

**NetComm**<sup>®</sup>  
*www.netcomm.com.au*

 **Dynalink**

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**Wireless Security Guide**  
(for Windows XP, Windows Vista, Windows 7, Mac OSx)

## **Wireless Security Guide**

This guide will take you through the process of configuring, changing or checking the wireless security settings on an existing wireless network.

This guide **will not** assist you to setup a new wireless network. Please refer to the wireless setup document for your model available from the support section of the [NetComm\\*](#) or [Dynamlink\\*\\*](#) website.



Any changes to your wireless security settings will require you to reconfigure wirelessly connected devices to use the new security settings. Please ensure that you have your wireless setup guide handy for this.

\* NetComm Support - <http://www.netcomm.com.au/support>

\*\* Dynamlink Support - <http://www.dynamlink.co.nz/cms/index.php?page=how-to>

## Step 1: Selecting a wireless security type:

There are a number of different types of wireless security to select from.

Before changing your settings, check the types of security available on your modem/router and then consult your wireless adapter manufacturer to ensure your wireless adapter is compatible with your chosen security type.

The most commonly used security types are:

- WEP (64bit or 128bit)
- WPA (Radius)
- WPA-PSK
- WPA2 (Radius)
- WPA2-PSK

The majority of wireless adapters should support one (or all) of the above security types.



You will be unable to utilise Radius server authentication without having a Radius server in place and configured on your network.

## Step 2: Selecting a wireless security key:

Once you have chosen which wireless security type you want to use on your network, you will then need to create your wireless security key or wireless password.

Depending on the security type you choose, you will have the option of using either an ASCII or HEX format key.

ASCII refers to any letter or number you can see on your keyboard.

HEX refers to the letters A to F and the numbers 0 to 9.

You will need to ensure that your security key is the correct length. Your modem/router will display the required number of characters (letters and/or numbers) you need.



The default wireless key for most NetComm products is:

**a1b2c3d4e5**

### **Step 3: Setting up your wireless security:**

**Please ensure that your modem/router is connected to your computer using an ethernet cable before continuing.**

1. Open your web browser and go to the address <http://192.168.1.1>, using admin as the username and password when prompted.
2. Select "**Interface Setup**" from the menu at the top of the page and then click on "**Wireless**".
3. If you have decided to use 64bit WEP, and you would just like to change your current WEP network key, simply replace the key specified in the "**Key#1**" section and click "**Save**".

|   |   |                        |                 |                   |             |        |      |
|---|---|------------------------|-----------------|-------------------|-------------|--------|------|
| Interface   | Quick Start   | <b>Interface Setup</b> | Advanced Setup  | Access Management | Maintenance | Status | Help |
|   | Internet  | LAN                    | <b>Wireless</b> |                   |             |        |      |
| <b>Access Point Settings</b>  | Access Point : <input checked="" type="radio"/> Activated <input type="radio"/> Deactivated<br>Channel : Auto <input type="text"/> Current Channel: <input type="text"/><br>Beacon Interval(ms) : <input type="text"/> (range: 20~1000)<br>RTS/CTS Threshold : <input type="text"/> (range: 1500~2347)<br>Fragmentation Threshold(bytes) : <input type="text"/> (range: 256~2346, even numbers only)<br>DTIM(ms) : <input type="text"/> (range: 1~255)<br>Wireless Mode : <input type="text"/>                                    |                        |                 |                   |             |        |      |
| <b>11n Settings</b>   | Channel Bandwidth : <input type="text"/><br>Extension Channel : <input type="text"/><br>Guard Interval : <input type="text"/><br>MCS : <input type="text"/>   |                        |                 |                   |             |        |      |
| <b>Multiple SSIDs Settings</b>  | SSID Index : <input type="text"/><br>Broadcast SSID : <input checked="" type="radio"/> Yes <input type="radio"/> No<br>Use WPS : <input checked="" type="radio"/> Yes <input type="radio"/> No  |                        |                 |                   |             |        |      |
| <b>WPS Settings</b>   | WPS state : Unconfigured<br>WPS mode : <input type="radio"/> PIN code <input checked="" type="radio"/> PBC<br><input type="button" value="Start WPS"/><br>WPS progress : Idle<br><input type="button" value="Reset to OOB"/><br>SSID : <input type="text"/><br>Authentication Type : <input type="text"/>   |                        |                 |                   |             |        |      |
| <b>WEP</b>  | WEP 64-bits : For each key, please enter either (1) 5 characters excluding symbols, or (2) 10 characters ranging from 0-9, a, b, c, d, e, f.<br>WEP 128-bits : For each key, please enter either (1) 13 characters excluding symbols, or (2) 26 characters ranging from 0-9, a, b, c, d, e, f.<br><input checked="" type="radio"/> Key#1 : <input type="text"/><br><input type="radio"/> Key#2 : <input type="text"/><br><input type="radio"/> Key#3 : <input type="text"/><br><input type="radio"/> Key#4 : <input type="text"/> |                        |                 |                   |             |        |      |
| <b>WDS Settings</b>   | WDS Mode : <input type="radio"/> On <input checked="" type="radio"/> Off<br>Mac Address #1 : <input type="text"/><br>Mac Address #2 : <input type="text"/><br>Mac Address #3 : <input type="text"/><br>Mac Address #4 : <input type="text"/>  |                        |                 |                   |             |        |      |
| <b>Wireless MAC Address Filter</b>  | Active : <input type="radio"/> Activated <input checked="" type="radio"/> Deactivated<br>Action : <input type="text"/> the follow Wireless LAN station(s) association.<br>Mac Address #1 : <input type="text"/><br>Mac Address #2 : <input type="text"/><br>Mac Address #3 : <input type="text"/><br>Mac Address #4 : <input type="text"/><br>Mac Address #5 : <input type="text"/><br>Mac Address #6 : <input type="text"/><br>Mac Address #7 : <input type="text"/><br>Mac Address #8 : <input type="text"/>                    |                        |                 |                   |             |        |      |
| <input type="button" value="SAVE"/> <input type="button" value="CANCEL"/> |   |                        |                 |                   |             |        |      |

