85Mbps HOMEPLUG WIRELESS G ETHERNET ADAPTER



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Safety Summary Messages

WARNING HIGH VOLTAGE is used in the equipment. Make sure equipment is properly grounded BEFORE opening. Failure to observe safety precautions may result in electric shock to user.

CAUTION

Check voltages before connecting equipment to power supplies. Wrong voltages applied may result in damage to equipment.

Chapter 1 – Setup the HomePlug Wireless Adapter

The HomePlug Wireless Adapter is a Homeplug 85Mbps Turbo with 802.11G Wireless LAN that transforms your in-house power circuit into networking infrastructure with a Wireless LAN interface. Transforms any plug socket into a WLAN connection. Ideal for anyone to extend their Wireless Internet access or make an internal network. Surf the Internet and share data - and rest assured with the best security from eavesdroppers through encryption on the power circuit and WLAN.

Built-in Quality of Service (QOS) features also provides the necessary bandwidth for multimedia payloads including TV over IP (IPTV), higher data rate broadband sharing, Online-Gaming, VoIP Calls, extending Wireless LANs coverage, Audio-Video transmission across the network as well as Network camera connectivity.

1.1 Minimum Requirements

- Pentium[®] MMX 233MHz
- A CD-ROM Drive
- Ethernet card installed with TCP/IP Protocol
- Operating Systems support for Setup Utility:
 - Windows® 98 Second Edition
 - Windows® Me
 - Windows® 2000
 - Windows® XP
- OS independent for Ethernet
- Web Browser support:
 - Microsoft Internet Explorer 4.0 (or later versions)
 - Netscape® Navigator 3.02 (or later versions)

1.2 Typical HomePlug Wireless Adapter Connection

Figure 1 shows a typical HomePlug Wireless Adapter connection.



Figure 1 : User Connection Diagram

Chapter 2 – HomePlug Wireless Adapter Overview

2.1 Light Indicators and Ports

The HomePlug Wireless Adaptor has four light indicators (LEDs). See Figure 2 below.



Figure 2 : Light Indicators

Icon	LED Status	Description		
Φ	ON	When power is supplied to the HomePlug Wireless Adapter.		
	ON	When detected and connected with another HomePlug Adaptor within the network.		
Flicker When the receiving		When the HomePlug Wireless Adapter is transmitting / receiving data.		
01))	Flash	When the Wireless LAN is operational.		
- -	ON	When the Ethernet cable is properly connected from your HomePlug Wireless Adapter to the Ethernet Card.		
	Flicker When the Ethernet is transmitting / receiving data.			

The **Ethernet Port** is a 10/100 Base-T Auto-MDI/MDIX (allows either cross or straight cable) Ethernet jack (RJ-45) to connect to your Ethernet Network card or Ethernet Router/Modem or Ethernet Hub/Switch.

The **Reset** button is used to reset the HomePlug Wireless Adapter to its factory defaults.

Chapter 3 – Configuring Your Ethernet Network Card

The illustrated screen shots serve only as examples. For any dissimilarity, please follow the instructions closely as prompted on your computer.

NOTE: Proceed with this section <u>ONLY</u>:

 if the Request IP Address from DHCP Server is disabled.
 OR
 if the Request IP Address from DHCP Server is enabled but there is no DHCP Server available.

3.1 For Windows[®] 98 Second Edition / Windows[®] Me

Proceed with the steps below.

- 1. From your Windows desktop, right-click on the **Network Neighborhood** icon. Select **Properties**.
- 2. From the **Configuration tab**, select **TCP/IP->** xxx where xxx refers to the model of your Ethernet Card that is connected to your Bridge Modem.
- 3. Click **Properties** as shown in **Figure 3**.



Figure 3 : Network settings

- 4. Click the **IP Address** tab.
- 5. Select the option **Specify an address**. Enter the IP address as shown in **Figure 4** and click **OK**..

