

# Net2

*access control systems*



Net2 is a new network access control system with a host of features which make the product exceptionally quick and easy to learn, install, commission, set up and support giving huge operational and cost advantages to both the installer and the end user. It has been designed as a system that can grow from a single door to hundreds of doors on multiple sites with no hardware redundancy. A full range of reading technologies are supported.

Paxton Access Ltd is a market leader in the design and manufacture of access control systems. The products are rich in features and provide excellent levels of quality and reliability at a competitive price. Above all, our systems are designed to be exceptionally easy to install and use. The products are available from a wide range of professional installation companies and leading security industry trade distributors.

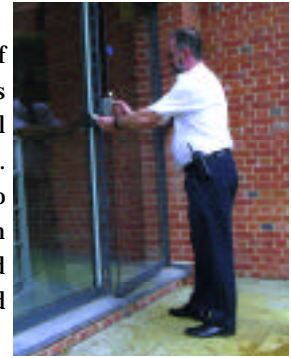


**PAXTON  
ACCESS**

**Simple & Powerful**

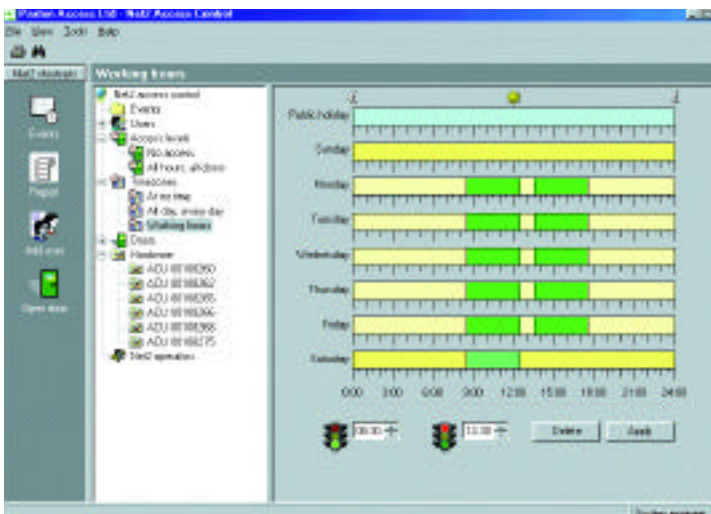
## The advantages of electronic access control

An increasing number of organisations of all sizes have been recognising the benefits of replacing their old key based systems for controlling access to buildings with electronic access control systems. The benefits in lower running costs and ease of administration are well proven. For example, when a key is lost, locks have to be replaced to maintain security levels. By contrast, a card access control system will simply allow lost cards to be cancelled. They also increase security levels by allowing control of which parts of a building different people can enter and at what times. Networked access control systems allow everything to be controlled from a central location. They record events as they happen and allow reports to be produced on the movements of individuals or on the events at a specific location.



## How NET2 works

The names of the doors and the details of all the users and timed operations are entered into the Net2 software. This information is recorded in database files on the PC's hard disk. The software sends all the information required to decide on which users are allowed access at any access point to the relevant access control units. This information is held in memory inside the units which make all the access decisions locally. The units also record all of the events as they occur, eg which card has been swiped and whether access has been permitted or denied. Each access control unit sends back the record of its events to the PC. The events are recorded onto the hard disk of the PC for subsequent interrogation and reporting when required.



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**Distributed intelligence.** This type of system architecture which gives autonomy to the individual access control units is called distributed intelligence. It offers two important advantages over systems that rely on a central computer or other central decision making units to make the decisions.

**Speed of decision making.** As the decision is made

locally it is not relying on remote processors that have other tasks to perform or on the speed of a busy data line. As a result decisions are virtually instantaneous.

**System integrity.** The access control units are low voltage units which can be economically fitted with backup batteries. If the computer goes off, or has its data link with one or more access control units interrupted for any reason, the control units will continue to operate the system off-line. The users will be unaware of the breakdown in communications and will be permitted or denied access in the usual way. The control units record all of the events and hold them in a buffer (up to 2,300 events) until communications are restored. The events are then sent to the PC giving a complete audit trail.