- If you would like to select a different network security type instead, click the drop down menu in the "Authentication Type" section and select the desired security type.
- After selecting your desired security type (we're using WPA2-PSK for the example), enter the wireless security key you would like to use into the "Pre-Shared Key:" section and click "Save".

**Access Point Settings**

Access Point :  Activated  Deactivated  
 Channel : Auto Current Channel: 1  
 Beacon Interval(ms) : 100 (range: 20~1000)  
 RTS/CTS Threshold : 2347 (range: 1500~2347)  
 Fragmentation Threshold(bytes) : 2346 (range: 256~2346, even numbers only)  
 DTIM(ms) : 1 (range: 1~255)  
 Wireless Mode : 802.11b+g+n

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**11n Settings**

Channel Bandwidth : 20/40 MHz  
 Extension Channel : above the control channel  
 Guard Interval : AUTO  
 MCS : AUTO

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**Multiple SSIDs Settings**

SSID Index : 1  
 Broadcast SSID :  Yes  No  
 Use WPS :  Yes  No

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**WPS Settings**

WPS state : Unconfigured  
 WPS mode :  PIN code  PBC  
 Start WPS  
 WPS progress : Idle  
 Reset to OOB  
 SSID : NetComm Wireless  
 Authentication Type : WPA2-PSK

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**WPA2-PSK**

Encryption : TKIP/AES  
 Pre-Shared Key : 28bb9a0d0f9327 (8~63 ASCII characters or 64 hexadecimal characters)

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**WDS Settings**

WDS Mode :  On  Off  
 WDS Encryption Type : TKIP  
 WDS Key : (8~63 ASCII characters or 64 hexadecimal characters)  
 Mac Address #1 : 00:00:00:00:00:00  
 Mac Address #2 : 00:00:00:00:00:00  
 Mac Address #3 : 00:00:00:00:00:00  
 Mac Address #4 : 00:00:00:00:00:00

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**Wireless MAC Address Filter**

Active :  Activated  Deactivated  
 Action : Deny Association the follow Wireless LAN station(s) association.  
 Mac Address #1 : 00:00:00:00:00:00  
 Mac Address #2 : 00:00:00:00:00:00  
 Mac Address #3 : 00:00:00:00:00:00  
 Mac Address #4 : 00:00:00:00:00:00  
 Mac Address #5 : 00:00:00:00:00:00  
 Mac Address #6 : 00:00:00:00:00:00  
 Mac Address #7 : 00:00:00:00:00:00  
 Mac Address #8 : 00:00:00:00:00:00

SAVE CANCEL

Any changes to your wireless security settings will require you to reconfigure any wirelessly connected devices to use the new security settings. This is done by removing any stored wireless settings and then reconnecting to your wireless network.

Please ensure you have your wireless setup guide handy for this.