T	CP/IP Properties				? ×
	Bindings DNS Configuration	Adv Gateway	anced WINS Confi	Ne guration	etBIOS
	An IP address can If your network doo your network admi the space below.	be automat es not auton histrator for address aut	ically assigne natically assig an address, a omatically	d to this c n IP addre nd then ty	omputer. esses, ask pe it in
	– • Specify an IF	address:	-		
	~				
	IP Address:	192	.168.1	. 20	
	S <u>u</u> bnet Mas	k: 255	. 255 . 255	. 0	

Figure 4 : TCP/IP Properties

- 6. Ensure that your Bridge Modem is powered ON.
- 7. Restart your system.
- 8. Proceed to Chapter 4.

3.2 For Windows[®] 2000 / Windows[®] XP

Windows[®] 2000:

- a. From your Windows desktop, right-click on the icon My **Network Places** and select **Properties**.
- b. At the Network and Dial-up Connections window, right-click on the Local Area Connection icon and select Properties.

Windows® XP: (Instructions are based on default Start menu option)

- a. From your Windows desktop, click **Start** > **All Programs** > **Accessories** > **Communications** > **Network Connections**.
- b. Right-click on the **Local Area Connection** icon that reflects the model of your Ethernet Card that is connected to your Bridge Modem and click **Properties**.

Ensure that the field **Connect Using** indicates the model of your Ethernet Card that is connected to your Bridge Modem.

NOTE: This is important especially if you have more than one Local Area Connection icons displayed at the Network and Dial-up Connections / Network Connections window. Ensure that you have selected the correct one.)

1. Select Internet Protocol (TCP/IP) and click Properties.

🕹 Local Area Connection Properties 🛛 🔹 💽
General Authentication Advanced
Connect using:
Intel(R) PR0/100 VE Network Conne
This connection uses the following items:
Gos Packet Scheduler Gos Packet Scheduler Security Protocol Packet Driver
Internet Protocol (TCP/IP)
I <u>n</u> stall Uninstall P <u>r</u> operties
Description

Figure 5 : Local Area Connection properties

2. Select the option **Use the following IP address**. Enter the IP address as shown in **Figure 6** and click **OK**.

Internet Prot	t Protocol (TCP/IP) Properties 🛛 😢 🔀				
General					
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.					
O <u>O</u> btain	an IP address automatically	/			
U <u>s</u> e th	OUse the following IP address:				
	IP address: 192.168.1.20				
S <u>u</u> bnet m	iask:	255 . 255	.255 .	0	
<u>D</u> efault g	ateway:				

Figure 6 : TCP/IP Properties

- 3. Click **OK** again to close.
- 4. Ensure that your Bridge Modem is powered ON.
- 5. Restart your system.
- 6. Proceed to Chapter 4.

Chapter 4 – Configuring Your Internet Browser

4.1 Microsoft[®] Internet Explorer[™] (based on IE 5.5)

1. From your Windows desktop, double-click on your **Internet Explorer** icon to launch your Browser.



- 2. From the Menu, click Tools and select Internet Options....
- 3. Select the **Connection** tab. Click the field, '**Never dial a connection**'. (This option will be grayed off if you have not installed an analog modem on your computer/notebook before.
- 4. Click the LAN Settings... button. Ensure that your Proxy Server is not enabled.
- 5. Click **OK** to close the dialog box.
- 6. You may now proceed to Chapter 5.

4.2 Netscape Navigator

1. From your Windows desktop, double-click on your **Navigator** icon to launch your Browser.



- 2. Click **Options** > **Network Preferences.**
- 3. Select **Proxies**. Ensure that the **No Proxies** option is selected. OR
- 4. Click **Edit** > **Preferences**.
- 5. Select Advanced and click Proxies. Ensure that the option Direct Connection to the Internet is enabled.
- 6. Click **OK** for changes to take effect.
- 7. You may now proceed to <u>Chapter 5</u>.

Chapter 5 – The HomePlug Wireless Web Page

NOTE: If the Request IP Address from DHCP Server is disabled OR if the Request IP Address from DHCP Server is enabled but there is no DHCP Server available, you should have your computers configured in Fix IP Address mode (refer to "Chapter 3: Configuring Your Ethernet Network Card" on Page 9.