## System Highlights

**Ease of use** - easy to learn user interface working in Microsoft Windows 95/98 or Windows NT.

**Open architecture** - Microsoft Access database allows easy linking of data to other software systems. Relay outputs and digital and analogue outputs allow easy linking of data to the hardware of other systems.

**Fully upgradable** - the latest FLASH memory is used in the access control units to allow for greater future proofing.

**Card technology** - the user can select magnetic stripe or proximity.

**Communications** - high speed and resilient communications will allow real time alarm reporting and virtually unlimited system sizes.

**Easy wiring** - Clearly labelled terminals on the access control unit removes the need for continual references to wiring diagrams. Clear coding of reader cables leads to fewer mistakes.

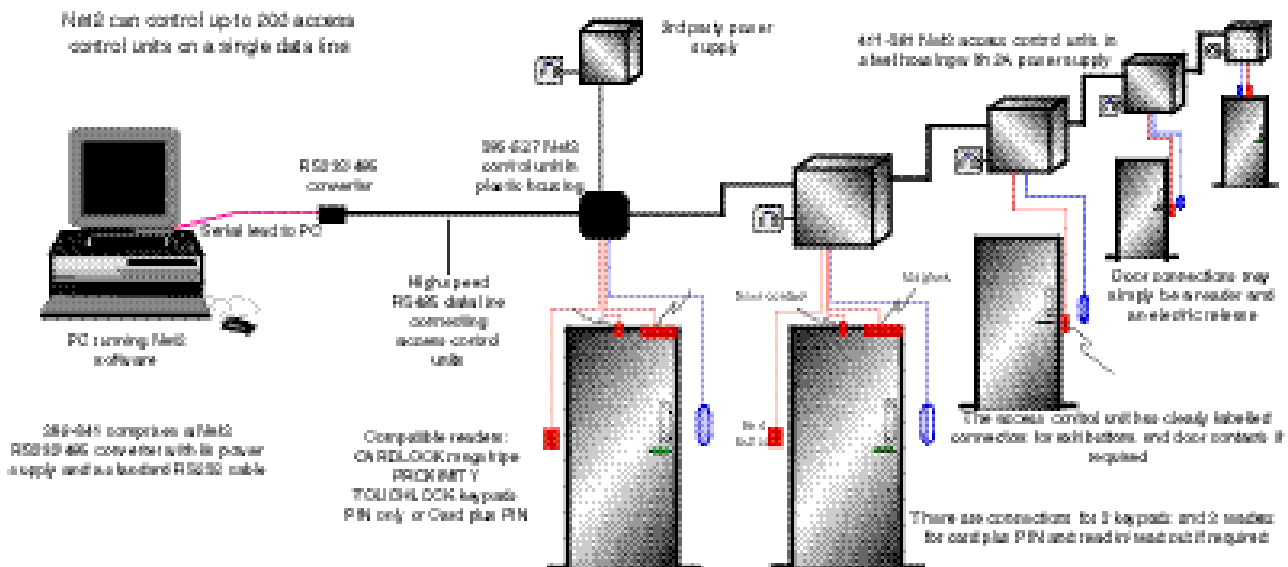
**Easy commissioning** - auto detection and numbering of access control units.

**Easy diagnosis of faults** - an array of diagnostic LEDs on the access control unit provide for fast troubleshooting both on site and by telephone technical support services.



## Net2

- The look and feel of the software will be immediately familiar to any user of standard Windows programmes. Coupled with the clear software structure, this makes it exceptionally intuitive to use and quick to learn. Shortcuts and wizards are used for everyday tasks such as adding users.
- Commissioning times are slashed by the auto detection system - just wire the control units and watch the software configure the network. No DIP switches, binary numbers, reader settings, jumpers, etc.
- Optional desktop reader allows fast and error free entry of cards.
- Full distributed intelligence for maximum system resilience and continued operation with the control PC switched off.
- Microsoft Access database for ease of data exchange or integration with other systems working under Windows 95/98 or Windows NT.
- The basic building block of the system is the Net2 one door access control unit. This low cost unit provides economical solutions from a single door to hundreds of doors. Outstanding features are:
  - Flash memory** - the program in the control unit (firmware) can be fully upgraded from the PC enabling system development and upgrades with no hardware redundancy.
  - Diagnostic LEDs** aid commissioning fault finding and support.
  - Clear labelling** making connections quick and easy.
  - Top quality **pull off rising clamp connectors** for ease of wiring.
- Housing options: The access control unit can be purchased as a board with adhesive feet for mounting in an installer's own power supply housing. It is also available mounted in our excellent low cost plastic housing for use with a separate power supply. Finally it may be purchased ready mounted in our heavy duty hinged steel housing complete with its 2 amp power supply.



