

digital keying modular
interface audio
converters analogue video

REMIND

1U remote control panel

USER MANUAL



General Safety Summary

Use only power cords that meet the required specification for this product.

This product must be grounded through the grounding conductor of the power cord.

Do not operate the equipment with covers or panels removed.

To avoid fire hazard use only fuses of the type and rating specified.

To avoid electric shock do not operate this product in wet or damp conditions.

To avoid injury or fire hazard do not operate this product in an explosive atmosphere.

To avoid overheating provide proper ventilation.

Only use this rack in conjunction with Crystal Vision modules designed for that purpose.

Do not use the frame unless all the rear connector positions are filled, either with Crystal Vision Rear Modules, or with Crystal Vision blanking plates.

Only suitably trained personnel should perform service procedures.

Apart from procedures described in this manual there are no user serviceable parts within the frame. If the frame requires any other servicing it should be returned to the manufacturer or dealer.

CAUTION these servicing instructions are for use by qualified personnel only. To reduce 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.

Explanation of symbols used on the equipment



Protective ground connection.



Refer to the user manual.

USERS MANUAL

INDIGO Remind Remote Panel issue 100 Manual.doc GD 19-12-03

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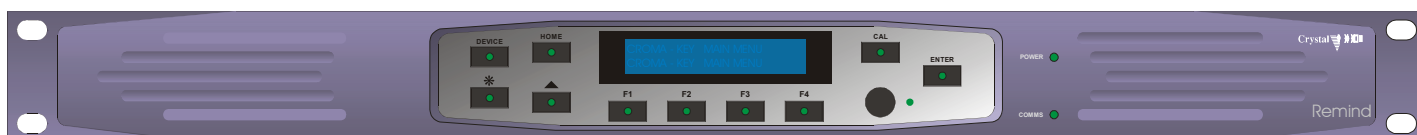
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Introduction

The **Remind** remote control panel allows the control of up to two Crystal Vision frames with a maximum of 24 cards fitted.

A fused IEC mains input is provided for the power supply module. The universal input power supply used can accept voltages between 85 and 264V rms. The mains input must include a protective ground connection. The fuse holder is part of the mains inlet and must be disconnected before the fuse can be accessed. Replace the fuse only with one of the same type and rating.

The **Remind** Front Panel Controls with LCD display and keyboard allows easy user adjustment of suitable Crystal Vision modules with a menu driven user interface.



The Remind front panel

Specification

Size (mm)	482 (w) x 44 (h) x 90 (d)
Weight	1.0 kg
Supply Voltage	110 – 240Vac 47 – 400 Hz
Amb Temp Range	0 – 40 °C

Mains Connections

The frame is connected to the mains supplies by means of a detachable power cord. 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. It should meet the relevant local safety standards.

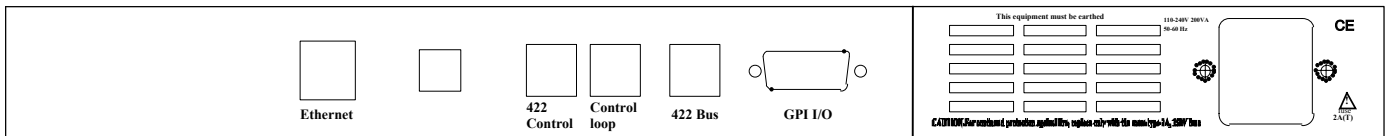
Power Supply.

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.

Front Panel indication

The Remind has two front panel indicators LED's. The upper green LED will be illuminated indicating power is being supplied to the panel. The lower yellow indicator LED. labelled **COMMS** provides an indication of any external communication to the frame on either the Statesman RS422 port or the Ethernet port. Note the comms LED will not indicate traffic when connected to a frames local RS422 Bus port.