From your Internet Browser, key in 192.168.1.254 at the address bar and hit < Enter>.



Figure 7 : Login – Fix IP



From your Internet Browser, key in **x.x.x.x** which is the **IP address** assigned by the **DHCP Server** at the address bar and hit **<Enter**>.



Figure 8 : Login – DHCP Server

NOTE: If you are not able to get any IP address from the DHCP Server, please power off and on again for the HomePlug Wireless Adapter. You can also plug out the HomePlug Wireless Adapter and then plug in again with the present of the Ethernet cable.

The NOTE: Upon accessing HomePlug Wireless Adapter, if the screen shown in Figure 9 is not attainable, you must delete your temporary Internet files to clear the web cache.

You will be prompted with user login page. Enter "admin" for the Password and click on LOGIN.

USER LOGIN		
Password:		
	LOGIN CANCEL	

Figure 9 : Login Password

Upon successful login, the Advanced Setup page as shown in will be displayed.

Advanced Setup

The System Settings allow Administrator Settings, Firmware Upgrade, Configuration Tools, System Status System Log and Reset

Infineon recommends you keep the default settings.

Figure 10 : Advanced Setup Page

Construction NOTE: Please remember to click on Logout upon exiting the web page. This is because ONLY one user is allowed to access the web page at one time.

5.1 System

The System Settings allow Administrator Settings, Firmware Upgrade, Configuration Tools, System Status, System Log and Reset.

5.1.1 Administrator Settings

When you configure the HomePlug Wireless through an internet browser, the system requires you to enter your password to validate your access permission. By default, the **Password** is set to "**admin**".

The Administrator Settings page under the System allows you to set a password to restrict management access.

Administrator Settings		
Set a password to i	restrict management access	
Current Password		
Password		
Re-type password	(3-12 Characters)	
Auto-Logout Time	30 Min (Auto-logout Time, at least >= 1 Min)	

Figure 11 : Administrator Settings

5.1.2 Firmware Upgrade

The HomePlug Wireless software is stored in the FLASH memory and can be upgraded as new software is released.

irmware Update	
Enter the path and name of the confirm the upgrade.	upgrade file then click the APPLY button below. You will be prompted to

Figure 12 : Firmware Upgrade

Click **Browse** to locate the software file and then click **Apply**.

You will be prompted to confirm on the continue with the upgrade process.



Figure 13 : Firmware Upgrade Confirmation



Click **OK** when the below is prompted. Do not turn off the device.



Figure 14 : Firmware Upgrade Warning

5.1.3 Configuration Tools

The Configuration Tools allow you to Backup Settings, Restore Settings and Restore Factory Default Configuration.

5.1.3.1 Restore Factory Default Configuration

To restore the factory default settings, select **Restore Factory Default Configuration** and click **Apply**.

Configuration Tools

Use the "Backup Settings" tool to save the current configuration to a file named "config.bin" on your PC. You can then use the "Restore Settings" tool to restore the saved configuration. Alternately, you can use the "Restore to Factory Defaults" tool to force to perform reset and restore the original factory settings.

- Restore Factory Default Configuration
- Backup Settings / Restore settings

Figure 15 : Restore Factory Default Configuration

The page as shown in **Figure 16** will be displayed. Click on **Restore...** and you will be asked for the confirmation as shown in **Figure 17**.

Restore Factory Default	
To restore the factory default settings, click onthe "Restore" button. You will be asked your decision.	to confirm
Restore	

Figure 16 : Restore Factory Default



Figure 17 : Restore Factory Default Confirmation

NOTE: The HomePlug Wireless will be rebooted. Please do not turn off the device.

5.1.3.2 Backup Settings

To backup the settings as a configuration file saved on to your PC, select **Backup Settings** / **Restore settings** as shown in **Figure 18**.

Configuration Tools

Use the "Backup Settings" tool to save the current configuration to a file named "config.bin" on your PC. You can then use the "Restore Settings" tool to restore the saved configuration. Alternately, you can use the "Restore to Factory Defaults" tool to force to perform reset and restore the original factory settings.

