

User Guide

WEBS 100 Access Point

Revision History

Version	Date	Prepared/ Revised by	Reason for Change
1.0.0	APR 21, 2010	TM Research and Development	Release Version

Table of Contents

Table of Contents	3
List of Figures	4
List of Tables.....	4
1. Introduction	5
1.1. Purpose	5
1.2. Scope	5
2. Component List.....	6
3. Installation	7
4. Configuring using Web Configuration Page	9
4.1. Example Settings	9
4.2. Configuration Procedures	9
4.3. Testing the Settings.....	15

List of Figures

Figure 1: WEBS-100 Access Point.....	6
Figure 2: PoE Adaptor	6
Figure 3: Attach Ethernet cable to WEBS-10 Access Point	7
Figure 4: Attach Ethernet cable to PoE Adaptor	7
Figure 5: Attach Ethernet cable to Modem.....	7
Figure 6: Connection between Modem, PoE Adaptor and WEBS-100 Access Point.....	8
Figure 8: Login Page	11
Figure 10: Infrastructure Settings – Mode sub-tab	12
Figure 11: WAN Settings sub-tab	13
Figure 12: LAN Settings sub-tab	14

List of Tables

Table 1: Component List	6
Table 2: Installation Procedures	7

1. Introduction

1.1. Purpose

The purposes of this document are:


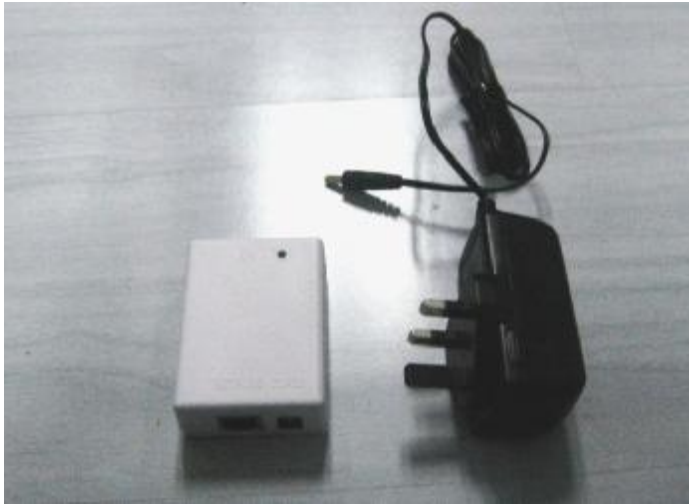
- Provides guides for the System Installer to install WEBS-100 system.
- Configure the WEBS-100 Access Points
- Test the configurations.

1.2. Scope

This document is intended for the usage of the Installer (authorized by TM).


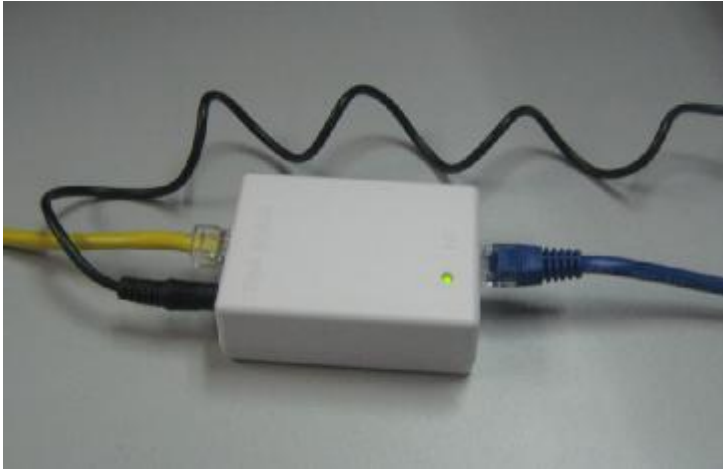

2. Component List


Table 1: Component List

Index	Item	Reference	Quantity
1	WEBS-100 Access Point	 <p>Figure 1: <u>WEBS-100 Access Point</u></p>	1
2	WEBS-100 Power Over Ethernet (PoE)	 <p>Figure 2: <u>PoE Adaptor</u></p>	1
3	RJ-45 Ethernet cable		2

