

NETPASSAGE

Quick Install Guide

Compex Dual Band Wireless A+G VPN Internet Router

NetPassage 18A

Version 1.5



Manual Number:
M-0453-V1.5C
Version 1.5
October 2006

1. Introduction



Thank you for purchasing the Compex NetPassage 18A Dual Band Wireless A+G VPN Internet Router!

Integrated with 4-port 10/100Mbps Fast Ethernet Switch, it supports IEEE802.11 connections, providing a wide variety of connectivity options that are ideal for hotspot or any public access deployment. Alternatively, it can also be used purely as a VPN router in a wired network environment.

NetPassage 18A supports industry leading security standards including WPA, 802.1x authentication, and 64/128-bit WEP encryption to secure your wireless data traffic. With other advanced features such as SNMP management and web-based configuration interface, NetPassage 18A is the perfect, secure, high performance broadband Internet sharing solution for SOHO and enterprise users.

NetPassage 18A is available in a few variants:

- **NetPassage 18A 1A11US, 1A13EU, 1B11US, 1B13EU:** These dual band wireless A+G VPN Internet Routers support IEEE802.11 wireless LAN connections.
- **NetPassage 18A 1A00US, 1A00EU, 1B00US, 1B00EU:** These VPN Internet Routers are used in a purely wired network environment.

2. Packaging Contents

The Compex NetPassage 18A 1A00US, 1A00EU, 1B00US, 1B00EU retail package contains the following items to start you off:

- 1x NetPassage 18A
- 1x External Power Adapter (5Vdc)
- 1x Read-me-first Note
- 1x Product CD (includes Quick Install Guide with Warranty Registration Card, User Manual, and Utilities)
- 1x Wall-Mount Template

The Compex NetPassage 18A 1A11US, 1A13EU, 1B11US, 1B13EU retail package contains the following items to start you off:

- 1x NetPassage 18A
- 2x External Antennas
- 1x External Power Adapter (5Vdc)
- 1x Read-me-first Note
- 1x Product CD (includes Quick Install Guide with Warranty Registration Card, User Manual, and Utilities)
- 1x Wall-Mount Template

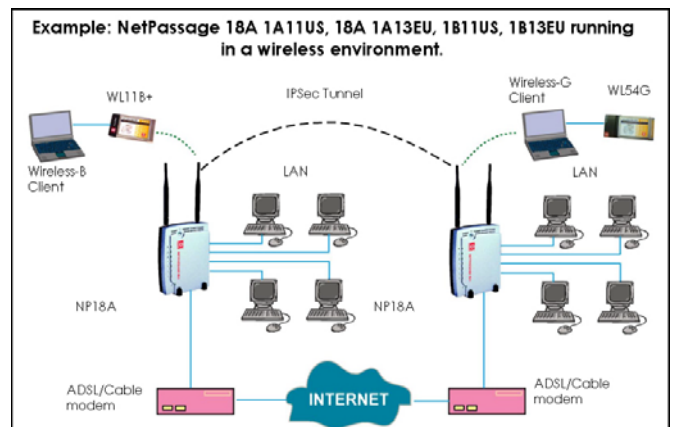
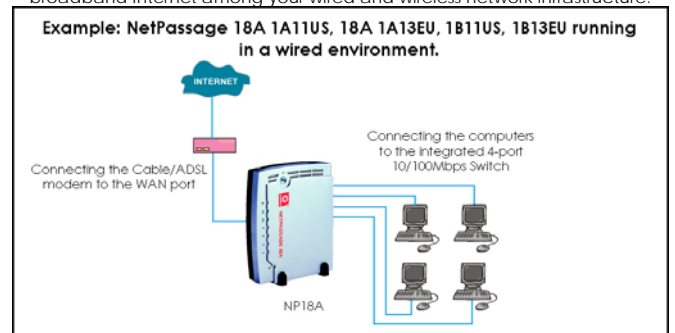
The Compex NetPassage 18A 2AA00US retail package contains the following items to start you off:

- 1x NetPassage 18A
- 1x Read-me-first Note
- 1x Product CD (includes Quick Install Guide with Warranty Registration Card, User Manual, and Utilities)
- 1x Wall-Mount Template

Note: There is no difference in operation between "US" and "EU" versions of NP18A. Rather, "US" denotes that the unit can be used in countries using a power voltage of 110V such as the United States, Canada, Japan, etc whereas "EU" denotes that the unit can be used in countries using 220V/230V such as countries in Europe, in the Middle East, etc.

