the REMIND-E will require a reboot. When requested to reboot rotate the shaft control to show the reboot menu and press the F2 soft key. You will then be requested to confirm that you wish to reboot the REMIND-E by pressing the F3 soft key.

REMIND-E will now briefly indicate that it is rebooting after which the panel will blank before restarting in the home menu. To confirm that the new IP address is in place enter the Stats menu by pressing the F4 soft key and scroll the rotary shaft control to show the IP address status.

## Scanning for frames

Pressing the F1 soft key will enter the scan menu. The user will then be invited to press the F2 soft key to initiate the scan. On completion of the scan the number of frames found will be reported and a list of their IP addresses or if named their names will be available. Rotating the shaft control will scroll through the address information.



*Available frames*

**Note:** The list will be compiled in the order that the frames answer the pole request, which is likely to vary with subsequent poles.

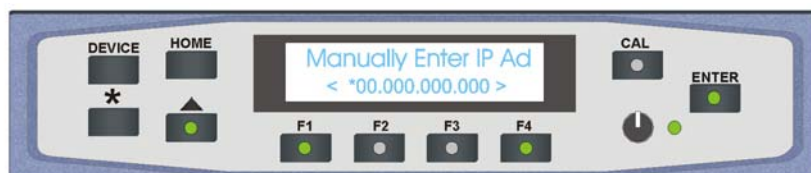
Once a frame has been selected from the polled list the frame controls are initiated by pressing the Enter key. At this point the REMIND-E will effectively become an active control panel for the selected frame and will display the last page accessed in that frame.

**Tip:** To return to the REMIND-E home menu at any time press the DEVICE followed by the Up Arrow soft keys.



## Manual frame selection

If a frame IP address is already known it is possible to manually select that frame from the manual menu. To enter the manual menu, press the F2 soft key from the home menu.



*Manual menu*

The new IP address is entered with the shaft control one digit at a time. The active digit is indicated by the \* which is can be moved left or right using the F1 and F4 soft keys. Once the new address is complete press the ENTER key to action the selection.

The selected frame IP address will be displayed briefly followed by the last page accessed in that frame.



At this point the REMIND-E will effectively become an active control panel for the selected frame and will display the last page accessed in that frame.

**Tip:** To return to the REMIND-E home menu at any time press the DEVICE followed by the Up Arrow soft keys.

## Status menu

The status menu is entered from the home menu by pressing the F4 soft key. Rotate the rotary shaft control to display the software version, panel serial number and the current REMIND-E IP address.

## 3 Controlling frames and cards

As previously mentioned in the introduction chapter, the information presented on the REMIND-E display will depend on the state the frame was left in when last interrogated. This could be any of the available card menus, frame menu or if this is the first access after power on, the message - 'Statesman Mode Press CAL to Exit' - will be displayed. The message displayed will determine the appropriate action to take.

Once a frame has been selected for control the REMIND-E will behave as though it was an active front panel fitted to that frame.

**Note:** Should the controlled frame be already fitted with an active control panel both panels will mirror each other as any actions are carried out. Both panels will have complete control of the frame.

This chapter describes the controls available to the REMIND-E when it is in control of a frame.

### The panel operational modes

The active panel has five operational states or modes:

- **Device mode** - select a card to control from a list of those detected
- **Card mode** – control the selected card using the menus provided by the card
- **Statesman mode** – start-up mode optimised for Statesman control (default)

**Notes:** There are also panel and frame diagnostic modes, which are provided for factory use and for Crystal Vision support personnel.

After powering a frame it will automatically enter Statesman mode.



*Statesman mode is entered by default*

To continue with control panel operation or configuration, press the 'CAL' key once. A second press of the 'CAL' key will return the panel to Statesman control.

When Statesman mode is exited, the Device menu will display the name of the last module detected together with its location number.



*Device menu showing available 'cards'*

The location number consists of the frame number plus the module position in the frame. In the example above, the PSU module displayed is located in the first frame in slot number 15.

## Selecting different modules

The active panel on the Indigo 2A frame maintains a list of controllable modules, which is accessed by exiting Statesman mode or by pressing the 'DEVICE' button in normal operation. The rotary control on the panel is used to scroll through the available devices.