3. Installation

Table 2: Installation Procedures

Step	Diagram
1. Connect one end of the RJ-45 Ethernet cable to the Ethernet port of the WEBS 100 Access Point.	 <p>Figure 3: Attach Ethernet cable to WEBS-10 Access Point</p>
2. Connect the other end of the RJ-45 Ethernet cable to the "POE" port of the PoE Adaptor.	 <p>Figure 4: Attach Ethernet cable to PoE Adaptor</p>
3. Connect the another RJ-45 Ethernet cable to the Ethernet port of the Modem (normally this port will be marked with label 'Internet')	 <p>Figure 5: Attach Ethernet cable to Modem</p>
4. Connect the other end of the	

Step	Diagram
RJ-45 Ethernet cable (from the Modem) to the “LAN” port of the PoE Adaptor.	 <p>Figure 6: <u>Connection between Modem, PoE Adaptor and WEBS-100 Access Point</u></p>

4. Configuring using Web Configuration Page

4.1. Example Settings

Follows are the example settings for configuring the WEBS-100 Access Point. These settings are unique from one site to another. (**Note:** *This value is used as illustration purposes only. The actual values will be provided by TM.*)

Mode:

- **Bridge**

WAN Settings:

- **Dynamic IP address**

LAN Settings:

- ESSID: **WEBS**
- Channel: **11**
- Security Mode: **None**

4.2. Configuration Procedures

Follows are the additional items required:

- Installer Notebook
- Ethernet cable

Procedures:

1. At the Installer notebook, access its network interface configuration as shown in **Figure 7**. Set the IP address to **192.168.1.1**.
2. Set the Subnet Mask to **255.255.255.0**.
3. Set the Gateway to **192.168.1.1**. Click on the OK button to proceed.
4. At the PoE Adaptor, disconnect the Ethernet cable at LAN port.
5. At the Installer Notebook, connect an Ethernet cable to the LAN port of PoE Adaptor.
6. Once the connection is established, at the notebook; open the Internet browser. The recommended browser is Microsoft Internet Explorer 8.
7. In the browser, browse to URL **192.168.1.20**.
8. In the Login page as shown in **Figure 8**; type in **tmadmin** for User name and **tmbusiness** for Password.
9. In the Settings sub-tab as shown in **Figure 9**; click on the Next >> button to proceed.