3. Network Application Illustrations

Only a few simple steps are required to set up the NetPassage 18A and share your broadband Internet among your wired and wireless network infrastructure.



4. Hardware Installation

Before starting, please verify that the following is available:

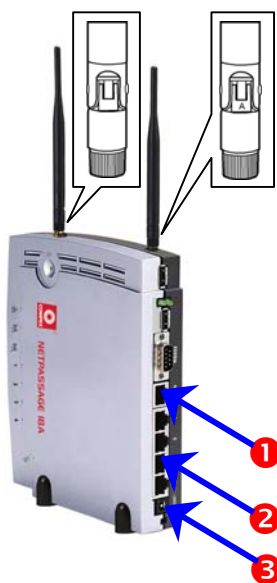
- Cable/ADSL modem with RJ45 connection
- CAT5/5e networking cable
- At least one computer is installed with a Web browser and a wired or wireless network interface adapter
- TCP/IP protocol is installed and IP address parameters are properly configured on all your network's nodes
- Before fixing the antennas, check the markings on the antennas. See Section 4a on how to recognize 'G' and 'AG' antennas.

4a. How to recognise the 'G' and 'AG' antennas when fixing them

NetPassage 18A (namely, NetPassage 18A 1A11US, 1A13EU, 1B11US, 1B13EU) has two types of antenna: dual-band 'AG' antenna and single-band 'G' antenna (as shown in the figure below).

It is important to fix the antennas correctly otherwise the router won't function properly. If you see no marking on the antenna, it indicates the single-band 'G' antenna being fixed to the right (Ant-2) of the NetPassage 18A. Otherwise the 'A' marking indicates the dual-band 'AG' antenna that is fixed to the left (Ant-1) of the router.

4b. How to set up the router



- 1 Using an Ethernet cable, connect your Cable/ADSL modem to the WAN port of the NetPassage 18A.
- 2 For Wired user, connect an Ethernet cable from your computer's network port to any of the LAN ports of the NetPassage 18A.
- 3 Connect the power adapter to the DC jack on the Router.

After the cable/ADSL modem and the NetPassage 18A have been turned on, the Router's WAN link LED should light up, to indicate that the modem and Router are connected to each other.

Turn on your PC. After it has booted up, the LAN link LED corresponding to the LAN port to which it is connected, will light up so that you can verify that your PC is connected to the Router.



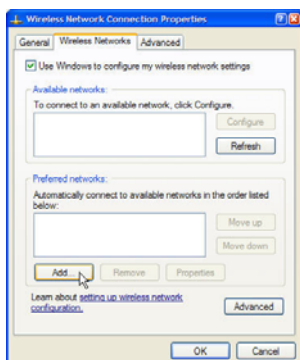
NOTE

For Wired Network users, please skip Section 5 and go to Section 6.

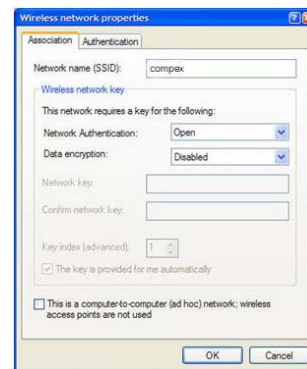
5. Configuring Wireless Network Connection

Depending on your client's wireless adapter, you may set up Windows XP's Wireless Network Connection as follows:

1. Right-click on **Wireless Network Connection** for the wireless Ethernet adapter you wish to connect with the NetPassage 18A, and click on **Properties**.
2. At the **Wireless Networks** tab, click on the **Add** button under **Preferred Networks**.



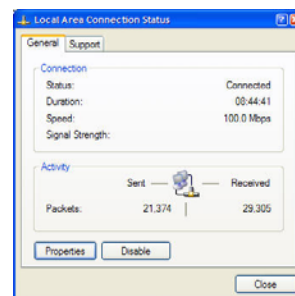
3. At the **Network name (SSID)** field, type in 'compex' (the factory default of NetPassage 18A). Click **OK**.



6. Configuring TCP/IP Settings

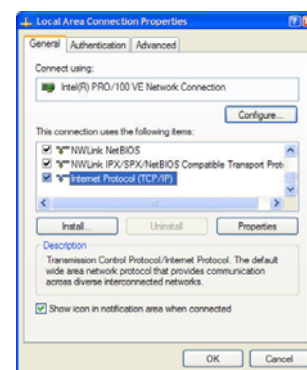
You should configure your PC or wireless client to obtain IP address automatically. For users of Microsoft Windows XP, you may configure the TCP/IP settings as follows:

1. Click the **Start** button. Select **Settings** and click the **Control Panel** icon. Then double-click the **Network Connection** icon.