Rear panel connections



RJ45 Connector labelled –Ethernet

Note: This option is for future development and at present is not supported

Pin number	Function
1	TD+
2	TD-
3	RD+
4	Not used – Internal 75 ohm resistor to GND
5	Not used – Internal 75 ohm resistor to GND
6	RD-
7	Not used – Internal 75 ohm resistor to GND
8	Not used – Internal 75 ohm resistor to GND

RJ45 Connectors labelled – 422 Control and Control loop

Pin number	Function
1	RX+ RS422 i/p Statesman
2	RX- RS422 i/p Statesman
3	TX+ RS422 o/p Statesman
4	Not used – Internal 75 ohm resistor to GND
5	Not used – Internal 75 ohm resistor to GND
6	TX- RS422 o/p Statesman
7	Not used – Internal 75 ohm resistor to GND
8	Not used – Internal 75 ohm resistor to GND

RJ45 Connector labelled – 422 Bus

Pin number	Function
1	Not used – Internal 75 ohm resistor to GND
2	Not used – Internal 75 ohm resistor to GND
3	Not used – Internal 75 ohm resistor to GND
4	TX+ bus RS422 (Frame internal bus)
5	TX- bus RS422 (Frame internal bus)
6	Not used – Internal 75 ohm resistor to GND
7	RX+ bus RS422 (Frame internal bus)
8	RX- bus RS422 (Frame internal bus)

Note, since the **422 Control and 422 Bus** connectors have no GND pin, any equipment, which makes a connection to these 422 I/O ports, should share a common GND (this will normally occur through the earth pin on the mains connector).

GPI Connections

The High-density D-type connectors on the rear of the frame contain various outputs associated with other generic frames. The outputs that may be off use to the Remind customer are listed below. Note +5.0 Vdc maximum 500mA total internally fused by auto-resetting fuse

GPI I/O connections (26 way high density D-type socket)

Pin number		Pin number	
1	+5.0 Vdc	14	0V (Frame ground)
2	0V (Frame ground)	15	nc
3	nc	16	nc
4	nc	17	nc
5	0V (Frame ground)	18	nc
6	nc	19	nc
7	nc	20	nc
8	nc	21	nc
9	+5.0 Vdc	22	nc
10	nc	23	nc
11	nc	24	nc
12	nc	25	nc
13	nc	26	0V (Frame ground)

nc (no connect)

Front Panel Control Module on the **Remind** remote panel.

Using the Front Panel Controls

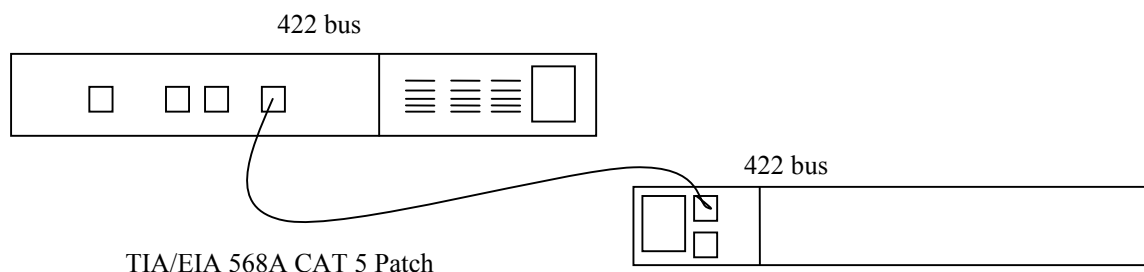
The **Remind** front panel allows the control of all suitable Crystal Vision Audio/Video cards. Front panel control and status indication uses a two-line by twenty-four-character alphanumeric display to guide the user through the control process. The user has a number of buttons and an adjustment knob to select and adjust parameters.

The front panel on the **Remind** maintains a list of the boards available for control. Pressing the "DEVICE" button at any time will access this list. The display will give information about the number of cards available (which have the remote control facility), and about the type and position of the card currently selected. The position of the cards for slot positions 1 to 12 are expressed as a "1.01" to "1.12" for lower frame, and when a second frame is linked to the first frame, the selection and the position of the cards for slot positions 1 to 12 are expressed as a "2.01" to "2.12" for upper frame selection.