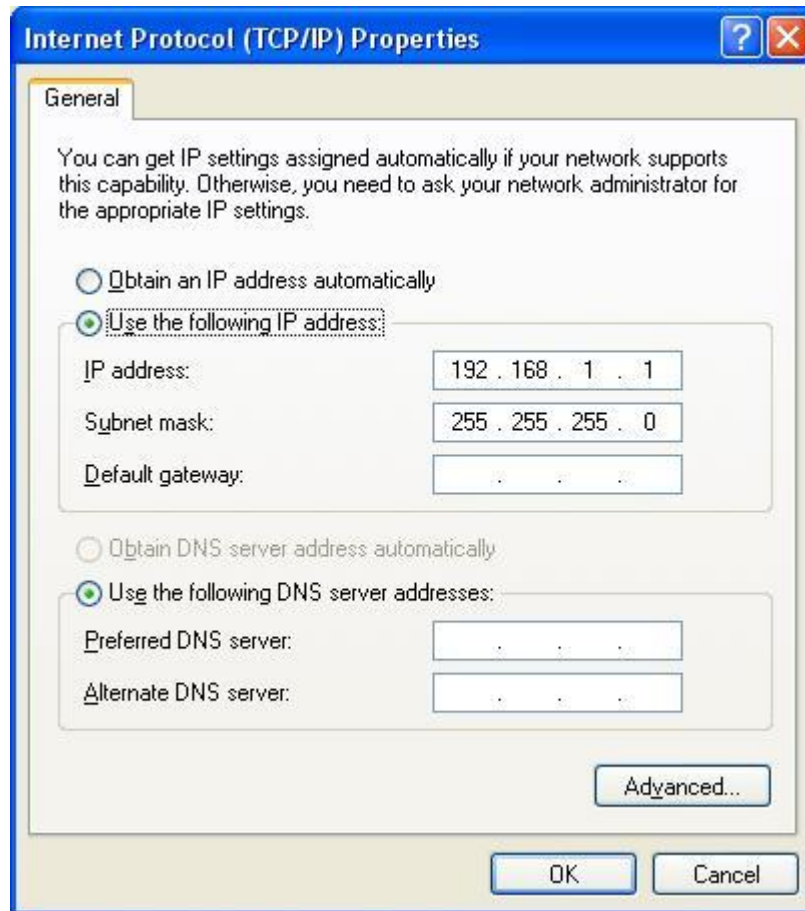


Figure 7: Setting Installer's Notebook IP Address



Figure 8: Login Page

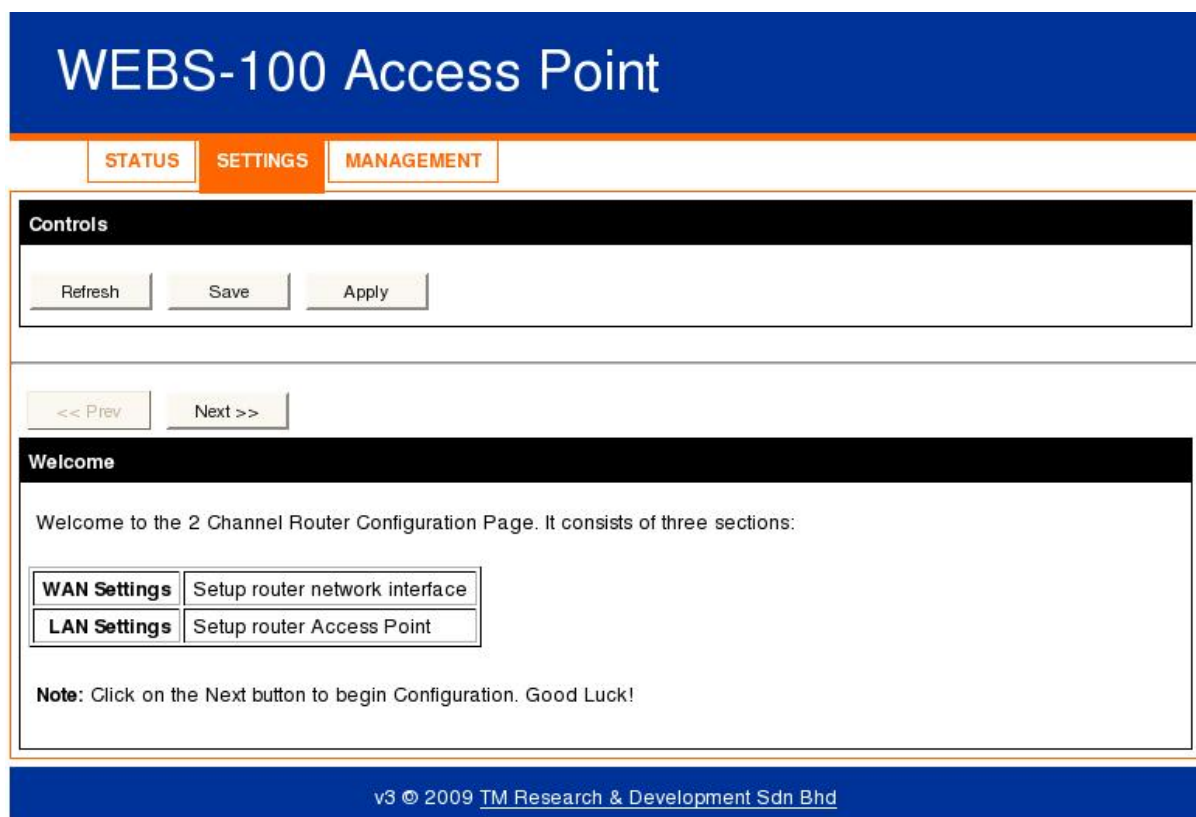


Figure 9: Settings sub-tab

10. In the Infrastructure Settings – Mode sub-tab as shown in **Figure 10**; click on the Bridge radio button.

11. Click on Next >> button.
12. In the WAN Settings sub-tab as shown in **Figure 11**; click on the “Obtain an IP address automatically” radio button.
13. Click on the “Obtain DNS servers automatically” radio button.
14. Click on the Next >> button to proceed.

