## ins-30084-US Net2Air USB bridge



## **Technical Support**



1 800 672 PAXT



support@paxton.co.uk

Technical help is available:

Monday - Friday from 5am - 5pm PST / 8am - 8pm EST

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

#### **Net2Air wireless communication**

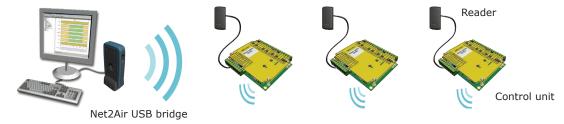
The Net2 nano control unit connects to the central administration PC using Paxton Access' Net2Air proprietary wireless technology. Control units communicate to the PC via a Net2Air USB bridge or Net2Air Ethernet bridge.

Unfortunately, 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 loose signal completely only a few metres away. The main problem in an office environment are signal reflections from the walls, floor and office furniture. A strong signal received directly from the bridge may be completely cancelled by a signal reflected via the floor.

See also: AN1095 - Net2 nano - How does it work? < http://paxton.info/974 >

AN1096 - How to plan a Net2 nano installation < http://paxton.info/975 >

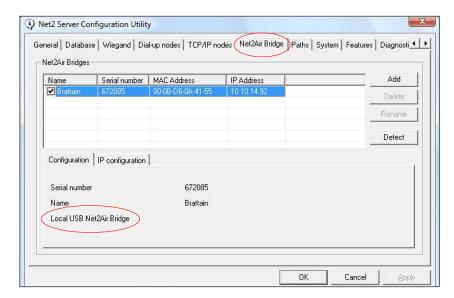
Ins-30096 - Net2Air site surveyor < http://paxton.info/1015 >



Net2 nano is a wireless based 1 door access control unit. It is recommended that a Net2Air site surveyor is used to determine the best position for the bridge and units.

#### Software - Requires Net2 v4.13 or later

Plug the device into a spare USB port on the PC. The bridge will be registered by the Net2 software automatically. This displays in the Net2 Server Configuration Utility/Net2Air bridge as a fixed IP entry.



NOTE: Only ONE Net2Air USB bridge can be configured per system. Multiple Net2Air Ethernet bridges may also be configured, up to 50 bridge nodes in total.

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.

## Layout



# **Changing frequency channel**

If you are experiencing problems with the range or reliability this may be due to poor nano / bridge positioning or adjacent interfering 2.4 GHz equipment, e.g. an adjacent wireless PC network.

The system has fifteen different channels available. The unit is set to channel 11 as this frequency is normally clear of other device transmissions.

Technical support can advise how to change the channel if interference is the cause of the problem.

IEEE 802.15.4 channel	GHz		
11	2.405		
12	2.41		
13	2.415		
14	2.42		
15	2.425		
16	2.43		
17	2.435		
18	2.44		

IEEE 802.15.4 channel	GHz
19	2.445
20	2.45
21	2.455
22	2.46
23	2.465
24	2.47
25	2.475

This equipment complies with FCC radiation exposure limits set forth for use in a General Population/ Uncontrolled environment. This equipment should be operated with a minimum distance of 20cm between the radiator and your body.

Specifications				
System Specification	Min	Max		
ACUs per Net2Air bridge	1	10		
Net2Air USB bridge per system		1		
Carrier frequency			2.4 GHz	
Net2Air wireless range to ACU		30 m		
Electrical	Min	Max		
Voltage	4.75 V	5.25 V	USB certified	
Current		150 mA		
Environment	Min	Max		
Operating temperature	-20 °C	55 °C		
Waterproof			No	
Dimensions	Width	Height	Length	
	70 mm	195 mm	100 mm	