Note the micro-controller on the front panel PCB and the two power supplies have an address and are treated as if they are cards, so the reported number of cards available will include the PSUs and front panel. The address of the front panel on the first frame is "1.00" and the address of the psu is "1.14"; likewise the address of the second frame is "2.00" and the address of the psu is "2.14". Pressing ENTER when these address are selected will display information on the serial numbers and in the case of the frame address "1.00" and "2.00", the air temperature, in degree C, inside the frame above slot 3.

In both **INDIGO 1** and **INDIGO 2** frames, the slot numbers, are determined by the position of the card in the frame, and by the position of the 2 position slide switch on the top edge of front panel PCB labelled **UPPER / LOWER**. Details for this switch setting is given in the section "Controlling Two Frames from One Remote Panel" below.

Turning the knob will scroll through the available cards. When the desired card is selected pressing the "ENTER" button will activate control for that card. The details of the menu structure depend on the card type and configuration. Consult the documentation supplied with the card for more detail.

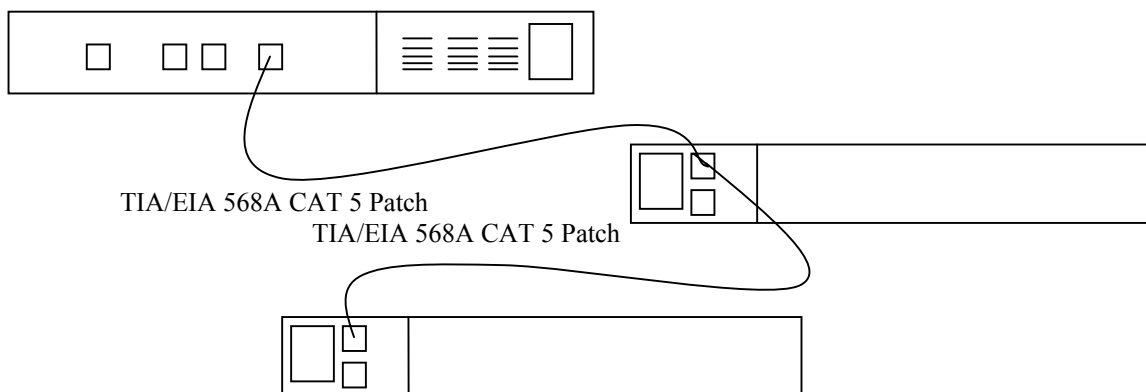


Controlling a single frame from a Remind remote panel.

Controlling Two Frames from One Remote Panel

It is possible to configure and connect two **INDIGO** frames so that all the remote accessible cards they contain are controlled from the **Remind** front panel. The two frames can be up to 10m apart depending on the type of cable used and the ambient electrical noise.

The position of the 2 position slide switch labelled **UPPER / LOWER** on the top edge of the front panel PCB in one frame must be set to **LOWER** and on the second frame set to **UPPER**.



Controlling two frames from a Remind remote panel.

Using a Remind with existing cabling.

Where a Remind is used in place of a REM1U an adapter cable will be required to convert the existing 15-way D-type connector to an 8-pin RJ45 type.

RJ45 pin No.	Likely colours of pre-wired RJ45 plug	RJ45 pin names	15-way D-type Socket pins No.	15-way D-type pin names
8	Brown	RXB Bus	1	TX-
7	Brown/White	RXA Bus	2	TX+
4	Blue	TXA Bus	3	RX+
5	Blue/White	TXB Bus	4	RX-

Maintenance

CAUTION. These servicing instructions are for use by qualified personnel only. To reduce 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.

Replacing the mains input fuses

The mains input fuses are fitted inside the IEC 320 connectors at the rear of the frame. A spare fuse is also stored inside the connector. The fuse can only be accessed when the power cord is disconnected. The sequence is as follows: -

Disconnect the power cord from the rear of the frame.

Using a flat bladed screwdriver or similar tool gently lever out the fuse drawer from the relevant IEC connector using the tab visible at the bottom of the connector depression.

Remove the defective fuse and replace with either the spare fuse or with a 2A(T), 250V-time delay fuse.

Replace the fuse drawer and reconnect the power cords.

If a fuse blows repeatedly this indicates a fault either in the associated power supply module or elsewhere. Return the control panel to the manufacturer or dealer for repair.

End of document.