**Caution:** Older modules that do not respond to panel interrogation cannot be controlled, unless updated with a firmware update (if available).

The reported number of devices includes the PSUs and front panel as the Indigo front panel processor (known as a PIC) and power supplies have addresses and are treated as modules.

In Indigo frames, the slot numbers are determined by the position of the module in the frame, and by the address range of the frame. When two frames are linked so that an active panel in one frame can control modules in a second frame with a passive panel, the address range of one of the frames has to be changed.

The following table shows the upper and lower address or slot number range on the panel PIC, PSUs and installed modules for a variety of Indigo frames.

Device/Indigo frame	Lower address in 1 <sup>st</sup> frame	Upper address in 2 <sup>nd</sup> frame
Modules in 2U frames	1.01 to 1.12	2.01 to 2.12
Modules in 1U frames	1.01 to 1.06	2.01 to 2.06
Modules in desktop frames	1.01 to 1.02	2.01 to 2.02
Panel PIC in all frames	1.00	2.00
Upper PSU in 2U frames	1.14	2.14
Lower PSU in 2U frames	1.15	2.15
PSU in 1U frames	1.14	2.14

Turn the panel knob to scroll through the available modules. Press Enter to display information for the selected module.

**Note:** Refer to the Appendix in this manual or section 2.4 'Controlling two frames from one panel' in the Indigo Frame manual for details on using the Upper/Lower address range switch.

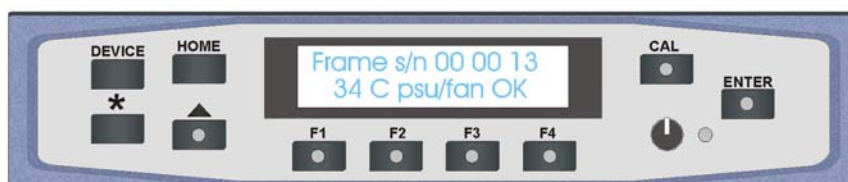
To display the properties of a PSU or PIC select it with the rotary control and press ENTER when it is displayed.



*PSU type together with issue, modification and serial numbers*

Press DEVICE to return to the Device menu.

Press ENTER when a Panel PIC is displayed to view its properties.



*Frame serial number, frame temperature and PSU/PSU fan status*

Press DEVICE to return to the Device menu.

To control a particular Crystal Vision module select it with the rotary select control.



*Use device menu to select a module to control*

When the desired module is selected press the ENTER key to access that card's HOME menu.



*The Tandem home menu*

The control panel will then enter card mode and communication with the selected card will be enabled.

**Note:** Cards with card edge local/remote switches will need to be set to remote to enable active or remote control panel operation. Please refer to the appropriate card manuals to ensure that remote mode is selected on all cards that need to be accessed from a control panel.

## Node numbers

Whilst most Crystal Vision cards have their unique card location address assigned automatically, older cards and frames use a 'node' switch on each card.

**In all of the current frames, this node switch should be set to zero (factory default).**

For compatibility reasons, the Home menu for each module still displays the module's node number (one less than its location or slot number in single frames). Please refer to the Appendix to find out how node numbers relate to slot numbers in particular frames and frame combinations.

## Navigating the display

The functions assigned to control panel keys are dependent on the card selected for control and the panel mode. The following list illustrates typical functions when controlling a TAD202:

- DEVICE – enters Device menu to select a card or card to control / enter Panel setup when held down during power up / shows frame diagnostics when pressed from Statesman mode
- CAL – Enter or leave Statesman mode / enter panel diagnostics mode when held down during power up
- F1 to F4 – soft keys, function assigned within each menu
- HOME – moves the display to the home menu
- ENTER – accept current selection
- Upward arrow – used to move up the menu structure /
- Rotary control – shaft encoder used to select options or variable data

**Note:** Please refer to individual card manuals for details of card operation.

# 4 Trouble shooting

## Fault finding guide



REMIND-E

The REMIND-E has two LED indicators

LED	Colour	Notes
Power	Green	Normal operation
	Unlit	PSU or supply fault
Comms	Unlit	No comms or disconnected
	Flash amber	Comms present