Right click on **Local Area Connection** or **Wireless Network Connection** corresponding to the Ethernet adapter you wish to connect to NetPassage 18A.

2. Under **General** tab at **This connection uses the following items**, make sure the box next to **Internet Protocol (TCP/IP)** is checked. Then select **Internet Protocol (TCP/IP)**, and click the **Properties** button.



3. Check the radio button next to **Obtain an IP address automatically**.

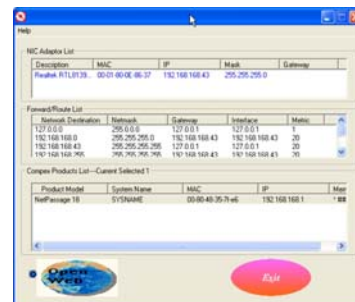
Then click the **OK** button on this page, and the **OK** button on the previous page it returns you to.



Restart your computer to complete the PC configuration.

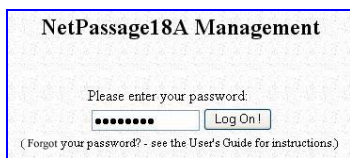
7. Accessing the Web Configuration Interface

1. Insert the Product CD to your CD-ROM drive, go to **Utilities** section and run the **uConfig** program, select **Wireless-G Multimedia Router** and click on **OpenWeb** button.



Alternatively, launch your web browser (or Netscape). At the Address field, key in <http://192.168.168.1>.

The default password is pre-entered in the field provided. Just click on the **LOGIN!** button to access the main page of NetPassage 18 Management. The factory default password is 'password'.



2. To configure NetPassage 18A for Internet connection, go to the **Configuration** menu.

3. Click on **WAN Setup**.

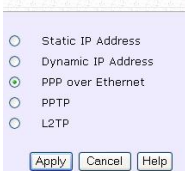
4. When the page opens, press the **Change** button.



If your ISP uses a PPPoE connection (for most DSL users),

5. Select **PPP over Ethernet** from the list. Click on **Apply**.

Select WAN Type



6. Enter the name that you use to log on: username@dsl.com as **Username**.



7. Key in the **Password**. The **Service Name** is optional. Click on **Save**.

This basic input is sufficient to allow your NetPassage NP18A to gain access to broadband internet. For further information on how to configure the rest of the PPPoE setup parameters, please refer to the User's Manual found on the Product CD.

8. Go to the **System Tools** menu. **Reboot** NetPassage 18A to allow the new parameters to take effect.

Note on Broadband Internet accounts

1. For Singapore SingNet Broadband subscribers

WAN Type: PPP over Ethernet (PPPoE)

Username Format: <username>@singnet.com

2. For Singapore Pacific Internet Broadband subscribers

WAN Type: PPP over Ethernet (PPPoE)

Username Format: <username>@pacific.net.sg

3. For Germany T-DSL & T-Online subscribers

WAN Type: PPP over Ethernet (PPPoE)

Username Format:

<Connection ID><T-Online Number>#0001@t-online.de

The <Connection ID> and <T-Online Number> are provided by German Telecom

4. For Australia Optus@Home subscribers

WAN Type: Dynamic IP

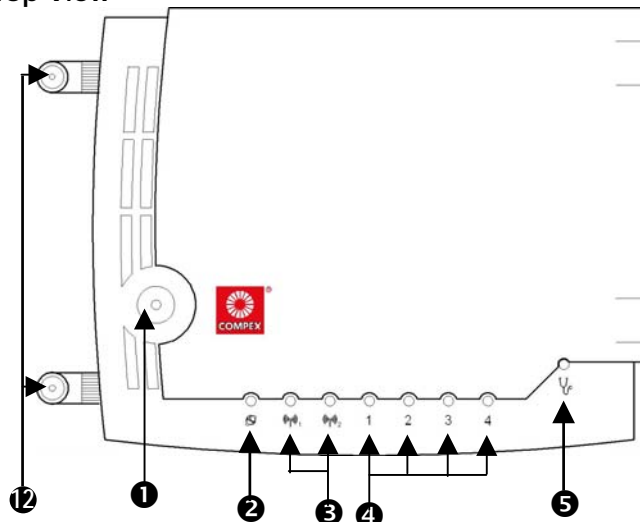
DHCP Client ID: Set as Router's Identity

If you are using other Broadband Internet connections and need more information on how to configure NetPassage 18A, please refer to the User's Manual on the Product CD.

