Scope

This guide provides the basic instructions for installing, configuring and adding cards to the CRC200+ Controller. Refer to the User Guide for detailed information on using the CRC200+.
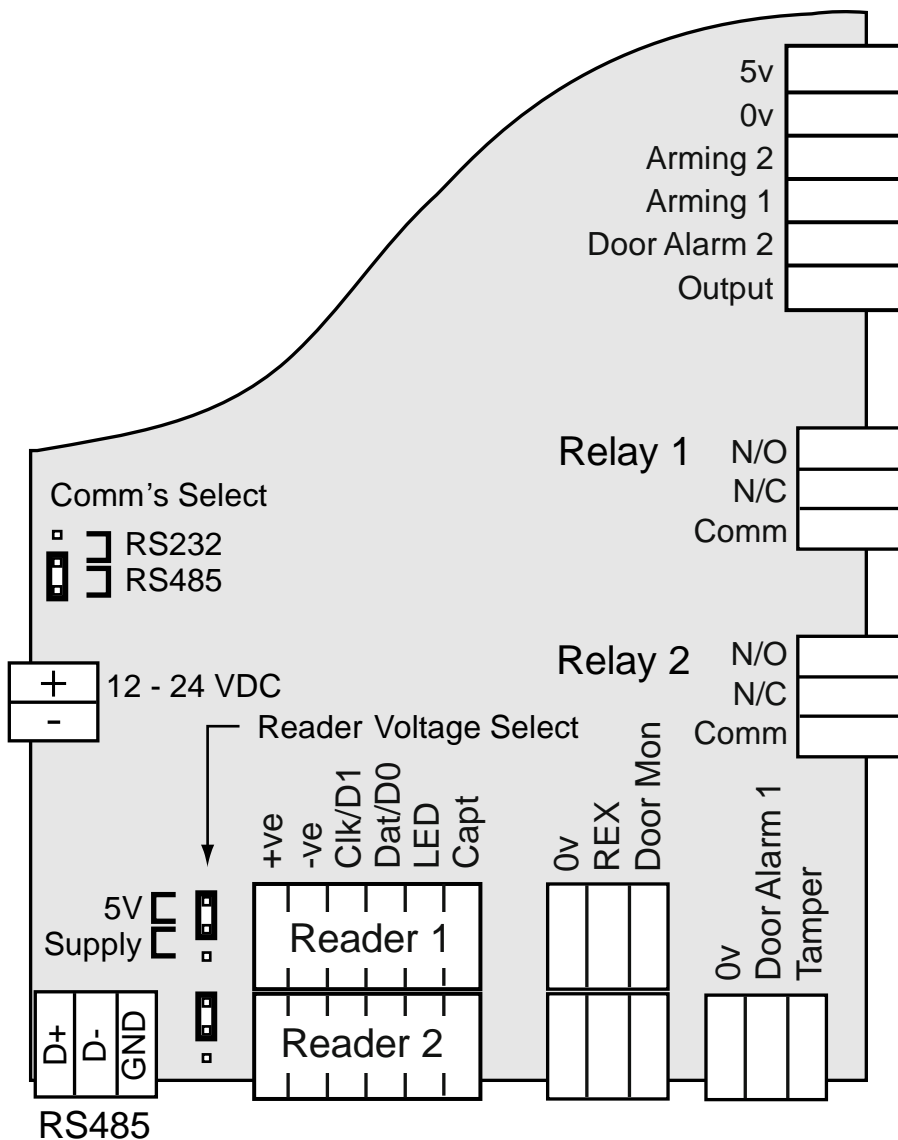
Fitting the CRC200+

Release the front cover from the main unit by pressing the retaining buttons at the base of the unit while you lift off the cover from the bottom (hinging the cover at the top).

Carefully unplug the ribbon cable linking the cover to the main unit (avoid pulling or bending the ribbon cable). Completely remove the front cover.

Fit the unit to the mounting surface using the 2 keyhole slots and 2 mounting holes in the back plate. Use 4 appropriate screws or nuts/bolt (M4) according to the type of mounting surface.

After wiring the unit, support the cover with one hand and carefully re-insert the end of the ribbon cable into its socket. Refit the cover by engaging the top of the cover with the top of the housing and hinging in the bottom of the cover until the securing buttons are fully engaged in the housing.

