Paxton

Net2Air wireless communication

The access control unit connects to the Net2 system using Paxton Net2Air proprietary wireless technology through a Net2Air bridge.

Radio signals do not always behave as you might expect. For example, a mobile phone that displays a full signal on one part of the site will lose signal completely only a few metres away.

See also: AN1095 - Net2 wireless access control - How does it work? < http://paxton.info/974 >
              AN1096 - How to plan a Net2 wireless installation < http://paxton.info/975 >

Radio frequency

This product should not be installed within 3 metres 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.

Net2 Server

LAN/WAN

Net2Air Ethernet bridge

Reader

Control unit

Range

0   3m   15m   20m   30m
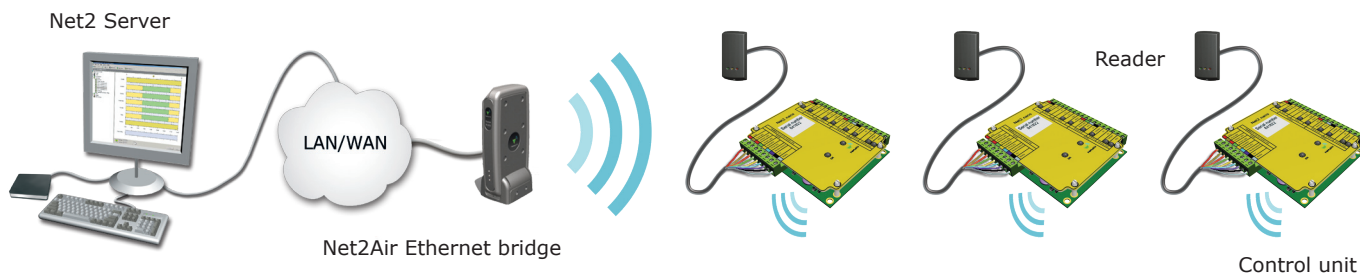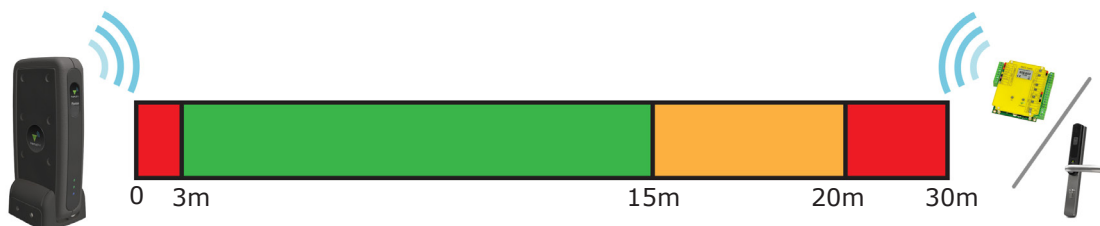
With reference to the diagram, the unit should be located at a distance as shown within the Green area.
Performance may be reduced with an increase in distance as shown by the Amber area.
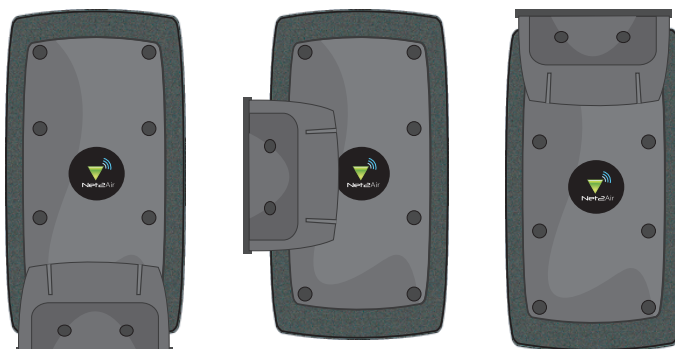The unit should not be used at distances shown by the Red areas.
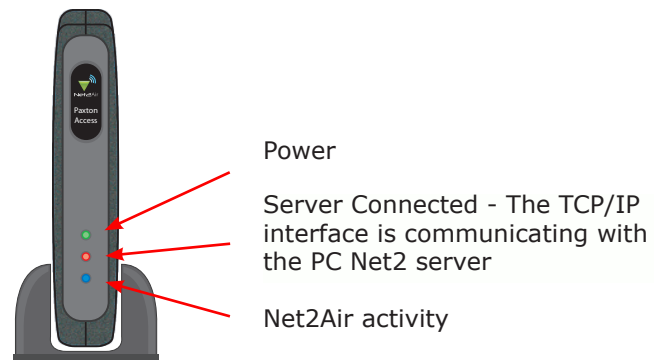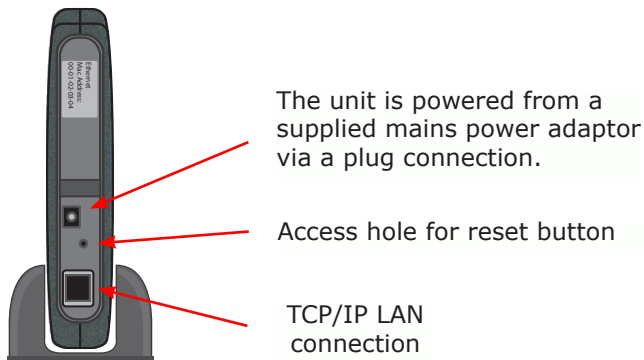
Enclosure
The unit should be mounted vertically in the supplied base to achieve the optimum range.