## Frequently asked questions

### Why is the display black and/or no LEDs illuminated?

Check that the REMIND-E is powered and that the fuse is intact

Check that the panel is cabled correctly

### Comms LED not illuminated

Check that the REMIND-E is connected to the LAN

Check cabling is intact

### Why do I keep getting a warning message about a power supply/fan/temperature problem on the frame?

Refer to the frame manual for all frame warnings

### Why do some cards do not appear in the available cards list?

Some cards take longer than others to finish their initialisation routines - try waiting at least 30 seconds for all cards to initialise

Check that any cards with remote/local switches are set for remote control

Check that any hex node switches are set to zero

Some less complex cards do not report their presence

## 5 Specification

### REMIND-E

#### General

Dimensions	482mm (w) x 44mm (h) x 90mm (d)
Weight	1kg
Power connection	Rewireable IEC connector supplied. Any power cord used should be fitted with supplied IEC 320 female connector. It should have a minimum current rating of 6A and it should meet the relevant local safety standards.
Power consumption	110 – 240Vac 47 – 400 Hz , 10W  The frame has an integral 10-watt switch mode power supply. There are no user serviceable parts inside the power supply module. The safety cover should not be removed even when the module is disconnected.
Ambient temperature range	0 – 40 °C
Ethernet connection	RJ45 8-way



## 6 Appendix 1

### Setting up and connecting via the Ethernet

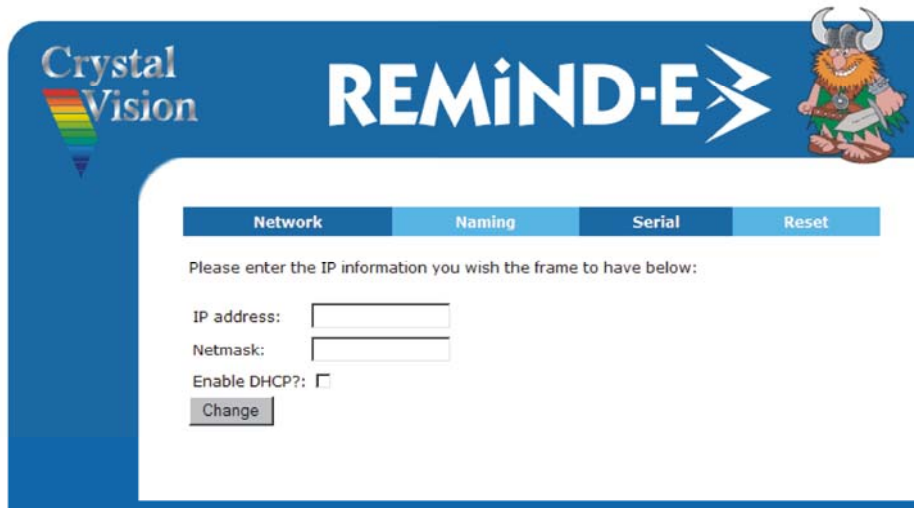
REMIND-E can be connected to a network port or directly to a PC from the rear panel RJ45 port labelled 'Ethernet'. If connecting directly to a PC a CAT5 cross over cable will be required. Connecting to a network port hub uses a straight CAT5 cable.

#### Changing the IP Address

REMIND-E will need to have its IP address set upon installation. This is made possible by setting it to act as a web server and then accessing an internal web page. Any software upgrades can also be downloaded to the REMIND-E via this web page.