WEBS-100 Access Point

STATUS
SETTINGS
MANAGEMENT

Controls

Refresh
Save
Apply

<< Prev
Next >>

Infrastructure Settings - Mode

You may choose the router Operation Mode; Bridge or Router.

<input type="radio"/> Router	Router serves the local networks.
<input checked="" type="radio"/> Bridge	Bridge mode extends the networks. It placed the user within the core network cloud. In return, it reduces the speed rate. Take note that the back end must support WDS.

v3 © 2009 TM Research & Development Sdn Bhd

Figure 10: Infrastructure Settings – Mode sub-tab

WEBS-100 Access Point

STATUS

SETTINGS

MANAGEMENT

Controls

Refresh

Save

Apply

<< Prev

Next >>

WAN Settings

IP Address Setting

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

☒ Obtain an IP address automatically
☐ Use the following IP address

IP Address :	.	.	.	.
Netmask :	.	.	.	.
Gateway :	.	.	.	.

DNS Settings

Just leave the DNS column empty if you do not wish to configure the DNS

☐ Obtain DNS servers automatically
☐ Use the following DNS servers

DNS1 :	.	.	.	.
DNS2 :	.	.	.	.
DNS3 :	.	.	.	.

v3 © 2009 TM Research & Development Sdn Bhd

Figure 11: WAN Settings sub-tab

15. In the LAN Settings sub-tab as shown in **Figure 12**; set the ESSID value as **WEBS**.
16. Set the Channel value to **11**.
17. Set the Security Mode to **None**.
18. Click on the Next >> button to proceed.

WEBS-100 Access Point

STATUS
SETTINGS
MANAGEMENT

Controls

Refresh
Save
Apply

<< Prev
Next >>

LAN Settings

Here, you can configure the Wireless settings for the Access Point

Network Settings

☒ Enable DHCP Server

IP Address :	192 . 168 . 100 . 1
Netmask :	255 . 255 . 255 . 0

Client IP Range :	192 . 168 . 100 . 10 - 192 . 168 . 100 . 100
Domain Name :	
DNS Server :	192 . 168 . 100 . 1
Default Lease Time :	7200
Max Lease Time :	36400

Access Point Settings

ESSID :	WEBS
Channel :	6

Security Settings

Security Mode :	None
-----------------	------

v3 © 2009 TM Research & Development Sdn Bhd

Figure 12: LAN Settings sub-tab

19. Click on the Save button to save the current settings.
20. In the Message Box as shown in **Figure 13**; click OK to automatically apply the settings during boot-up.
21. Another Message Box appears as shown in **Figure 14**. Click on OK button to proceed.
22. Close the browser.
23. Turn off the PoE Adaptor.
24. Disconnect the notebook from the PoE Adaptor.
25. Reconnect the Ethernet cable (at LAN port) to the Modem.
26. Turn ON the PoE Adaptor.