Power over Ethernet.
This unit can be powered over the ethernet link with POE compatible hardware.

Software - Requires Net2 v4.14 or later.

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

Access hole for reset button

TCP/IP LAN connection

Power

Server Connected - The TCP/IP interface is communicating with the PC Net2 server

Net2Air activity

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.

Run the Net2 Server Configuration Utility (Start/Programs/Net2) and Click on Net2Air Bridge.
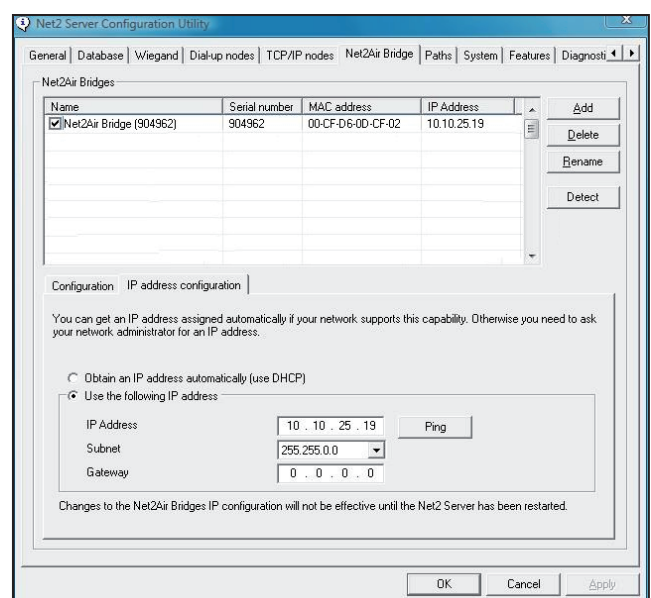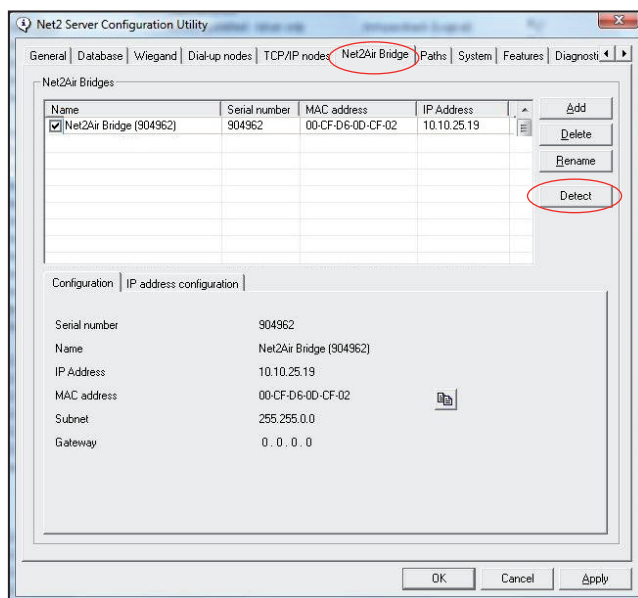
Click on **Detect** and the MAC address of the device(s) will appear in the table. You must then use the "IP address configuration" tab to manually assign the IP address, subnet mask and gateway.

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.

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.

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.

Specifications			
System Specification	Min	Max	
ACU's per Net2Air bridge - Recommended	1	10	
Net2Air USB bridge per system		1	
Net2Air Ethernet bridge per system		200	
Carrier frequency			2.405 GHz
Net2Air wireless range	3m	20 m	
Electrical	Min	Max	
Mains supply voltage	100V AC	240V AC	
DC supply voltage	10V DC	14V DC	
DC supply current		150 mA	
Power over Ethernet (PoE) power rating	0.4 W	3.8 W	IEEE 802.3af
Environment	Min	Max	
Operating temperature	-20 °C	55 °C	
Waterproof			No
Dimensions	Width	Height	Length
	70 mm	195 mm	100 mm

CE0889   The declaration of conformity is available on request. Contact details are provided at:
http://paxton.info/596

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