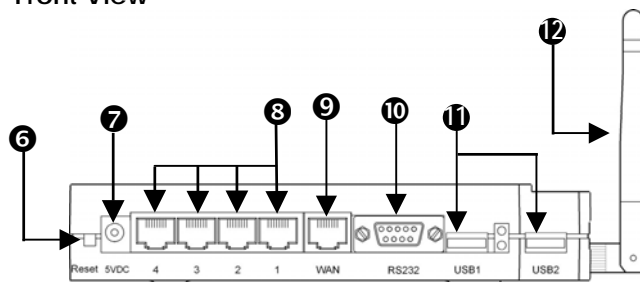
8. Schematic Overview of the NetPassage 18A

Although the illustrations feature **NetPassage 18 1A11US, 1A13EU, 1B11US, 1B13EU**, the panel components are similar for all models in the NetPassage 18A series.

Top View



Front View



Label	Indicator	Description
1	Power (LED)	<i>Steady Green:</i> Power has been turned on
2	WAN (Link/Activity LED)	<ul style="list-style-type: none"> <i>Steady GREEN:</i> The WAN connection is ON <i>Flashing GREEN:</i> Data transmission at WAN connection
3	WLAN (1), (2) (Link/Activity LED)	<ul style="list-style-type: none"> <i>Steady GREEN:</i> At least one wireless link is present <i>Flashing GREEN:</i> Activity is detected in the wireless network.
4	1, 2, 3, 4 (Link/Activity/ Speed LEDs)	These LEDs reflect the status of the integrated Fast Ethernet Switch. <ul style="list-style-type: none"> <i>Steady GREEN:</i> There is a connectivity link of 100Mbps <i>Flashing GREEN:</i> 100Mbps data transmission is detected at the port concerned <i>Steady AMBER:</i> There is a connectivity link of 10Mbps <i>Flashing AMBER:</i> 10Mbps data transmission is detected at the port concerned
5	DIAG (LED)	This LED is reserved for diagnostic purposes.
6	Reset (Push Button)	<ul style="list-style-type: none"> <i>Push for less than 3 seconds:</i> Reboot the router <i>Push and hold for 5 seconds:</i> Reset password to its default: "password" <i>Push and hold for between 8 seconds and 10 seconds:</i> Reset all settings to factory default including password. <i>Push and hold for more than 10 seconds:</i> Reset cancelled.
7	DC Jack	Direct Current Jack. If using power adapter to supply power to the unit, attach the power adapter to the main electrical supply and connect the power plug into the DC Jak of the NetPassage NP18A.
8	1, 2, 3, 4 (RJ45 Ports)	Integrated 4-port 10/100Mbps Switch

9	WAN (RJ45 Port)	10Base-T Port connects to Cable/xDSL modem
10	RS232	Not in use. Reserved for future update.
11	USB1, USB2 USB Ports (NP18A 1A, 2A)	These ports support printers, webcams, or hard drives.
11	USB1, USB2 USB Ports (NP18A 1B)	These ports support printers, webcams, or hard drives.
12	External Antennas	This pair of antennas is only provided for wireless models.