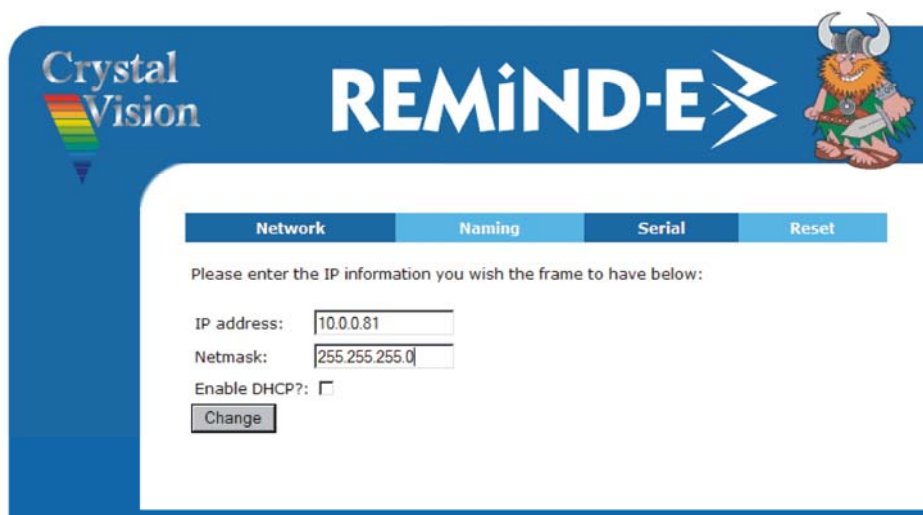
To access the internal web page find the default IP address to be found in the Stats menu, F4 from the home menu. Open up your PC web browser and set its search to `http://10.0.0.***` and select 'go to'. This is the default IP address, the sub-mask being 255.255.255.0. After a dialogue box has briefly appeared the REMIND-E Network page will be displayed.

From this web page you are able then to change the IP address manually or automatically if DHCP is available. A frame serial number may also be entered.



*The REMIND-E network page*

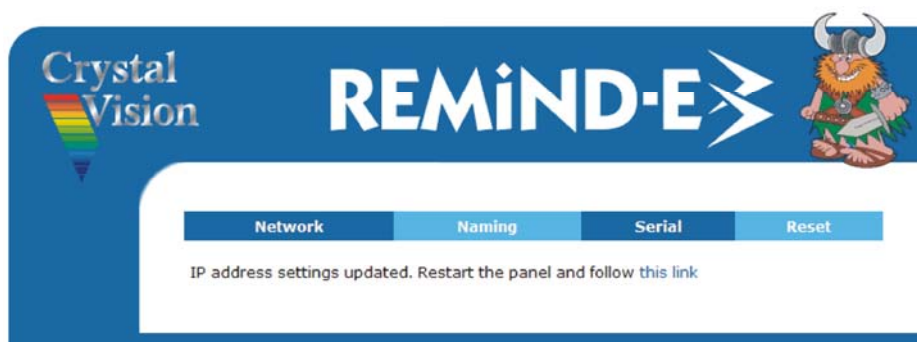
To reset the IP address, enter the new IP address and Netmask information and select 'Change'. Should the REMIND-E be connected to a DHCP running network and a fixed IP address is not required, leave all the information blank and tick the DHCP box before selecting 'Change'.



The screenshot shows the 'Network' tab selected in the REMiND-E interface. The header includes the Crystal Vision logo and the REMiND-E title with a Viking character icon. Below the tabs, a message asks the user to enter IP information. There are input fields for 'IP address' (containing 10.0.0.81) and 'Netmask' (containing 255.255.255.0). An 'Enable DHCP?' checkbox is unchecked. A 'Change' button is located at the bottom of the form.

*Network Window*

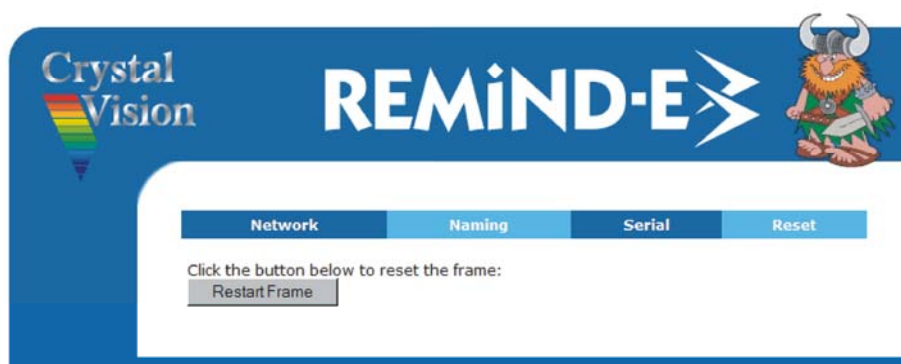
Once 'Change' has been selected the Network screen will be replaced by a conformation screen. As instructed, restart the REMiND-E. This can be carried out from the Reset window.