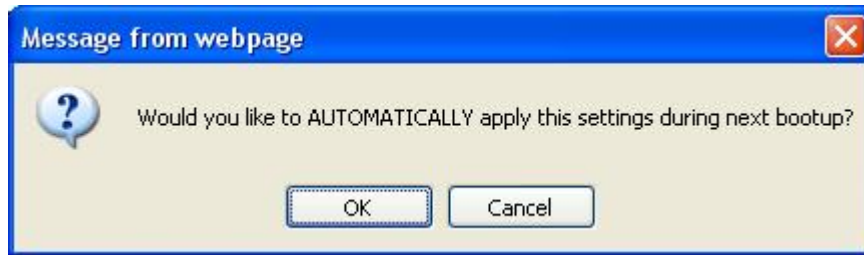


Figure 13: Message Box to ask to AUTOMATICALLY apply settings during boot-up

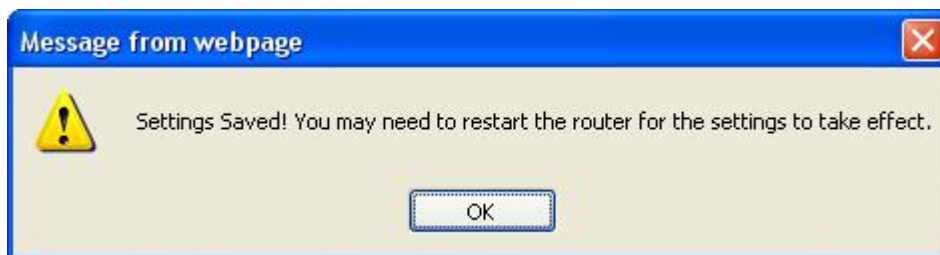


Figure 14: Message Box to notify to restart the AP to apply the changes

4.3. Testing the Settings

The configuration can be test by connecting clients to the WEBS-100 Access Point. The AP should be able to serve the clients.

Connecting to WEBS-100 Access Point

1. In the client notebook, scan for the WEBS-100 Access Point ESSID. Connect to **WEBS** as shown in **Figure 15**.
2. Once connected, open the Wireless Network Connection Status to verify that the client is connected to AP and the client is assigned with a valid IP address as shown in **Figure 16**.
3. At the client notebook, open an Internet browser and browse to any website.

