

Ins-40085-US Net2Air Ethernet bridge - UL

Technical Support

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Technical help is available: Monday - Friday from 02:00 AM - 8:00 PM (EST)

Documentation on all Paxton products can be found on our web site - <http://www.paxton-access.com/>

For instructions in alternative languages - <http://paxton.info/1000>

Net2Air wireless communication

The access control unit connects to the Net2 software running on the PC using Paxton Net2Air proprietary wireless technology. A Net2Air bridge enables communication from the Net2 software to the Paxton wireless products.

Radio signals do not always behave as you might expect. For example, a cell phone that displays a full signal on one part of the site will lose signal completely only a few feet away. These problems can be addressed by using the Net2 site surveyor kit (690-200-US)

See also: [AN1095 - Net2 nano - How does it work? < http://paxton.info/974 >](http://paxton.info/974)
[AN1096 - How to plan a Net2 nano installation < http://paxton.info/975 >](http://paxton.info/975)
[Ins-30096-US - Net2Air site surveyor < http://paxton.info/1193 >](http://paxton.info/1193)

Radio frequency

This product should not be installed within 10 feet of other wireless equipment operating on a 2.4Ghz frequency. To ensure optimum performance other wireless networks should avoid WiFi channels 11, 12 and 13 to reduce the possibility of interference.



This unit is for supplemental use only, and is to be employed as a programming/downloading/monitoring tool only.

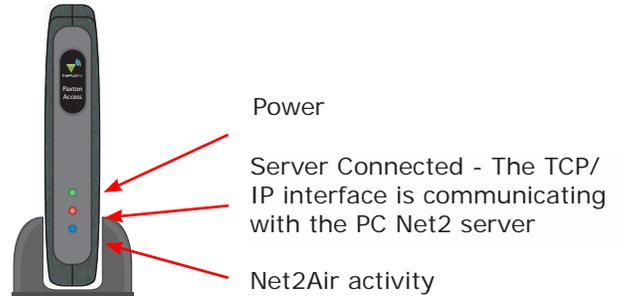
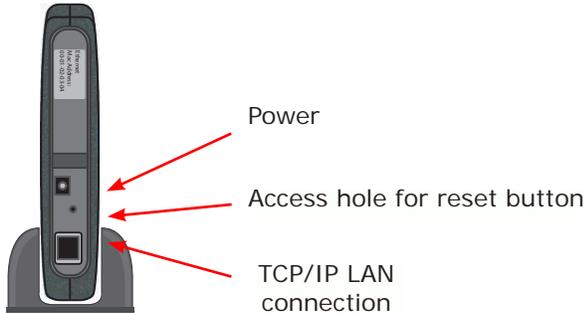
The unit will continue to operate in a 'standalone' mode if the PC is shut down. Any Events that occur during this period are stored in the unit and the PC is updated when it comes back on line.

Options	
Part number	Description
477-384-US	Net2Air Ethernet bridge

****IMPORTANT - THIS IS A NETWORK DEVICE****
Please contact your IT Administrator before installing this product.

Enclosure

The bridge should be mounted vertically in the supplied base to achieve the optimum range



This equipment must not be co-located with any other transmitter and must be used at a distance in excess of 20cm (7.9 inches) to the user.

The party that incorporates this equipment into another host device is responsible for verification of the emissions produced by the final product and must adhere to the limits specified in FCC Part 15.

Furthermore, a label must be applied to the exterior of the final product referring to this enclosed module, which states : "Contains FCC ID: USE477268"

For CAN/ULC-S319 installations, terminals, leads and wiring methods must comply with CSA, C22.1, Canadian electrical code, Part 1, safety standards for electrical installations.

The use of any add-on, expansion, memory or other module manufactured or supplied by the manufacturer's representative will invalidate the CAN/ULC-S319 certification.

Power Supply

The unit is powered from a supplied mains power adaptor via a plug connection.

Wiring methods shall be in accordance with the National Electrical Code (ANSI/NFPA70), local codes, and the authorities having jurisdiction.

All interconnecting devices must be UL Listed.

Power over Ethernet.

This unit can be powered over the ethernet link with POE compatible hardware. Where used, any POE injector must be UL294 listed.

Parts Kit	
Part number	Description
fk1-088	2 off - No8 x 1in pozi round woodscrew - zinc
	2 off - Wall plugs

Maintenance

Following the completed installation of this equipment, no further maintenance or testing is required.

It is advisable to ensure that any third party backup power supplies or recovery procedures are checked regularly to ensure that the operation of the Paxton system is not compromised.