Power & Cabling Requirements

Reader Voltage Settings

Each of the two reader interfaces includes a power supply output that can be individually set to either 5V or "supply voltage" to match the requirements of the connected reader. The voltage for each reader is set on a jumper to the left of the corresponding terminal block. To avoid damage to the readers, you must set the correct voltage for each reader before applying power to the CRC200+. For use with 12V readers, the power supply to the CRC200+ must be 12VDC.

If you are in any doubt about the output voltage to the reader, apply power to the CRC200+ without connecting the readers and measure the voltage across the reader +ve and -ve connector pins.

Basic Confidence Check

Once all cables have been terminated, power up the CRC200+ and check that the opening screen is displayed as follows:

```
CRC200 Vx.xx
Node: N
```

Key: **Vx.xx** = firmware version number
Node: N - indicates the node id. when the CRC200+ is part of a network. For standalone operation, this can be ignored.

Also check that the connected readers have the correct ready status displayed (refer to the manufacturer's handbook).

Configuring the CRC200+

If the CRC200+ is to be used online to Norpass3, it is only necessary to configure the node number (see instructions at the end of the document).

The CRC200+ has a wide range of features that can be configured in standalone mode. The factory default settings support standard sequentially numbered Clock & Data cards with no additional features activated. For random cards, you need to change the Card database setting before adding cards. This guide explains how to configure only those items required for basic operation using **standard Clock & Data format cards**. Refer to the CRC200+ User Guide if you are using Wiegand format cards and/or wish to activate additional features. The full menu structure is shown at the end of this guide for general guidance.

The required basic programming actions are:

1. Set relay operation times (and set the Card Database where random cards are used)
2. Add and validate cards as required (with or without cards available)

Once these actions have been carried out, the CRC200+ is ready for basic use.

Programming

The CRC200+ is programmed using the 12 buttons and the LCD display.

Configure Relay Operation Time and Card Database

Press (P) once and then press (0) repeatedly until 'Installer' is displayed:

`Installer`	Press $(\leftarrow)$ to enter the installer menu
`Config`	Press $(\leftarrow)$ to display the first parameter
`Config` `Relay1:xxx>`	Enter a value between 1 and 30 to set the operate time for Relay 1 in second (or enter '0' for 500ms) & then press $(\leftarrow)$ repeatedly until the following screen is shown:
`Config` `Relay2:xxx>`	Enter a value between 1 and 30 to set the operate time for Relay 2 in second (or enter '0' for 500ms) & then press $(\leftarrow)$ repeatedly until the following screen is shown:
`Config` `Card DB 64k`	**Sequential cards:** press (P) 3 times to exit Programming mode. **Random cards:** press (0) until 'RANDOM' is displayed and then press $(\leftarrow)$. Press (P) 3 times to exit Programming mode.