9. Specification

Technical Specification	
Industrial Standards	Wired: <ul style="list-style-type: none"> IEEE 802.3 10Base-T IEEE 802.3u 100Base-Tx IEEE 802.3x Flow Control Wireless: <ul style="list-style-type: none"> IEEE 802.11a IEEE 802.11b IEEE 802.11g
WAN Interface	1x Auto MDI/MDI-X RJ45 Ethernet Port for external Cable/ADSL modem
WAN Type	<ul style="list-style-type: none"> Static IP Dynamic IP PPP over Ethernet (PPPoE) PPTP L2TP
LAN Interface	Integrated 4-port 10/100Mbps Switch
USB Interface (NP18A 1A, 2A)	2X integrated USB ports supporting: <ul style="list-style-type: none"> PC Web Camera Print Server Storage disk drive Thumb drive
Wireless Security	<ul style="list-style-type: none"> WPA Personal WPA Enterprise WPA2-Personal WPA2-Enterprise WPA-Auto-Personal WPA-Auto-Enterprise 64/128-bit WEP 802.1x Authentication
IP Protocol Set	Dynamic IP Addressing, Static IP Addressing, DHCP server, PPPoE, NAT, TCP, UDP, IP, ICP, PPTP, IPsec, PAP, CHAP, SNTP, SNMP, L2TP
VPN Functionality	IPSec encryption
VPN Tunneling	<ul style="list-style-type: none"> Site-to-Site VPN Tunneling Remote VPN client tunneling (maximum of up to 100 VPN tunnels for both tunneling modes)
IP Addressing	All Classful/Classless subnets
Built-in-DHCP Server	Yes
DHCP Reservation	Yes
NAT Firewall	Yes
Stateful Packet Inspection (SPI) Firewall	Yes
Universal Plug and Play	Yes
Dynamic DNS Service (Subscribed service)	Yes
Time-based Access Control	Yes
Broadband Internet Sharing	Yes
Support for Watchdog Timer	Yes
Load-Balancing/Fail-Over Internet Connectivity	Parallel Broadband
Virtual Server	IP and Port Forwarding, De-Militarized Zone hosting
IP Packet Filtering	Time-based, TCP Port, Source IP Filtering
URL Filtering	Yes
IP Routing	Static and Dynamic Routing Entry
VPN Client Pass-Through	PPTP, IPsec
Management and Monitoring	SNMP, Web-based Configuration Interface, uConfig, Telnet, SSH
Profile Backup and Restore	Yes
Firmware Upgradeable	Yes
Power Requirements	<ul style="list-style-type: none"> Voltage : 5VDC Current Rating : 3A
Physical and Environment	Temperature: <ul style="list-style-type: none"> Operating : 0°C to 55°C Storage : -20°C to 75°C Humidity: <ul style="list-style-type: none"> Operating : 10% to 80% RH Storage : 5% to 90% rh
Physical Dimension	31mm x 160mm x 170mm (H x W x D)

Further Information References

If you have other Windows operating systems or broadband Internet accounts, please refer to the User's Manual in the accompanying Product CD. This document may become superseded, in which case you may find its latest version at: <http://www.complex.com.sg/prodspec.asp?f=Manual&s=1>

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Manual Revision by Daniel

Manual Number: **M-0453-V1.5C** Version 1.5, October 2006

FCC NOTICE: This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses and can radiate radio frequency energy. If not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception which can be determined by turning the PC off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Connect the computer into an outlet on a circuit different from that to which the receiver is connected.
- Increase the distance between the computer and receiver.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

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

ICES 003 Statement

This Class B digital apparatus complies with Canadian ICES-003.

DECLARATION OF CONFORMITY: Complex, Inc. declares that the product:

Product Name: Complex Wireless A+G VPN Internet Router

Model No.: NetPassage 18A conforms to the following Product Standards:

This device complies with the Electromagnetic Compatibility Directive (89/336/EEC) issued by the Commission of the European Community. Compliance with this directive implies conformity to the following European Norms (in brackets are the equivalent international standards.)

Electromagnetic Interference (Conduction and Radiation): EN 55022 (CISPR 22)

Electromagnetic Immunity: EN 55024 (IEC61000-4-2,3,4,5,6,8,11)

Low Voltage Directive: EN 60 950: 1992+A1: 1993+A2: 1993+A3: 1995+A4: 1996+A11:1997.

Therefore, this product is in conformity with the following regional standards: FCC Class B: following the provisions of FCC Part 15 directive; CE Mark: following the provisions of the EC directive.

DECLARATION OF CONFORMITY: Complex, Inc. declares that:

The wireless card in this product complies with the R&TE Directive (1999/5/EC) issued by the Commission of the European Community. Compliance with this directive implies conformity to the following European Norms (in brackets are the equivalent international standards.)

EMC Standards: FCC: 47 CFR Part 15, Subpart B, 47 CFR Part 15, Subpart C (Section 15.247); CE: EN 300 328-2, EN 300 826 (EN 301 489-17)

Therefore, this product is in conformity with the following regional standards: FCC Class B: following the provisions of FCC Part 15 directive; CE Mark: following the provisions of the EC directive.

Manufacturer's Name Complex, Inc.

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D-63322 Rödermark, Germany

Fax +49 6074-4-9 0668

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WARRANTY REGISTRATION CARD		[M-0088-V2.3C]	
You can register via Internet at:	http://www.cpx.com		or
	http://www.complex.com.sg		
Or E-mail: support@complex.com.sg with the following information:			
To activate the warranty, please complete this card and return to Complex within ninety (90) days of purchase date.			
Product:	Purchase Date:	Model:	Serial No:
Name:	E-mail:		
Company:			
Address:			
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	<input type="checkbox"/> Other:		

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For purchases within U.S.A and Canada, please fax to Complex, Inc. at (714) 482-0332
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