## Ins-30091 PROXIMITY LCD reader



## **Technical Support**



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Technical help is available: Monday - Friday from 07:00 - 19:00 (GMT)

Saturday from 09:00 - 13:00 (GMT)

Documentation on all Paxton products can be found on our website - http://www.paxton.co.uk/

## Suitability

Security-sensitive doors



Wet environments



Mounted on metal surface



Readers mounted together

300 mm between readers

The full colour backlit LCD screen can be configured to display images of the customer's choice. For example, an image using a company name/logo could be used as the default display on each reader around the site.

The reader comes with four preloaded images. These can be replaced using a free uploader program available from our website via any Net2Air USB bridge or a Net2Air USB dongle.

If you wish to update these images, you should ensure that you have a suitable Net2Air device as one is NOT supplied with the reader.



## **Fitting**





The LCD display is best positioned at eye level for ease of reading.

It is mounted using the backplate and fixings provided and can be positioned to allow the display of portrait or landscape images.

Fix the mounting plate to the wall, noting the position of the orientation arrow (see diagram).

Make a hole in the wall to take the reader cable and feed this through. Ensure there will be sufficient slack to allow the reader to slide over the mounting plate during installation.

Present the reader to the mounting plate so that the slots pass over the side tabs in the plate.

Slide the reader down the plate until the retaining pin clicks into position.

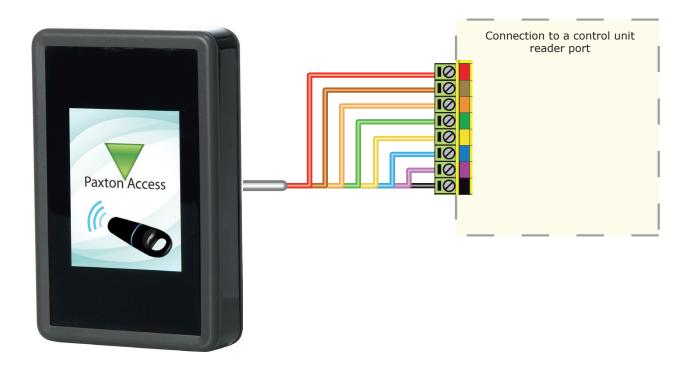
A tool is provided with the reader to depress this pin should the reader ever need to be removed.

# **Image display**

The unit comes with four preloaded images. These relate to the 3 LED's (Green, Amber and Red) on a standard Paxton reader plus a default image.

Once a token has been read, the control unit establishes the access permissions of that user. Access is granted or denied as appropriate with the designated image displayed. For example, if access is denied the image assigned could show "Please return to Reception".

# Wiring



## **Connection modules**



### Reader junction box (325-020)

This module can be used to provide a connection point for the reader RJ45 plug. The terminals on the module are then wired colour for colour to the controller.

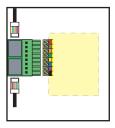
Alternatively, the reader can be wired directly into the screw terminals of the control unit by first cutting off the RJ45 plug and stripping back the wires in the cable.

### Reader port module (325-030)

This module may be purchased separately to speed up the installation and replacement of readers.

The reader port module is designed to convert the standard reader ports on Switch2 and Net2 controllers to accept one or two RJ45 connections. Pull off the screw terminal block from the reader port and simply replace it with this module.

Further information on how to purchase Installer Tools is available at: http://paxton.info/841



#### **Cable extensions**

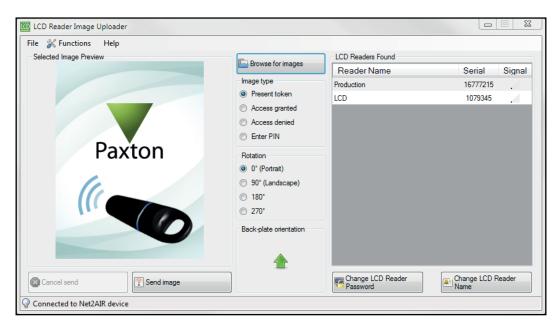
Readers can be extended using Belden CR9540 10-core overall screened cable to a maximum of 100 metres.

## LCD reader image upload

The reader is supplied with four preload images. Images cannot be retrieved from the reader but they can be refreshed if the orientation is incorrect or replaced using the uploader program.

This program can be download from the website at < http://paxton.info/1521 >

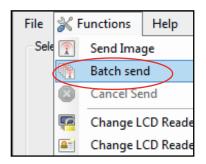
NOTE: This is an uploader utility and does not display the current image that is displayed on any particular reader.



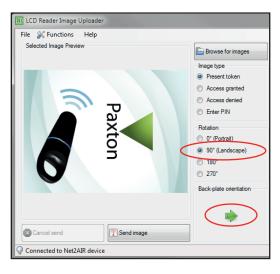
Close down any other Net2 applications, including the Net2 server, to avoid any USB program conflicts. Run the LCD reader image uploader and it will detect the USB Net2Air device connected to the PC. The PC will then detect and display any LCD units that are in range of the USB device.

They are listed along with their Net2Air signal strength. Highlight the required reader and select one of the four image types. You can browse the PC for a new image or restore one of the defaults provided. (see Customised images)

Once the image is displayed, click on 'Send image' and this will be uploaded to the selected reader.



If more than one reader requires updating, a batch send function is available. Select the option in the functions menu and then select the readers to be updated. The selected image will be sent to each reader in turn.



## **Image orientation check**

The metal backplate is marked with an arrow. Select a 'Rotation' option to turn the green arrow into the same direction as the backplate arrow.