### NET2 hardware

The diagram above is a schematic of the architecture of a NET2 access control system. As shown, the readers, locks and other hardware at the door are connected to the access control unit. The access control unit is powered by a local boxed power supply at each door. Standard batteries may be put in the power supplies to ensure continued operation of the system in the event of a power cut. The units are wired to unswitched 13A fused mains outlets. The access control units are connected together by a data cable which is also connected to a RS232/485 communications converter. The communications converter is connected to a computer with a standard RS232 cable. A desktop reader may be placed on the worktop next to the PC. The communications converter and PC plug into standard mains sockets.

### Specifications

10,000 users	<b>Inputs:</b>
2,300 events	2 readers
64 time zones	2 keypads (in/out)
250 access levels	Exit button
200 doors on one data line	Tamper
115kbps network	PSU monitor
<b>Readers / keypads:</b>	Door contact
TOUCHLOCK keypads	<b>Outputs:</b>
CARDLOCK readers	Door relay
PROXIMITY readers	Relay 2
Card only	Alarm output
PIN only	<b>Events:</b>
Card plus PIN	Event recording
	Event reporting



## Where can Net2 access control systems be used?

Net2 access control systems have been designed for controlling access into and within a wide range of public sector, commercial and industrial environments. Reports on events by any combination of users and access points can be produced as required. Net2 can control access through doors, revolving doors, turnstiles, gates and barriers.



Net2 standard plus software has all the features to satisfy small and medium sized systems of up to 10,000 users and 200 doors on a single site. Multi-site and other



advanced features are planned for the system during the coming months. Net2 was conceived as a system that will grow. The design of the hardware will provide an economical single door system or a powerful large system with hundreds of doors. The technology used will allow systems to grow without redundancy of system hardware. The investment is safe.

Net2 uses the superb looking, weatherproof range of Paxton Access readers. PROXIMITY, CARDLOCK magnetic stripe and TOUCHLOCK keypads are available in a range of finishes some of which are pictured below. The user cards and tokens can be used with other applications such as ID and cashless vending.

## Users of Paxton Access systems

Net2 and other Paxton Access systems are used in many countries around the world. Users include multi national corporations, banks, local and national government, Police authorities, hospitals, colleges, schools, sports clubs, theatres, factories, research laboratories, warehouses and many others including: Allied Breweries • Banque Nationale de Paris • British Aerospace • British Gas • British Petroleum • Boots • Dubai World Trade Centre • Barclays Bank • Cable & Wireless • British Airways • Citibank • Conoco • DHSS • Glyndebourne Productions • Land Registry • Littlewoods • Romanian Embassy • Moorfields Eye Hospital • D H L Asia Pacific • National Trust • Open University • Rolls Royce • Brunei Fire department DQ



## Other Paxton Access Products

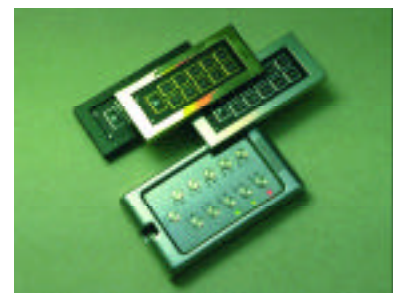
Other Paxton Access systems follow the same philosophy of making access control easy and cost effective for both the installer and the end user. For further information about buying Net2 or about the stand alone systems detailed below please call us, your installer or your distributor. Alternatively see our Internet web page at <http://www.paxton-access.co.uk>



CARDLOCK is the leader in providing simplicity and ease of use in card access control. The ingenious system of set up and card management allows a range of powerful features to be mastered in minutes.



PROXIMITY provides all of the convenience of proximity reading technology combined with the same ease of use and system management as CARDLOCK.



TOUCHLOCK keypad systems are available in compact and switch versions. An attractive range of finishes is complemented by the tough vandal resistant stainless steel version.

### Paxton Access Ltd

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