- O Restore Factory Default Configuration
- Backup Settings / Restore settings

Figure 18 : Backup Settings / Restore settings

Click on **Backup Settings**.

Configuration Tools
Backup Settings Please press the "Backup Settings" button to save the configuration file to your PC
Backup Settings
Restore Settings Enter the path and name of the backup file then press the "Restore Settings" button below. You will be prompted to confirm the backup restoration.
Browse
Restore Settings

Figure 19 : Backup Settings

Click on **Save file** when the below is prompted.



Figure 20 : Backup Settings – Save file

Select the folder where you want to save the file and key in the file name under which you want to save the settings.



Figure 21 : Backup Settings – Save to folder

5.1.3.3 Restore Settings

To restore the settings from a configuration file saved on your PC, select **Backup Settings** / **Restore settings** as shown in **Figure 22**.

Configuration Tools

Use the "Backup Settings" tool to save the current configuration to a file named "config.bin" on your PC. You can then use the "Restore Settings" tool to restore the saved configuration. Alternately, you can use the "Restore to Factory Defaults" tool to force to perform reset and restore the original factory settings.

- Restore Factory Default Configuration
- Backup Settings / Restore settings

Figure 22 : Backup Settings / Restore settings

Click Browse to locate the configuration file saved on your PC and then click Restore Settings.

Configuration Tools
Backup Settings
Please press the "Backup Settings" button to save the configuration file to your PC
Backup Settings
Restore Settings
Enter the path and name of the backup file then press the "Restore Settings" button below. You will be prompted to confirm the backup restoration.
Browse
Restore Settings

Figure 23 : Restore Settings

5.1.4 System Status

The **System Status** allows you to see the connection status of the LAN interface and also the firmware/hardware version numbers.

Status

You can use the Status screen to see the connection status for the LAN interfaces, firmware and hardware version numbers.

LAN SETTINGS

IP Address	192.168.1.254
Subnet Mask	255.255.255.0
DHCP Client	Enable

INFORMATION

Firmware Version 89.2.1-004 LAN MAC Address 00:69:66:61:64:6D Hardware Version 1.00.00

Figure 24 : System Status

5.1.5 System Log

The **System Log** allows you to view any attempts that have been made to gain access to your network.

Security Log								
View one attempts that have been made to gain assess to your patients								
New	any	/ allempts i	.nat nave	e been made to	yanı access i	.o your ne	LNUIK.	
Log	Fil	e						
Jan	1	00.13.46	(none)	local0 debug	udhana[96].	Sending	discover	~
Jan	1	00:14:50	(none)	localO.debug	udhene[96]:	Sending	discover	
Jan	1	00:14:52	(none)	localO.debug	udhcpc[96]:	Sending	discover	
Jan	1	00:14:54	(none)	local0.debug	udhcpc[96]:	Sending	discover	=
Jan	1	00:15:58	(none)	local0.debug	udhcpc[96]:	Sending	discover	
Jan	1	00:16:00	(none)	local0.debug	udhcpc[96]:	Sending	discover	
Jan	1	00:16:02	(none)	local0.debug	udhcpc[96]:	Sending	discover	
Jan	1	00:17:06	(none)	local0.debug	udhcpc[96]:	Sending	discover	
Jan	1	00:17:08	(none)	local0.debug	udhcpc[96]:	Sending	discover	
Jan	1	00:17:10	(none)	local0.debug	udhcpc[96]:	Sending	discover	💌
<								>
			_					2
Dov	vnlo	ad		Clear	Ref	resh		
				TIELP				

Figure 25 : System Log

Click on the **Download** button to save the system log files. Click on the **Clear** button to clear away the system log files. Click on the **Refresh** button to update the system log files.

5.1.6 Reset

The **Reset** page allows you to perform a reset to the device.

Reset	
In the event that the device stops responding correctly or in some way stop reset. Your settings will not be changed. To perform the reset, click on the 'asked to confirm your decision. The reset will be complete when the power	s functioning, you can perform a 'Reset'' button below. You will be ' light stops blinking.
Reset	

Figure 26 : Reset

5.2 LAN

5.2.1 LAN Settings

The LAN Settings page under the LAN allows you to configure the device's IP address for the LAN interface. The default IP Address of the device is 192.168.1.254.