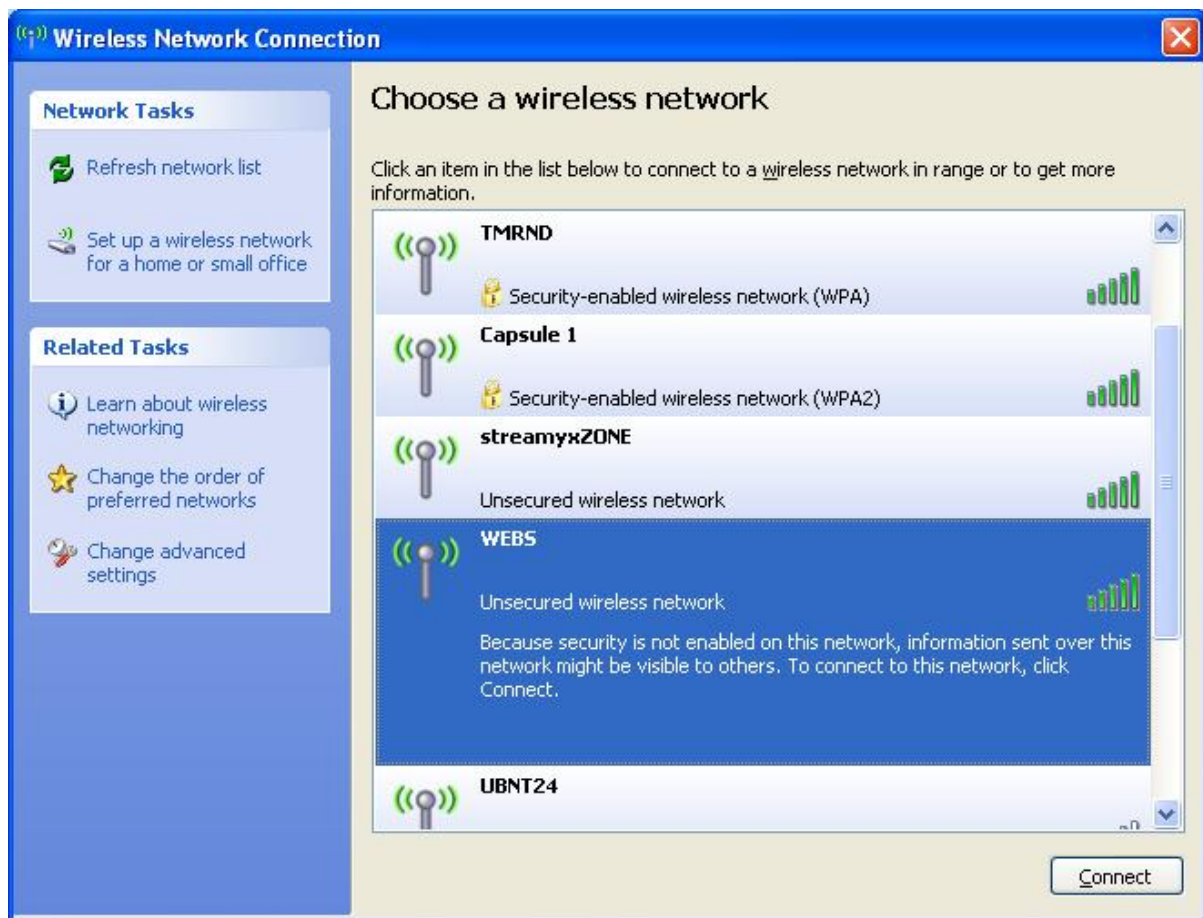


Figure 15: Available AP list

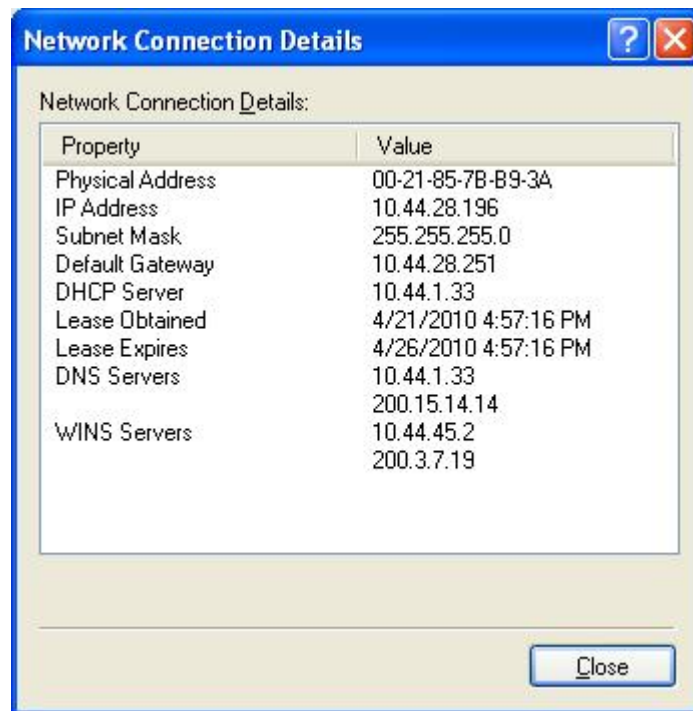


Figure 16: Connection Details

This device must not be co-located or operating in conjunction with any other antenna or transmitter

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

Federal Communications Commission (FCC) Requirements, Part 15

This equipment 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 equipment generates, uses and can radiate radio frequency energy and, 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 equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment 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.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Regulatory information / Disclaimers

Installation and use of this Wireless LAN device must be in strict accordance with the instructions included in the user documentation provided with the product. Any changes or modifications (including the antennas) made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the

equipment. The manufacturer is not responsible for any radio or television interference caused by unauthorized modification of this device, or the substitution of the connecting cables and equipment other than manufacturer specified. It is the responsibility of the user to correct any interference caused by such unauthorized modification, substitution or attachment. Manufacturer and its authorized resellers or distributors will assume no liability for any damage or violation of government

CAUTION: To maintain compliance with FCC's RF exposure guidelines, this equipment should be installed and operated with minimum distance 20cm between the radiator and your body. Use on the supplied antenna. Unauthorized antenna, modification, or attachments could damage the transmitter and may violate FCC regulations.

MPE Statement (Safety Information)

Your device contains a low power transmitter. When device is transmitted it sends out Radio Frequency (RF) signal.

Safety Information

In order to maintain compliance with the FCC RF exposure guidelines, this equipment should be installed and operated with minimum distance 20cm between the radiator and your body. Use only with supplied antenna. Unauthorized antenna, modification, or attachments could damage the transmitter and may violate FCC regulations.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

IEEE 802.11b/g operation of this product in the U.S.A. is firmware -limited to channels 1 through 11.

4.1. This device is intended only for OEM integrators under the following conditions:

The antenna must be installed such that 20 cm is maintained between the antenna and users, and

The transmitter module may not be co-located with any other transmitter or antenna.

As long as 2 conditions above are met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc.).