The screenshot shows the 'Conformation' window in the REMiND-E interface. The header is identical to the previous window. The message states: 'IP address settings updated. Restart the panel and follow this link'. The 'Reset' tab is highlighted in the navigation bar.

*Conformation Window*

Should an incorrect IP address be entered an error dialogue box will be displayed indicating the likely cause of the error condition.



The screenshot shows the 'Reset' window in the REMiND-E interface. The header is identical to the previous windows. The message states: 'Click the button below to reset the frame:'. A 'Restart Frame' button is located below the message.

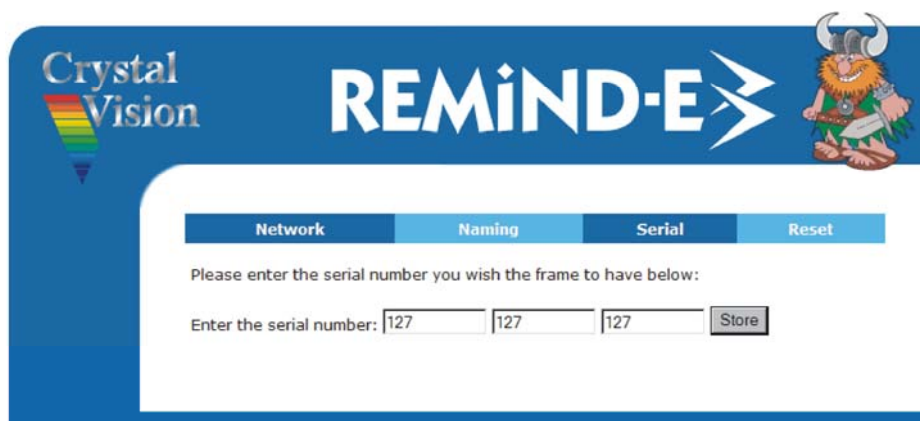
*Reset Window*

## Adding a frame serial number

There is a facility to add a serial number to aid identification or for auditing purposes. The REMIND-E will have had a serial number entered during manufacture, presently this is the front panel serial number. This serial number can be freely overwritten with any series of numbers within the specified range.

The electronic serial number consists of three groups of numbers. These groups must only contain digits with no gaps and must fall into the range of 0-127.

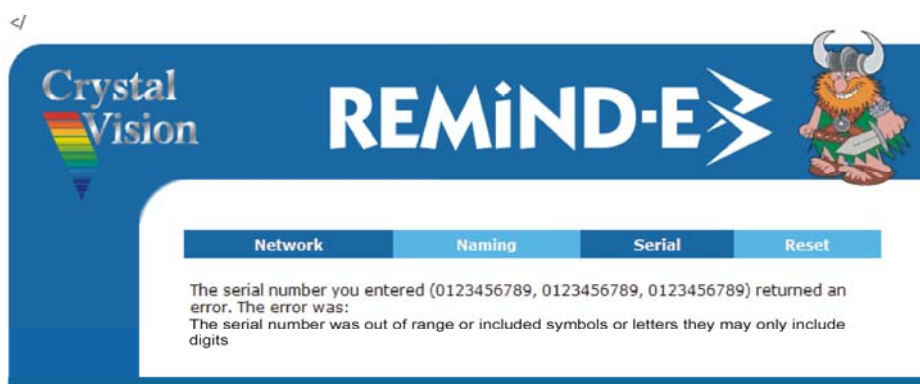
From the Status window select Serial. The following box will open.