By default, the device request an IP address from a DHCP server.

LAN Settings			
You can disable DHCP to manually set IP address.			
IP Address	192 168 1 254		
Subnet Mask	255.255.255.0		
Request IP Address from DHCP Server	🗹 Enable		

Figure 27 : ADSL Modulation

Click **Apply** to take effect the settings.

NOTE: If the Request IP Address from DHCP Server is disabled OR if the Request IP Address from DHCP Server is enabled but there is no DHCP Server available, you should have your computers configured in Fix IP Address mode (refer to "Chapter 3: Configuring Your Ethernet Network Card" on Page 11 in order to access the web page.

5.3 HomePlug

The HomePlug section allows you to setup the Local Network Password, Remote Network Password and Scan the Powerline Network to get the MAC address of all the connected HomePlugs.

5.3.1 Local

This is used to setup the Network Password of Local Homeplug. See Figure 28.

All HomePlug devices are shipped using "**HomePlug**" as a Network Password. This page allows you to change this Network Password and set your own private password then apply it to the HomePlug device connected to the computer.

The local HomePlug MAC address will be shown.

Local Homeplug Settings				
You can set Local Homeplug Network Password.				
Homeplug MAC Address: Network Password:	00:30:0A:52:0B:D7			

Figure 28 : Local Network Password



5.3.2 Remote

This is used to setup the Network Password of Remote HomePlug. See Figure 29.

This page allows you to set up a Network Password remotely on other HomePlug devices through the powerline.

The other devices on the network with HomePlug capabilities will have a **Device ID/Device Password** printed on the device itself. Find the passwords for the device you want to manage and type it into the Remote Device ID text box.

Next, type your private Network Password into the Network Password text box. Click on the Apply button. This will set the Network Password of the Remote HomePlug to the currently defined Network Password.

Remote Homeplug Settings			
You can set Remote Homeplug Network Password if you have Remote Homeplug Device			
Remote Device ID:			
Remote Network Password:			

Figure 29 : Remote Network Password

Click **Apply** to take effect the setting.

NOTE: The remote device must be present on the powerline in order for the password to be confirmed and changed.

5.3.3 Scan

The Scan function displays the MAC Address' of all connected HomePlugs. See Figure 30.

This page shows all HomePlug devices found on your powerline network identified by their MAC addresses.

Homeplug Scan

You can scan Homeplug powerline network to display MAC address of all connected Homeplugs.

HOMEPLUG SCAN RESULT

MAC 1: 00:30:0A:22:01:31

Figure 30 : Scan Network

NOTE: In case a HomePlug device in your home is not listed in the screen above, make sure that its Network Password is not with a different password than your current Local Network Password.

5.4 Wireless

This section allows you to configure the Wireless parameters.

5.4.1 Setting

The **ESSID** is set as "**LNX_WILDPASS**" by default. It can be changed. **ESSID** is wireless network name for the HomePlug Wireless device. Your wireless client will need this name for wireless connection. See **Figure 31**.

To disable the HomePlug Wireless Access Point, uncheck the box for the **Wlan Radio**. This will prevent the wireless router from emitting any wireless signal.

You can also hide the ESSID by checking the box for **SSID Broadcast**. The wireless client will not be able to see your ESSID wireless network name.

You can configuration wireless settings about Channel ID, ESSIDetc.				

Figure 31 : Wireless Settings

5.4.2 Security

It is important for user to enforce security in wireless LAN environment, this is to prevent unauthorized wireless users from accessing your router. By default, the '**None**' is selected for the **Encryption Type**. See **Figure 32**.

In order to implement security, proceed with the following steps.

- a. Select the Shared option for the Encryption Type.
- b. Select the Auto Switch option for the Authentication Type.
- c. Under Key 1 box, 10 Hexadecimal (0-9, or A-F) digits are needed if 64-bit WEP is used and 26 Hexadecimal digits are needed if 128-bit WEP is used. For example, the characters "1122aabbcc" are in 10 Hexadecimal digits.
- d. You can configure up to 4 sets of keys for your wireless access point.