This display is used to confirm that any image transmitted to the reader will match the orientation of the reader as installed. Rotating this display does NOT alter the actual image that will be sent.

In the example on the left, we have set the rotation to show a reader installed in a landscape orientation. This shows that the current image would display incorrectly. (i.e. sideways)

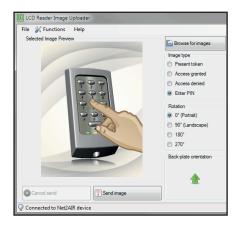
The image should be corrected and viewed again before uploading to the unit.

## **Image selection**

The LCD reader will hold 4 images. These are selected automatically by the reader's LED control wires. The 'Present token' image will display unless one of the three LED wires (Brown, Amber or Green) is individually active (0v). In that case the corresponding image (Access Granted, Access Denied or Enter PIN) will display. The supplied images are shown below.







#### Changing the reader name

The name is stored within the reader. Select the reader, click the 'Change LCD reader name' button and you will then need to enter the password (if set). The reader name can then be changed.

#### Changing the reader password

The password is stored within the reader itself. Select the unit, click the 'Change LCD reader password' button. You will be asked to enter the old password and the new password.

# **Customised Images**

You can rotate or refresh any of the four images or produce your own customised versions.

From the main screen, click on 'Browse for images'. Select the required image and click 'Open'. The image will zoom to fill the display area.





The image can be further zoomed to any size using the controls and can also be dragged around the screen by clicking on the image and holding down the mouse button.

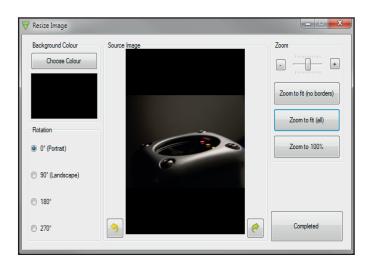
The display area should be rotated to match the reader orientation (See page 3). The image can also be rotated using the arrow buttons.

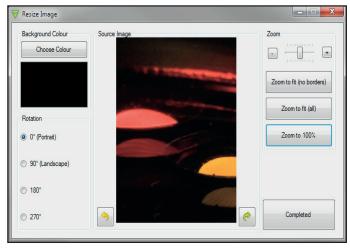
The other zoom functions work as follows.

- Zoom to fit (all) will ensure that the whole picture will display on screen by adopting a 'letter box' style. The background colour can be set as required.
- Zoom to 100% will display the image in a pixel to pixel relationship. This allows the image or logo to be displayed with perfect clarity when produced from commercial artwork.

Once you have the correct image displayed, click on 'Completed' to return to the main updater program.

The modified image can be saved via the 'File' menu.



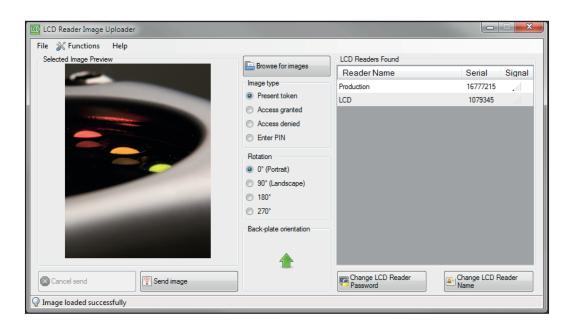


#### **Image limitations**

The following limitations apply:

LCD Portrait image: 240 x 320 pixels - minimum LCD Landscape image: 320 x 240 pixels - minimum

Image format: .bmp, .jpg, .gif, .tif, .png, .dib, .rle
Import size: 2430 x 1822 pixels - maximum



## **Image upload**

Select the LCD reader from the list of units detected and check that the image type is the correct one to be updated.

Check that the image orientation is correct and then click on the 'Send Image' button.

This will bring up a password security screen. The reader password is left blank when supplied but one can be created if required.

The image will upload to the LCD reader in about 90 seconds and reports the progress on a status bar.

# **Factory reset**

The reader can be reset to a factory default state by carrying out the following operation:-

- 1. Connect together the yellow and green wires. (reset link)
- 2. Connect power to the reader.
- 3. The reader will beep 3 times to confirm the reset sequence.
- 4. Remove the power and remove the reset link.

This factory reset sequence results in the LCD reader images returning to the default images, the LCD reader name will be cleared and the reader password will be blanked.

Specifications					
Environment	Min	Max			
Operating temperatures - all items	-20 °C	+55 °C			
Waterproof	IPX7		Outdoor Use		
Cable length			5 metres		
Silent operation feature			Yes		
Electrical	Min	Max			
DC supply voltage	10V DC	14V DC			
DC supply current	165 mA	215 mA			
Carrier frequency			125 kHz		
Clock and data bit period			600 µs		
Dimensions	Width	Height	Depth		
	68 mm	109 mm	22 mm		
Read Range	Token	Keyfob	Hands Free Token		
	40 mm	30 mm	400 mm		

Contents in box					
PROXIMITY LCD reader					
Reader mounting plate					
Documentation					
Option		Qty	Description		
Fixing Kit - LCD reader	fk1-087	4	No 6 x <sup>3</sup> /4 in pozi pan self tapping screw - zinc		
		4	22 mm Wall Plugs		
		5	Cable clips		
		1	LCD reader removal tool		

This product is not suitable for retail sale. All warranties are invalid if this product is not installed by a competent person.

# CE

The declaration of conformity is available on request. Contact details are provided at: <a href="http://paxton.info/596">http://paxton.info/596</a>