Installation

This unit is for Indoor use only

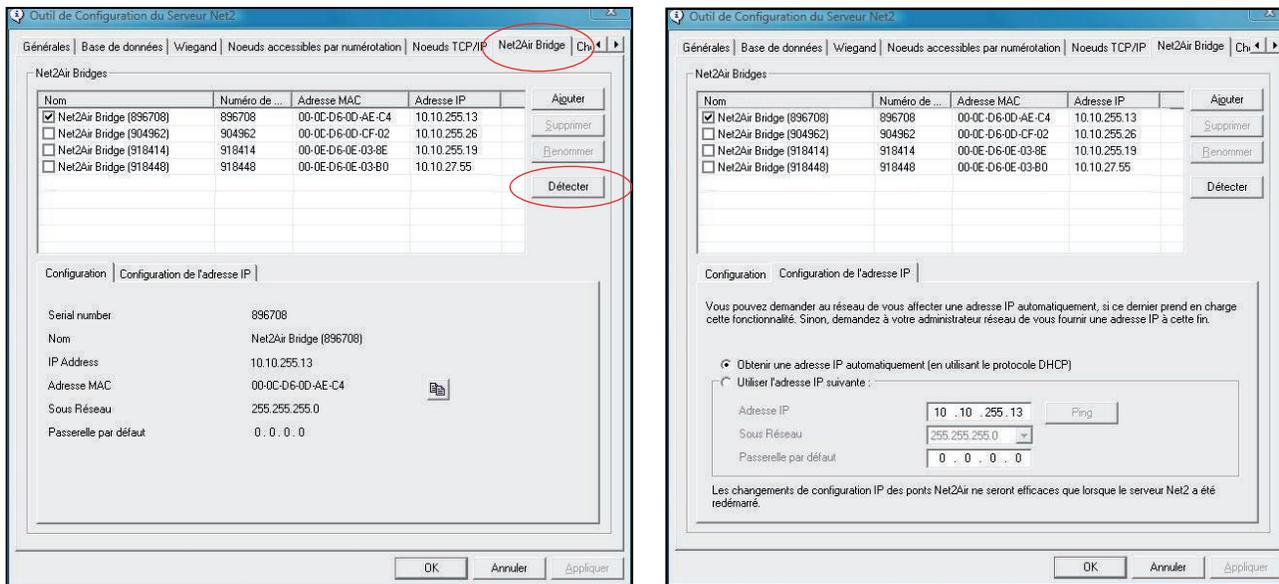
This unit is designed to connect to an Ethernet port and supply the data at the required communications protocol necessary for Paxton Net2 equipment.

The unit is supplied in a plastic housing with a clip-on mounting (See Enclosure section). Suitable fasteners; two screws and wall plugs are also provided if the base is to be fixed to a wall or ceiling.

Connecting to the PC via the Ethernet port

The IP address should be assigned a fixed value, or should be given a DHCP reservation. Unreserved IP addresses issued by DHCP servers are not guaranteed to be constant, leading to potential failure of communication between Net2 software and the bridge.

To configure the unit, run the Net2 Server Configuration Utility (Start/Programs/Net2) and Click on Net2Air Bridge.



Click on **Detect** and the MAC address of the device(s) will appear in the table. You must then use the "IP address configuration" tab to manually assign the IP address, subnet mask and gateway.

Be aware that if the IP address that you give the device is not in the same IP range as the PC, the device will no longer respond until you connect to it with a PC that is in the same IP range.

Some firewall/virus protection software and other wireless hardware can block the IP detection process. Disable these and try to detect the device again. Please contact Technical Support if you require further advice.

If you detect the MAC address but the device now shows 'Not Responding', you must check the IP address, to make sure it is still in range with the PC or network. If it is not, you should either change the IP address of the PC or the IP address of the device so they are both again in the same range. Our Technical team can talk you through this if you need help.

If the MAC address does not appear when you click **Detect**, ensure that the following ports are open on all devices between this unit and the Net2 PC: -

69	UDP
6486	TCP
6488	UDP
6489	UDP

If you still cannot detect the MAC address of the device, connect it directly to your PC via a network cable and call our Technical Help line.

Sounder

The device will 'beep' when detected by the Net2 Server Configuration Utility or when new IP settings are applied. The sounder will also respond to a direct 'Ping' over the network. This is a feature to assist with finding devices hidden from view.

When connecting to a WAN or different subnet mask

If you are connecting this device to a remote subnet which is different from the Net2 software PC, the standard detect mechanism cannot work across the network routers between them. The IP address, along with the correct subnet mask and gateway for the remote subnet have to be set. Either do this on the local subnet with the existing Net2 PC, or use a PC on the remote subnet once the device is installed.

The PC that has the Net2 server installed must be able to access the IP address range on the WAN/remote site. This may require the routers and gateways to be configured between the networks. Again, this would be done by the Network administrator of that site. Make sure the ports listed above are open on all intermediate routers.

Once installed, create a record with the **Add** button (if none was created during initial set up) and you should then be able to detect its MAC by entering the IP address in the Configuration screen Ping box.

Data Reset

To clear all settings back to their factory default, including clearing the current IP address and setting the bridge to acquire new addresses using DHCP, power on the unit with the reset button held down for 3 seconds. This is located at the rear of the unit through a small hole beneath the power connection.

The unit will beep to acknowledge once the reset is complete.

Specifications			
System Specification	Min	Max	
ACU's per Net2Air bridge - Recommended	1	10	
Net2Air USB bridge per system		1	
Net2Air Ethernet bridge per system		100	
Carrier frequency			2.405 Ghz
Net2Air wireless range to ACU		30 yds	
Mains power adaptor	Min	Max	
Input supply voltage	100V AC	240V AC	
DC supply voltage	10V DC	14V DC	
DC supply current		1 A	
Electrical			
Net2 Ethernet bridge current		170 mA	
Power over Ethernet (POE) power rating	0.44 W	3.84 W	IEEE 802.3 af
Power over Ethernet (POE) voltage			48V DC
Environment	Min	Max	
Operating temperature	0°C (32°F)	55°C (131°F)	
Waterproof			No
Dimensions	Width	Height	Length
	2 3/4 inch	7 3/4 inch	4 inch

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

Product compliance and limitations

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

FCC Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.