WPA is the short term for WiFi Protected Access. WPA is an industry-supported, pre-standard version of 802.11i that utilizes the Temporal Key Integrity Protocol (TKIP), which fixes the problems of WEP, which includes using dynamic keys.

Enter the IP Address of the **RADIUS Server** (for 802.1x authentication purposes). This is used only when you have a RADIUS Server and want to use it for authentication. Almost all homes and offices do not have a RADIUS Server.

Security					
You can setting Encryption type and Authentication typeetc.					
Encryption Type	None				
Authentication Type	Open System 🐱				
Active Key	Key 1 🔽				
Key 1(Hex 10/26)					
Key 2(Hex 10/26)					
Key 3(Hex 10/26)					
Key 4(Hex 10/26)					
WPA					
PSK (HEX 64 or 8-63 chars)					
Radius Server IP	Secret				
10 . 1 . 1 . 248	123456				

Figure 32 : Wireless Security

5.4.3 AP Mode

The AP Mode allows you to specify the mode settings for the HomePlug Wireless device. The device can be set to an **Access Point**, **Wireless Client** or **WDS Mode**. By default, it is set to **Access Point**.

5.4.3.1 Access Point

Select Access Point and click Apply to take effect the setting.

When set to the **Access Point** mode, the wireless clients will use the ESSID of the Access Point for the connection.

AP Mode						
The AP mode allows the user to specify the mode settings for the Access Point. This selection allows this AP to perform as an AP/ AP client/ WDS Repeater for other wireless devices to connect.						
 Access Point 						
O Wireless Client						
Site Survey Selected AP SSID: WEP Key: Show Connection Status	כ					
O WDS Mode						

Figure 33 : Access Point

Click on the **Show Connection Status** and all the MAC address of the wireless clients that are connected to the HomePlug Wireless **Access Point** will be displayed. See **Figure 34**.

Current Mode: Accesss Point						
Connection Status						
		MAC Address	Data Rate			
	1	00:12:0e:2c:88:f4	54M			
				Back		

Figure 34 : Access Point – Connection Status

5.4.3.2 Wireless Client

Select Wireless Client and click Apply to take effect the setting.

The device is now in the **Wireless Client** mode and you are ready to connect it to an wireless access point.

AP Mode					
The AP mode allows the user to specify the mode settings for the Access Point. This selection allows this AP to perform as an AP/ AP client/ WDS Repeater for other wireless devices to connect.					
O Access Point					
Wireless Client					
Site Survey Selected AP SSID: WEP Key: Show Connection Status					
O WDS Mode					

Figure 35 : Wireless Client

Click on the **Site Survey** and the device will scan for all the available wireless access points. The information of the wireless access points will be displayed. See **Figure 36**.

Site Survey						
Device type	BSSID	ESSID	WEP	Selected	Click	
11g	00300a0f9017	ipdslam1	ENABLE		0	
11g	00120e02dc1c	hw- access1	ENABLE		0	
11b	00601df26fc3	Palette- WLAN	ENABLE		0	
11g	00300a0dd52d	WirelessAP	ENABLE		۲	
11g	00300a12a357	ipdslam1	ENABLE		0	
11g	00095b43178b	SDP	ENABLE		0	
Connect AP Back						

Figure 36 : Wireless Client – Site Survey

Select the wireless access point that you want to connect by clicking on the radio button under **Click** and then click on **Connect AP**. You will be prompted for confirmation. Click **OK**.



Figure 37 : Connect to AP Confirmation

If the wireless access point is WEP enabled, you will be prompted to enter the security WEP in Hexadecimal format.

Explorer User Prompt	×
Script Prompt: Enter the Hex WEP key 10/26/32	OK Cancel

Figure 38 : WEP

Once connected to the wireless access point, the ** character will be displayed under the **Selected** cloumn. See **Figure 39**.