The screenshot shows the REMIND-E web interface. At the top left is the 'Crystal Vision' logo. In the center is the 'REMIND-E' title with a stylized arrow. On the top right is a cartoon character of a bearded man with horns. Below the title is a navigation bar with four tabs: 'Network', 'Naming', 'Serial', and 'Reset'. The 'Serial' tab is selected. Below the navigation bar, the text reads: 'Please enter the serial number you wish the frame to have below:'. Underneath, there is a label 'Enter the serial number:' followed by three input fields, each containing the number '127'. To the right of the input fields is a 'Store' button.

*Serial number entry box*

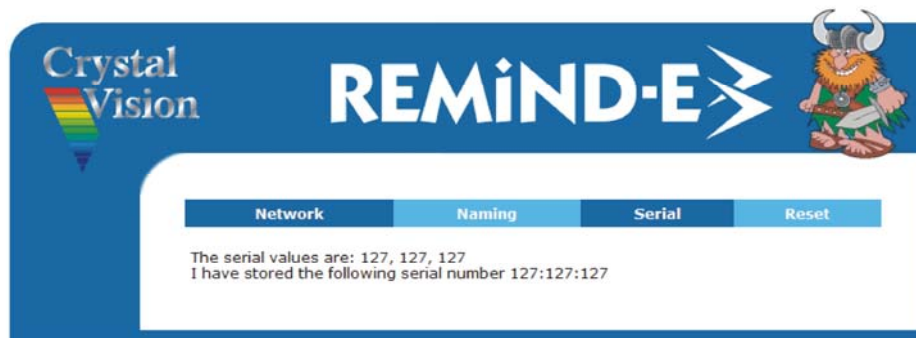
Once the desired serial number has been entered press the Store button to save it to memory. Should the chosen serial number contain an error or be out of range an error dialogue box will be displayed.



The screenshot shows the same REMIND-E web interface as above, but with an error message displayed. The 'Serial' tab is still selected. The error message reads: 'The serial number you entered (0123456789, 0123456789, 0123456789) returned an error. The error was: The serial number was out of range or included symbols or letters they may only include digits'. The 'Store' button is no longer visible.

*Error dialogue box*

Once a serial number has been successfully entered a conformation dialogue is displayed. The Status page will also display the new serial number.

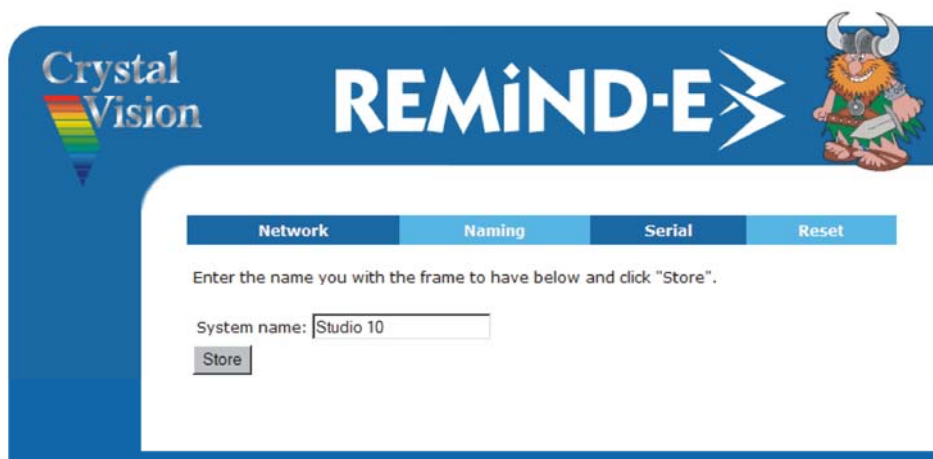


*Serial number successfully added*

## Naming

The user can give REMIND-E a particular name to aid identification or for auditing purposes.

From the Network window select Naming. The following box will open.



*Name entry box*

Once the desired name has been entered press the Store button to save it to memory. The name must not exceed 20 alpha-numeric digits.

Once a name has been successfully entered a conformation dialogue is displayed.

## Updating software

As new improvements and features become available in the form of software releases they can be up-loaded to the REMIND-E panel using the Statesman flash server uploader program. This program plus any software releases are available as downloads from the Crystal Vision website ([www.crystalvision.tv](http://www.crystalvision.tv)), or if preferred available on CD upon request.