Add a Block of Sequentially Numbered Cards

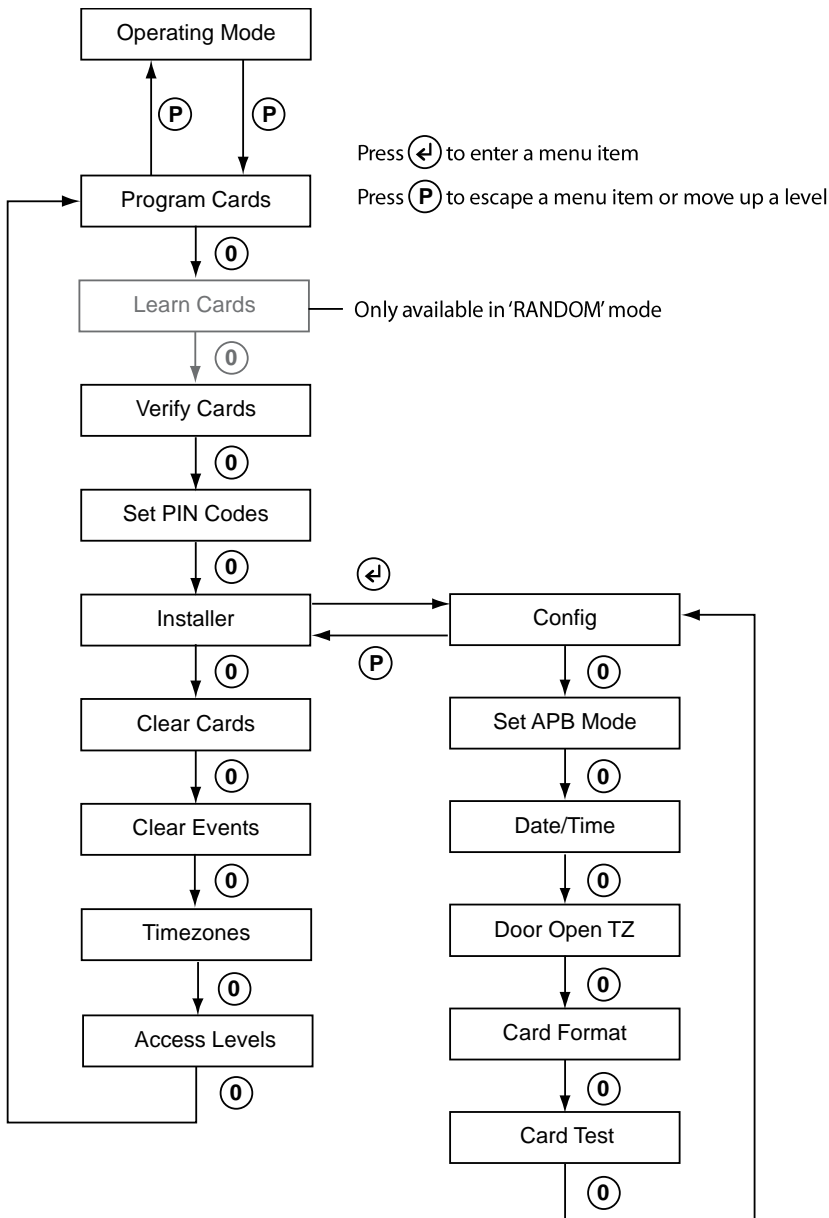Press (P) once. The following screen is displayed:

`Program  Cards`	Note: In RANDOM mode, the number of programmed card is displayed on the bottom line. Press (↵) to display the first parameter
`Program  Cards` `From:`	Enter the first card number & press (↵)
`Program  Cards` `To :`	Enter the last card number & press (↵) (Simply press (↵) if only one card is to be validated)
`Program  Cards` `Acc  Level:  x`	Enter the Access Level assigned to the card(s) and press (↵) (Level 1 = valid on both readers)
`Program  Cards` `Capt  1  no`	Use (0) to toggle between 'Yes' or 'No' to indicate whether these cards should be captured at Reader 1 and press (↵)
`Program  Cards` `Capt  2  no`	Use (0) to toggle between 'Yes' or 'No' to indicate whether these cards should be captured at Reader 2 and press (↵) Press (P) twice to exit Programming mode

Learn Individual Cards (Random Cards Only)

Press (P) once and then press (0) once. The following screen is displayed:

`Learn  Cards`	Press (↵) to display the first parameter
`Learn  Cards` `Acc  Level:  0`	Enter the Access Level assigned to the card(s) and press (↵) (Level 1 = valid on both readers)
`Learn  Cards` `Capt  1  no`	Use (0) to toggle between 'Yes' or 'No' to indicate whether these cards should be captured at Reader 1 and press (↵)
`Learn  Cards` `Capt  2  no`	Use (0) to toggle between 'Yes' or 'No' to indicate whether these cards should be captured at Reader 2 and press (↵)
`Learning`	This display indicates that CRC200+ is waiting for a card to be presented to reader 1. Present a card to the reader.
`Learning` `XXXX  NNNNNNNN`	Card number NNNNNNNN has been saved against index XXXX. You can now present further cards to be learnt or press (P) to escape learning mode.

CRC200+ Programming Menu Structure

Setting the Node ID for Online Operation

Press ⒫ once and then press ⓪ repeatedly until 'Installer' is displayed:

I n s t a l l e r	Press ↵ to enter the installer menu
C o n f i g	Press ↵ repeatedly to display the following screen:
C o n f i g N o d e : x	Type a number to set the node identity of the unit & press ↵ press ⒫ 3 times to exit Programming mode. Refer to Norpass3 online help for allocating node numbers.