Site Survey						
Device type	BSSID	ESSID	WEP	Selected	Click	
11g	00300a0f9017	ipdslam1	ENABLE		0	
11g	00120e02dc1c	hw- access1	ENABLE		0	
11b	00601df26fc3	Palette- WLAN	ENABLE		0	
11g	00300a0dd52d	WirelessAP	ENABLE	**	0	
11g	00300a12a357	ipdslam1	ENABLE		0	
11g	00095b43178b	SDP	ENABLE		0	
				Connect AP	Back]

Figure 39 : Wireless Client - Connected

Click on the Show Connection Status and the status will be displayed.

С	Current Mode: Wireless Client				
	Con	nection Status			
		MAC Address	Data Rate		
	1	00:69:66:61:64:6d	54M		
	2	00:12:3f:72:06:f4	54M		
				Back	

Figure 40 : Wireless Client – Connection Status

5.4.3.3 WDS

Select **WDS** and click **Apply** to take effect the setting.

The **Wireless Distribution System** (WDS) allows you to connect to other access point through wireless.

AP	Mode			
The AP mode allows the user to specify the mode settings for the Access Point. This selection allows this AP to perform as an AP/ AP client/ WDS Repeater for other wireless devices to connect.				
0	Access Point			
0	Wireless Client			
	Site Survey Selected AP SSID: WEP Key: Show Connection Status			
۲	WDS Mode			

Figure 41 : WDS

The **WDS Setting** will show the **Channel ID**, **ESSID**, **Encryption Type** and the **Authentication Type**. These values can only be modified in the <u>Wireless Setting</u> or <u>Wireless</u> <u>Security</u> page.

WDS Setting		
The Wireless Distribution System(WDS) allows the user to connect to other AP through wireless.		
The following values can only be modified in Wireless Setting or Wireless Security Page!		
Channel ID	Channel 6 🔽	
ESSID	LNX_WILDPASS	
Encryption Type	None 😽	
Authentication Type	Open System 🔽	

Figure 42 : WDS Setting

5.5 Wireless QoS

The Quality of Service (QoS) provides prioritization of traffic based on the traffic classification.

5.5.1 QoS QAP Setting

This allows you to change the settings of **Best Effort**, **Background**, **Video** and **Voice**. All the default values are based on standard 802.11e for **QoS QAP**.

QOS QAP Settings					
Access Category	ECWmin (2**x-1;x can be 0-10)	ECWmax (2**x-1;x can be 0-10)	AIFSN (1-12)	Transmit Opportunity (0-65535 uS)	Admission Control
Best Effort (CoS 0,3)	4	6	2	32	Enable
Background (CoS 1-2)	4	10	5	0	Enable
Video (CoS 4-5)	3	4	1	3008	Enable
Voice (CoS 6-7)	2	3	1	1504	Enable

Figure 43 : QoS QAP Setting

5.5.2 QoS QSTA Setting

This allows you to change the settings of **Best Effort**, **Background**, **Video** and **Voice**. All the default values are based on standard 802.11e for **QoS QSTA**.

QOS QSTA Settings					
Access Category	ECWmin (2**x-1;x can be 0-10)	ECWmax (2**x-1;x can be 0-10)	AIFSN (1-12)	Transmit Opportunity (0-65535 uS)	
Best Effort (CoS 0,3)	4	10	3	0	
Background (CoS 1-2)	4	10	7	0	
Video (CoS 4-5)	3	4	2	3008	
Voice (CoS 6-7)	2	3	2	1504	

Figure 44 : QoS QSTA Setting

5.5.3 QoS DSCP Setting

The IP DSCP field indicates the different classification types.

The Priority field indicates that the different classes of service that the access point will apply to different IP DSCP classification type.

QOS DSCP Settings				
IP DSCP	Priority			
Best Effort	Best Effort (0)			
Class Selector 1	Background (1)			
Class Selector 2	Spare (2)			
Class Selector 3	Excellent (3)			
Class Selector 4	Control Lead (4)			
Class Selector 5	Video <100ms Latency (5) 💌			
Class Selector 6	Voice <100ms Latency (6) 💌			
Class Selector 7	Network Control			

Figure 45 : QoS DSCP Setting